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How General and Special Educators' Conceptualizations of Critical Thinking Influence Their Pedagogy for Students with Disabilities in Secondary English Inclusive Classrooms

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HOW GENERAL AND SPECIAL EDUCATORS' CONCEPTUALIZATIONS OF CRITICAL THINKING INFLUENCE THEIR PEDAGOGY FOR STUDENTS WITH DISABILITIES IN SECONDARY ENGLISH INCLUSIVE CLASSROOMS

by

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DEDICATION

This manuscript is dedicated, first and foremost, to my wife. Her patience and understanding throughout the last four years have allowed me to succeed at KSU. She and I often joked that we wrote this manuscript together because of the sacrifices she has made—maybe not in the intellectual sense, as she was not glued to the computer screen and stuck between pages in books as I was—but certainly in terms of time and energy, as I relied on her heavily to care for our two young children throughout this process.

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ABSTRACT

HOW GENERAL AND SPECIAL EDUCATORS' CONCEPTUALIZATIONS OF CRITICAL THINKING INFLUENCE THEIR PEDAGOGY FOR STUDENTS WITH DISABILITIES IN SECONDARY ENGLISH INCLUSIVE CLASSROOMS

By Jeffrey R. Wheeler

The purpose of the study was to explore the intersection of critical thinking, teachers' thought processes and values, and students with disabilities. More specifically, the researcher sought to reach a stronger understanding of how general and special educators' decisions to explicitly and/or implicitly embed critical thinking into English course content for students with and without disabilities at the secondary level are influenced by teachers' conceptualizations of critical thinking. The study utilized case study methods with four participants who teach in co-teaching pairs (i.e., a general and special educator who comprise the co-teaching partnership in 9th Lit, and a general and special educator who comprise the co-teaching partnership in Multicultural Lit), located within one high school in a suburban area of a major metropolitan city.

The overarching research question asks, How general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms? The three sub-questions embedded within the overarching research question were:

1) How do teachers define, understand, and view critical thinking? (theory-based)

2) How do teachers frame the aptitude and achievement of students with disabilities in light of their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking? (theory-based)
3) How and when do teachers incorporate critical thinking into the classroom for students with disabilities? (practice-based)

In order to address these research questions, data were collected in the form of in-depth biographical and semi-structured interviews, classroom observations and informal conversations, and visual representations of critical thinking.

Cross-case analysis of the data illuminated four themes, with each theme situated in a unique educational context:

1) New problems exist with the old problems, in terms of the societal and institutional factors that influence student success and critical thinking
2) Teachers and students may practice critical thinking without theorizing it, which explores the conceptual underpinnings of critical thinking in the classroom
3) Within the walls of schools, teachers prepare students for life beyond the walls of schools, linking students from an educational context to a real-world context
4) In the context of academic achievement, not every student can reach the pre-established goal, but every student can reach a student-centered goal,

These assertions illuminated through data analysis reflect seemingly contradictory ideas. Yet, conceptualizing the study's cross-case findings through the frame of these themes and these contexts speaks to the complexities in teachers' ideologies and instructional practices for students with disabilities in secondary English inclusive classrooms, particularly regarding how teachers foster critical thinking for students with disabilities.

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Chapter 1: Introduction

Background and Statement of the Problem

With the increasingly interconnected and competitive nature of the workplace, students' abilities to think critically seems more important than ever (Carr, 2010; Greenfield, 2009; Law & Kaufhold, 2009; Marzano, 2010; Snoke & Underwood, 1999; Wagner, 2008). Despite stakeholders' interest in critical thinking as a result of these shifting societal demands, it remains a nebulous concept for many educators, as the literature provides diverging or vague definitions of critical thinking (Cuban, 1984; Lewis & Smith, 1993; Mulnix, 2012; Rudd, 2007). As Pinkney and Shaughnessy (2013) explain, "modern mandates" like No Child Left Behind and the National Council of Teachers' Principles and Standards "require that schools teach higher level thinking, without really specifying what this means" (p. 346).

For the purpose of clarity and acknowledgment of positionality, the researcher ascribes to the works of Facione (1990, 2000) and Ennis (1993), two seminal authors in the field of critical thinking, who describe critical thinking as the reflective process of purposefully considering one's own values and actions. Yet reaching the point of accepting these authors' definitions and conceptualizations (or others', for that matter) takes time, more time than the average educator may possess. For the practitioner, critical thinking must make sense in practice, not just in theory. The first step in understanding critical thinking, then, especially in high school classrooms, involves making the invisible visible: explicating the processes and components of critical thinking from the perspective of teachers and their pedagogy (Beyer, 1998). Once these instructional practices become visible, and viewed in light of teachers' conceptualizations of critical thinking, we may begin to understand how and why teachers provide certain opportunities for critical thinking in specific content areas such as English and Language Arts.

The need to illuminate teachers' theories and practices of critical thinking becomes particularly important when considering the experiences of students with disabilities (Albrecht & Joles, 2003). Students with disabilities face many challenges in high schools especially, such as those stemming from teachers' lower expectations, students' own lack of motivation or self-efficacy, or a seeming self-fulfilling prophecy whereby students with disabilities receive watered-down level thinking (e.g., simple recall or rote processes). When teachers allow lower-level thinking to take precedence, the lack of exposure to critical thinking only reinforces teachers' perceptions about these students' inabilities to reach higher planes of thought (Bulgren, Marquis, Deshler, Schumaker, & Lenz, 2006; Bulgren, Deshler, & Lenz, 2007; Torff, 2006; VanTassel-Baska, Bracken, Feng, & Brown, 2009; Zohar, Degani, & Vaaknin, 2001). However, if teachers implement skill-rich instructional practices for students with disabilities as well, and hold them to the same expectations for critical thinking, these students can achieve to the same degree as their peers without disabilities (Leshowitz, Jenkens, Heaton, & Bough, 1993; VanTassel-Baska et al., 2009). It becomes important, then, to explore teachers' conceptualizations of critical thinking in order to examine how these conceptualizations inform the opportunities for critical thinking, as enacted through teachers' thoughts and decision-making processes, that teachers provide (or not) to students with and without disabilities in high school literature and composition courses.

Positionality

Before discussing the purpose of the study, it seems important to present my positionality as a researcher, so that my own values and experiences can become clear to the reader. As a child and young adult, I have always enjoyed literature and writing. In my undergraduate program at the University of Michigan, I majored in English and then completed a Masters of

Arts with Certification program for novice teachers, again concentrating on the English content areas. Fresh out of that graduate program at Michigan, I moved to a large metropolitan area in the southeastern United States, because full-time teaching jobs were more prevalent than in the state of Michigan. For my first year as an educator, I taught eighth grade Language Arts, including two classes with a special education co-teacher. I realized throughout the course of the year, however, that I was quite interested in issues of pedagogy, instructional delivery, and individualizing or adapting content based on students' needs, and that becoming a special educator would satisfy these interests of mine. So, my second year, I took a job as a special educator at the school in which the investigation will occur, in which I was placed in all English courses due to my comfort with (and certification within) the content field.

And now, as I write this, I have finished my seventh year at this school as a special educator in English courses. Throughout my tenure at this school, I have taught inclusion English classes across all four grade levels, and I have also taught small-group classes in English and study skills. I have been trained in a plethora of literacy programs and strategies, ranging from highly scripted to highly flexible, I have used many skills-based test-prep programs, and have supported students through remediation for our state's standardized exit exams. Like most educators with more than a couple years' experience, I have seen initiatives come and initiatives go, reflecting changes in administrative/support personnel and/or changes in funding or district focuses. I have worked with general educators for whom I have the utmost respect, and with others who, I believe, were in need of some serious guidance from veteran teachers or from administration.

My point here is not to imply that I have "seen it all"; to the contrary, I acknowledge, and fully appreciate, the fact that every day in the profession brings something new and keeps the

experience of teaching fresh and engaging for me. Yet, through the experiences I have gained, one of the constant struggles and persistent goals in the classroom has been pushing students to think critically. Fostering critical thinking can be challenging because many structures seem to impede it, from stubborn, lazy teachers to parents or students who look for the easier path or the "easy A" for themselves or their children.

What particularly interests me about critical thinking is that, from my own experience and from the literature, its meaning and implications are elusive and nebulous. Facione (1990, 2000) and Ennis (1993), among other authors, have dedicated much time and energy to describing critical thinking in the literature. I agree with their description that critical thinking is the reflective process of purposefully considering one's own values and actions, because embedded within is the element of higher-order thinking needed to purposefully reflect, and because considering one's own beliefs implies both the cognitive skill of metacognition and the democratic, humanitarian disposition of making sound choices.

In practice, however, critical thinking is often an unspoken or assumed goal, without the specific mechanisms in place to achieve that goal. In theory, it is a concept, whose definition of *what*, whose version of *why*, or whose explanation of *how* may become relegated in importance, taking a backseat to reaching an explicit understanding of *for whom* critical thinking matters. The irony here, however, is that even though practitioners and researchers may discuss *for whom* critical thinking matters, ignoring the theories of *what* and *why* (i.e., conceptualizations of critical thinking) or the practice of *how* (i.e., critical thinking pedagogy) makes an informed and thorough discussion of *for whom* it matters nearly impossible. In simpler terms, we cannot discuss who benefits from opportunities for critical thinking—including what these opportunities look like, and how they differ from student to student and teacher to teacher—without also

discussing how teachers conceptualize critical thinking and how these beliefs and understandings inform their teaching practices.

This issue becomes even more intriguing to me in terms of students with disabilities, because I have seen, in my own experience, that educators' viewpoints or perceptions toward students with disabilities are often polarizing. The same holds true regarding critical thinking, in the sense that some teachers believe that all students should work to achieve the same pre-established levels of critical thinking, while others believe that some students with disabilities should work to achieve the same growth as other students, even if those with disabilities do not reach the same pre-established level of critical thinking. Of course, I am oversimplifying these two viewpoints, but I find it interesting that, more times than not, all educators use the same argument to support whatever position for which they are advocating on this continuum between completely uniform standards and completely individualized goals. This argument boils down to doing what is best for the students.

To complicate the issue even further, my personal experience has revealed that few teachers' viewpoints remain static; instead, their opinions often shift depending on a number of contextual, societal, and institutional factors. The continuum of uniform versus individualized standards of critical thinking (or of academic achievement in general, for that matter) represents just one example, but a useful one, of how conceptualization links to pedagogy. It is this connection between teachers' understandings of critical thinking and the related opportunities for critical thinking that they provide for students with disabilities, then, that most intrigues me, and that I hope to explore further in the proposed case study.

Purpose of the Study

The purpose of this investigation is to more fully understand how teachers' decisions for explicitly and/or implicitly embedding critical thinking into English curricula for students with and without disabilities influence how teachers define and explain critical thinking. Teachers' conceptualizations of critical thinking seem linked to the opportunities for critical thinking that they provide through their instructional practices (Bulgren et al., 2006; Bulgren et al., 2007; Torff, 2006; VanTassel-Baska et al., 2009; Zohar et al., 2001). Exploring how teachers implement instructional practices relating to critical thinking may support and/or reflect teachers' broader thought processes (Copeland, Birmingham, DeMeulle, D'Emidio-Caston, & Natal, 1994) and decision-making processes (Peterson & Clark, 1978), as well as teachers' *in-flight thinking*, which combines thought processes and decision-making processes to describe teachers' thinking while engaged in classroom teaching (Paterson, 2007). Illuminating teachers' understandings of critical thinking in relation to perceptions of students' abilities may also shed light on the similarities and differences among teachers' viewpoints of how to help students with disabilities succeed, and how the construct of success compares or contrasts among teachers. This illumination may also bring the reader and the investigator toward a deeper and broader understanding of the (un)just practices that students with disabilities experience in high school English inclusion classes, at least within the context of the bounded case of this investigation. This will be addressed further when discussing the significance of the study.

Summary of Conceptual Framework

The conceptual framework for this investigation will center around three theories. First, personal epistemic beliefs and epistemic culture may help the researcher to understand his participants' viewpoints on the nature of knowledge in light of their own values, the values

among members of a group, and the researcher's own values as situated within broader, institutional contexts. Second, domain specificity and domain generality may explain the extent to which critical thinking abilities (as understood by the participants) exist within the domain of the setting, and the extent to which these abilities exist beyond the participants' group setting. Finally, espoused theory and theory-in-use may provide the basis for recognizing any incongruities among participants' self-proclaimed values regarding critical thinking and the enacted-in-practice versions of these same beliefs.

Research Questions

The overarching research question for this study asks, How do general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms? This question contains two distinct focal points: theory and practice. The theory-oriented focal point involves teachers' conceptualizations of critical thinking, which two sub-questions address: How do teachers define, understand, and view critical thinking?, and How do teachers frame the aptitude and achievement of students with disabilities in light of their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking?

Teachers' theories of critical thinking, both regarding the construct itself and in relation to students with disabilities, are important to recognize before considering the second, related focal point, which involves the practice aspect of teaching critical thinking for students with disabilities, and is addressed by the sub-question, How and when do teachers incorporate critical thinking into the classroom for students with disabilities? The extent to which teachers offer divergent practices of critical thinking may speak to areas of the topic that require further research, or may reveal ideological or pedagogical rifts among teachers regarding how to

conceptualize critical thinking and/or how to frame the aptitude and achievement of students with disabilities. Conversely, convergence on this question may reflect solidarity or consensus among the group (i.e., the domain) for the issues at hand.

Significance of Study

This study is not intended to lead directly to decision-making processes, but is aimed at exploring how teachers' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms. In fact, there exists a dearth of empirical literature that speaks to this topic. The study hopes to narrow the gap by uncovering the many layers that exist beneath teachers' pedagogical decisions. These layers may include the notions of whether teachers view students with disabilities from an assets- or deficits-based theory, whether students with disabilities possess the abilities and/or opportunities to think critically to the same extent as their peers without disabilities, and how these particular views align with teachers' philosophies, ideologies, and attitudes. In short, the study seeks to find out how teachers' pedagogy is impacted by their conceptualizations of critical thinking—how critical thinking is a mechanism for understanding teachers' thought processes.

The current study may also help to illuminate the processes by which teachers' understandings and conceptualizations of various ideas become solidified and potentially modified throughout their careers. A teacher may, after reading about the experiences and beliefs of the participants in the current study, consider how she formed her own notions of critical thinking—whether her notions derived from her institutions of higher learning, her in-service professional development programs, her family upbringing, her exposure to media, etc. This recognition of the derivation of one's conceptualizations may lead teachers toward a greater skepticism of the status quo in education, or toward a heightened awareness of inequities that

exist among various stakeholders in education, depending upon how much power or influence each group holds. In other words, teachers who consider the institutional forces surrounding their learning and their knowledge may become aware of the power that a particular institutional mechanism—be it a textbook, a college, or a professional development session—holds for its learners, and the implications thereof.

While the focus of this research investigation does not necessitate a thorough discussion of the ideological, epistemological, and institutional factors that may lead to classroom inequities for students with disabilities on an individual or systemic level—or even the mechanisms by which individuals gain knowledge and understandings on a topics—the present study may, in part, contribute to the existing body of literature surrounding issues of social justice for students with disabilities, and the study may deepen the field of literature from which future researchers or practitioners may benefit. This becomes especially important in light of how infrequently these broader factors are addressed in relation to critical thinking in the literature.

Because exploring the development of one's own ideas may require a more purposeful delineation and acknowledgment of critical thinking skills and dispositions than might otherwise be necessary, this heightened awareness of the origins of one's conceptualizations of critical thinking might then lead to reconceptualizations of their craft. These transformations could make an impact in the areas of content and curricula, pedagogical decisions, and the notions and beliefs surrounding students with disabilities. Teachers' reconceptualizations might even provide teacher leaders with the catalyst they need to seek educational reforms—reforms to help students bolster those same skills and dispositions that are needed for students to succeed on the global, international stage.

Definition of Terms

This section provides a common point of reference related to the terms used typically in this manuscript. Terms are arranged alphabetically.

Asset-based Model of Disability. In contrast to the deficit-based model, the asset-based model of disability focuses on the environmental and contextual factors that lead to disability labeling, as opposed to emphasizing the individual's position as the focal point of the perceived disability (Cory, White, & Stuckey, 2010; Ferri, Connor, Solis, Valle, & Volpitta, 2005; Harry & Klingner, 2007; Linton, 1998). See also *deficit-based model of disability*.

Critical Thinking. Although the spirit of this research investigation embraces, in part, the notion that definitions of critical thinking are varied, nebulous, or context-specific, for the sake of clarity within the manuscript, it seems necessary to provide a working definition for readers. Facione, one of the leading researchers of critical thinking, believes that critical thinking "*per se* is judging in a reflective way what to do or what to believe" (2000, p. 61, emphasis in original) and is "purposeful, self-regulatory judgment" (1990, p. 3). Ennis, another seminal author in the field, considers critical thinking to be "reasonable reflective thinking focused on deciding what to believe or do" (1993, p. 180). Taken together, critical thinking describes the reflective process of purposefully considering one's own values and actions.

Deficit-based Model of Disability. Unlike the asset-based model, the deficit-based model of disability places the emphasis upon the individual for his disability and often ignores the contextual and ideological factors that influence how students are deemed to possess disabilities. Negative, exclusionary processes that align with the deficit approach include labeling, stereotyping, and stigmatizing (Cory, White, & Stuckey, 2010; Ferri et al., 2005; Harry & Klingner, 2007; Linton, 1998). See also *asset-based model of disability*.

Disability Studies. Disability studies, which also encompasses the asset- and deficit-based approaches to disability, aims to ameliorate injustices that exist within social, cultural, political, and educational contexts, and seeks to address individuals' and society's inequitable practices and ideologies regarding the notion of disabilities (Cory et al., 2010; Linton, 1998; Linton, Mello, & O'Neill, 1995). See also *asset-based model of disability* and *deficit-based model of disability*.

Domain Generality. This term suggests that epistemic beliefs transfer among contexts and are not context-specific (Hofer, 2000, 2006; Hong & Milgram, 2010; Muis, Bendixen, & Haerle, 2006). See also *domain specificity*.

Domain Specificity. This term suggests that epistemic beliefs are context-specific and do not translate from one context to another (Hofer, 2000, 2006; Hong & Milgram, 2010; Muis, Bendixen, & Haerle, 2006). See also *domain generality.*

Epistemic Culture. Related to epistemology, epistemic culture refers to the mechanisms through which we gain knowledge as a group, or a group's collective attitudes about the nature of knowledge (Jones, 2007; Knorr Cetina, 1999, 2007).

Espoused Theory. This concept refers to professionals' or practitioners' theories of action based on knowledge or potential behaviors (Argyris & Schön 1974). See also *theory-in-use*.

Higher-Order Thinking. Higher-order thinking refers to any intellectual skill that is more complex and more cognitively demanding, such as creating, judging, and evaluating. Higher-order thinking is often used synonymously with critical thinking (Bulgren et al., 2007; Glaser, 1984). See also *lower-order thinking*.

In-Flight Thinking. This concept combines thought processes and decision-making processes to describe teachers' in-the-moment thinking, while engaged in classroom teaching (Erickson, 2011; Paterson, 2007); it relates to meaning making for its involvement in describing teachers' thoughts and actions.

Instructional Tolerance Theory. This theory describes the degree to which teachers can effectively teach to students with unique learning needs, given limited resources. Because of the pedagogical complexities of teaching within a diverse classroom environment, certain students will become excluded from teachers' zones of instructional tolerance, leaving them on the fringes of the classroom and subject to rejection from teachers and academic or social failure (Gerber, 1988).

Lower-Order Thinking. Lower-order, or lower-level, thinking refers to any intellectual skill that is less complex and less cognitively demanding, such as memorization and recall of facts. This term is often used as an antonym of critical thinking (Bulgren et al., 2007; Glaser, 1984). See also *higher-order thinking*.

Meaning-Making. This concept connects to teachers' personal epistemological beliefs and to espoused theory and theory-in-use, and describes how teachers' understandings of the shifting demands of the classroom context informs the instructional decisions that they make (Copeland et al., 1994, p. 167).

Metacognition. With a close relationship to critical thinking, metacognition describes the process of thinking above one's thinking, such as by utilizing skills like self-regulation and progress monitoring in order to reach higher-order thinking levels (Crenshaw, 2010; Ivie, 2001; Magno, 2010). For instance, Facione's (1990, 2000) and Ennis's (1993) notion of reflective thinking, as a component of critical thinking, involves the process of metacognition.

Personal Epistemological Beliefs (PEBs). Closely linked to epistemology, PEBs describe one's beliefs about the nature of knowledge and how one comes to know something (Fazey, 2010).

Sameness. A concept that is similar to metacognition for its involvement in thinking about thinking, sameness refers to the process of noting the commonalities among concepts, rules, strategies, and schemas (Carnine, 1991).

Split rosters. This term refers to the practice of schools or school districts placing students with disabilities and students without disabilities on separate lists for attendance and gradebook purposes. Proponents of split rosters may suggest that separating students with disabilities from those without disabilities allows teachers to more effectively identify individual students' needs, while opponents of split rosters may argue that separating students into two lists creates an unhealthy and unnecessary rift between students with and without disabilities.

Theory-in-Use. This concept refers to professionals' or practitioners' theories of action based on specific, observable behaviors (Argyris & Schön 1974). See also *espoused theory*.

Chapter 2: Review of the Literature

Introduction

The purpose of reviewing the existing literature is to explore how the literature may inform and guide the researcher's approach to the investigation and the research topic. Regarding the research topic, a review of the literature related to critical thinking will follow a description of the search term process. The review, which is divided into three sections, should enhance the reader's and the researcher's understanding of critical thinking and its related ideas. Following this review, the conceptual framework will draw on literature that will help the reader to understand the concepts that frame the research investigation. An explanation of the

researcher's methodological framework follows the conceptual framework, before concluding with a summary of the ideas gleaned throughout the literature review process.

Literature Review on Critical Thinking

This review of the literature reveals relevant empirical and conceptual literature that, thematically, organizes the topic of critical thinking into the following three sections: 1) Setting the Stage for Critical Thinking; 2) Critical Thinking in Mind and Action; and 3) Critical Thinking (In)equity. These three sections will follow a discussion of search procedures.

Search Procedures. Reviewing the literature involved engaging in what Butin (2010) deems an "open-ended search" using traditional academic research tools and databases: ERIC and Proquest, in this case. While considerable crossover existed between them, each database offered some articles that the other did not. In a few cases, Google Scholar was utilized if ERIC and Proquest could not provide full-text versions of the articles of interest. One hundred and eighty articles were accessed for further reading, with over 100 of these articles referenced in the manuscript. However, it seems likely that a more thorough review will become necessary once data collection and analysis begins.

The following criteria were employed when selecting research articles: First, each article must have related to, if not directly included, the term *critical thinking* or a closely-associated term such as *higher-order thinking*. Second, each article must have included an indirect or direct reference to at least one of the following key terms (or their synonyms) taken from the manuscript title: *high school*, *English*, *inclusion, teachers*, *conceptualizations, teacher perceptions/attitudes, students with disabilities* (see subsequent paragraphs for further explanations of included terms). For instance, an article about critical thinking in middle schools, or an article about higher-order thinking in mathematics, or an article about students'

metacognitive abilities in resource (i.e., Special Education or small-group) classes, would be excluded for failing to fulfill this second criterion, despite meeting the first criterion. Third, only peer-reviewed, professional articles and reports in the field of education (whether practitioner- or research-centered) were included in the study. Finally, empirical studies were sought, but other scholarly, peer-reviewed articles were accepted as well.

All of the following terms were searched as both subject indicators and as key words (i.e., located anywhere in the articles), and many different combinations of the terms were used to ensure an exhaustive search. *Critical thinking* and *higher-order thinking* were searched in order to encapsulate the research topic on the broadest level. The former term yielded 2,373 results in ERIC and 223,039 results in Proquest, while the latter term yielded 207 results in ERIC and 224,839 in Proquest. Clearly, these two terms alone would not provide the narrow scope required for an in-depth literature review. However, s*tudents with disabilities, disability studies, teacher perceptions/attitudes, deficit-based and asset-based models of disability, special education,* and *learning disabilities* were also searched alongside *critical thinking* and *higher-order thinking* to capture the issue of students' disabilities, as well as teachers' ideologies thereof. While Proquest's results remained high (between 9,000 and 76,000 hits, among the different combinations of the aforementioned terms), ERIC's results were considerably narrower (between eight and 28 hits among the different combinations of the aforementioned terms).

In terms of the setting of the study, *secondary education* and *high school* were searched alongside the aforementioned terms, yet using either *secondary education* or *high school* limited the search results too much, because searching either of them alongside *critical thinking* yielded few useful sources (excluding those articles that were already discovered to be useful). *English, language arts, literacy, reading and writing*, and *literature and composition* were searched to

focus on the chosen content area; again, however, these parameters were often limiting to the point that the search results proved unfruitful, because there were few articles that discussed critical thinking in the context of these search terms. Terms related to critical thinking such as *metacognition* and *teachers' thought processes* were also utilized to ensure a thorough search. However, when searching what may be the two main terms of this research investigation, *critical thinking* and *students with disabilities*, only 11 articles appeared in ERIC. This seems to support the need for further research within the topic of interest. With the search terms established, we may now explore how critical thinking presents itself in the literature.

Section 1: Setting the Stage for Critical Thinking. Setting the stage involves seeking a definition of critical thinking and considering the environments in which it may flourish, including the supports and barriers to students' critical thinking.

Critical Thinking Defined. It seems fitting to begin this section by quoting Cuban (1984), who, nearly thirty years ago, recognized the complications of defining critical thinking and its related concepts: "Defining thinking skills, reasoning, critical thought, and problem solving is troublesome to both social scientists and practitioners. Troublesome is a polite word; the area is a conceptual swamp" (p. 676). Lewis and Smith (1993) noted the same concern nearly ten years later, and well into this century, Rudd (2007) claims that "a great deal of [work in the field of critical thinking] not only leaves one wondering how it is measured, but also leaves one groping for a clear definition" (p. 46). The term "critical thinking" seems as elusive as ever, as the review of the literature reveals.

The literature on critical thinking relies heavily on the works of Facione, who has spent more than two decades of his life working to uncover and explore the meaning and implications

of critical thinking (e.g., Facione, 1990, 2000, 2011). Facione believes that critical thinking "*per se* is judging in a reflective way what to do or what to believe (2000, p. 61, emphasis in original); it is "purposeful, self-regulatory judgment" and is "a liberating force in education and a powerful resource in one's personal and civic life" (1990, p. 3). In order to arrive at a thorough understanding of critical thinking, Facione called upon a panel of experts to implement The Delphi Research Method, which involved eliciting many written and verbal exchanges among panel members (i.e., experts in the field) in order to arrive at a consensus of how to define and explain critical thinking (1990).

From the panel's input, he delineates the two distinct elements of critical thinking: skills and dispositions (1990, 2000, 2011). The six core critical thinking skills are interpretation, analysis, inference, evaluation, explanation, and self-regulation. Facione also delineates seven critical thinking dispositions that students should embrace: being systematic, inquisitive, judicious, truth-seeking, confident in reasoning, open-minded, and analytical. According to Facione, the skills and dispositions together comprise one's critical thinking ability, with skills representing cognitive capabilities and dispositions representing emotional capabilities (Facione, 2000; 2011). Interestingly, the qualitative Delphi Method revealed that, overwhelmingly, the panel did not support the addition of a normative element to critical thinking to accompany the skill and disposition elements. In other words, the panel believed that a person could engage in critical thinking regardless of the moral or ethical implications of the products he creates or the actions he produces via the critical thinking process. However, the panel did reach consensus in its belief that critical thinking does hold value toward building a more just and democratic society (Facione, 1990).

The literature credits another researcher, Ennis, who, according to Lewis and Smith (1993), has been instrumental in providing "a scholarly rationale and specific ingredients for designing school programs to develop critical thought" (p. 132). In alignment with his interest in developing specific programs, Ennis, like Facione, views critical thinking as a practical activity through which we can reach the goal of reasonable beliefs or actions (Ennis, 1987). Also, similar to Facione, Ennis conceptualizes critical thinking as comprising both skills and dispositions, with skills (or abilities) representing the more cognitive aspect of critical thinking, and dispositions (or attitudes) representing the more affective aspect of critical thinking (Aloqaili, 2011; Rudd, 2007). Ennis further divides critical thinking skills into four basic areas: clarity (e.g., focusing, analyzing arguments, asking appropriate questions), basis (e.g., judging for credibility and supporting inferences), inference (e.g., inductive and deductive reasoning), and action (e.g., refining one's thinking based on need in a given context) (Ennis, 1987; Pinkney & Shaughnessy, 2013). In contrast, Ennis's dispositions of critical thinking, which exist more on the macro level, include taking into account the big picture, keeping the original problem in mind, looking for alternatives, becoming sensitive to others' feelings and knowledge, and remaining open-minded (Aloqaili, 2011; Ennis, 1987). As even a glimpse into these skill- and disposition-oriented areas of critical thinking suggests, Facione and Ennis seem to align considerably in terms of conceptualizations of critical thinking.

Despite Facione's and Ennis's extensive work on the topic over the last quarter century, the review of the literature reveals few practitioner-focused empirical studies or otherwise scholarly articles that actually provide definitions or thorough understandings of critical thinking (or, interchangeably, "higher-order thinking"), despite the fact that all of the research references or discusses the topic explicitly (Bulgren et al., 2007; Crenshaw, 2010; Ivie, 2001; Khan &

Inamullah, 2011; Mendelman, 2007). One may only speculate that prominent researchers in the field share an implicitly understood definition of critical thinking, possibly as a result of Facione's and/or Ennis's work, and would therefore find it unnecessary to clarify the definition in relation to others' definitions. Even so, it seems surprising that they would not strive for clarity; they must surely acknowledge that their readers lack the same depth of knowledge on the topics at hand and thus should recognize the importance of offering clear definitions for teachers and other readers. In fact, this lack of clarity is ironic considering the divergence of the definitions.

Possibly because of the varying definitions of critical thinking offered within the literature, Mendelman (2007) utilizes a definition from The Encarta World English Dictionary instead: "disciplined intellectual criticism that combines research, knowledge of historical context, and balanced judgment" (p. 300). Conversely, Bulgren et al. (2007) provide their own definition of higher-order thinking as "involving the manipulation of information [and]…explaining 'big ideas' in a subject...[for] the construction of new perspectives and understandings" (p. 121), a description which is tailored much more to education than Mendelman's definition and is thus more relatable to this particular research topic. Glaser (1984) offers a different conceptualization: that higher-order thinking comprises understanding, reasoning, and problem-solving. Like Bulgren et al.'s (2007) definition, Glaser's seems appropriate for the educational context, and like Mendelman's, Glaser's includes some element of the discernment on the part of the thinker, yet none of these three includes any reference to metacognition.

However, other authors within the literature suggest a link to reflective practices like metacognition and self-questioning. For instance, Crenshaw (2010) describes critical thinking as

"thinking about thinking – one's own thinking or the thinking of others – with the goal of improving it" (p. 4) and Ennis (1993) suggests the definition, similar to Facione's (2000) of "reasonable reflective thinking focused on deciding what to believe or do" (p. 180). Yet, three decades earlier, Ennis defined critical thinking as simply "the correct assessing of statements" (1993, p. 179). So it seems that both Crenshaw's and Ennis's recent understandings of critical thinking acknowledge the metacognitive skill of thinking above or beyond the content and reflecting upon one's thinking processes. They also share the sense that critical thinking involves a distinct purpose—that it does not occur whimsically or aimlessly. Besides Crenshaw and Ennis, Wang and Orig (2003) suggest a definition which lends itself much more to the practitioner than the researcher, as it involves the level of questioning that educators often utilize: Critical thinking is characterized by higher-order questions (e.g., related to analysis, evaluation, and judgment) that are challenging and open-ended (as cited in Khan & Inamullah, 2011). The importance of questioning cannot be overstated in the literature, as will become apparent in the second of the three sections of the literature review.

Despite Facione's and Ennis's foundational works and the substantive body of literature on the topic of critical thinking, no consensus exists amongst researchers regarding an exact definition or a thorough understanding, which may indicate a lack of accepted framework for critical thinking (Aloqaili, 2011). However, this illuminates the importance of recognizing how theory and practice often result in divergent understandings, with theory (e.g., Facione's panel of experts) informing the research field from a scholarly perspective that may be far removed from the realities of the classroom. From a practice standpoint, individual teachers' definitions of critical thinking become important as they relate to how teachers frame the achievement and aptitude of students, particularly those with disabilities, and then the opportunities for critical

thinking that general and special educators provide for students with disabilities. Given this lack of consensus and unique curricula demands, even within the subject area of English, it becomes important to consider the various scaffolds of barriers to critical thinking that exist within schools.

Environment. An essential component of a classroom which can foster critical thinking entails one that recognizes and accentuates students' unique strengths as learners. Newman (2008) describes the Talents Unlimited Model, which includes six talent areas to promote critical thinking: productive thinking, decision making, planning, forecasting (i.e, predicting), communication, and academic. Newman argues that teachers, with parents' support, should establish these talent areas early on, so that they exist as innate qualities of the class environment as opposed to peripheral ones. However, simply utilizing these talent areas does not guarantee a classroom rich with critical thinking; one must also consider the teachers' roles in the classroom.

In the discussion of *Content Enhancement Routines*, Bulgren (2006) implies that in order for students to truly think critically and utilize graphic organizers to their fullest extent, teachers must serve the role of a mediator of instruction as opposed to a dispenser of knowledge. Teacher-as-mediator requires a certain classroom environment, one that supports teachers' goals of relinquishing control. Bulgren's work suggests that if teachers do not relinquish control via the use of graphic organizers and other methods of encouraging students' unique thought processes, students will not take ownership of the content or think critically. This relates to the importance of the class atmosphere. For instance, Dillon (1998) argues that in order to promote students' higher-order thinking, teachers must set the *interrogative mood* in the classroom (as cited in Ciardiello, 2003); teachers should create an open environment in which students feel comfortable asking questions and taking chances.

This sentiment is not lost on Beyer (1998), who suggests a few simple yet effective methods for maintaining a positive atmosphere for students, such as arranging students so that they face each other, allowing for wait time, and responding to students' answers by prompting them (or others) further, instead of providing an obligatory "good answer!" and moving on. Beyer argues for teachers' acute awareness of students' struggles, as critical thinking cannot occur amidst confusion and misunderstanding. As soon as teachers notice students' difficulties with the content, they should switch their instructional focus from the content to the critical thinking abilities that relate to that subject matter.

Despite these aforementioned supportive elements within class environments, barriers to critical thinking do exist within and beyond the classroom context. Bakioglu and Dalgic (2013) distinguish between internal and external barriers to reflective thinking and critical thinking. The internal barriers that are most relevant to the topic at hand include staticity (e.g., teachers' motivations to develop new, creative pedagogy that fosters students' critical thinking skills may stagnate after becoming ingratiated in a given school) and inclination of authority establishment (i.e., teachers, especially novice ones, seem less open to pushing the envelope in terms of creative pedagogy and seem more inclined to towing the line with administration). Snyder and Snyder (2008) suggest another internal barrier to critical thinking, which is teachers' and students' "preconceptions about the content that blocks their ability to think critically about the material. Preconceptions such as personal bias partiality prohibit critical thinking because they obviate analytical skills such as being fair, open-minded, and inquisitive about a topic" (p. 93; see also Kang & Howren, 2004). Although all of these internal barriers could be mitigated by changes in attitude or belief, such changes are not always easy, as human nature often suggests.

Like internal barriers, external ones may prove challenging to overcome, if only because external barriers often involve many stakeholders, making swift, meaningful change unlikely. Relevant external barriers to critical thinking include conciliation culture (e.g, teachers in a professional learning community may strive to get along at the risk of truly reflecting on how they could have pushed students' thinking to the next level), isolation and lack of networking (e.g., teachers may feel like no opportunities exist for candid discussions about their beliefs about student learning, because they either must teach alone behind closed doors, or they must adhere to certain topics within a professional learning community), and parental indifference (e.g., teachers struggle with parents providing students with the basic necessities like books and supplies, making it difficult to reach out to parents for support with any critical thinking-oriented tasks or projects) (Bakioglu & Dalgic, 2013). Other external barriers include constant change and workload (e.g., teachers' courses shift and/or teaching demands increase as a result of budget restrictions, leaving less time to dedicate to critical thinking instruction) (Bakioglu & Dalgic, 2013; Snyder & Snyder, 2008) and a lack of training or lack of information (e.g., teachers may not be trained properly in critical thinking pedagogy or school textbooks lack scaffolding for critical thinking (Snyder & Snyder, 2008; see also Broadbear, 2003). Considering these barriers to an environment in which critical thinking can thrive, it seems important to turn to the pedagogical techniques that teachers may utilize, both in mind and action, in order to foster critical thinking in the classroom.

Section 2: Critical Thinking in Mind and Action. To justify critical thinking from a pedagogical standpoint, and even from a moral one, Pinkney and Shaughnessy (2013) state that "educators must teach critical thinking because critical thinking is a skill which makes people fully human" (p. 351). However, based upon the literature, the notion of how we should teach

critical thinking proves just as divergent as defining and understanding it. Before exploring questioning techniques and instructional approaches to address the issue of how to teach critical thinking, it is worthwhile to first consider teachers' thought processes as related to critical thinking.

Teachers' Thought Processes. The literature on teachers' thought processes offers readers different concepts and different explanations to explain how and why teachers think, and subsequently respond, in particular manners in the classroom—which, of course, influences what opportunities for critical thinking exist. Buchmann (1990) provides an introduction into the concept of teachers' thought processes by distinguishing between decision-making and vision. Building on the works of Wilson (1975), Buchmann argues that researchers', practitioners', and stakeholders' attention to teacher decision-making at the expense of vision "reflects a historical trend characteristic of modernity with its emphasis on free choice and an implicit preference for a certain form of rationality...In ordinary language, however, thinking is seen as, among other things, an internal kind of gazing" (p. 43). Buchmann might be suggesting, then, that to understand teachers' behaviors and choices in the classroom in terms of critical thinking, one must recognize a vision—the more contemplative, emotive, and value-oriented element of teacher thinking—in addition to the element that is decision-making.

The literature suggests processes by which teachers perceive and respond to students' behaviors (whether social, academic, or emotional), which becomes important when considering the concepts of *in-flight thinking* and *meaning making*. In-flight thinking describes the thinking processes of teachers as they are engaged in classroom teaching or a reflexive read on the state of their classrooms (Erickson, 2011; Paterson, 2007), although these processes may be imperceptible to teachers and students (Mason, 2002). Meaning making refers to a "teacher's

appropriate response to the continually varying exigencies of the classroom. Such appropriate response is, in turn, dependent on the inclusivity and detail of the teacher's understanding of these exigencies" (Copeland et al., 1994, p. 167). In other words, how teachers understand the shifting demands of the classroom (i.e., meaning making) informs their decision-making process (i.e., in-flight thinking) and subsequent responses. Some research suggests that cognitive processes such as in-flight thinking and meaning making lead special educators to perceive the needs of students differently from general educators (M.D. Clark, 1997; Mayer & Marland, 1997; Paterson, 2007; Stough & Palmer, 2003), and other research indicates that general educators often lack self-efficacy and the confidence in their abilities to meet the needs of all students in inclusive settings (Baker & Zigmond, 1995). The notions of meaning making and in-flight thinking, then, fit within the framework of the current study, in the sense that general and special educators' conceptualizations of critical thinking, and related pedagogy, depend upon their unique perspectives and thus may manifest themselves differently.

Building upon the concept of meaning making and in-flight thinking is a model conceived by Snow (1972; as cited in Peterson & Clark, 1978), which describes teachers' cognitive processes and how they subconsciously take themselves through a cyclical pattern of thought while providing instruction in the classroom. The model delineates a series of paths representing alternatives to the originally-conceived plan for lesson delivery, alternatives that teachers may entertain if they find that, in the course of the instruction, student behaviors or outcomes do not match those for which teachers had hoped. This model of thinking processes suggests that teachers constantly engage in meaning making, adjusting (or not) their manifestations (i.e., lesson delivery and teacher behaviors) based on the shifting context of the classroom.

The model applies to teachers' conceptualizations of critical thinking and to the potential opportunities for students with disabilities for critical thinking. The model establishes how teachers may cycle from perceptions and beliefs of students' critical thinking abilities, to classroom behaviors and practices which make manifest these beliefs, to considerations of alternate routes to critical thinking, to revised student outcomes for critical thinking based on changing contexts, and back to newly-formed perceptions and beliefs. Teachers' abilities to adapt their instruction based on formative feedback seems especially important for students with disabilities, who may need more instructional support (Bulgren, 2006; Leshowitz et al., 1993).

Questioning. The research supports questioning as one of the most effective ways for teachers to elicit critical thinking from students and for students to utilize these skills through their own questions (Chin, 2004; Ciardiello, 2003; Crenshaw, 2010; Marzano, 2010; Snyder & Snyder, 2008). Ciardiello (2003) presents an intriguing paradox as an introduction to the topic of questions for critical thinking: Although we often ask questions in order to find solutions or reach definitive understanding, it is, paradoxically, the act of asking questions that remains important, not the answers themselves. This contradictory truth provides the basis of Ciardiello's question-finding strategy, whose purpose involves creating perplexity by drawing forth students' inner conflicting emotions and knowledge, whereby fostering curiosity, creativity, and, consequently, critical thinking (2003). Similarly, Marzano (2010) describes *elaborative interrogation*, through which teachers pose certain questions that target students' abilities to infer. Making inferences remains a necessary critical thinking skill and one of the higher components of Bloom's taxonomy of learning from over fifty years ago. Thus, inference-related questioning can serve as a springboard for students' higher-order thinking skills.

While Ciardiello and Marzano provide engaging overviews of the power of questioning, Chin (2004) outlines specific types of questioning, some of which foster critical thinking more than others. For example, *closed* or *convergent questions* (those with a limited number of acceptable answers, such as "who," "what," "where," and "when" questions) become important in certain educational settings, but do not bolster students' critical thinking abilities like *open* or *divergent questions* (those with a large range of subjective answers, such as "why" and "how" questions). With these critical thinking-oriented questions, however, the literature supports the notion of providing adequate wait time for students to formulate their responses (Brown & Kelley, 1986; Chin, 2004; Hemming, 2000), at least eight to twelve seconds for these more challenging questions (Snyder & Snyder, 2008).

Furthermore, Crenshaw (2010) discusses the value of *Socratic questioning*, aptly named after the philosopher Socrates, in which the teacher (as moderator) encourages students to think deeply and to ground their analyses in the text. Crenshaw also describes *exploratory questioning*, which helps to prime or activate students' prior knowledge about a topic, thus giving them a stronger foundation upon which to think critically. Despite the large body of research to support questioning as a method of accessing and improving critical thinking, Khan and Inamullah (2011) conducted a quantitative study surrounding this very issue that may seem surprising. Their findings indicate that although teachers in observations at all educational levels spent more than 90% of their instructional time assessing students via questioning, only 20% to 30% of teachers' questions occurred on a higher-order level, thus eliciting minimal critical thinking from students (2011). The troublesome nature of these data may underscore the need for instructional methods, graphic organizers, and resources that foster critical thinking.

Instructional approaches. The literature suggests a number of instructional approaches to promote students' critical thinking skills. For instance, Snyder and Snyder (2008) state that in order to link content to critical thinking, teachers must focus on the learning process itself and ask themselves the question, "How will the students *get* the information?" (p. 91, emphasis in original). Toward this end, authors in the literature argue against teachers giving lectures or requiring rote memorization, which are too fact-based, lack more challenging elements of conceptualization, and do not scaffold for critical thinking (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004; Snyder & Snyder, 2008). Teachers should instead utilize instructional strategies that will tap into students' higher-order thinking skills, skills such as judgment, analysis, and synthesis (Duplass & Ziedler, 2002; Hemming, 2000; Snyder & Snyder, 2008; Wong, 2007). Also, despite the pervasive notion that multiple-choice assessments cannot promote critical thinking, the opposite is often the case, such as with a question that asks students to choose an answer that best aligns with a particular concept (Ennis, 1993; Snyder & Snyder, 2008).

Toward the same goal of developing students' reasoning, problem solving, and learning skills, the literature describes curricula programs that have been utilized in the classroom, which reflect some of the key components of critical thinking. Glaser (1984) reviews three types programs that relate to the current research topic: 1) programs that have been process-oriented, whose goal "is to develop habits of reasoning and skills of learning to improve performance of a general metacognitive, self-monitoring character" (p. 95); 2) programs that are not content-bound and utilize prior knowledge; and 3) programs that challenge the notion that basic skills and complex thinking skills are not interdependent. While Glaser (1984) delineates these critical thinking-based programs as separate entities, more contemporary instructional approaches to

higher-order thinking in the literature seem to contain elements of each of these three types of programs. For instance, Facione (2007) suggests the *Six Steps to Effective Thinking and Problem Solving*, or IDEALS: Identify the problem ("What is the real question we are facing?"); Define the context ("What are the facts that frame this problem?"); Enumerate the choices ("What are plausible options?"); Analyze options ("What is the best course of action?"); List reasons explicitly ("Why is this the best course of action?"); and Self-correct ("Look at it again...What did we miss?"). As Snyder and Snyder (2008) explain, IDEALS guides students through the necessary processes of critical thinking, and promotes collaboration among learners.

While Facione's (2007) six steps require conversation and some basic writing, the literature reveals other supports to critical thinking utilize visual aids. One such instructional approach is Bulgren's (2006) CERs, which take the form of elaborate graphic organizers, and which promote students' critical thinking by demanding that they utilize prior knowledge and skills of juxtaposition in order to discern a hierarchy of content based upon the significance of information. In turn, this hierarchy allows students to prioritize and categorize course content, increasing the likelihood of students truly understanding and analyzing what teachers expect them to know and how teachers expect them to demonstrate this knowledge. Ivie (2001) provides a similar graphic organizer entitled the *Critical Thinking Model* (CTM). Like CERs, CTMs ask students to represent content visually and hierarchically, which fosters critical thinking by demanding that students understand relationships among ideas. However, unlike CERs, CTMs invite students to take their higher-order thinking one step further by applying a metaphor to the content, which benefits students by asking them to connect the content to prior knowledge.

The literature describes how the instructional approaches of *sameness* and *metacognition* also reflect the importance of making connections that transcend most concrete levels of content. Sameness refers to the process of noting the commonalities among concepts, rules, strategies, and schemas (Carnine, 1991). While sameness appears more abstract and theoretical than other instructional strategies to elicit critical thinking, Grossen (1991) explains how its two essential elements—*analogical reasoning* and *logical reasoning*—can promote students' critical thinking with teachers' guidance. Analogical reasoning (i.e., identifying sameness between two ideas) would help students understand, for example, how two short stories share a thematic connection. Logical reasoning (i.e., applying this identified sameness to a new situation or experience) would help students use that thematic connection to understand another short story or connect the theme to their own lives. Like the concept of sameness, metacognition has a significant relationship to critical thinking, as students must utilize skills like self-regulation and progress monitoring in order to reach higher-order thinking levels (Crenshaw, 2010; Ivie, 2001; Magno, 2010).

While some literature has focused on these aforementioned broader cognitive skills in relation to critical thinking, some authors have conducted research that specifically bridges critical thinking and literacy. For instance, Fischer (2003) articulates the importance of fostering students' critical thinking in any subject through explicitly teaching skills of comprehension. Fischer divides this direct method of instruction into three categories which vary from lower- to higher-order thinking: literal recall of content, translations to connect the content to prior knowledge, and interpretations to analyze, judge, and conclude. Questions related to interpretation dominate this method of instruction and allow students to master the few lower-order thinking questions before moving on to the many higher-order thinking

questions. VanTassel-Baska and Bracken (2009) also bridge critical thinking and reading comprehension in their longitudinal study, which explored whether a specific reading program, over a three-year period in Title I schools, could increase students' scores on critical thinking and comprehension assessments. Their findings support the use of a content-rich curriculum to enhance critical thinking for all learners. Finally, Law and Kaufhold (2009) found, in a mixed methods study, that when teachers of reading and Language Arts engage their students in instructional activities that require critical thinking, students perform better on other higher-order thinking tasks. Despite the positive relationships between literacy and critical thinking that these authors' works suggest, it is also important to consider how teachers can promote critical thinking equitably.

Section 3: Critical Thinking (In)equity. Over two decades ago, Grossen (1991) acknowledged, if not embraced optimistically, the challenge in fostering critical thinking equitably for all learners: "It may be possible to teach reasoning strategies to subjects with poor reasoning, including many subjects with learning disabilities" (p. 343). The literature is awash with investigations that acknowledge gaps in performance and achievement on critical thinking tasks between students with and without disabilities (see Bulgren, 2006; Bulgren et al., 2007; Torff, 2006). For example, Bulgren (2006) suggests that students with disabilities face the same learning challenges as those without disabilities, but more severely and to a greater extent. As such, while all students may struggle with critical thinking, students with disabilities need more scaffolding because they may possess weaker skills for lower-level thinking (e.g., reading comprehension or basic math skills) than students without disabilities, which hinders their critical thinking abilities.

Bulgren (2006) argues that improving adolescent literacy skills remains important for all students, but because students with disabilities often experience more difficulty discerning essential from non-essential course content, utilizing CERs or other instructional tools becomes that much more important toward helping these students think critically and to diminish gaps in equity among students. Similarly, Leshowitz et al. (1993) found that "a brief instructional intervention in higher order thinking can bring students with learning disabilities to a level equal to or higher than their nondisabled peers' with regard to critical thought" (p. 487). Also, in a quantitative study of science classrooms in Israel, Zohar and Dori (2003) found that although gains in thinking scores for high achievers surpassed those for low achievers, low achievers often made "considerable progress" (p. 145) on their post-tests compared to their pre-tests.

Despite, or possibly as a result of, the aforementioned researchers' recognition of achievement gaps in critical thinking between students with and without disabilities, the literature suggests that teachers may expect less from their students with disabilities because of teachers' preconceptions about these students' abilities and skill sets (Torff, 2006). Even if the basic skills of students with disabilities equal those without disabilities, teachers often overemphasize lower-level skills and tend to ignore critical thinking skills (Bulgren et al., 2007). This may stem from teachers' perceived need to maintain a sense of accomplishment or self-efficacy for students with disabilities that could become threatened by "risky" critical thinking (Torff, 2006). According to this belief, when teachers focus primarily on lower-order thinking skills, a self-fulfilling prophecy develops in which students with disabilities may begin to doubt their own abilities, thus decreasing motivation and self-efficacy, which only hinders their chances for success even more (Zohar et al., 2001). For this reason, teachers must work to

close the rigor gap and ensure that all students receive opportunities for higher-order thinking (Torff, 2006).

Empirical studies in the literature reveal that teachers' beliefs and perceptions regarding students' abilities and skills of students is a more complex issue than only the degree to which teachers foster critical thinking skills for students with and without disabilities. Cook, Tankersley, Cook, and Landum (2000) focused on other dimensions of teachers' perceptions which may also indirectly play a role in teachers' expectations for students' critical thinking abilities; these four teacher attitudes are attachment, concern, indifference, and rejection. The findings of Cook et al. (2000) suggest that students with disabilities are significantly underrepresented in the category of attachment (i.e., "If you could keep one student another year for the sheer joy of it, whom would you pick?"), and are significantly overrepresented in the categories of concern (i.e., "If you could devote all your attention to a child who concerns you a great deal, whom would you pick") and rejection (i.e., "If your class was [sic] to be reduced by one child, whom would you be relieved to have removed?") (p. 121).

Similarly, the literature suggests that teachers' perceptions of the inclusion of students with disabilities also depend upon their familiarity with research and their use of instructional strategies. deBettencourt (1999), for instance, studied general educators' attitudes toward students with mild disabilities, as well as these teachers' use of instructional strategies, and found that general educators who had taken fewer education courses individualized instruction to a lesser degree than other educators. Likewise, Smith (2000) found via survey that the majority of teachers reported feeling as if they lacked adequate preparation to teach students with any disability. Yet the research of Swain, Nordness, and Leader-Janssen (2012) indicates that

preservice teachers' attitudes toward inclusion can improve by pairing special education coursework with field experience that involves students with disabilities.

Despite the training that Swain et al. (2012) suggests may facilitate preservice teachers' positive beliefs of inclusive practices, deBettencourt's (1999) findings revealed that, in general, teachers "did *not* use several strategies that research suggests facilitate academic achievement for students with mild disabilities" (p. 33, emphasis in original), pedagogical techniques which include using advanced graphic organizers and learning and metacognitive strategies. The area of "greatest concern" (p. 33) to deBettencourt, however, is the finding that 61% of general educators either disagreed with inclusion or lacked strong feelings on it. As the author contends, "in a time when over a fifth of general educators' classes consists of students with mild disabilities, one would hope that general educators would be more positive toward students with mild disabilities in their classrooms" (p. 33). The varied findings regarding the intersection between teacher training/development and perceptions of students with disabilities may reflect nuances in terminology used by the different researchers, as Woodcock (2013) speculates.

Nevertheless, the negative perceptions and beliefs expressed by the teachers in Cook et al.'s (2000) study as well as deBettencourt's (1999) study reinforce a term from the literature called *instructional tolerance theory*. This theory describes the zone within which (that is, degree to which) teachers can optimally teach, with limited resources, to the various learning styles of students. Gerber (1988) theorizes that in a given classroom, teachers' zones of optimal teaching will, by the very nature of the difficult pedagogical decisions made by teachers, cause some students to become excluded, thus falling outside of teachers' instructional tolerance. The literature presents a complicated scenario, then, which the reader/practitioner may have trouble discerning whether teachers' negative perceptions and/or lower expectations for students with

disabilities lead to less tolerant instructional practices and strategies (see deBettencourt, 1999), or whether a lack of effective teacher training programs and professional development lead to an unpreparedness in the classroom for teaching students with unique learning needs, an unpreparedness which then manifests itself through negative attitudes or perceptions (see Scruggs & Mastropieri, 1996).

Despite the aforementioned research that reflect teachers' negative perceptions surrounding the inclusion of students with disabilities, O'Rourke and Houghton (2009) found that "the classroom teachers involved in this study were overwhelmingly positive about inclusion and the strategies implemented within the program" (p. 34). The program outlines a set of positive-oriented strategies to facilitate the inclusion of students with disabilities and to enhance teachers' positive perspectives of these students, and is known as the TICC Support Program (i.e., Team teaching, Interesting and enjoyable classroom content, Clear instructions, and Collaborative learning opportunities). However, while these four strategies provided optimism for teachers (regarding the benefits of inclusion) on a theoretical level, this enthusiasm did not carry over into teachers executing any meaningful or sustaining changes in their classroom instructional practices (O'Rourke & Houghton, 2009). This contradiction reflects Argyris and Schön's (1974) notion of espouse theories and theories-in-use. Thus, while some research may contradict the idea that teachers hold negative views of students with disabilities, the question of whether teachers possess the time, energy, or expertise to successfully transfer these optimistic or equitable views into practice.

The literature exposes another factor that relates to teachers' perceptions of students with disabilities: the particular nature or severity of the disabilities. For instance, Cameron's and Cook's (2013) study found that teachers' goals for students with disabilities depend upon the

severity, or "obviousness" (p. 18), of the disabilities. That is, for students with mild disabilities, general educators in inclusive classrooms possessed expectations related to academic performance, classroom and behavior skills, and improved self-confidence, while for students with more severe disabilities, these teachers possessed expectations related to social skills, at the expense of academic ones. Furthermore, the findings of Smith's (2000) study "strongly suggest that the severity of a disability affects the regular education teachers' opinion on inclusion. They do not feel qualified to teach students with severe disabilities in the regular classroom" (p. 58). A lack of preparation or qualification on the part of teachers, then, invariably brings about diverging perceptions or goals for students with various disabilities, which is referred to as differential expectations (Cook, 2001; Cook & Semmel, 2000).

The variation among teachers' expectations for students with disabilities speaks to the notion in the literature of whether teachers view students' abilities from a deficit- or an asset-based approach. The deficit-based model of disability places the emphasis (or, at worst, the blame) upon the individual for his disability and often carries a medical connotation, even in educational or social spheres, "operating from the premise that disability is a defect within the individual that is in need of cure or remediation" (Ferri et al., 2005, p. 64). The literature also suggests that the deficit approach to disability has become intertwined with the "historical devaluing of minorities" (Harry & Klingner, 2007, p. 16), and that processes of the deficit approach such as labeling, stereotyping, and stigmatizing are not specifically applied to people with disabilities, but rather to anyone who exists on the fringe of mainstream, normalized society (Cory et al., 2010; Linton, 1998).

However, the literature reveals that recent perspectives in education and science have helped to promote an asset-based model of disability. For instance, the theoretical perspective of

constructivism, which maintains that students must be actively engaged in the classroom in order for learning to occur, takes a "holistic" as opposed to an "atomistic" approach to understanding (Ferri et al., 2005, p. 64). This more fluid, broader approach of constructivism aligns with an asset-based model of disability because it removes the spotlight from the individual with the perceived disability, and instead considers the environments and contextual factors surrounding the labeling of his disability.

According to Armstrong (2012), the scientific exploration of the neurodiversity perspective has, along with constructivism, fostered an asset-based model of disability. The neurodiversity perspective argues against the notion of a so-called typical brain, and instead claims that educators should view students with disabilities in terms of their strengths, not in terms of the labels or related assumptions associated with their particular disability categories. Armstrong (2012) also contends that educators must engage in "positive niche construction," (p. 13) whereby educators determine, after gaining greater awareness of students' strengths, the areas in which each student thrives, and then cultivating those environments for individual students to the greatest extent possible.

Despite the literature on these contrasting approaches of deficit and asset models of disability, it is also important to consider the literature that speaks to the broader framework of disability studies. Disability studies aims to illuminate injustices that occur within various contexts—social, cultural, political, and educational—and aims to consider the problems inherent in individuals' and society's practices and ideologies regarding the notion of disabilities (Cory et al., 2010; Linton, 1998; Linton, Mello, & O'Neill, 1995). As Linton et al. (1995) explain, "disability studies redresses omitted histories, ideas, or bodies of literature and also

analyzes the construction of the category 'disability,' the impact of that construction on society, and on the content and structure of knowledge—fundamental epistemological issues" (p. 2).

More specifically, Linton (1998) suggests a number of "faults and fault lines" (p. 526) with our current constructs of disability, such as isolating disability as solely an individual or family matter (that is, ignoring the power of environment and context in labeling and understanding disability), considering disability to be a problem in the first place, and objectifying and oversimplifying disability (particularly through empirical literature and other research). Finally, Ferri et al. (2005), in their exploration of the discourses of disability, contend that individuals are so interconnected and interdependent within our society that in order to construct notions of disability (or any other social/cultural concept, for that matter), individuals rely upon *scripts* to formulate and reinforce our worldviews. While this needing of others for meaning-making may not seem problematic in and of itself, in the context of constructing notions of disability it creates an extremely narrowed view of disability, it legitimizes the creation and maintenance of labels, stereotypes, and social/cultural archetypes, and it ultimately breeds judgment instead of genuine understanding and tolerance (Ferri et al., 2005).

Other authors, although not specifically discussing disability studies or discourses, echo the broader-than-classroom contextual levels that may lead to inequities for students with disabilities, in terms of opportunities for critical thinking and otherwise. Giroux (2001) criticizes our society's inability, or unwillingness, to consider some of the broader issues and contexts that can breed inequity, even on the classroom level, when ignored:

> The institution of education and the discourse of pedagogy have been largely eliminated from discussions of politics, power, and democratic transformation…In many respects, there is a cynical refusal on the part of all of these ideologies to engage schools as critical

> sites of cultural and political struggle and pedagogy as a crucial element in waging such battles. (p. 3)

Giroux further claims that refusing to view pedagogy "as a moral and political practice does more than undermine the opportunity for educators to explore its transformative possibilities; it also means that they often have no language for recognizing the abuses often exercised under the rubric of teaching" (p. 8). As Giroux suggests, by our failing to acknowledge the pedagogical power that teachers wield (for better or worse), we are hindering their abilities to create more equitable classrooms.

Although it is a complex task to consider the broader influences on pedagogical power and on teachers' perceptions of diverse learners, the literature builds from Giroux's (2001) notions of power, as it relates to several elements, including the institutionalization of ideas and values, the discourses among teachers within schools, the forming of teachers' dispositions, and the hidden process of norming. Several authors (e.g., Ball, 1990; Drew & Heritage, 1997; Smith, 2008; Thornborrow, 2002) have discussed the significance of institutional discourse in terms of influencing teachers' knowledge and the power that knowledge may or may not hold for its learner. As Ball (1990) explains, discourses are "about what can be said, and thought, but also about who can speak, when, where and with what authority" (p.17). Implicit in Ball's statement is the idea that discourse is inextricably linked to power, which other authors discuss in the literature as well.

Smith (2008) describes Habermas's institutional talk, or "strategic talk," as discourse that is "power-laden and goal oriented" (as cited in Thornborrow, 2002, p. 2). In other words, strategic talk describes how discourse is not neutral or benign, but instead serves to benefit one

concept, position, or group of people at the expense of other ones. Elbaz (1990) explains the process by which discourses become power-laden within a given context:

> One looks at the ongoing praxis of a given community or cultural group through the various forms of discourse with make up the social text of that group; the particular signifying practices of a given group are both constituted by and constitutive of the discursive field within which members of the group live and function. Another way of putting it is that "language provides the conceptual categories which organize thought into predetermined patterns and set the boundaries on discourse (Bowers, 1987). Further, the ability to determine these conceptual categories constitutes power. (p. 15)

As Elbaz intimates, certain approaches to learning and certain values become normalized through language within the collective culture (or epistemic culture) of the group—among faculty and preservice teachers within a higher education program, for instance—while other approaches or values become viewed as less desirable, either overtly or covertly.

While these asymmetrical discourses (Drew & Heritage, 1997) may seem harmless or inconsequential, their effects can trickle down to issues of equity in the classroom, such as how teachers view the critical thinking abilities of students with and without disabilities. To examine discourses and their effects with a critical eye, one should consider the following three questions: 1) Around what concepts and beliefs is the context organized, and what assumptions guide the group members' decisions to distribute value unevenly?; 2) Who leads the development of a particular subject within a context?; 3) What can be said about how discourse is produced, and what is the impact of the development of this discourse? (Elbaz, 1990; Foucalt, 1979). These questions, which essentially ask the *what, who,* and *how/why* of discourse and the resulting process of norming, may be too theoretical for teachers to consider following everyday

classroom experiences. However, this intersection of discursive power and equity for all students seems relevant to the current study because of the deep-seated and complex nature of how teachers come to formulate and adapt their beliefs and viewpoints of their students' abilities.

How teachers view their students (in terms of critical thinking and otherwise) is closely aligned in the literature to the concept of teachers' dispositions, which can "capture both the perspectives teachers have forged through their life experiences and those they are developing in their everyday teaching" (Hand, 2012, p. 234). It is both of these elements of disposition that are relevant to the current study, as teachers' (in)equitable beliefs about students' abilities to think critically likely draw from the past and the present. Furthermore, teachers' dispositions both reflect and are reflected by the contexts in which they reside, and thus relate to the aforementioned discursive power that grows out of these communities or institutions; as discourses of power either reinforce or challenge teachers' dispositions, these dispositions may adapt over time (Hand, 2012; Martin, 2007; Stinson, 2008). As Hand, Penuel, and Gutierrez (2012) suggest, stakeholders in education "stabilize or destabilize power structures in local school contexts by acting and using tools in ways that signal (consciously or subconsciously) their attention to larger social imaginaries" (p. 254).

The nature of teachers' dispositions, in light of the powerful forces of context, discourse, and norming (i.e., attention to the larger social imaginaries), becomes interesting when considering how and why teachers' values have (or have not) shifted throughout their careers, and what these values convey about teachers' views on critical thinking and equity. In a discourse that often emphasizes teaching as "knowledge production" as opposed to "self-production," it is almost impossible to use pedagogy as a process for teachers to become attentive to their own dispositions and ideologies (Giroux, 2001, p. 11). The current study may

illuminate some of these elements, toward reaching a better understanding of how classrooms with critical thinking can places of equity for all learners.

Conceptual Framework

After having reviewed the body of literature that relates to the overarching question of how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms, it is important to discuss the concepts and theories that frame this investigation. The first two concepts involve a discussion of epistemology, which refers to the nature of knowledge (Merriam, 2009), and which "is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate" (Maynard, 1994, p. 10).

Personal Epistemological Beliefs. Fazey (2010) uses the term *personal epistemological beliefs* (PEBs) to describe "the beliefs that people hold about the nature of knowledge and how something is known" (n.p.). Fazey (2010) and others (e.g., Kitchener, 1983; Kuhn, 2000) contend that the recognition of one's PEBs allows one to operate at higher levels of thought, or critical thought. In other words, the metacognitive process of understanding one's own viewpoints of the nature of knowledge construction requires critical thinking abilities. This concept of PEBs and their link to critical thinking pertains to this research investigation in four respects, each with a distinct focal point.

First, in the most abstract sense, this investigation has facilitated the researcher's exploration of his own PEBs, as a research project demands its researcher to consider his topic of interest through the frame of his personal experiences and values and his understanding of the nature of knowledge. Second, in alignment with the methodology and methods of this

investigation, the researcher seeks to recognize and understand the participants' PEBs, which may then help to explain how these teachers' conceptualizations of critical thinking influence their instructional practices for students with disabilities. Third, on a practical and classroom-specific level, because recognizing one's own PEBs may facilitate critical thinking (Fazey, 2010), this investigation's participants may, during the data collection phases, directly or indirectly convey the notion that in order to foster students' critical thinking abilities, the teachers must make the course content relevant or meaningful for their students (i.e., teachers must help students recognize their own PEBs in order to think critically). Fourth, although this investigation will not involve students as research participants, personal epistemic beliefs "may provide further insight into how individuals make meaning and how this in turns affects learning" (Hofer, 2000, p. 379). Thus, the concept of PEBs seems embedded throughout the various layers of this investigation of critical thinking, and therefore is a necessary part of the conceptual framework.

Epistemic Culture. Besides PEBs, *epistemic culture* is another concept that involves a discussion of epistemology. Epistemic culture refers to the arrangement, machineries, and mechanisms through which we gain knowledge (Knorr Cetina, 1999, 2007), or the collective attitude or thoughts that a certain group possesses about knowledge or the nature of knowing (Jones, 2007). As Jones (2007) argues, the epistemic culture of a particular group within an academic discipline influences how that group conceptualizes critical thinking: The group's conceptualization of critical thinking (among other constructs or skills) within a given domain relies in part on how "skills are constituted in teaching, assessment, and learning," so that it becomes "necessary to explore the ways in which the epistemic culture shapes teaching practice" (p. 87). In other words, a group of teachers in a given content area implicitly and/or explicitly

promotes skills, such as critical thinking, in a manner that reflects how the group collectively understands the nature of knowledge.

This relationship among critical thinking abilities, the nature of knowledge, and pedagogy becomes important when considering the research question of how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms. For instance, convergences among teachers' conceptualizations may reveal the mechanisms of a strong epistemic culture (Heath, 2012), that is, a strong sense of unity or even consensus among teachers in terms of how they view the meaning or the purpose of knowledge in their particular academic domain. On the other hand, divergences among teachers' conceptualizations may reveal the mechanisms of a weak epistemic culture (Heath, 2012), or may indicate that those particular teachers operate more independently and rely upon one another to a lesser extent than teachers within other academic domains. Furthermore, the notion of epistemic culture recognizes knowledge as a process and as a practice as opposed to "the representational and technological product of research" (Knorr Cetina, 2007, p. 364). Epistemic culture, then, may explain the degree to which various teachers within a given subject area agree share an understanding of critical thinking, and to emphasize practice over product, or the processes of critical thinking that may occur for students with disabilities instead of the mere products of critical thinking in the classroom.

The Broader Context of PEBs and Epistemic Culture. As mentioned previously, a discussion of epistemology traverses multiple contexts, and as Vandermensbrugghe (2004) suggests, critical thinking can only be understood from its broadest contextual level. Although a high school is the research setting of the current study, it seems beneficial to go beyond the

classroom walls to explore the broader, institutional mechanisms that influence the researcher's PEBs, those of his participants, and the epistemic cultures that may exist within schools.

To consider the broader factors that influence one's beliefs, and thus one's conceptualizations about critical thinking, one must explore how individuals acquire knowledge over time, and how they develop academically. Alexander (2000) argues that knowing and knowledge possess an idiosyncratic quality that exists "above and beyond the shared understandings that arise from the sociocultural nature of human learning and development" (p. 29); these personal understandings can extend beyond any specific time or place (Cobb, 1994). In other words, despite the solidified structures of thought that exist in the social world, we each possess unique beliefs and values. Because our understandings of the world are individualized, fluid, and context-diverse (Cobb, 1994), so do we learn and grow over time in the academic sense (Alexander, 2000). This understanding of individuals' long-term academic development may support the argument that teachers' conceptualizations of critical thinking shift throughout their careers, and that individuals' academic knowledge, or theories of academic learning, do not derive solely from their studies in their higher education degree programs, but also from their everyday experiences in the workplace. This does not necessarily detract from the power that institutions of higher learning hold in terms of formally and informally shaping and molding their students' professional beliefs, but it does suggest that individuals' processes of knowledge construction are neither short-lived nor derived only from formal institutions.

If Alexander (2000) argues for the individualized nature of knowledge construction despite a broader sociocultural nature of learning and development, Sfard (1998) argues for individuals' epistemological beliefs *because of* this broader sociocultural framework. Sfard describes an environment in which learning occurs as one marked by "situatedness,

contextuality, cultural embeddedness, and social mediation," in which the learner is a social participant as opposed to a private consumer, and in which learning a subject is equated to joining a community, a process which "entails, above all, the ability to communicate in the language of this community and act according to its particular norms. The norms themselves are to be negotiated in the process of consolidating the community" (p. 6). Similarly, Hodkinson (2005) claims "to be an individual person is to be a social person. To be human is to be socially positioned, with socially derived and constructed dispositions, and socially derived and constructed identities" (p. 112). While Hodkinson (and Sfard, for that matter) may agree with Alexander's notion of an idiosyncratic quality of knowing, Hodkinson emphasizes the idea that this duality of an individual person versus an individual product of society is a fruitless one. As with Alexander, however, Hodkinson suggests that teachers' sources of knowledge construction and academic learning extend beyond the formal walls of higher education, and continue to develop throughout their careers.

Another dualism to dismiss, according to Hodkinson (2005), is that of formal versus informal learning, which relates to the discussion of the broader contexts within which teachers develop their beliefs about knowledge and, by extension, critical thinking. Although Hodkinson does not discuss critical thinking directly, his arguments against this dualism would indicate the belief that critical thinking is taught, like other academic concepts, in educational settings, but also in everyday contexts as well. In other words, according to Hodkinson, making distinctions between formal and informal learning serves no useful purpose, since students glean informal content (including an understanding of critical thinking) from institutions that are often viewed as scholarly or formal, such as teacher training programs in post-secondary schools.

However, Hodkinson (2005) scrutinizes that, in the literature, "there is little discussion here about the nature of education and schooling as macro institutional phenomena…There is little explicit focus on the wider social, economic, political and historical contexts [of learning]" (2005, p. 109). In a sense, Karnieli-Miller, Strier, and Pessach (2009) address Hodkinson's concern, in that they discuss the importance of context in research and learning, particularly in qualitative research, which could be considered a function of macro institutional phenomena. They suggest that this wider context involves how the researcher is situated within the content of the research inquiry as well as the institutional setting in which the study is conducted. As Karnieli-Miller et al. convey, the researcher's epistemological stance plays a pivotal role in the research process, and the researcher's beliefs are inextricably bound to the institutional context. Thus, the ideas of Hodkinson and Karnieli-Miller et al. align with those of Alexander (2000) and Sfard (1998), as all of these authors recognize the power of everyday contexts and groups in shaping individuals' beliefs and ways of knowing, beyond the formal walls of higher education programs. It seems likely, then, that these societal and institutional forces have been shaping the researcher's and teachers' personal beliefs regarding critical thinking in complex and multifaceted ways, some of which may become clearer in the data collection and analysis processes, as well as in the discussion of findings.

Domain Specificity and Generality. Linked to the discussion of context are *domain specificity* and *domain generality*, or "to what extent does it make sense to think of learning as specific to particular disciplines or contexts, as opposed to thinking of it in more generic terms?" (Hodkinson, 2005, p. 116). Domain specificity refers to the notion that one's conception of knowledge or the nature of knowing (i.e., epistemic beliefs) entirely depends upon the context or area of study in which the learning occurs, and that one's beliefs do not automatically translate

into another context. Conversely, domain generality describes the opposite: that epistemic beliefs transfer among contexts (Hofer, 2000, 2006; Hong & Milgram, 2010; Muis, Bendixen, & Haerle, 2006).

Some researchers have found that epistemic beliefs are domain-specific (e.g., Chi, Feltovich, & Glaser, 1981; Glaser & Chi, 1988), while others have found them to generalize beyond the context (e.g, Schommer & Walker, 1995; Schommer-Aikins, Duell, & Barker, 2003). However, as the research of Muis et al. (2006) suggests, the question is not whether one's personal epistemic beliefs—and, by extension, the epistemic culture of a group—exist solely within the domain or whether they generalize among all possible contexts, but rather how some elements of one's epistemological stance or a group's epistemic culture are situated within a specific domain and how other elements extend beyond that domain. This issue of epistemic culture for a given domain becomes relevant when considering, for instance, general and special educators, who may co-teach in a given *academic* domain, but still exist within separate *social* or *ideological* domains.

If the reader follows the assumption that different components of one's epistemic beliefs exist both within and beyond a given domain—no matter how a domain is defined (Ennis, 1997)—then the question becomes, what beliefs might one domain hold as truth compared to other domains? Answering this question is complicated because academic disciplines possess unique "knowledge structures and epistemological assumptions" (Hofer, 2000, p. 384; see also Donald, 1995 and Schwab, 1964, 1978). Furthermore, Langer (1994) found that high school teachers' pedagogy and educational objectives reflected discipline-specific epistemologies. It seems likely, then, that individuals possess domain-general epistemic beliefs, which they then adapt, as needed depending on application, to fit the domain-specific context (Hofer,

2000). (This adaptation of beliefs from the general to the specific may relate to Argyris's and Schön's (1974) notions of espoused theory and theory-in-use, which will be discussed subsequently.). Extending beyond the individual level, if other members of the domain-based group hold these same beliefs within their shared context, an epistemic culture emerges.

Now that the concepts of domain specificity and generality are illuminated, one must consider them in the context of critical thinking. Ennis (1997), one of the seminal authors of critical thinking research, uses the notion of domain specificity to frame the issue of how to incorporate critical thinking into course curricula. Although Ennis (1997) poses the question, "Is critical thinking domain specific?" he explains how seeking an answer "usually turns out to be complicated, partly because it is fraught with ambiguity and vagueness, and partly because it interacts with a large number of other issues" (p. 1). The ambiguity and vagueness to which he refers reflects, at least in part, the diverging definitions and understandings of critical thinking (Cuban, 1984; Lewis & Smith, 1993; Mulnix, 2012; Rudd, 2007), will be explored in the review of the literature. However, determining whether, or to what extent, critical thinking is domain specific also depends upon how one views the goals of education (Ennis, 1997; Pinkney & Shaughnessy, 2013) and to which type of domain specificity one refers: either empirical domain specificity, which suggests that learned critical thinking does not transfer from one context to another, or epistemological domain specificity, which suggests that critical thinking is unique to each domain (Ennis, 1997).

The goal in presenting these domain-related concepts is not to make a claim about whether critical thinking is domain specific or general, or about whether empirical domain specificity or epistemological domain specificity applies to critical thinking. Instead, it is important to recognize these concepts within the discussion of how teachers' conceptualizations

of critical thinking influence their pedagogy for students with and without disabilities. In other words, through the data collection and analysis processes, the researcher and the reader may come to a greater understanding of how to position teachers' beliefs and practices in light of domain specificity and generality.

Espoused Theory and Theory-in-Use. In their book, *Theory in Practice: Increasing Professional Effectiveness*, Argyris and Schön (1974) provide a framework for understanding how the relationships among individuals' espoused theories (i.e., their theories of action drawn from knowledge or insight) and their theories-in-use (i.e., their theories of action drawn from specific, observable behaviors) explain their professional practices. In simple terms, if someone were asked how he would behave in a given situation, his espoused theory of action would dictate what he would claim to do, while his theory-in-use would inform his actual behaviors (for examples, see Argyris & Schön, 1974; Jones, 2009; Kane, Sandretto, & Heath, 2004; and Schön, 1987). Gersten, Baker, and Lloyd (2000) use the term *slippage*, closely akin to the gap between espoused theory and theory-in-use, or the gap between "experimental conceptualisation [sic] and execution" (O'Rourke & Houghton, 2009, p. 34).

While slippage and espoused theory and theory-in-use may apply to many professional fields, they seem particularly relevant to education because the majority of teachers' training, excluding student teaching, occurs on the theoretical and hypothetical level within institutions of higher education, in which teachers' espoused theories "encompass the world view and values upon which [teachers] *believe* their behavior to be based" (Jones, 2009, p. 177, emphasis in original). However, these values and beliefs may not align with their future experiences in the classroom, or with their theories-in-use (Argyris & Schön, 1974; Jones, 2009). This imbalance

between espoused theories and theories-in-use can occur in all professions, but with children's well-being at stake, it seems especially important to achieve congruence.

Congruence represents one criterion that Argyris and Schön (1974) suggest as necessary to consider when evaluating theories of action: "Lack of congruence between espoused theory and theory-in-use may precipitate search for a modification of either theory since we tend to value both espoused theory (image of self) and congruence (integration of doing and believing)" (p. 23). Argyris and Schön (1974) further contend that while no virtue exists in congruence alone, congruence is beneficial in the long run in order to retain one's positive sense of self. To illustrate the relevance of congruence for this research investigation, consider a teacher who holds strong values and beliefs (i.e., espoused theories) about the importance of fostering critical thinking for all students, including those with disabilities. Yet, if her classroom experiences (i.e., theories-in-use) prove challenging enough that she lacks the time, energy, will, and/or resources to promote critical thinking for students with disabilities to the same extent as those without disabilities, her innate drive to retain a positive self-concept may lead her to seek congruence. To this end, she may modify her values and beliefs about whether students with disabilities deserve to attain the same levels or same types of critical thinking, thus adapting her espoused theories to match her theories-in-use. Instead, by recognizing this incongruence, she may possess the understanding needed to adjust her classroom practices or theories-in-use to meet her own high expectations established through her espoused theories.

Jones (2009) explains that despite the importance of generic attributes (of which critical thinking is one type) for student learning, "there is often a lack of consistency between beliefs about the importance of these skills and attributes and the degree to which [beliefs, skills, and attributes] exist in teaching practice" (p. 175). Jones (2009) further argues that these skills and

attributes are complex and often remain implicit in teaching. Argyris and Schön (1974) make a similar argument regarding theories-in-use: They exist as tacit knowledge, and face problems of existence (i.e., "How do we know a person's theories-in-use exist if we cannot state them"?), inference (i.e., "If the manifesting behavior does not, in some instances, appear, how can we infer the theories-in-use?"), and learning ("How can we change an existing theory-in-use or learn a new theory-in-use when we cannot state what is to be changed or learned"?) (pp. 9-10). Related to the tacit or implicit nature of generic attributes and theories-in-use, Jones (2009) claims that this gap between theory and practice results from variations in interpretations of generic attributes like critical thinking, from difficulties in "reducing complex attributes to definable learning outcomes" (p. 175), and practical constraints on teaching. Finally, Jones (2009) brings the concept of epistemic culture into the fold by suggesting that generic attributes, like critical thinking,

While a thorough discussion of the research methods for this investigation will occur in the subsequent chapter, it seems relevant to note that utilizing interviews and observations as methods of data collection may foster a richer understanding of teachers' espoused theories (primarily conveyed through their in-depth biographical and semi-structured interviews) and of their theories-in-use (primarily gleaned through the researcher's classroom observations). Although the main purpose of the research investigation is not to understand (in)conguence between teachers' espoused theories and theories-in-use, it seems important to consider these ideas during the data collection and analysis stages, because these ideas may help to shed light upon the relationship between teachers' conceptualizations of critical thinking and their instructional practices for students with and without disabilities, and may help educators to understand the relationships among teachers' theories, actions, and epistemic cultures.

Methodological Framework

The overarching research question for this study asks, How do general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms? Embedded in this question are three sub-questions that expand upon a different aspect of the overarching question explored in the literature. Because these questions derive from others' research and without yet conducting the study, they reflect *etic*, or outsider, issues (Merriam, 2009; Stake, 1995).

1) How do teachers define, understand, and view critical thinking? How teachers operationalize this term may suggest what ideas or beliefs they value in education. It also leads into the next question, which involves teachers' beliefs about diverse learners.

2) How do teachers frame the aptitude and achievement of students with disabilities in light of their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking? How they understand the abilities and chances for academic growth for students with and without disabilities may inform their instructional decisions in the classroom, which relates to the third question.

3) How and when do teachers incorporate critical thinking into the classroom for students with and without disabilities? This answer will likely involve a great deal of variety amongst teachers (e.g., during group work, individual activities, formative or summative assessments, verbal exchanges), and may provide valuable insight into teachers' diverging viewpoints of effective teaching and learning in terms of critical thinking. The answer may also allow for a more thorough understanding of when and how to best strengthen the critical thinking skills and dispositions of students with disabilities, and one might argue, for their teachers as well.

Researchers should obtain a strong connection between the research questions and the end product, that is, the understandings and insights that one hopes to gain surrounding a research topic (Merriam, 2009). To address these questions regarding their conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms, the proposed research study will follow the structure of a case study, a method of qualitative research that, according to Merriam (2009), sprouted in the literature in the 1980s with Stake (1988), Yin (1984), and Merriam herself (1988). In fact, the study is comprised of four cases—one case for each of the four participants—which allows the researcher to conduct cross-case analysis during the data analysis process.

Choosing a case to study should, first and foremost, involve maximizing what we can learn, with the caveat that learning often takes the form of refining one's own understanding of a topic as opposed to creating a brand new understanding (Stake, 1995). A case study method allows the researcher to understand deeply an event or phenomenon—one that may prove too complex for a survey or experimental design—and framed within the context or environment of interest (Creswell, Hanson, Clark Plano, & Morales, 2007; Yin, 2009). In fact, Frake (1977) explains how qualitative research thrives in complexity without rendering the topic opaque. The case of study (or, for the current study, the four cases) exists within a bounded system, even if these boundaries seem nebulous, and the unit of study must involve one particular situation, program, or context (Creswell, 1998; Stake, 1995).

Merriam (2009) deems the bounded nature of a case study *particularistic* due to its specificity and of its intensity of focus, and explains that because it is "anchored in real-life situations, the case study results in a rich and holistic account of a phenomenon" (p. 51). Thus, a case study provides an in-depth understanding of a particular, focused context (Creswell, 1998;

Creswell et al., 2007). This focused context of case study research is appropriate for the current study because the researcher can use a small number of participants (four, in this study) toward reaching his goal of clarifying and understanding, in practice, the vague or conflicting conceptualizations of critical thinking that exist in the literature, as well as exploring critical thinking in relation to students with disabilities.

The current study is considered an instrumental case study (with four cases) as opposed to a collective or intrinsic case study because the researcher has selected an issue *before* selecting the bounded cases to illustrate the issue (Creswell et al., 2007; Stake, 1995). The researcher utilizes Yin's (2009) term *representative* case, one of the forms of case studies, to describe the study, in the sense that the researcher hopes to "capture the circumstances and conditions of an everyday or commonplace situation" (p. 48) that give rise to teachers' viewpoints and pedagogies related to critical thinking. This case study could, then, represent or mirror the experiences of other educators in similar contexts. The word *could* is emphasized because, as Maxwell (1996) explains, "qualitative studies often employ small samples of uncertain representativeness," as many case studies, including mine, "can provide only suggestive answers to any question framed in general terms" (p. 55). A case study can, however, sufficiently address a question posed in particularizing terms, if the question delineates the boundaries of the cases. The relationship between particularization and generalization will be discussed further when considering the limitations of the study.

Despite the negative connotation of Maxwell's (1996) "uncertain representativeness" (p. 55), representative case studies possess other benefits. In addition to case studies allowing for potential applicability across similar contexts, scholars also hail the case study design in general for its ability to connect the researcher to the reader. Stake (1995) describes the case study as

more contextual and more developed by interpretation compared to other research designs, which makes the case study more generalizable by the reader. As Merriam (2009) claims, "it is the reader, not the researcher who determines what can apply to his or her context" (p. 51). That the value of a case study derives from the reader in addition to the researcher reflects the *heuristic* feature of the case study, in that the case study illuminates the reader's understanding of the case or phenomenon (Merriam, 2009).

Stake (1995) conveys a similar idea through the concept of *naturalistic generalizations*, or "conclusions arrived at through personal engagement in life's affairs or by vicarious experience so well constructed that the person feels as if it happened to themselves" (p. 85). The researcher will embrace Stake's (1995) suggestions of how the researcher might assist in the validation of naturalistic generalization, which include the following: incorporating accounts of matters with which readers are already familiar; providing adequate raw data before interpretation, thus allowing for readers' alternative interpretations; describing the research methods in everyday language, for readers' ease of understanding; making information available about the researcher; and emphasizing how reported happenings could or could not happened, while de-emphasizing the idea that validity derives solely from observed phenomena. Heuristic features and naturalistic generalizations, then, allow the reader to find personal value from the case study, making it more relevant and meaningful.

Conclusion

Dividing the literature into three sections allows one to recognize where the research is thorough and where it requires further inquiry. For example, although the literature offers a handful of definitions of critical thinking, the lack of consensus in definitions indicates the need for more discussion on this front. On the other hand, a strong majority of the literature describes

how and when teachers incorporate critical thinking into the classroom, which may reflect the concept of attempting multiple solutions despite a single, unified understanding of the problem. Despite the breadth and depth of research on scaffolds and strategies for critical thinking, the literatures is largely unable to address how the needs of students with disabilities may differ from those without disabilities, nor do many researchers consider a global, long-term approach to critical thinking. Clearly, the long-term approach to critical thinking and its influence on teachers' decision-making processes and pedagogy for students with disabilities demand further research, as educational stakeholders should consider students' varied learning styles and abilities as well as the purpose and impact of critical thinking for American adolescents in the future. By reviewing the relevant literature in terms of defining and eliciting critical thinking for students with disabilities, several research questions emerge which support the proposed study on critical thinking, questions which may address the aforementioned gaps in the research. The theoretical and methodological framework of the study begins with a discussion of these very questions.

Chapter 3: Methodology

The overarching research question asks, How do general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms? In order to address this question, this qualitative investigation will utilize case study methods (with four cases—one per participant) and will incorporate anecdotal observations (field notes), in-depth biographical and semi-structured interviews (transcripts), and participant-generated visual data in the content area of English (literature and composition) as data sources. Participants will include two general and two special education teachers in inclusive settings in a high school, each of whom is in a co-teaching

partnership. The research methodology and methods are described in detail below, beginning with a description of the research setting, followed by an explanation of the participant selection process. Next, data collection and data analysis methods will be discussed, followed by limitations and delimitations of the case study. These sections will precede a consideration of ethical issues and a description of the research participants, before concluding with a summary of the methodology and a short explanation of the subsequent chapter on data collection.

Research Setting

The current study occurred within a high school located in a suburban area of a major metropolitan area of the southeastern United States. The school houses just over 1,800 students, making it one of the smaller schools in its county. Most of the students in the school are part of the racial and ethnic majority—81% identify themselves as White/Non-Hispanic, 6% as Asian/Pacific Islander, and 7% as Black/African American, and 1% identify themselves as being Limited English Proficient—and most come from affluent or middle-class backgrounds, with 9% of students receiving free or reduced-price lunch ("2011 Profiles Report," 2011).

This school is high-achieving and has received local, state, and federal recognition for the academic achievements of its students. For instance, on the newly-developed College and Career Ready Performance Index (CCRPI)—which serves to identify schools' successes and challenges (much like the measure of Adequate Yearly Progress within President Bush's No Child Left Behind initiative)—the school scored 94.1, which is the 14th highest in the state and the 6th highest of a non-magnet high school ("College and Career Ready Performance Index," 2012). In addition, Newsweek listed the school as within the top third of the best 1,000 high schools in 2012 ("America's Best High Schools," 2012). In terms of testing, the school's pass rate for the state's writing test was 100% in 2012 ("Improved High School Writing Test Results

Reflect District Focus On Writing Skills," 2012) and 2013 ("Cobb County School District Testing Brief: Georgia High School Writing Test," 2013), and in 2012, 98.8% of students passed the End Of Course Test (EOCT) for 9th grade Literature and Composition, and 99.3% passed the EOCT for American Literature and Composition ("College and Career Ready Performance Index," 2012).

Based upon these achievement levels, it may not be surprising that much of the student body is commonly considered to have high socioeconomic status (SES) among stakeholders in the area. Although the intersection of SES and critical thinking is not at the forefront of the current study, it seems important to acknowledge that the study's findings may, in some respects, reflect the SES of the school. It is presumptuous to assume that the participants in the study will address SES directly in interviews, but it is more likely that the participants' beliefs about critical thinking or about the nature of its relationship to students, may link to issues of SES.

As a simple example, a participant may indicate that although her students' parents help their children with the homework on a regular basis, and although the parents are very involved in the mechanisms of the school, parents do not really understand how to foster their children's critical thinking skills. Of course, the latter part of this example is more directly related to the current research topic, but the former part about parental involvement may speak to the high SES of the school. In other words, at a school with more middle-class or impoverished students, teachers may be less likely to discuss parents' lack of knowledge of how to foster critical thinking, if, stereotypically speaking, fewer parents at these schools are as involved in the educational process as parents at a high SES school. In addition, in a mixed methods study, Law and Kaufhold (2009) found that teachers in high-achieving schools viewed themselves as more capable of fostering critical thinking compared to teachers in middle- and low-performing

schools. Thus, SES in relation to critical thinking may prove to be an important element to explore during or after data analysis, and may be an area that deserves further research.

Before even considering SES or other factors, though, it is necessary to examine critical thinking as a concept within the school. The classroom context will provide a deeper and more practical understanding of how teachers conceptualize critical thinking for students with disabilities beyond the somewhat theoretical or hypothetical understanding from the literature. Because the literature review yielded divergent understandings and conceptualizations of critical thinking, it seems important to conduct this descriptive study in the classroom context, in order to either echo the variability found in the research, or to provide evidence and analysis for the idea that, at least within the bounded system of this particular high school, teachers within one context can share a common belief system, purpose, and implementation of critical thinking for students with and without disabilities. The high school's strategic plan supports a goal that seems to relate to critical thinking. The document indicates that a key strategy for the school is to "develop, implement, and support new plans and/or programs that focus on student-centered learning, higher-order thinking, and problem solving in the classroom" ("School Strategic Plan - High," 2013, p. 1). Similar to the influence that SES may hold over participants' conceptualizations of critical thinking and beliefs about student learning, the strategic plan may not exert an overt impact on teachers, but at least seems to possess the potential of shaping teachers' beliefs and practices within the inclusive classrooms at the school.

At this high school, an inclusive setting refers to a classroom which contains a general and a special educator who co-teach, and whose students include those without disabilities and those with high-incidence disabilities such as autism, learning disabilities, and attention deficit/hyperactivity disorder. As such, the current investigation will utilize the same meaning of

inclusion or inclusive classroom. Furthermore, both in spite of and because of the researcher's familiarity with high school inclusion classes in literature and composition, the hope of this research endeavor is to understand other teachers' viewpoints regarding critical thinking in inclusive English classrooms in expanded, if not new, ways (Stake, 1995). Finally, the researcher's employment at the site of the bounded case does present the potential issue of social desirability, which will be addressed in the limitations section.

Selection of Participants

Rationale and Criteria. The research participants have been selected based upon their profession as educators at the high school in which the investigation will occur, which was chosen via convenience sampling. Because the qualitative investigation utilizes case study methods, it is important that all four participants teach within the same school to allow for appropriate data analyses within this bounded system. Furthermore, selecting general educators and special education co-teachers is necessary in order to capture the co-teaching dynamic, in the inclusive setting, to the fullest possible extent. At this school, as with many other schools, inclusive classrooms utilize co-teaching models, with one general educator and one special educator. Although other iterations of co-teaching partnerships exist (e.g., a general educator with a speech/language pathologist or occupational or physical therapist), focusing on the traditional co-teaching partnership of one general and one special educator seems the most practical for the current study.

Selecting teachers of literature and composition courses reflects the researcher's interest in this content area because it fosters important skill sets for life, like literacy, textual analysis, and speaking and listening skills. The question of how many English classes a general educator teaches is moot, since all English teachers at the school only teach English classes (as opposed to

splitting their time between two disciplines, such as social studies and English), but it is not moot when considering special educators. Due to scheduling needs, some special educators traverse among multiple content areas in a given year. However, focusing solely on literature and composition courses for the investigation reinforces the need for the special education-based participants to possess considerable experience in this chosen content area, in order to ensure that they can respond to the interview questions without much concern of misunderstanding or confusion surrounding content vocabulary or pedagogies that are unique to literature and composition courses. For participant selection, the study will utilize a typical purposeful sample, or nonprobability sampling (Merriam, 2009), "in which particular settings, persons, or events are selected deliberately in order to provide important information that can't be gotten as well from other choices" (Maxwell, 1996). The type of purposeful sampling that the investigation will utilize is convenience sampling (Merriam, 2009), as the setting of the study is also the high school where the researcher works.

Data Collection Procedures

The sources of data collection for the study include interviews, observations, and visual data. The data collection process will be explained (see Appendix B for a timeline), followed by a more thorough discussion of each data source.

Phase 1: In-depth Biographical Interviews and Observations. Phase one of data collection begins with individual, in-depth biographical interviews with both members of the 9th Lit co-teaching partnership. At the beginning of these interviews, participants, who are a general and a special educator, will receive a prompt which asks them to visually represent their conceptualization of critical thinking (see subsequent section entitled "Data Source 3: Visual Data" for a detailed description of the visual representation; see Appendix C for interview

protocols; and see Appendix D for the visual data prompt). Both participants from the 9th Lit co-teaching partnership will be asked to return the visual representation, which they will have completed on their own time, to the fourth interview for discussion and collection by the researcher. Following the first, individual interviews for the general and special educator in the 9th Lit co-teaching partnership, one classroom observation will occur for the 9th Lit co-teaching partnership (see subsequent section entitled "Data Source 2: Classroom Observations" for a detailed description of the observation process).

Then, the same process will occur for the general and special educator who comprise the Multicult Lit partnership. As with the 9th Lit partnership, individually-administered, in-depth biographical interviews will occur for both members of the Multicult Lit partnership, the visual data prompt will be given to both members of the co-teaching partnership (to be collected by the researcher during the fourth interview), and one observation of the Multicult Lit co-taught classroom will take place. Therefore, when including both the 9th Lit and the Multicult Lit co-teaching partnerships, phase one of data collection is comprised of four in-depth biographical interviews (one per participant), two classroom observations (one for the 9th Lit and one for the Multicult Lit co-teaching partnerships), and four visual prompts distributed (one per participant), to be collected at the fourth interview.

Phase 2: Semi-structured Interviews (Individual) and Observations. Phase two of data collection begins with individual, semi-structured interviews with both members of the 9th Lit and both members of the Multicult Lit co-teaching partnerships. The second phase of interviews will focus primarily on exploring the sub-question, How do teachers define, understand, and view critical thinking? Following the second, individual interviews for both members of the 9th Lit and for both members of the Multicult Lit co-teaching partnerships, a

second classroom observation of each co-teaching partnership will occur. The purpose of the second observations is to see how the participants' theories and conceptualizations are enacted in practice, and to gain additional context for understanding participants' thoughts, actions, and motivations. When including both the 9th Lit and the Multicult Lit co-teaching partnerships, phase two of data collection is comprised of four interviews (one per participant) and two classroom observations (one for the 9th Lit and one for the Multicult Lit co-teaching partnerships).

Phase 3: Semi-structured Interviews (Individual) and Observations. Phase three of data collection begins with individual, semi-structured interviews with both members of the 9th Lit and both members of the Multicult Lit co-teaching partnerships. The third phase of interviews will focus primarily on exploring the sub-question, How do teachers frame the aptitude and achievement of students with disabilities in light of both their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking? Following the third, individual interviews for both members of the 9th Lit and for both members of the Multicult Lit co-teaching partnerships, a third classroom observation of each co-teaching partnership will occur. The third observations may allow the researcher additional opportunities to strengthen his understanding of the instructional practices utilized by the participants, and to provide a fuller context for the theories and ideas conveyed during the interviews. Therefore, when including both the 9th Lit and the Multicult Lit co-teaching partnerships, phase three of data collection is comprised of four interviews (one per participant) and two classroom observations (one for the 9th Lit and one for the Multicult Lit co-teaching partnerships).

Phase 4: Semi-structured Interviews (Partnership-Based) and Visual Data. Phase four of data collection begins with semi-structured pair interviews in which the general educator

and special educator who comprise the 9th Lit co-teaching partnership will respond to questions as a team, as will the general and special educator who comprise the Multicult Lit co-teaching partnership. The fourth phase of interviews will focus primarily on exploring the sub-question, How and when do teachers incorporate critical thinking into the classroom for students with and without disabilities? During this fourth, combined interview for both members of the 9th Lit and for both members of the Multicult Lit co-teaching partnerships, the researcher will collect, for discussion and subsequent analysis, the individually-created visualizations (e.g., schematics or flow charts) produced by each member of the partnership. Therefore, when including both the 9th Lit and the Multicult Lit co-teaching partnerships, phase four of data collection is comprised of two partnership-based interviews (one for the 9th Lit and one for the Multicult Lit co-teaching partnerships) and four collected visual representations (one per participant). When combining all four phases of the data collection process, then, this investigation will utilize 14 interviews, six classroom observations, and four visual representations for subsequent data analysis. Now that the process of data collection is evident, a more thorough explanation of each data source is needed.

Data Source 1: Interviews. As typical of a case study, in contrast to other qualitative research designs, each interview will involve deep, descriptive questions (Creswell et al., 2007). Interviews will last 20 to 30 minutes each. They will be structured as in-depth biographical and semi-structured, open-ended ones. Each teacher will participate in one in-depth biographical interview, two semi-structured, open-ended interviews, and one semi-structured, open-ended interview with her co-teaching partner. Each of the four interviews may illuminate unique viewpoints held by the participants, or may allow the researcher to make connections among their beliefs or practices. Whether comparing participants' interviews or contrasting them, the

researcher hopes to uncover how participants' conceptualizations of critical thinking influence their pedagogy for students with disabilities. This goal reflects the need for appropriate research questions.

Anfara, Brown, and Mangione (2002) explain the importance of writing effective interview questions: "Keeping in mind that research questions provide the scaffolding for the investigation and the cornerstone for the analysis of the data, researchers should form interview questions on the basis of what truly needs to be known" (p. 30). In order to ensure that what needs to be known is covered during the interview process, each of the four interviews will contain a unique focus. Also, the interviews will follow Seidman's (2006) three-interview series framework, but with adaptations in order to accommodate a fourth interview for the general and special educator comprising the 9th Lit co-teaching partnership and for the general and special educator comprising the Multicult co-teaching partnership.

The first interview, which will ask in-depth, biographical questions, will help to establish rapport between the researcher and the participant and will focus on the participants' life histories (Seidman, 2006). The biographical questions, which refer to the participants' personal histories (Patton, 2002), will help the researcher to understand each participant on a broader and deeper level, which may then yield better data for analysis. The three remaining interviews will adhere to a semi-structured format, which allows for more flexibility and authenticity within the conversation (as participants and researchers avoid the constraints imposed by structured interviews), yet also provides a roadmap to guide the conversation towards particular subtopics more so than unstructured interviews (Merriam, 2009).

The second interview will present a narrower focus, or the "details of experience" (Seidman, 2006, p. 18), utilizing classroom materials (e.g., unit and lesson plans and student

handouts) as instruments for data collection. The third, final individual interview, which essentially adds breadth and depth to Seidman's (2006) interview two, will continue the in-depth discussion on critical thinking, but with a much greater emphasis on students with disabilities and on teachers' perceptions of their students. General and special educators who comprise the 9th Lit and Multicult Lit co-teaching partnerships will also discuss the nature of their respective partnerships.

Finally, the fourth interview, which will be conducted in two separate co-teaching partnerships (i.e., the 9th Lit general and special educator together, and the Multicult Lit general and special educator together), will continue to explore teachers' perceptions of students with and without disabilities, but with greater emphasis on how teachers embed critical thinking into the planning and execution of lessons and units. This interview will also provide an opportunity to discuss any new questions or topics that arise from the data collection process overall. Seidman (2006) refers to this as "reflection on the meaning" (p. 18).

Stake (1995) writes, "The interview is the main road to multiple realities" (p. 64). One key element of the interview process will entail each teacher defining or explaining their viewpoint of critical thinking, that is, describing their individual, unique realities. This element is important because during the lesson observations, their own conceptualizations of critical thinking will be applied to the lessons instead of applying the researcher's understandings. This distinction is necessary to reiterate that exploring other educators' understandings and implementations of critical thinking is more important than the researcher's. Interviews allow the research participants to explain their opinions and pedagogical decisions regarding critical thinking and students with (and without) disabilities. Because of the researcher's interest in teachers' often intangible conceptualizations and beliefs, interview questions will rely primarily

upon a *realist*, as opposed to an *instrumentalist*, approach. Researchers who pose instrumentalist questions believe that all questions should relate to observable or measurable data, and should avoid any references to unobservable phenomena; conversely, researchers who pose realist questions embrace the fallible, subjective nature of the data, and do not assume that research questions must reflect observable phenomena (Maxwell, 1996; Norris, 1983). The drawbacks of realist questions will be addressed in the limitations section of the methodology.

Data Source 2: Observations. Anecdotal classroom observations (generating field notes) will occur three times for each of the co-teaching partnerships, and will last at least 45 minutes each. (At the investigation site, the class length ranges from 45 minutes to 55 minutes, depending on the day of the week). In terms of sequencing, data collection will alternate between interviewing and observing (beginning and concluding with an interview), which allows the participants to clarify and elaborate upon their teaching practices that will have been observed (Maxwell, 1996), and allows for follow-up questions to be asked based on field notes and based on supplementary materials collected for the lesson. Besides reflecting upon the observed lessons during the interviews, the researcher may have the chance to briefly discuss the lesson with the teachers immediately following the observation (Appendix E includes space for teachers' reflections). Finally, the researcher will, as another type of observational data, use an adapted version of the observation protocol (see Appendix F) to paraphrase and reflect upon any relevant conversations that may arise in the teacher lounge, faculty meetings, etc., to be included in the data collection process alongside the classroom observations and potential post-observation discussions.

Writing anecdotal observations entails recording nonjudgmental, objective notes about the who, the what, the how, and sometimes the where or when of the behaviors and events in the

classroom (Nicolson & Shipstead, 1998). Observing each teacher's English class becomes important to fully explore the relationship between teachers' approaches to fostering critical thinking and students' demonstration of these targeted skills, as well as teachers' theories and teachers' practices. Observations can enable an understanding of certain theories-in-use (Argyris & Schön, 1974), or classroom practices derived from beliefs, that participants may seem reluctant to discuss (Maxwell, 1996). Participants' theories-in-use may reinforce or contradict the espoused theories that they express during interviews. As Argyris and Schön (1974) explain, an interview subject who is asked to describe how he would behave in a particular situation will usually provide "his espoused theory of action for that situation … However, the theory that actually governs his actions is his theory-in-use, which may or may not be compatible with his espoused theory" (pp. 6-7).

As the purpose of the investigation reflects an interest in gaining greater insight into teachers' practices and how the pedagogy and process of critical thinking unfolds in the secondary English inclusive classroom for students with disabilities, the focus of the classroom observations will remain on how teachers elicit or foster students' critical thinking, and how these opportunities compare for students with and without disabilities. The participants' interviews, then, may support or contradict what critical thinking-oriented pedagogy and processes are revealed in the classroom observations, which will speak to the (in)congruences between teachers' espoused theories and theories-in-use (Argyris & Schön, 1974). During each lesson, the researcher will complete an electronic version of the observation protocol sheet as thoroughly as possible so that these (in)congruences may be discussed during the three semi-structured interviews.

Data Source 3: Visual Data. Participants will be asked to create visual representations (e.g., illustrations, schematics, flow charts) of critical thinking (see Appendix C for the prompt), introduced by the researcher during the first interview and collected at the beginning of the fourth interview. The researcher will ask participants to create a visual representation (e.g., a schematic or flow chart) to illustrate how they conceptualize critical thinking. The researcher will invite participants to use any terminology (e.g.,, content, skills, standards, curriculum, instructional practices, and pedagogy) to include in order to demonstrate how critical thinking relates to other aspects of education. However, the researcher will not list specific terms to avoid creating bias, whereby participants may limit their conceptualizations based on a few terms that are listed. Then, during the final interview—conducted with the general and special educator who comprise the 9th Lit co-teaching partnership followed by the general and special educator who comprise the Multicult Lit co-teaching partnership—each participant will have the opportunity to compare and contrast her own representation with her co-teacher's. These visual data fall under the category of arts-based educational research (ABER), in that they should enhance perspectives relating to education and human affairs and because they should "infuse the inquiry process and the research 'text'" with certain design elements (Barone & Eisner, 2006, p. 95).

For this investigation, the design elements (Barone & Eisner, 2006) involve the instructional concepts (e.g., content, text, instruction, and assessment) that participants will be invited to include in the visualizations of critical thinking; the inquiry process refers to the research question; and the "text" refers to the illustrations themselves, which the researcher will "read" and interpret as documents for analysis, along with the related discussions that arise out of the partnership interviews as participants compare and contrast their own visualizations with

those of their co-teachers (see Appendix C for the discussion points during the partnership interview). Asking the four participants to create representations may help them delineate their own understandings of critical thinking and may generate some interesting conversations during the interviews. Barone and Eisner (2006) describe the purpose of ABER not as "a quest for certainty," but as the "enhancement of perspectives. If traditionalists generally seek to secure solid explanations and confident predictions, arts-based researchers aim to suggest new ways of viewing educational phenomena" (p. 96). It also seems worth noting that because the visual data are products of the researcher's inquiry as opposed to unprompted products of the participants' minds, the visual data carry a certain artificial quality. However, although the visual data may lack full authenticity, they may still provide important information about the participants' conceptualizations of, as Barone and Eisner put it, an educational phenomenon.

To analyze these viewpoints (as represented through teachers' visual data) of the educational phenomenon of critical thinking, a simplified understanding of semiology can be utilized. Semiology, often credited to Saussure's 1916 book, *Course in General Linguistics*, is the study of signs, and the meaning that is constituted from the relationships among images, gestures, sounds, or objects; semiology involves the classification of these signs (Barthes, 1964). In terms of the current study, classification refers to comparing and contrasting the images and words that each teacher produces on her visual representation. By juxtaposing the individual elements on each visual representation (i.e., comparing and contrasting the elements within one representation, before finding similarities and differences among each representation), the researcher will recognize each teacher's perspective on the relational aspects among the elements within the visual representation, and the symbolic meaning that the creator of the object (i.e., the teacher) attempts to convey through the overall image (Barthes, 1964). In other words,

by remaining attentive to the specific words and images (the signs) that each teacher chooses to depict on her visual representation, the researcher can, with sufficient explanation from the teacher, come to understand the conceptual meaning of the overall image and, by extension, the teacher's conceptualization of critical thinking.

Instruments: Classroom Materials. Classroom documents such as handouts, assessments, and lesson and unit plans will be obtained, as instruments from which the participants can locate specific evidence of critical thinking. The researcher will also create a sketch of each classroom to be used as a reference to different elements of the lessons, such as configuration of desks and visual aids on the board, as these elements may provide additional insight into teachers' conceptualizations and pedagogies and may prove useful for analysis.

Furthermore, the benefits of classroom materials as instruments include ease of access (i.e., easy and inexpensive to obtain), stability (i.e., researchers can view them repeatedly), objectivity (i.e., unobtrusive, pre-existing, and not created as a result of the case study), exactness (i.e., contain specific details), and broad coverage (i.e., they can cover many events and settings, if needed) (Merriam, 2009; Yin, 2009). Because so many different forms of documentation might be considered beneficial, Stake (1995) cautions researchers that "the potential usefulness of different documents should be estimated in advance and time allocated so that it is judiciously spent" (p. 68). Obtaining classroom-based documents from the participants during the interview-and-observe cycles will afford the opportunity to discuss these materials with the participants as well as to see them utilize them in the classroom, which should prove valuable in following Stake's (1995) cautions.

Data Analysis Procedures

The literature indicates how, since the birth and subsequent growth of qualitative research, divergences have existed in terms of how closely the methods of qualitative research should align to those of quantitative research (Gergen & Gergen, 2000; Howe & Eisenhart, 1990). These differences in viewpoint become apparent with the concepts of refutability and replicability, which are drawn from classical science. In striving for consensus about how to uphold these (and other) standards in qualitative research, Anfara et al. (2002) call for the public disclosure of processes, i.e., making explicit the steps and procedures for analyzing data: "A key part of qualitative research is how we account for ourselves, how we reveal that world of secrets. Good naturalistic inquiry shows the hand and opens the mind of the investigator to his or her reader" (p. 29). To that end, the researcher will analyze data in the current study using the overarching process of code mapping, which provides a system for bringing meaning, structure, and order to the data (Anfara et al., 2002). Code mapping allows the researcher to translate the raw data collected into a textual form that is understandable to the reader (Van Maanen, 1988) by way of presenting "the reader with the stories identified throughout the analytical process, the salient themes, recurring language, and patterns of belief linking people and settings together" (Anfara et al., 2002, p. 31).

The researcher can conduct code mapping using the constant comparative method, which is credited to Glaser and Strauss (1967) from their seminal work on grounded theory. While the current study will not ascribe to grounded theory as a methodology, Merriam (2009) supports the plausibility of utilizing constant comparative method and induction (i.e., making generalizations from specific data) for analysis without grounded theory. The researcher will utilize a coding process of the constant comparative method known as open coding, or "unrestricted coding of

the data" (Strauss, 1987, p. 28). Open coding involves comparing and contrasting events and interactions and grouping them conceptually based on categories and subcategories that emerge throughout the process (Anfara et al., 2002; Corbin & Strauss, 1990). Similarly, as Stake (1995) writes, "all research is a search for patterns, for consistencies" (p. 44); the goal of open coding and of the constant comparative method is to produce concepts that fit the data (Strauss, 1987).

When utilizing constant comparative analysis in the data analysis process, the researcher in the current study will develop three iterations of code mapping. The first iteration calls for the creation of initial codes and surface content analysis to examine and label the data (Anfara et al., 2002; Patton, 1990). This iteration involves grouping the data into more manageable chunks (Constas, 1992) and finding common conditions that exist among the participants (Miles & Huberman, 1994). The second iteration allows the researcher to group the initial codes into pattern variables (Anfar et al., 2002) or inductively-developed core categories (Maxwell, 1996; Merriam, 2009), with which the researcher can gain "meaning and insights" from the "words and acts of the participants involved" (Anfar et al., 2002, p. 32). The process of generating patterns, or themes, is called "de-contextualization" and "re-contextualization" (Tesch, 1990) on account of pulling the data out of their original contexts in which they were conveyed to the researcher (via observations, interviews, etc.) in the first iteration and then moving the data into a new context among other data that may have originally existed in other contexts. Furthermore, Stake's (1995) explanation of direct interpretation (i.e., drawing inferences from a single instance or datum) seems to exist as a process for the first iteration, and his explanation of categorical aggregation (i.e., combining various instances so that patterns emerge) seems to exist as a process for the second iteration. Finally, the third iteration gives application to the data set

by bringing the analysis to the level upon which the research questions and conceptual theories reside and may develop (Anfara et al., 2002).

In the analysis process, the researcher will connect these developing codes, patterns, or themes to various elements that frame the current study. For instance, the researcher can refer to the existing theories and practices of critical thinking from the literature review (and related issues such as the (in)equity for students with disabilities) while creating patterns. Merriam (2009) explains that "the process can contribute to formulating the problem and answering specific design questions" (p. 72), and can show how the researcher's study aligns with existing literature (Maxwell, 1996). Wolcott (2009) adds that theories identified in the literature review should serve the researcher's purpose, not the other way around. Thus, the literature review should be considered when analyzing data because the themes generated in this process may connect to the researcher's purpose and his suggested theories.

As well, the conceptual framework of the current study will also remain important when analyzing data, and can act as a jumping-off point for building codes. The conceptual framework for the study reinforces the ideas, concepts, and perspectives that the researcher deems most significant to the study: "The most important thing to understand about your conceptual context is that it is a formulation of what you think is *going on* with the phenomena you are studying—a tentative *theory* of what is happening and why," whose "function is to inform the rest of your design" (Maxwell, 1996, p. 25, emphasis in original). As such, concepts related to participants' epistemological beliefs or culture, contexts or domains for learning, and participants' theories enacted in practice all represent ideas from the conceptual framework that may retain relevance to the current study in the data analysis process.

Similarly, the research questions are necessary to consider when analyzing data, as the research questions set parameters for the study's focus and "reflect the researcher's thinking on the most significant factors to study" (Merriam, 2009, p. 60), to avoid any tendencies by the researcher to develop a focus that is too narrow or too broad. As Butin (2010) contends, the research question is the "key guide" within the study, and should be interconnected with the study's research purpose and with the research findings, as discovered through the data analysis. Therefore, linking the literature review, conceptual framework, and research questions to the data analysis process can help to ensure that the emerging themes "actually have some congruence or verisimilitude with the reality of the phenomenon studied" (Anfara et al., 2002, p. 29).

Codes and patterns, however, may also develop independently from the literature review, conceptual framework, or research questions, but that still relate to these elements in ways that were previously unseen by the researcher. In other words, the themes that emerge from constant comparative analysis will both directly reflect and indirectly strengthen the research questions, conceptual framework, and/or literature review (Eisenhart & Howe, 1992). The analysis process will not, however, involve a set of a priori codes or pre-defined categories, and the researcher will remain open to serendipitous findings, as an unwillingness to modify or adapt the initial categories would violate the essence of open coding and the constant comparative method. Instead, coding and recoding will occur in a recursive process, as the researcher continues to collect and analyze data, until the code eventually reaches the point of saturation and can exist in a near-permanent relationship to other codes (Merriam, 2009; Strauss, 1987), and then can be considered a core category (Merriam, 2009). After developing codes, it remains

important to keep every code linked to its data, in order to avoid the problem of context stripping, in which the original context from which the codes develop is lost (Maxwell, 1996).

Within- and Cross-Case Analysis. Before cross-case analysis can occur, data within the current study must be analyzed, using networks, matrices, and causal chains as methods of within-case analysis. For instance, in order to view within-case categories or characteristics holistically, the researcher will create (and continue to adapt throughout the data collection and analysis phases) multiple matrices of codes, as reflective of the aforementioned process of code mapping. From this collection of raw data, a matrix can help the researcher to choose, based on what will have been coded and where, which data to further analyze and which to forego (Miles, Huberman, & Saldana, 2014). As Stake (1995) explains, "It also is important to spend the best analytic time on the best data. Full coverage is impossible; equal attention to all data is not a civil right" (p. 84). For example, if the process of creating a matrix reveals that a particular code is only listed a few times, then the researcher may consider collapsing that code into another one, exploring that code in subsequent data collection, or just altogether ignoring the data associated with that code. Developing a matrix will help the researcher reach the point of saturation of codes (Merriam, 2009; Strauss, 1987) and avoid context stripping (Maxwell, 1996).

Miles et al. (2014) describes the importance of a creating causal chain, or "a researcher-constructed linear display of events, actions, and/or states that suggests a plausible sequence of causes and effects" (p. 235). Once several chains from the matrices have been created, the researcher can then organize the concepts into at least one causal network, which retains the causal connections from the chains but adds other dimensions to the graphic, so that a given event or state may influence, and be influenced by, multiple factors. In other words, the chain

becomes more complicated, but also more useful and a more realistic reflection of the relationships among the data (Miles et al., 2014).

Finally, with matrices and causal chains and networks as methods of within-case analysis, the researcher may then conduct cross-case analysis. Cross-case analysis involves creating causal networks for each of the four cases in the current study as well as other case studies from the literature, and then overlapping the networks from the cases in the current study with those from others' studies, which then allows the researcher to identify characteristics and themes that exist among multiple cases (Miles et al., 2014). With these processes of data collection and analysis in mind, it is necessary to consider the limitations and delimitations of the current case study.

Triangulation

Although qualitative researchers need not defend their methods to the same extent as in the mid-twentieth century (Wolcott, 2009), they must nonetheless establish credibility as researchers and methodologists. Data triangulation will be sought through the various forms of data, as triangulation "remains a principal strategy to ensure for validity and reliability" of a study that utilizes an interpretive perspective (Merriam, 2009, p. 216). Yin (2009) identifies the use of multiple sources of evidence as the first principle of data collection. The investigation will utilize observations, interviews, and visual data as sources (along with supplementary documents as instruments) because case study research, more so than other research methods, requires multiple sources of evidence to establish construct validity and rigor (Yin, 2009). To ensure that each source yields the most fruitful data, the quality indicators for qualitative research will be adhered to, as outlined by Brantlinger, Jimenez, Klingner, Pugach, and Richardson (2005).

Trustworthiness. According to Brantlinger et al. (2005), quality indicators for observations include choosing the appropriate settings (i.e., the setting allows for the researcher to observe whatever evidence or factors s/he wishes to explore) with minimal intrusion by the researcher and maximum acceptance (of the researcher) by those observed, systematic field notes, and measures to ensure confidentiality of participants and settings. For interviews, quality indicators include choosing appropriate participants (i.e., purposefully identified, effectively recruited, adequate number, and representative of population of interest), asking reasonable research questions (i.e., clearly worded, not leading, sufficient for exploring domains of interest) with adequate measures to record and transcribe the dialogue (i.e., recordings are clear and not manipulated and transcriptions are accurate and faithful to the original conversation to the greatest possible extent), representing participants sensitively and fairly, and ensuring participants' confidentiality. Finally, for document analysis, quality indicators include establishing the relevance and meaningfulness of documents, obtaining, storing, describing, and citing documents carefully, and ensuring the confidentiality of private documents (Brantlinger et al., 2005).

When collecting data, the researcher should recognize and rely upon the notion of multiple realities; no one individual embraces or articulates the same reality (Merriam, 2009). In other words, the investigation will explore how different people frame and conceptualize the same topic in different manners, understanding that the findings must remain grounded in the context of participants' unique perceptions. As a result of this exploration, the study obtains credibility through the acknowledgment that these multiple realities exist not within the researcher, but rather within others. The investigation's purpose, then, does not reflect the researcher's desire to judge the value of their realities, but to explore how their realities intersect

(or not) and to consider the implications thereof. The study will also utilize prolonged engagement and persistent observation to obtain credibility: "If prolonged engagement provides scope, persistent observation provides depth" (Lincoln & Guba, 1985, p. 304). In other words, the former ensures that the researcher has explored sufficiently the breadth of related topics, while the latter ensures that the researcher has focused effectively on the intricacies of the issues.

Dependability. The study will achieve sufficient dependability or consistency in the sense that it will utilize thick description—or "the complete, literal description of the incident or entity being investigated" (Merriam, 2009, p. 43)—in all aspects of the data analysis process in order to ensure the most elaborate details possible for data interpretation and analysis. An important component of thick, careful description involves a sense of detachment in order to appropriately distinguish the observed behaviors from inferred ones (Wolcott, 2009). In addition to allowing the researcher to conduct the necessary analyses, thick description provides readers with "good raw material" with which they can make their own generalizations (Stake, 1995, p. 102).

As another method of triangulation, related research will be utilized to either support or refute the findings of this investigation. Because the context for the research study was constructed, not found, within the literature, the conceptualization of the existing literature can potentially align with the data analysis process of this study (Maxwell, 1996). In other words, because the literature has been contextualized into the categories of "setting the stage for critical thinking," "critical thinking in mind and action," and "critical thinking for students with disabilities," the data may be conceptualized and organized around similar themes or ideas.

Limitations

The research study contains several limitations. As Stake (1995) indicates, the cost in time for qualitative research is high, especially to the low pay-off "in the advancement of social practice" and the "slow and tendentious" contributions to disciplined science (p. 45). Similarly, despite the benefits of rich, thick description, an in-depth study may seem too lengthy, detailed, or involved for busy policymakers who find little in the study to relate to or generalize to their own professional lives (Merriam, 2009). For instance, teachers or policymakers may not dedicate the necessary resources to reap the potential benefits of the current study if these individuals do not have an interest in the secondary English inclusive setting, or an interest in exploring opportunities for students with disabilities. However, Stake (1995) illuminates the question of how researchers can describe the case fully and completely without jeopardizing readers' interest, time, or relatability in his discussion of researchers' propositional generalizations and readers' naturalistic generalizations.

The concept of generalizability reflects a limitation of qualitative research: "The real business of case study is particularization, not generalization. We take a particular case and come to know it well, not primarily as to how it is different from others but what it is, what it does" (Stake, 1995, p. 8). Paradoxically, though, generalizability suggests that since the general lies in the particular, readers can transfer what they learn from a given case to similar contexts (Erickson, 1986). In this sense, case studies provide the opportunity for readers to make connections between the research and their own environments (i.e., generalization) despite the particulars of a given study. For readers who are not experienced in the context of the current case study, then, they may need to relate the secondary English inclusive setting to their own

contexts. Insofar as qualitative researchers hope to make their studies as relatable as possible, then, it is negotiating between particularization and generalization that can prove tricky for them.

The difficulty of mediating between particularization and generalization results, at least in part, from the fact that findings in qualitative studies often seem esoteric to those not familiar with the context(s) or bounded environment of the case, which reflects the highly subjective nature of this research paradigm; although qualitative researchers should embrace this subjectivity as a central feature of these studies, qualitative researchers have not developed widespread protocols to address the misunderstandings that often occur because of researchers' "own intellectual shortcomings and because of the weaknesses in methods that fail to purge misinterpretations" (Stake, 1995, p. 45). In other words, although triangulation has become an essential component of reaching validity and reliability in qualitative research, researchers still lack consensus on how to best recognize, and to some degree reconcile, their own subjectivity as individuals (Stake, 1995). This proves to be especially challenging for the researcher of the current study, whose familiarity with the setting of the case study and whose acquaintance with the participants makes subjectivity a realistic concern. The challenge for most qualitative researchers, then, becomes maximizing their assertions through thick description and rich details without alienating their readers, all the while acknowledging their own weaknesses or biases, individually and professionally.

Another limitation of this case study involves *key informant bias*, which can occur when qualitative researchers rely on a small number of informants for their data collection; even when researchers choose their participants purposefully and when the data seem valid, there is no guarantee that these participants' perceptions and pedagogies are typical or representative (Maxwell, 1996). For instance, the current study utilizes only four participants, because of the

researcher's desire to explore the topic with as much depth as possible, as opposed to seeking breadth. This limitation of participant number underscores the need for researchers to implement sufficient methods of triangulation, and cautions against the desire to make any inferences or judgments without firm grounding in the data. Of course, key informant bias hinders the generalizability of this study, but qualitative research, by its nature, often relies upon particularization (Stake, 1995) and construct validity (i.e., whether correct operational measures are utilized for the concepts in the study) because of the challenges of attaining external validity or generalizability (Yin, 2009).

Another threat to validity is *self-report bias*, which relates to the contrast between instrumentalists' and realists' aforementioned approaches to research questions. As Maxwell (1996) explains, the contrast between these two paradigms "is not a matter of philosophical hair-splitting; it has important implications for how you will do the research, and each of the two approaches has its risks" (p. 57). Although an instrumentalist approach to research questions may provide a more *precise* answer to a specific question, Maxwell (1996) argues that this specific question may be the *wrong* question, and instead, a researcher is better off utilizing a realist approach in order to gain an *approximate* answer to a question that is the *right* one.

The main risk for those who will utilize the realist principles involves the potential for researchers to rely increasingly on inferences and fallacious conclusions and to allow their assumptions to sway their results (Maxwell, 1996). Case study researchers are especially vulnerable to this form of bias because of the likelihood that they possess a strong foundation of the issue beforehand (Yin, 2009). Maxwell (1996) calls this a threat to valid interpretation, in which researchers impose their own framework or meaning rather than understanding their participants' perspectives. The researcher of the current study needs to remain particularly aware

of this bias because of his prior interest in the topic at hand, and because of his prior knowledge of some of the issues embedded within the topic. As such, this investigation will use data matrices in order to minimize this risk, and to keep the conclusions grounded in the data themselves, as opposed to the researcher's assumptions surrounding the data. The researcher will also remain open to serendipitous findings, which will help to eliminate bias because the investigation will focus on what data the participants offer as opposed to what data the researcher hopes to find.

Another limitation of qualitative research is *reactivity*, which refers to the researcher's influence on the setting or participants. The participants may become more cognizant of their pedagogy during the observations, but that influence probably holds equally true for any sort of observation in an educational setting. Reactivity could, however, become more of a concern in the interviews than in the observations. In order to minimize reactivity, the interview protocol will avoid leading questions and closed questions (Maxwell, 1996), and instead focus on asking open-ended questions and give the participants plenty of time to respond before reacting and responding to their statements. This proves especially challenging for the researcher of the current study, as his familiarity with participants opens up the possibility for a more relaxed interview atmosphere; although this sounds completely beneficial, one could argue that reactivity might lead the researcher to lessen his wait time and/or ask leading or closed questions.

Despite the researcher's concerns, the goal of qualitative inquiry, as Maxwell (1996) describes, "is not to eliminate [reactivity] but to understand it and use it productively" (p. 91). In other words, by the nature of the interview questions that will be posed to participants, the participants will have already been influenced because the context or scope of the conversation will have been established, which could alter or inform their responses in the interviews. Yet as

Maxwell's (1996) aforementioned words imply, what is important is the researcher's acknowledgment of reactivity, not whether it occurs. By understanding its existence, reactivity can be minimized by bracketing out the researcher's own framework and assumptions as much as possible (Crotty, 1998; Maxwell, 1996).

A related limitation to reactivity is the concept of *social desirability*, which refers to the possibility of participants presenting the versions of their "selves" that align with what they see as the researcher's implicit or explicit research goals (Denzin, 1989). This desire to appeal to the researcher reflects what Orne (1962) calls demand characteristics, which he considers a "contextual variable" (p. 779). The likelihood of social desirability, or demand characteristics, seems even more probable in a proposed study such as this, in which the researcher and the participants have a pre-established professional relationship. However, despite this limitation and those aforementioned, the benefits of choosing this particular school as the site of the bounded case exceed the drawbacks. A discussion of delimitations may illuminate why this bounded case can provide fruitful data and analysis for the topic at hand.

Delimitations

Now that the limitations of the proposed investigation have been discussed, one might consider its delimitations. The study focuses solely on high school English inclusion teachers within one high school, to the exclusion of several groups and factors. Regarding methodology, research will be conducted within one setting in order to meet the expectations of a single case study. In other words, the four participants, who all teach in inclusion English classes at the same school, exist as a bounded case. Extending beyond the walls of this school would also extend the case beyond its current structure.

Although the topic of interest relies heavily upon students with disabilities and the opportunities for critical thinking that they receive in the classroom, no students are being asked to participate. Because teachers typically possess the control and power within their own classrooms, it seems best to target their conceptualizations and pedagogical decisions, as the overarching research question indicates. In addition, the scope of the study is not extending beyond literature and composition courses. The rationale here is two-fold.

First, by concentrating on the content area with which the researcher is most familiar, both professionally and personally, a deeper perspective can be gained about teachers' conceptualizations and opinions because of the researcher's pre-existing knowledge of English. Second, choosing participants from the same subject area may allow for better comparisons among teachers' experiences and perceptions, and may help eliminate extraneous factors from the conversation when making comparisons (e.g., one would have to consider, when analyzing data from a math teacher and an English teacher, that these teachers' beliefs or classroom decisions stem the often stark contrast between the two disciplines).

The researcher has chosen the high school level as the setting in which to investigate teachers' conceptualizations of critical thinking and the influence on pedagogy for students with disabilities. Based on prior, small-scale research studies, the researcher has come to understand that teachers often describe the purpose or goal of critical thinking to be preparing students for life after high school, or helping them adjust to the "real world." This understanding is not intended to imply that elementary or middle school teachers lack the same or similar conceptualizations of critical thinking, but that the same immediacy or necessity of critical thinking may not exist in the earlier grades to the same degree. And it is, in part, this intensity of purpose that the researcher seeks to explore.

In terms of educational placement, the investigation focuses on the inclusive environment, commonly referred to as the co-taught setting (although these two terms are not necessarily interchangeable), in which students with disabilities learn alongside their peers without disabilities. First, general education classes without any special supports for students with disabilities (e.g. honors or on-level courses with just one general educator) are excluded because one of the researcher's primary interests in this topic involves whether and how teachers adapt their instructional practices in classes that contain students with and students without disabilities. Second, the investigation is excluding special education classrooms, commonly referred to as small-group or resource classes, because these classes do not contain any students without disabilities; including only students with disabilities would preclude an exploration of teachers' conceptualizations of critical thinking and their related pedagogies for students with and without disabilities.

As another delimitation, the interviews will exclude unstructured formats for interviews. The in-depth biographical interviews (one per participant), which will provide anecdotal, background information about the four participants, will utilize a structured format because the wording and the order of questions will largely be predetermined (Merriam, 2009). The semi-structured interviews (three per participant, including one interview as a co-teaching partnership), which will center on different aspects of the research question and purpose, will utilize a semi-structured format, to the exclusion of unstructured formats.

Because the researcher has already conducted two similar, qualitative pilot studies, and because participants will be interviewed multiple times, the topic-centered, semi-structured interviews need to contain more structure than the informal format suggests, but not to the extent that the interviews become standardized; this would be too formulaic for the proposed case

study. However, it is worthwhile to note that the informal conversations, which may occur between the researcher and participant immediately following observations, are unstructured in nature. The unstructured, or informal, format often applies when researchers conduct preliminary studies and/or when the goal of the interviews is to learn more about the topics so that researchers can ask more relevant questions in subsequent interviews (Merriam, 2009). Regarding the current study, these informal conversations may provide a short period for debriefing, clarification, or elaboration, which might then facilitate the researcher's process of writing more specific, lesson-focused questions for his upcoming explorations during interviews with the same participants whose classes he will have recently observed.

Some exclusionary decisions have also been made, and will continue to be made, in terms of the literature review. First, the investigation is excluding searches that focus on students' post-secondary options. While some of the participants may reference post-secondary options in their conceptualizations of critical thinking, information about colleges, technical schools, or the workplace present a whole host of other considerations that exist beyond the scope of the proposed research study (e.g., access to post-secondary education, financial implications of choosing school or the workplace, intrinsic and extrinsic motivation to further one's education beyond K-12 schooling, economic achievement gap between college- and non-college-bound students). Second, although one may argue that reading and writing are non-negotiable skills that students must possess when leaving high school, researching literacy as an element of critical thinking would be making the assumption about the relationship between literacy and critical thinking. This sort of assumption would contradict the researcher's positionality or epistemological stance of constructivism because it would indicate to the reader that the

researcher is leading them to make certain connections before completing the data collection or analysis phases.

The investigation also excludes terms such as critical inquiry, critical lens, and critical perspective. Although these terms certainly relate to issues of education, the use of "critical" in these instances does not align directly with the topic of interest. "Critical" in the exclusionary sense seems to refer to something that critiques or scrutinizes, or that questions the status-quo or the power structures in place in a given context (Crotty, 1998). Conversely, the "critical" in critical thinking seems to refer to something that is focused, urgent, or of heightened importance. These connotations may seem similar, but the pervasiveness of these multiple meanings requires clarification in the search process as to which connotations relate to this particular study.

The investigation also excludes literature that provides demographic information about students with disabilities (e.g., the percentage of students who have disabilities in an average classroom or the percentage of students with disabilities who graduate from high school or who attend college). While the demographics of students with disabilities (regionally, nationally, etc.) is interesting, the proposed methodological framework supports a case study of opportunities for critical thinking that teachers provide for students with (and without) disabilities. As such, the proposed study somewhat precludes the need for trend data or generalized information for students with disabilities because of the bounded nature of the case. This is not to say that the case cannot generalize to other contexts, but this generalization should occur from the reader, *as a result of* the particularization (Stake, 1995) that the researcher conveys through data collection and analysis, and should not occur from the literature review, *in spite of* the particularization of the case. Stated simply, providing literature about trend data or

other generalized characteristics for students with disabilities would be too far removed from the purpose and methods of the case study.

Finally, the review of the literature excludes terms that label (in)effective pedagogy in general, vague terms, such as best practices, differentiation, and effective teaching. As with other excluded phrases, these terms certainly relate to the topic of interest in the broadest sense, but practitioners and scholars often view them or understand them with such variation that utilizing them for the proposed study would not help narrow its focus; instead, doing so would add far too much breadth, without much depth, to the subject of how high school inclusion English teachers conceptualize critical thinking and provide opportunities thereof for students with disabilities.

Ethical Considerations

The case study must consider several ethical concerns. In addition to matters of reliability and validity, the investigation seeks credibility, or trustworthiness, by acknowledging and adhering to these ethical considerations. As Yin (2009) explains, ethical research begins with protecting the participants in the following four respects: 1) gaining informed consent from the four teachers, in which the researcher explains to them the nature of the study and formally ask for them to volunteer to participate; 2) protecting the participants from any deception or harm, whether physical, emotional, or psychological/mental; 3) protecting the participants' privacy and confidentiality, so that they face no undesirable consequences as a result of their participation, and so that their names do not appear on any lists as potential participants' for anyone's future research studies; and 4) taking special precautions for vulnerable groups, such as children.

Following Yin's (2009) guidelines of ethical research, the four teachers have already provided verbal confirmation that they will volunteer to participate. Regarding the second consideration, the study will avoid any potential harm to participants by giving them the opportunity to "opt out" of any interview questions that they would prefer to leave unanswered. After observations, the researcher will clarify any necessary data points to avoid misinterpreting any aspect of participants' lessons, and when collecting documents, nothing will be retrieved against the participants' wishes. In terms of the third consideration, pseudonyms will be used for all names and places to protect confidentiality, and their names will not appear on any future lists of potential participants for other studies. The data and all documents related to the case study will be stored in a locked and secured location within the researcher's home. Finally, the fourth consideration is moot, because the four participants do not constitute a vulnerable group; however, classroom observations will occur with children present, so the researcher will adhere to the same professionalism and codes of conduct that educators follow every day.

Another ethical concern reflects Guba's and Lincoln's (1981) notion of "unusual problems of ethics. An unethical case writer could so select from among available data that virtually anything he wished could be illustrated" (p. 378). This concern relates to biases as a researcher. As Merriam (2009) explains, "deciding what is important...is almost always up to the investigator. Opportunities thus exist for excluding data contradictory to the investigator's views. Sometimes these biases are not readily apparent to the researcher" (p. 233). Attempts will be made to avoid this concern to the greatest possible extent by clarifying, as necessary, data points to confirm (or not) the researcher's understanding of the participants' values and ideas, by acknowledging and explaining the researcher's positionality to demonstrate an understanding of

the researcher's own beliefs and preconceptions, and by using matrices and networks to help prioritize the data and to see relationships among it.

Merriam (2009) presents ethical concerns of interviews, such as long-term, residual psychological or emotional effects. For instance, the interviews may draw out participants' anger or frustration participants toward a certain aspect of their profession, which could deepen and worsen over time, even after the study concludes. As Patton (2002) contends, however, the interviewer's task is that of a researcher, not a therapist or judge, so great care must be taken to find a balance between keeping the research study as the focus of the interviews without jeopardizing participants' mental health. Again, in order to protect participants from any harm, they may opt out of any interview questions; in this situation, attempts will be made to rephrase or alter the questions so that the participants feel comfortable answering them.

Participant Descriptions: Four Veterans on a Mission

In order to understand more about the participants, and as a preview of the following chapters on data collection, it would benefit the reader to receive some preliminary, background information about each of the four participants who teach at the site of the case study, a high school located in a suburban area of a city in the southeastern United States. Jeanne has been a special educator for over two decades. Most of her time has been spent in inclusion English courses, which is where she feels most comfortable. Due to scheduling demands, however, she has also taught resource English courses, study skills, and even social studies courses within the past few years. Jeanne is often amenable to her colleagues' suggestions and guidance, she listens well to others, and can adapt easily to a new or challenging environment. Jeanne currently co-teaches Multicultural Literature, a senior English course, with Laura.

Although Laura has been a general educator for the past five or so years, she spent the first decade of her career as a special educator concentrating in literature and composition courses. She made the transition from special to general education as a result of her love of reading and writing, and her interest in a change pace. Now, as a member of the English department (as well as the department chair), she teaches two sections of Multicultural Lit with Jeanne, and two sections alone. She seems to love the autonomy and freedom that Multicultural Lit provides for her, as she is the only teacher for this course at the school in which the investigation will occur. Laura is an engaging, approachable teacher. She works hard to make real-world connections between the content and her students' lives, often utilizing videos and analogies to help them along. Like most teachers with whom the researcher has professional and personal experience, Laura does her best to handle an inundating workload without sacrificing too much time from her family; she and her husband have two elementary-aged children.

Mary has been an English-focused special educator at the school since the late '90s. Before then, she was a paraprofessional at the same school; she has spent almost her entire career here, spanning over two decades in education. In addition to co-teaching 9th grade Literature and Composition with Nora (Mary and Nora have co-taught together for over a decade), Mary became the chairperson of the Special Education department about four years ago, when the school district restructured its Special Education staff across the county in an attempt to make austerity cuts. In her role as chairperson, she provides guidance for case managers and acts as a liaison between the teachers and the district Special Education support staff. Mary prides herself on taking any means necessary to help struggling students succeed, but never by cutting corners or slighting someone else; instead, she works diligently within the framework provided to her, and never shies away from tackling a troublesome or awkward issue head-on.

Mary's general education co-teacher, Nora, has been an English teacher for over 30 years. She continues working, despite the hour-long commute to and from the school, because of her love of the subject area and her love of helping students achieve. Alongside Mary, Nora's classroom acts as a well-oiled machine, yet a machine that is able to adapt itself to reflect the constant changes in policy and practice. She maintains her focus on the classroom strategies and philosophies that she supports, while still reinventing certain elements of her practice as needed.

Summary

To explore how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms, the researcher proposes to conduct a qualitative investigation that utilizes case study methods (with four cases—one per participant) within the bounded system of secondary English inclusive classrooms at one high school. Of the four participants, two are special educators, and two are general educators, and they exist as two co-teaching partnerships (that is, a general educator and a special educator in 9th Lit and a general educator and special educator in Multicult Lit). Examining co-teaching partnerships allows for exploring the data from multiple vantage points, which may provide an enriched and deeper understanding of the topic.

Data collection methods will include in-depth biographical interviews (one per participant, individually) and semi-structured interviews (two per participant, individually, and one with each general and special educator who comprise the 9th Lit co-teaching partnership and the general and special educator who comprise the Multicult Lit co-teaching partnership). Classroom materials (e.g., unit plans, lesson handouts, and sketches of classroom configurations) will be used as instruments during the interviews to enrich the collected

data. Data sources will also include three anecdotal observations of each co-teaching partnership, and visual data will be collected in the form of each participant's illustrated representation of critical thinking. For data analysis, field notes and memos from the observations, along with the interview transcripts and documents, will be organized into data matrices and networks in order to find thematic (dis)connections among the data, in accordance with Glaser's and Strauss's (1967) constant comparative method.

Limitations of the proposed case study include the high cost of time, the issue of generalizability versus particularization, the possibility of key informant bias and self-report bias and reactivity, and threats to valid interpretation. Delimitations of method include avoiding student participants, concentrating on literature and composition high school courses, observing inclusion classes as opposed to special education (i.e., resource or small-group) classes, and conducting the study within one high school. Delimitations of the review of the literature include the exclusion of post-secondary topics, avoiding the assumption that literacy relates directly to critical thinking, evading terms that use the word "critical" without preceding "thinking," bypassing demographic data about students with disabilities, and ignoring vague pedagogical terms. Ethical considerations include gaining the participants' consent, protecting them from harm, maintaining their confidentiality and anonymity, and recognizing biases as a researcher. Finally, descriptions of each teacher provide an overview of the four participants.

Chapter four, to follow, is comprised of results within each of the four cases (one case per participant). These within-case results include more detailed descriptions of each participant and discussions of each participant's responses regarding each of the research sub-questions. Data will be utilized to exemplify the participants' responses.

Chapter 4: Within-Case Results for the Four Cases

This chapter focuses on within-case results from the current study, that is, stand-alone results from each of the four cases (one per participant). Chapters five and six, on the other hand, are comprised of cross-case findings which are organized into four themes and four contexts. By first discussing each case separately in the current chapter, however, the reader may be provided a richer context with which to understand how the participants' personal and professional narratives both inform and reflect their conceptualizations of critical thinking and their instructional decisions for students with and without disabilities in high school inclusion English classrooms. As such, the current chapter is divided into four sections, one per case. Each section will include personal and professional background information on the given participant, followed by each participant's responses relating to the overarching research question of how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms. More specifically, the participants' responses will be organized according to the three research sub-questions:

1. How do teachers define, understand, and view critical thinking?
2. How do teachers frame the aptitude and achievement of students with disabilities in light of their ideologies and attitudes and their conceptualizations of critical thinking?
3. How and when do teachers incorporate critical thinking into the classroom for students with disabilities?

Data collected during the current study will be provided in order to reinforce each of the participants' responses as related to the three sub-questions. For the sake of brevity in this chapter, the three sub-questions will be abbreviated in the following manner: 1) Understanding critical thinking; 2) Perceptions of Students with Disabilities; and 3) Critical thinking in practice.

Nora: 9th Lit General Educator

Personal and professional background. Nora has been an English teacher for over three decades. She is married with three children who are now young adults, and she and her husband live in a rural area about an hour from the high school. As a teenager, Nora became enamored by the teaching profession when she started working as a teacher's assistant and helped eighth graders who struggled academically: "And so I started working with those students and just fell in love with it. I could see that I was really helping them. They seemed to bond with me, and called me over to come help them" (interview, October 10, 2014). Later in the same interview, Nora describes how she "just enjoyed being a positive influence in their lives because most of them had some pretty rough backgrounds. So that just is what sort of started me on that path [of teaching], I guess" (interview, October 10, 2014).

When considering what has changed between her youth and now in terms of classroom expectations and interactions, she describes how school used to be much more "business-like most of the time," with teachers who were strict and who "didn't monkey around or anything. I don't really have memories of getting in groups and doing collaboration...It was more lecturing and just sitting in our seats" (interview, October 10, 2014). Beyond the school walls, Nora explains how "we're a little bit more open-minded now," with society now supporting thinking "outside of the box"; she then admits, "I didn't know half of what [students] know at this point...or have access to anything like [they do now]" (interview, October 10, 2014). What Nora most enjoys about the teaching profession is students' love of learning, especially when some students lack support elsewhere:

> I love seeing the kids when they really do enjoy something that we're doing, and I'm not saying that happens often. But I'm just saying when it does, I just really like to see the

> success of them, and just making them feel like they can do things that they didn't know they could do. Just sort of pushing them a little bit more and having confidence in them when maybe they don't have it at home, they don't have that support. We try to give them that support that they're lacking. (interview, October 10, 2014)

Nora then states that what she finds most laborious about the profession is the paperwork and the grading, which occupies so much of her days and nights that she cannot find the time necessary to carry out other important tasks, such as contacting parents (interview, October 10, 2014).

The personal traits that she values most are integrity, punctuality, and self-worth. She also explains how she maintains "high moral values," even in the face of difficult social situations, and that she possesses "strong Christian values" (interview, October 10, 2014). The professional traits that she values most are compassion and helping students maintain their sense of integrity. She describes one conversation with a student whom she believed was acting without integrity by way of disregarding the dress code:

> And I just went up to him and I said, "You know, do you really want to do this?" I said, "Do you really want to be that student doing this?" I said, "You know I remember you as being a leader in the school, and I still see you as that." I said, "Is this really what you want to do?" And that just bothered me. (interview, October 10, 2014)

Nora states that what makes her proud as an educator is the success of her students: "And I know that I'm just a very small, little inkling of [their success], but still, it just makes me proud that they even want to come back [to visit] and tell me and share [stories of their lives] with me" (interview, October 10, 2014). She also values and is proud of "sharing the same philosophies" as colleagues and maintaining positive working relationships, and that "even though people may

differ in their opinions about how to do things, we all have that same common goal" (interview, October 10, 2014).

When asked if Nora holds any professional regrets from the past, she indicates that she possesses none. She explains that when a situation arose in which the outcome was less than ideal, and in which she was to blame, she realized that she "might could have handled it differently, but I think I've always learned from that and not make those same mistakes again" (interview, October 10, 2014). Nora also feels that it was best that, as a child herself, she was unaware of any disabilities that her peers faced, because of the issues associated with peers and the notion of normality: "I know it's wrong, but most people, when they feel like somebody is in Special Ed, it has that stigma attached to it" (interview, October 10, 2014).

Understanding critical thinking. Nora describes critical thinking as occurring when students pose questions, when they make connections to their own lives, or when they evaluate an answer and, instead of assuming its validity, offer a counterargument (interview, October 30, 2014). She also argues that standardized tests may not gauge critical thinking very well, but that "you can kind of see [critical thinking] when you're walking around. You can kind of hear the questions that they're asking each other" (interview, October 30, 2014). Conversely, Nora describes the absence of critical thinking as "memorizing a vocab word and being able to spout out the definition back to me" (interview, October 30, 2014).

When considering how and when Nora arrived at her understanding of critical thinking, she describes how the term first came into prevalence for her as she began teaching, even though she does not recall actively utilizing the term: "And I don't even know, too, that when I was thinking about my teaching that I was thinking, 'Oh yeah, I'm going to have teach him how to critically think,'" but that it is, instead, "intuitive to ask those kinds of questions that will lead

them into those levels of thinking" (interview, October 30, 2014). She later states that although her own thinking process about critical thinking has changed over the years, "there's always been that, just, ability to know what you want kids to do...and even being aware of [the fact that] they know what they're thinking" (interview, October 30, 2014).

Regarding any consensus of critical thinking as a concept, Nora believes that "it's a tough term really to put your finger on, how you would define it," even though teachers seem to share an understanding of how to foster it. She then states, however, that "if you put us [teachers] all together and we had a brainstorming session, some probably great things would come out of it, talking about what is critical thinking" (interview, October 30, 2014). Furthermore, Nora argues that consensus does exist among educators regarding the practices of critical thinking:

> Our standards, too, are guided towards looking at our essential questions that we have, that we've either done together or have come down from workshops or whatever. I think that it's all kind of the basis for what we're trying to get them to do. Yeah, I would say [that consensus exists in the form of] counter arguments and questioning and filling out questions that you know you want them to disagree with. (interview, October 30, 2014)

Nora also suggests, however, that students do not typically demonstrate awareness of critical thinking as a theoretical concept: "I don't think they're sitting there and thinking, 'Okay, what can I ask that's going to show that I'm a critical thinker?' I just think they do that, just naturally" (interview, October 30, 2014). Despite her thoughts about students' lack of awareness of the concept of critical thinking, she does believe that students can recognize the practices of critical thinking, depending on how "vocal" they are in the classroom (interview, October 30, 2014).

Perceptions of Students with Disabilities. When responding to an interview question about any stereotypes that students with disabilities face, Nora explains her belief that sometimes

other teachers "feel like students with disabilities can't do the same work as some of the other students," and that other teachers have "sort of set the expectations lower. And then if they don't set their expectations lower, then they're aggravated" that students with disabilities aren't meeting the standards that teachers and school systems set (interview, November 14, 2014). Nora provides an example of how other teachers' negative perceptions occur in the school environment:

> [In] observations and conversations that I hear [other teachers] talking–like when I go into the office or whatever, somebody will be talking about, "Well, they'll just sit and read [if they didn't read ahead of time]. It's just too bad. I'm not going to spoon feed them. They've got to get it sooner and later."... And I understand the frustration. I–one hundred percent, I get that. (interview, November 14, 2014)

Conversely, Nora believes in "getting to the bottom of why [the lack of work completion] is happening. And a lot of times, they're not putting forth the effort," but there are also "different situations" and "circumstances that impact" students' academic achievement (interview, November 14, 2014). These constraints may explain why Nora says it becomes important to give students "that chance to find that success [in class] and then I think it would spill over into maybe pushing them to achieve a little bit higher," instead of taking the approach that she claims other teachers take all too often (interview, November 14, 2014).

Nora does acknowledge that "there probably are limits to what some kids can do" and that "if they don't meet the standards, then I can't just pass them" (interview, November 14, 2014). This may be one explanation as to why Nora affords students as many choices as possible, to "try to pinpoint something that I think that they would like [to learn about]" (interview, November 14, 2014). For instance, regarding the choice to create any sort of written

narrative, Nora states, "just giving that freedom to just be as bloody as they want to be or whatever" allows them to "get engaged, and I know that sounds crazy, but it's true" (interview, November 14, 2014).

In terms of how teachers could reshape their perceptions or practices for students with disabilities, Nora states, "I don't think that all teachers do as much as they could. I'm including myself...I always feel like I'm under the gun as far as time goes" (interview, November 14, 2014). Nora then expands upon the issue of time, as she explains how revisiting the content for students with disabilities, while beneficial in theory, is practically and logistically difficult: "I would love it if we had more time to do that kind of [individualized] instruction...I've been teaching for 34 years and it's not happened yet" (interview, November 14, 2014). Ultimately, Nora believes that, especially given time constraints and other realistic barriers in the classroom, teachers should be flexible with instructional adaptations such as "reducing the number of questions on a test. I know some teachers would probably frown at that. But [my co-teacher and I] look at it as, again, giving them some success" (interview, November 14, 2014).

Critical thinking in practice. Regarding how much critical thinking is embedded into the lesson planning process, Nora states that it has "always been there," and that it's just a natural "ability that you know, as a teacher, where you want them to go and not just take an answer at face value" (interview, December 2, 2014). Although critical thinking may have always been a part of the curriculum, Nora discusses the importance of being able to anticipate any adjustments to the lesson or unit based on students' (lack of) success with critical thinking, and she conveys that, after over 30 years in the profession, "it's predictable every time...Basically, we know just looking at the IEPs [Individualized Education Plans] in the beginning to see what the problems are" (interview, December 2, 2014).

When considering how to help students who will struggle with critical thinking, Nora believes that what is needed most in order to facilitate critical thinking for students with disabilities is extra time "just to sort of mull [the answer] over for a minute," as opposed to other students who "just know instinctively what the answer is" (interview, December 2, 2014). Nora also suggests, however, that a common type of instructional adjustment that she and her co-teacher make to a given lesson is to the delivery format, with Mary, the special educator, "pulling out the key points [from the lesson] so that they're not bogged down," and also having Mary "[simplify] it a little bit more for them and just getting it where it's not so overwhelming to them" (interview, December 2, 2014). Nora adds that Mary will provide extra help sessions to facilitate critical thinking and general knowledge-building, and to help the students who struggle to feel more prepared: "I don't know if you want to call it previewing," but "to make it a little bit safer, I guess, [for these students] in the room" (interview, December 2, 2014).

Despite the struggles that students face with critical thinking, Nora describes how, during one particular class discussion, the students "really surprised me [because] they just really have...matured from the very beginning and have really seemed to take off"; she adds that so many of her students, including those with disabilities, "were just on fire with that [activity], and were answering and just getting together with their partners...They seemed to be engaged" (interview, December 2, 2014). Regarding how teachers may facilitate students' progress toward critical thinking, Nora claims that students "take it to the next level [once prompted or questioned]...You try to lead [the conversation or thinking process] where you want it to go, but I tell you, though, these kids are bright" (interview, December 2, 2014). Her comments support her position that she is often able to see students' improvement with critical thinking over time, as with the activity she described: "I could see the critical thinking or the light bulbs...I think just

as we go on through the lessons, we begin to see that they can identify [literary] terms and they don't need as much guidance or whatever" (interview, December 2, 2014). From these remarks, it seems that Nora holds her students in high esteem, and that she believes in their ability to think critically despite any learning challenges that they may face.

Mary: 9th Lit Special Educator

Personal and professional background. Mary has spent the last two decades as a special educator at the current high school, and she has been co-teaching with Nora for as many years. Mary is married and has a daughter who is in her early thirties, who has children of her own. Mary has been the special education department chairperson for five years. Mary came into the role of special education teacher after serving as a paraprofessional at a neighboring high school, where she realized how much she enjoys working with high school students (interview, October 13, 2014).

When thinking about how the classroom has changed from the time when she was a child, Mary states, "I think the classroom expectations sometimes are a little bit more back when I went to school. I think now our expectations of students to do any outside work is not as much as what the expectation was for us" (interview, October 13, 2014). She adds that "you had a healthy respect for your teachers...And your parents had a healthy respect for your teachers...I don't see the respect for educators very much anymore" (interview, October 13, 2014). In terms of broader social trends that have occurred since her childhood, Mary describes her frustrations of modern technology, particularly electronics, in schools:

> When I go into first period now, in the morning before class starts, everybody is on their cell phone. Nobody is talking at all. It's dead silence. And, I can remember back when I was going into my first period or homeroom back then, it was all about the conversation

> you might have with the different kids and you did everything face to face. But now, as I said, it's really sad to kind of walk into a room and see that kids don't communicate face to face any more. They're all about their electronics. (interview, October 13, 2014)

Mary does add, however, that electronics "can have a positive impact" in the classroom, but the negativity seems overwhelming "because kids are very distracted by their cell phones" (interview, October 13, 2014).

Despite her concerns about technology, Mary enjoys helping students learn to overcome their setbacks: "I love that feedback that I help them to understand something that was too complex for them to get otherwise. So that's what I really enjoy, is breaking it all down for those kids that don't [learn] how most of the others learn" (interview, October 13, 2014). When discussing the least enjoyable component of the profession, Mary cites paperwork as being "over the top, unnecessary, redundant," and that it has "taken a lot away from teaching, from planning over the years"; Mary adds that paperwork has "grown tenfold" in the last 20 years, which impedes being able to "really get in there and plan your lessons" (interview, October 13, 2014). Mary explains how the issue of paperwork extends into the realm of special education as well: "I do think it's gotten very laborious in the process of having to document all of these IEPs and it seems like every month, we get something updated because they had another lawsuit and they want to cover themselves" (interview, October 13, 2014).

Although Mary takes issue with paperwork in the general and special education contexts, she seems to have maintained a sense of positivity about the profession in general. She does believe that being "open to new situations" is one of the most important personal traits for teachers to possess. She also states that "you have to have, kind of, that love of life in what you do to show kids, in other words, that you are passionate about what you do" (interview, October

13, 2014). Mary considers herself a very compassionate person, and she tries "not to judge people based on first appearances or what I'm just seeing in class"; she explains that it is important to avoid judgment because there is "usually something that's going on in that person's life that may be impacting them to where they acted the way they did, or they're not learning, or it's just a bad situation" (interview, October 13, 2014). Premature judgment reflects one of her professional regrets: "Early on, I didn't realize that...there probably was something else going on [in a student's life] that was causing all of this [negative behavior or difficulty with learning]" (interview, October 13, 2014). Finally, Mary argues that the difficulties that students face outside of school have grown over the years, stating that now there are "so many more severe issues than what they had 20 years ago...You had students that had problems, bad problems, but not to the degree or the number that we have now, and that's not just our Special Ed kids" (interview, October 13, 2014). As Mary indicates earlier in the interview, however, she seems to have embraced the challenge of helping struggling students find success, by showing compassion to students and by showing them her own passion for her profession.

Understanding critical thinking. Mary recognizes critical thinking as students' ability to "apply and take [their knowledge] to the next level when they answer their questions, rather than just a one-answer, rote memory type [of response]," and their ability to "elaborate on [their answers] and give an example"; she adds that "straight memorization" is the antithesis of critical thinking (interview, October 29, 2014). Mary indicates that she first became aware of critical thinking in college, because the classes "really required a little bit more of you to really put your thoughts down as it applied to your life, your understanding [of] a situation" (interview, October 29, 2014). Although she was introduced to the concept and process of critical thinking in college, Mary admits that her own ideas regarding critical thinking have "definitely changed

working with special needs kids, because I now realize there are many different levels of critical thinking [for] special needs kids" (interview, October 29, 2014). Mary explains that society's expectations for critical thinking have shifted as well, especially in terms of the job market: "I think employers do want to look a little bit more for critical thinking and collaborative thinking amongst people, amongst employees" (interview, October 29, 2014).

Mary does believe that teachers share an understanding of critical thinking on a theoretical level, but that "there's an expectation difference amongst teachers, very definitely" (interview, October 29, 2014). Mary's perceived difference in expectations among her colleagues speaks to teachers' practices of critical thinking more so than theories, and she adds, "I just think some teachers probably don't promote it as often as other teachers...In other words, some do not put, I think, much emphasis on it, importance on it" (interview, October 29, 2014). Mary also states that she believes there is a "disconnect" between critical thinking theory and practice, and that it is "never implemented as it should [be]" (interview, October 29, 2014). Despite her viewpoint that some teachers may not promote critical thinking in practice, Mary does believe that students possess an awareness of critical thinking, if not an interest in it:

> I think they're very aware of it, but I think that the vast majority do not want to engage in it. They want everything handed to them. "Just give me the answer," basically. "Just tell me what the answer is in the simplest form," basically, is what we get a lot of, unfortunately. Every once in a while, you get that student who really wants to take it to the next level and engage in a conversation other than just rote memory information. But a lot of students nowadays, I think they're aware of it...because [of how educational policy pushes] certain things in education. (interview, October 29, 2014)

Later in the interview, Mary reiterates the idea that, currently, students "want to be entertained and the easiest route to take them" (interview, October 29, 2014). This supports her belief that students recognize, but do not wish to engage in, critical thinking.

Perceptions of Students with Disabilities. When asked about the stereotypes that students with disabilities face, Mary argues that people who lack knowledge of students with disabilities, or people who are not highly educated, "have a big misconception of what [disability] is...I think a lot of people think they either have very bad behavior problems or that they're so low, they can't go to any type of post-secondary situation" (interview, November 13, 2014). She then states that these stereotypes of students with disabilities, formed by people outside of the school, may impact students within the school in terms of how these stereotypes may shape "public opinion" of students with disabilities, which might then make an impact on educational policy. Mary also believes, however, that negative stereotypes of students with disabilities are perpetuated by teachers as well: "I think [some teachers] don't bother to inform themselves and I think they don't necessarily really care at times...They want to do things one way, and that's the only way they want to do it" (interview, November 13, 2014).

While Mary takes note of what she perceives to be her colleagues' negative attitudes toward students with disabilities, she also speaks freely about the learning issues that she notices they often experience. Mary explains how students with disabilities "can't read and they can't write. Somehow they have been passed on through the system, to high school"; she adds that "their vocabulary is limited, and because they haven't become big readers, they're very poor writers. They don't have any experiences to pull from" (interview, November 13, 2014). Mary also acknowledges the tension between struggling learners' lack of literacy skills and the need to keep them at age-appropriate grade levels: "They're passing these kids on to high school, and

then what would we do? We pass them on and get them out [because of] social promotion. And yet when they leave us, they're really no better off in their reading and writing" (interview, November 13, 2014). This idea of unpreparedness may explain Mary's opinion that elementary and middle schools should "forego all these extra [elective] classes until they can make sure students can read and write" (interview, November 13, 2014).

When considering any issues of identification and labeling, Mary states that "there's a whole lot of [students] out there that are just unidentified or they need help. Maybe they don't meet the requirements [for special education services] but they really need help. They have big pockets of knowledge that are missing" (interview, November 13, 2014). Mary adds, "You can't turn your back on them and say, 'Well, I'm sorry. You're not in the Special Ed program, so I'm not going to help you'" (interview, November 13, 2014). Mary also believes that, in terms of critical thinking, stakeholders often draw too fine of a line between students with and without disabilities, which supports Mary's belief in pulling out students for small-group instruction based on need, not based on whether they are labeled with a disability (interview, November 13, 2014). This belief about instructional pull-out leads directly into Mary's practices to support critical thinking.

Critical thinking in practice. When asked if and how teachers could provide students with disabilities with richer opportunities for critical thinking, Mary remarks that "pacing is hard for the kids…[my co-teacher, Nora, and I] try and figure it in [lesson planning] but then...we're somewhat bound by time constraints" (interview, November 13, 2014). Mary also mentions how, for students with disabilities, "you have to remove...a good portion of the extra stuff so that they can get down to the meat of what they really need to know. Because I do believe they can learn it" if it is simplified (interview, November 13, 2014). In addition to slowing the pace of

instruction and thinning out content, Mary also believes that teachers need to more effectively differentiate and diversity their method of content delivery:

> I do think there are teachers out there, though, that do not differentiate. They don't specialize any instruction. They just deliver it for everybody the way it is. If [students] don't get it, "too bad, so sad"...Some of these kids are just never going to ask for help, so they miss the boat the whole time. They just fail a test, fail the next test, fail the paper. And some kids are going to do that anyway no matter what you do, unless you write the paper for them or take the test for them. But I do feel like there are teachers out there that could do a better job of rather than just standing up and lecturing the whole period, could do a better job of some more hands-on activities to reinforce what the kids are supposed to be learning. I really do. (interview, November 13, 2014)

Mary describes her own reasoning for pulling out students in smaller groups, which is one method of differentiation that she describes as lacking from other teachers: "If they're not going to be able to read on their own and understand on their own, hopefully [pull-out instruction will] take away a little bit of the difficulty for them by reading it with them and explaining some things" (interview, December 2, 2014).

Besides pull-out instruction, Mary discusses how to incorporate critical thinking into the planning process and into classroom practices: "I think now it's just almost a given, over the last, what, 10 years. It's become a big push, so it's almost ingrained in you and [asking] how do you get them to the next level instead of just basic rote memorization"; Mary then states that, when planning, "You look at it now automatically the way the lesson lends itself [to critical thinking]. And you really just look at it and say, 'What kind of additional critical thinking activities can we do?' I think you're just in that mode now" (interview, December 2, 2014). In

terms of the skill sets that may require the most scaffolding for critical thinking, Mary explains that writing presents difficult challenges for struggling learners. Mary provides an anecdote of a student whom she helped one morning, and the difficulty "in dealing with that little girl, trying to get her to write a response to an informational piece, totally lacking the skills. She just told me whenever she was given a topic she wouldn't write"; Mary continues, "And to me, that's a skill that you need to start promoting a little bit earlier on, if that's what the expectation is when you get to high school" (interview, December 2, 2014).

Later in the interview, Mary makes a broader statement about students' lack of writing skills: "So many don't even do the basics. I don't know if they don't know or [are] not bothering to capitalize, punctuate, spell correctly. It's hard to tell [if it is because] they're so used to texting" (interview, December 2, 2014). Mary's concerns with students' lack of basic skills seems to reflect her beliefs in the effectiveness of instructional models like pull-out and extra scaffolding, with which she is able to help students in a smaller setting and individualize the content and the delivery to a greater degree. The discussion of students' lack of basic skills also relates to her frustrations about social promotion, to the extent that students are unprepared for post-secondary life if they lack foundational reading and writing skills (interview, November 13, 2014).

Laura: Multicultural Lit General Educator

Personal and professional background. Laura is married with two children who are in their elementary years. She has served as the department chairperson for English for the past three years. Laura has almost 20 years of experience as a teacher, but only six or seven years as a general educator. Prior to that, she taught within the field of special education. Laura became interested in education, and special education in particular, after she was placed in a special

education classroom during her high school internship. Although she felt "very uncomfortable for the same reason a lot of people are uncomfortable, if they're not used to being around people with disabilities," she ended up loving her placement, and became a special education major in college (interview, October 14, 2014).

Laura is guided by her desire to build strong relationships among peers and colleagues, and believes that "it's hard to get kids–or anybody, really–to do anything if there's not credibility and rapport and relationship-building" (interview, November 13, 2014). Laura also describes the influence of her own role as a parent: "My experience as a parent dictates a lot about how I teach...If I were [a student's] parent, what would I hope would be happening in my kid's classroom? So that shapes a lot of what I do" (interview, November 13, 2014). Laura cites her relationship with her father as a foundation of her passion for education: "He's crazy smart and had always just valued education in the home...He was big in critical thinking"; she adds, "He had a law degree and I remember him always telling us as kids that law school isn't really about law. It's about teaching you how to think" (interview, November 13, 2014).

Regarding changes in classroom expectations or practices between her childhood and now, Laura thinks that more interaction happens now: "I don't remember doing a lot of group activities and getting in circles and doing jigsaw-type things"; rather, Laura remembers being expected to memorize passages from Shakespeare and poetry (interview, November 13, 2014). Despite these changes in instructional techniques and content, Laura contends that "as students, we worked harder [when I was in school]," whereas now, students are more inclined to, for instance, only read part of an assigned book, and possibly not even obtain their own copies of the book (interview, November 13, 2014). When thinking about what has changed on a broader, societal level since her childhood, Laura explains how social mores have shifted:

> Morality is huge. The kids, what's normal now, in terms of, you know, we see it in the kids' dress code, the sexuality, and language. I would've, like, died three deaths if my teachers heard me drop some of the language we hear out here in the hallway. I think some of the things that TV teaches them as normal, that the music teaches them as normal, that was not normal. I guess that just shows my age...but that is the big thing, the social trends. The acceptance, particularly when you talk about culture and when you talk about things like homosexuality and things like that were much more taboo when I was younger. So I feel like, as a culture, we're much more accepting of things like bi-racial marriages. (interview, November 13, 2014)

Later in the interview, Laura expands on her thoughts about shifting norms, claiming that these changes are "mostly positive. I think, on the whole, we're much more accepting of individual differences"; she then states, however, that "the morality part," referring to increases in students' likelihood to curse in school or dress inappropriately, is more of a negative side-effect of these positive shifts in society's norms and values (interview, November 13, 2014).

Laura conveys that building relationships with students is the most enjoyable part of the profession, such as "being able to have conversations with them, not only about their learning, but where their learning connects to their real life" (interview, November 13, 2014). Laura then describes a situation that occurred on the same day of the interview, in which a female student, who was expected to locate and read a nonfiction book for her self-chosen project on parenting, came up to Laura and said, "My mom tries her best, but because of some of the things that happened to her, she just isn't really emotionally available for me. I want to have kids, but I don't want to parent like her"; as Laura explains, this student "wanted my help in finding...a

book so she could break the cycle, and...that's a day where you're, like, checking the box [for successful teaching]" (interview, November 13, 2014).

When discussing what is most laborious or frustrating about teaching, Laura remarks, "paperwork. Grading, to a degree, not because I don't mind grading, just that it gets really excessive when you teach this subject" (interview, November 13, 2014). When asked whether paperwork has changed throughout her career, she explains how "there's a lot more paperwork regarding, like, RTI [Response To Intervention], 504s [Section 504 of the Rehabilitation Act of 1973] and all of that"; she continues, "I don't mind gathering as a group of professionals and talking about a kid and how to help him...but when it needs to be 23 pages, it's ridiculous. It's all to protect yourselves. It's not about the kid" (interview, November 13, 2014).

Laura explains that faith, integrity, and empathy are some of the traits that she values on a personal and professional level. She states that her faith is connected to integrity, and explains that she talks to her students about the notion that "'right' is not a moving target and that it's really easy to justify things that we do...Integrity is really big" (interview, November 13, 2014). Regarding the importance of empathy, Laura tells a story about a student who was considering committing suicide, only to be held back by Laura's compassion and words of wisdom:

> [When this student] was in here, in the class one day, I made a comment about her mom, who wasn't supposed to be able to have kids. She had her that it was an accident. I was just being me and being nosey and I go, "Accident?" I go, "Wait a minute. So you defied all odds of science and medicine and there you are." I go, "Let's re-frame that. I call that a miracle." I said, "At that point, you get up every day and go, 'Watch out world...Here I am.'" She wrote me a letter the following Monday. She had planned to commit suicide

> that Friday. She was morbidly obese and had been collecting some kind of pill that she was on. She said she had finally collected enough to do the job. She was sitting on her bed and she said, "Every time I went to take the pills, what you said to me about being a miracle kept running around in my head. And she said, "It was the first time that I had ever considered that I had a purpose on this Earth." And even my husband, who's not a crier, was, like, balling when he went through this letter. I mean, it was the most heart-wrenching–but when I know that I've been able to even change the trajectory of personal success for a kid, even if at our stage, it's one degree. We know that, moving forward, that one degree can be important. So I feel like, I've done a good job with that. (interview, November 13, 2014)

From this student's letter, it appears that Laura is empathetic and compassionate. Laura admits, however, that she was less empathetic in her earlier years of teaching: "I was really hard on kids," without thinking about the fact that the students represented "the best the parents had to send you, and if they had better, they would send you better." Laura then remarks, "But I think I'm much more empathetic now, because I have that filter of how I would want somebody to handle this if this were my kid (interview, November 13, 2014). Based on her comments, it seems that Laura's personal experiences as a mother have helped to develop and strengthen her professional outlook.

Understanding critical thinking. Laura explains how students' critical thinking is evident in the classroom when students are able to focus with "sustained attention and sustained thinking," with which "kids today have an increasingly difficult time" (interview, October 30, 2014). Laura adds that critical thinking is evident "when I hear their answers and I can see that they've made connections to things, or something reminds them of something else that they did,

or they can see an application of something" (interview, October 30, 2014). Laura describes non-examples of critical thinking as "things where they try to get it straight out of the text," as well as "yes" or "no" questions that can be answered "without any kind of support" (interview, October 30, 2014).

Regarding how and when Laura began to recognize and understand critical thinking, she remembers how her father "played devil's advocate from the time we were in the crib," making comments to Laura like, "It doesn't matter what I believe. I'm trying to get you to think" (interview, October 30, 2014). Later in the interview, Laura remarks that she thinks her notions of critical thinking have shifted because of society and the increase in technology, with the emphasis in the past on "the information gathering" stage of research, whereas now "we kind of, almost, take that step out of it...because it's irrelevant," and now teachers are much more focused on what students "can do with that [information] and how they can make it relevant and meaningful...So much of the teaching has had to shift to [asking], 'What can you do with information once you have it?'" (interview, October 30, 2014). Laura does not believe, however, that the value of critical thinking has changed over time, rather that it functions differently depending on need (interview, October 30, 2014).

Laura also comments on the difficulty of reaching consensus on a definition of critical thinking and the difficulty of enacting those ideas in practice:

> I bet you get a lot of different answers. If you ask somebody how you define critical thinking, I think we could all come up with buzz words from our latest in-service, but when you get down to really–particularly, I'm guessing observing classrooms and seeing where the, kind of, rubber hits the road, because I think when you observe what they're

> doing with it, you can really, kind of, see what they believe that may be a little bit different than what they practice. (interview, October 30, 2014)

Laura describes how, even if teachers were to "agree on, conceptually, what critical thinking is, I don't know that you would find the practice being equal...My personal thought is there are a lot of teachers who just have different levels of commitment to this profession" (interview, October 30, 2014). Laura clarifies to whom she refers as having different levels of commitment, and speaks to the challenge of aligning practice to theory: "So where you get the overwhelmed teacher, where you get the new teacher. It takes a lot of practice to really develop some of the techniques that we use to teach [critical thinking]" (interview, October 30, 2014).

Regarding the extent to which students are aware of critical thinking as a concept, Laura comments that "maybe real high-level students would know [the concept], but I can tell you, most of mine wouldn't know it" (interview, October 30, 2014). Laura does not place this responsibility on her students, however, as she states that students' lack of recognition of critical thinking is partly due to an issue of growth and maturity, but also because of the fact that "as teachers, we keep the lingo on our side of the fence a lot...So I don't really think it's their fault" (interview, October 30, 2014). Laura also remarks that students are aware of the practices of critical thinking only if teachers give students the lexicon and the vocabulary to discuss it: "I don't think that they're incapable of understanding it. I just think that we haven't really talked about it" (interview, October 30, 2014). Based on Laura's assessment of students' and teachers' understanding of critical thinking, it seems logical, then, that students would not possess a firm grasp on the concept of critical thinking if teachers differ in their understandings of it and in their practices of it.

Perceptions of Students with Disabilities. When considering stereotypes faced by students with disabilities, Laura describes how some people make assumptions because of the special education label:

> I think the biggest [stereotype] and the most obvious one is just that [students with disabilities] are not going to be able to perform at the level of other kids. And I think there are times when that is certainly true or more things are required for that to happen. But I think that that assumption–because the kid has this label next to their name, automatically, my expectation is somewhat less for that kid–would be the biggest bias. (interview, November 12, 2014)

Related to this idea of assumptions based on labels, Laura explains how she takes issue with the school's gradebook system, which, splits any given class into two separate rosters, one for students with disabilities and one for students without disabilities. Laura believes that "any time we make a point to...separate kids out...I don't know that that's ever really good," and she adds, "I think in certain situations it embarrases the kids...I think it feels very divisive" (interview, November 12, 2014). Later in the interview, she refers to the same bias that other teachers may possess, that "you can lump all these kids together if they are disabled, that's just a uniform condition" (interview, November 12, 2014).

Laura also conveys throughout the interviews how sometimes her brightest, hardest-working students are labeled with disabilities: "The kids that succeed in my class are generally not the kids that have the highest IQ; they are the kids that work the hardest. And I see that time after time...We have tremendously bright, creative kids [with disabilities]" (interview, November 12, 2014). Laura argues that "in most cases, [a disability] doesn't really get in the way...of their critical thought as long as their IQ is there and their cognitive ability is there" (interview,

November 12, 2014). Similarly, Laura discusses how the struggles faced by some students come not from an inability to think critically, but from reading levels that are below "where their thinking is," or from the complicated nature and multi-step processing that is involved with writing tasks, which can be "pretty overwhelming for a normal kid and makes it more overwhelming and just makes it more arduous than it would be for a typical kid" (interview, November 12, 2014).

Aside from reading and writing skills that may be weaker for students with disabilities, despite age-appropriate critical thinking skills, Laura explains how a significant factor which influences how well students with disabilities can succeed in the classroom is the context of their prior learning environments and (lack of) confidence in themselves:

> If they've been treated like the special ed kids who were not really going to have much expectations for [teachers], I don't think that they volunteer a lot. But sometimes, even my lowest kids, would just come out of nowhere, and you're like, "that was good."...I think sometimes that they are insecure; they don't volunteer a lot because they know they are special ed, they feel dumb, they feel like they can't do anything. I think across time a lot of those things hinders them really giving what some of the other kids give. But I don't think it's because they can't because they have a disability. (interview, November 12, 2014)

Laura's remarks suggest that the special education label–or how others perceive the label–can become, over time, a source of students' insecurities. Despite her concerns about labeling, Laura believes that instead of ignoring students' personal background information, psychological test scores, and other data, teachers should use this information to figure out where "the wires are crossing," which "really could make a big difference with how you present the material [to

students"; she adds, "A lot of times, particularly now [in high school] the kids' eligibilities were done so long ago that we kind of quit talking about really what was the heart of why they have that label in the first place," and "I think that's just really important information that could change things if we had the time"(interview, November 12, 2014). Finally, Laura remarks that in order to avoid these misconceptions of students with disabilities, teachers should stop "painting with the broad brush" in the classroom, and should not let a disability label "color how you see the kid" (interview, November 12, 2014).

Critical thinking in practice. When asked about incorporating critical thinking into the Multicultural Lit curriculum, Laura explains how her process is "deliberate and intentional," and that she always tries "to include multiple levels of thinking because you know, particularly with the varied ability levels that we have...you'd miss all these kids [if only targeting the high-achievers]" (interview, December 1, 2014). Laura clarifies that struggling learners are not the only ones who need support: "I think, even for the kids that are capable of really, kind of, upper-level critical thinking skills, I think that a lot of those kids have to be scaffolded up there" (interview, December 1, 2014). Regarding any instances in which the instructional plan for critical thinking needs to be modified based on students' needs, Laura describes what can happen with major writing tasks: "We had this big, grand plan about how the kids were going to read these things and synthesize and then there's going to be unicorns and rainbows and it was going to be awesome," but "quickly realized that it wasn't happening in the way that we [envisioned]"; Laura realized, at this point, "that if we were going to really get the complex level of thought, that we had to slow down and force them to really, like, dig into the text" (interview, December 1, 2014).

Laura also speaks to the difference between critical thinking that develops more naturally and organically without much scaffolding, and critical thinking that develops only with scaffolding from teachers. Laura argues that scaffolded critical thinking "might push kids more...if you're looking at growth in academic situations," but that organic critical thinking "in real life might serve them better, because in real life, you're not going to have anybody scaffolding anything for you"; she then explains, "You have to take, kind of, the raw materials you have and whatever capabilities you have, and come out with what you're going to do" (interview, December 1, 2014). Regarding how to access students' critical thinking, whether organically or through scaffolding, Laura argues that "relevance is huge" and allows the content to become "more accessible" (interview, December 1, 2014). Her emphasis on relevance is reflected in the Project Success assignment, in which asks students to choose a life goal to explore in depth, and which involves both organic and scaffolded critical thinking (interview, December 1, 2014).

Jeanne: Multicultural Lit Special Educator

Personal and professional background. Jeanne has been a teacher in the field of special education for over three decades. She is married with two children who are both in their thirties, one of whom has children of her own. Jeanne became interested in education when she worked with adults with Down Syndrome in Massachusetts: "I just loved working with people that were, just, struggling" (interview, October 10, 2014). She states, "I always liked...working with kids," and in elementary and middle school, she "would seek out kids that seemed to just not be doing their work or something, then I would want to sit and work with them" (interview, October 10, 2014). In the early '70s, Jeanne enrolled in college and majored in special education, which she claims was a rare degree at that time.

Jeanne describes the most enjoyable part of teaching as "working with students that have all different types of learning styles, personalities, and trying to figure out what works for them [to learn best]" (interview, October 10, 2014). Conversely, the part of teaching that she finds the most frustrating is students' inability to focus and lack of work ethic, and that she has "to be prompting kids to be listening to the lesson [instead of texting on their phones]" (interview, October 10, 2014). The professional trait that Jeanne most values in herself is her ability to remain "positive with kids" and not "show frustration or discouragement when kids are either not doing what they're supposed to be doing or have difficulty understanding what they are supposed to be doing" (interview, October 10, 2014).

Jeanne also explains how she tries her best to "find what works for the kid, and I may change up some of the assignments just so I can at least fit it into something that I know they will find interesting" (interview, October 10, 2014). She mentions a "real car junkie" in her senior lit class, who wanted to come to class every day with greasy fingernails, and another student interested in computers; for students like these, Jeanne tries to find out "what makes the kid click,"and she tries to "give them something almost like an alternative" and help them to "feel like they have some say in what they're doing, just so that they'll be more interested and they'll complete the assignment" (interview, October 10, 2014). Similarly, Jeanne explains that what makes her most proud is "seeing kids that struggle be successful...or, I guess, just to see a smile on their face when they realize they really can write and they...are happy"; Jeanne says this is especially true for seniors, and she enjoys seeing them get out of high school, feeling "personally satisfied" (interview, October 10, 2014).

Understanding critical thinking. Jeanne believes that critical thinking occurs when teachers push students to use inferencing skills and when students must respond beyond a

"simple answer"; she adds that open-ended questions are more conducive to critical thinking than "yes" and "no" questions (interview, October 28, 2014). Jeanne recalls first being challenged with critical thinking in college: "I went to an all women's college, and we did some group projects that were tough for all of us. Jeanne claims that she is now "more aware of [critical thinking], because it's been kind of the standard, and we've been asked to do more critical thinking" (interview, October 28, 2014). Despite this awareness, however, Jeanne clarifies, "I don't know if I've thought about the term 'critical thinking,'" but rather focused on asking "questions that I hope would challenge the kids" (interview, October 28, 2014). Regarding if and how critical thinking changes across contexts, Jeanne thinks that "it does change, depending on what the subject [requires]...It depends on what kind of a learner you are, too, I think. If you're an active learner, then, yes, you want to be more challenged with critical thinking" (interview, October 28, 2014).

Jeanne suggests that "everybody has a different idea of what they think critical thinking is," which, she believes, influences how some teachers fail to hold all students to high expectations: "I think some teachers...don't think they feel that they can push...the special needs kids as much. But I think that if they just tried more often, they'd be surprised they can get more out of them" (interview, October 28, 2014). Similarly, Jeanne does not think students are clear on their understanding of critical thinking: "It's almost like you have to kind of model it for them...But I think if you ask the students about critical thinking, I'm not sure that they would be able to define it for you"; she then explains, "I just think you have to push them to show them that this is what we're looking for and expect that they can do it. I think that the expectation is important [to convey to students]" (interview, October 28, 2014). It seems that, from Jeanne's perspective, neither teachers nor students possess a unified understanding of critical thinking.

Perceptions of Students with Disabilities. Jeanne believes that one of the stereotypes faced by students with disabilities is that they will demonstrate poor behavior in co-taught, inclusive classrooms, but this "is not always true. It can be, but it just depends on the class make-up" (interview, November 11, 2014). Jeanne also makes a point of discussing the ambiguity or confusion of the labels used for special education eligibility, with Other Health Impaired (OHI) becoming, according to Jeanne, a much more common eligibility category compared to Autism, which may be because "the parent most likely did not want the Autism label"; as a result, "they've clumped them all under OHI for the most part" (interview, November 11, 2014). Jeanne's comments about labeling seem to reflect the notion that parents find more value or more power with one label over another, or that they may find one label less stigmatizing than another. This relates to Jeanne's remarks about what has changed between her childhood and now, as "we've come a long, long way with having kids and people with disabilities"; she explains, "We realized that people can learn a lot more than we ever thought they could that were disabled...They can become productive and outside of school once they graduated and all" (interview, November 11, 2014).

Jeanne also discusses the factors that relate to whether and how students with disabilities may return to the general education setting and relinquish special education services. Jeanne describes how she recently "exited [a sophomore student] out of special ed"; this student had shown improvement since seventh grade, but his "mom just kind of wanted to keep him identified because he was going to be in high school...So it depends on the severity of their disability [and on] parent involvement" (interview, November 11, 2014). Jeanne clarifies, "I do think parent involvement is so important for kids with disabilities...The kids know that their parents have those [high] expectations for them, where some kids, I don't think the parents

maybe don't even check their grades" and are "not involved in the child's education. So therefore, the child doesn't think it's important to the parents, so maybe it's not as important to [the child]" (interview, November 11, 2014). Although she does believe in the importance of parental support, Jeanne also thinks that there are some students with disabilities who no longer require special services, such as the sophomore she mentions earlier, but "[their parents are] just afraid to kind of let them off into general ed" (interview, November 11, 2014).

When asked about any improvements that teachers could make to more effectively foster critical thinking for students with disabilities, Jeanne indicates that the pace could decrease: "I feel like we're sometimes on this pace that I feel like is a little bit overwhelming"; she also believes that long-term projects sometimes "get a little bit out of hand with how much is due for each section...So it's almost like too many pieces, and I think we need to cut down on the quantity and go more for, like, the quality" (interview, November 11, 2014). Jeanne also believes that it is important for teachers to "hit all senses. I mean, you have to do for the auditory learner and for the visual learner...I think modeling does help for a lot of these kids" (interview, November 11, 2014).

Jeanne feels as if, ultimately, it is most important to embrace the idea "that every kid can be successful" and that "you don't give up on any of them...I just think all kids should be able to see success" (interview, November 11, 2014). This notion of success for every student holds true for critical thinking, according to Jeanne: "As a teacher, like, we are challenged to use...critical thinking in the classroom. So I guess I've tried to think about how to use it with...special ed kids"; she continues, "And I think everybody's capable of some critical thinking, but I'm not sure that all teachers feel that way...You always have to be thinking about a way that challenges a kid, no matter their disability" (interview, November 11, 2014).

Critical thinking in practice. When considering how to foster critical thinking for students with disabilities, Jeanne remarks that first "we have to ask questions from kids that are more literal" or "rephrase the question if they don't really seem like they understand what you're asking them from the start" before moving on to more complex questions (interview, November 11, 2014). Jeanne then explains how struggling learners may suffer from a lack of confidence, which impedes their ability to respond to complex questions:

> It's important to ask these kids [questions]. I think some of them are afraid to answer, thinking they're going to be wrong...I just don't think they have the confidence that other kids have. And, I mean, they know they're sitting there [and not becoming engaged]. They're under special ed, but, I mean, some kids it doesn't bother [them], but I would say the majority, it probably does bother them. And they're afraid of being wrong. They might have ideas. but they're afraid of raising their hand and thinking they might make–like, say something that's going to sound stupid. (interview, November 11, 2014)

Jeanne later explains how she embraces a level of responsibility for students who struggle to contribute in class: "I kind of feel I'm that voice of kids who don't want to ask [questions] because they don't want to look like, 'Am I the only one that doesn't really understand?'"; Jeanne adds, "I mean, I work with any kid that wants help, but I feel like I am in there for the kids that do struggle more" (interview, November 11, 2014). In addition to focusing her energy on struggling learners in order to help boost their confidence, Jeanne also believes that, in terms of fostering critical thinking, "it's almost good to tell them what we are looking for ahead of time and trying to amp it up a little bit. So as they're reading, they're thinking about some of that higher, critical [thinking] I guess" (interview, November 11, 2014).

Aside from engaging struggling learners in specific questioning techniques and previewing the course material, Jeanne describes how teachers can bolster students' critical thinking through meaningful, relevant assignments that can allow students to make connections to their lives, as occurred with a particular set of lessons involving issues of poverty: "I think [the assignment] really opened their eyes up to how much poverty there is, even in [the surrounding community]"; Jeanne adds, "And then when they did their timed writing, I think they had to use more critical thinking in that, because they needed to come up with ideas of how to help with the poverty issue" (interview, December 1, 2014). In addition to assigning tasks that are more relevant, Jeanne believes that students, particularly those with disabilities, would benefit from tasks–especially writing tasks–that are less daunting in length, because often the writing style of students with disabilities is "very simple. They don't really use complex sentences," which only magnifies students' writing deficits (interview, December 1, 2014).

Now that the results from the four cases have been discussed separately in the current chapter, by way of providing personal and professional background information on each of the four participants, as well as by way of exploring the participants' responses relating to the three research sub-questions, chapters five and six will provide cross-case analysis of the four cases. The cross-case findings are organized into four themes, each with a particular context of focus. Chapter five is comprised of the social and institutional, conceptual, and real-world contexts, while chapter six is comprised of the academic achievement context.

Chapter 5: Cross-Case Findings in Societal/Institutional, Conceptual, Real-World Contexts

Introduction: Educational Themes of Critical Thinking

The current study asks how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive

classrooms. This overarching research question is comprised of three sub-questions: 1) How do teachers define, understand, and view critical thinking?; 2) How do teachers frame the aptitude and achievement of students with disabilities in light of their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking?; and 3) How and when do teachers incorporate critical thinking into the classroom for students with and without disabilities? As a method of framing the findings that relate to these questions across all four cases, one may consider the themes that bring together various aspects of critical thinking, both from a theoretical and a practical standpoint.

The goal of the current study is to more firmly grasp how these themes illuminate the participants' rich, complex conceptualizations of critical thinking, and how these conceptualizations, in turn, influence their pedagogy for students with disabilities in secondary English inclusive classrooms. As such, the study involves an exploration of the intersections of English teachers, students with disabilities, and critical thinking, not simply an explanation of critical thinking as an educational process or product. The focal point of interest is not the notion of critical thinking in and of itself, but rather how general and special educators negotiate their values and thought processes among the related educational phenomena that influence the nature of critical thinking in the classroom. The cross-case findings are thus divided into the following four themes, each with a particular context of interest: 1) the societal, institutional context; 2) the conceptual context; 3) the real-world context; and 4) the academic achievement context. By framing critical thinking and its related phenomena in each of these contexts, the reader may develop a firmer grasp on the inherent complexities of teachers' ideologies and pedagogies. The first three cross-case themes and contexts are included in the current chapter, while the fourth comprises chapter six.

Theme 1: The Societal, Institutional Contexts – New Problems with the Old Problems

The first major findings of the current study involve the societal and institutional contexts. The societal context refers to the settings and situations that exist beyond the school walls, yet which influence students within the school walls, including students' home lives and socioeconomic status. The institutional context describes the broader trends and policies in the educational system that can affect students in the classroom. The findings related to these contexts include discussions of the factors that influence students' success, the impact of technology on teachers, and the process of identifying and labeling students.

Factors influencing students' success. The data in the current study reveal that teachers' pedagogy and values are influenced by their perceptions of broader, societal and institutional elements. For instance, some of the participant interviewees indicate that the struggles that students face–particularly in terms of home stability and socioeconomics–are still the same struggles as existed a few decades earlier, but yet different in certain respects. Mary, the special education research participant in 9th grade Lit, explains how there are "so many more severe issues than what they had 20 years ago...Some of those kids, they're so emotionally disturbed by what has happened to them and that's really sad to see" (interview, October 13, 2014). Mary's comments reflect how the severity of students' issues today can lead to greater problems than in decades past. Nora, Mary's general education co-teacher, explains one reason why students may have difficulties with critical thinking in school, and then suggests what is new about the same problem that has existed for decades:

> Some of them don't have families at home that are saying, "Okay, did you get your homework?" Some of them're living in a car. Do you know what I'm saying? We're trying to put in measures in place that will help those students–maybe as just being a

> teacher, and being a little bit more aware of it. Certainly, I don't really remember any of that for my own high school or anything like that...But I feel like we're making more of an effort to do something about it to help them. (interview, October 30, 2014)

Nora's comments suggest that, as a result of students' increased issues at home, educators adapted to students' need for more support in school over the last few decades.

Nora's and Mary's concerns about their students' home lives is reflected in the literature in a few instances. Alexander (2000) and Sfard (1998) both discuss the interconnectedness of the individual and his society, and Hodkinson (2005) conveys the idea that it is fruitless to adhere to the duality of the individual person versus the individual product of society. These researchers recognize, as do Nora and Mary, that removing a person from one context (e.g., home life) does not negate the influence of that first context on a second context (e.g., school life). Nora's and Mary's acknowledgement of the intersection of home issues and critical thinking abilities reflects the importance of meaning-making, which is described in the literature as the process of how teachers make informed decisions based upon shifting classroom demands (Copeland et al., 1994).

Impact of technology. Aside from factors at home that influence students' abilities to succeed, the data suggest that it is important to consider the impact of technology on our society and the institution of education, which relates to critical thinking in turn. One can argue that, throughout history, students have always taken advantage of the technology de jour, pushing the envelope of what older generations think is possible with the tools available to them at that time. Yet, paradoxically, the participants indicate that technological changes are more impactful now than ever before, even though technological improvement is nothing new (Roco & Bainbridge, 2013).

For instance, Mary laments about how the use of electronics in schools has decreased the face-to-face communication (which she values so much as evident by her visual data) among students: "It's dead silence...It's really sad" (interview, October 13, 2014). In a subsequent interview, Mary describes how a shift in the last few decades has impacted students' abilities to learn effectively, in the sense that "they want to be entertained and the easiest route to take" at the expense of critical thinking (interview, October 29, 2014). Nora echoes her co-teacher's concerns through her remarks about the unique and even ineffective multitasking behaviors of students of current and recent years:

> But you know, they're just on that fast pace of everything is right at their fingertips and for it not to be there–and they have to stop and go back and be patient and look for it–they're just not having that. They're just going on. They just want to get to the task. It's just a much faster pace, multitasking with their music and just all these things going on and not really going back and concentrating on one thing. (interview, December 2, 2014)

If considered in a different context, multitasking may not carry a negative connotation. In light of the belief, however, that critical thinking is a process which requires focus and dedication to task, it seems clear, through Nora's and Mary's comments, that technological advancement and critical thinking do not always align toward the same goals for students.

Mary even articulates how technological advancements in recent years have led to the fading away of literature: "It's surprising having ninth graders [who are] lacking basic computer skills to type papers, which is shocking...As a Lit teacher, I do see it's a dying art of writing and reading...There's no personal sense left anymore (interview, October 29, 2014). Similarly, Nora articulates how "technology masks a lot of [students' deficits in basic skills]" and that "it's keeping you from really seeing the bottom line (interview, December 2, 2014). From the

interviews, it seems that Mary and Nora feel that, at least in some respects, technology impedes students' abilities to think critically. Similarly, Muyingi (2014) discusses how technology can become problematic for students who are particularly prone to distractibility, as may occur for some students with disabilities in Nora's and Mary's 9th Lit class.

Although Nora and Mary agree on many aspects of the concerns of technology, Nora seems to accept, in many ways, changes in technology as pertaining to students' use in general, but does seem wary of the effectiveness of implementing new technology:

> One thing that I would like to see more of is having more technology so that we can do some of these [research projects involving collecting data]...And I'm thinking, "Okay, how are they going to be able to show that? Where is the technology going to come from?" I can only be on that lab two days a month and I could be in there almost every day...I think tablets are wonderful but that's not what I need in the English classroom. I need them to be able to pull up that newsletter [a prior class assignment] right there and me walk over and say, "Hey," instead of just going down to the media center when there are thousands of people down there and you're trying to concentrate and their minds are not with you...So it's just those kinds of distractions, and that's why the laptops in the classroom would at least allow you to go by and say, "Okay, now look at this," or, "Pull this up." It just gives you a little more freedom to do the things you want to do, having the technology right there…Yeah, I mean I think that would just be a tremendous help if we had [technology]. But yeah, I don't know that I'll ever see it. (interview, November 14, 2014)

Nora's comments explain her cautious optimism about students' use of technology in the classroom, recognizing its value but also its inconveniences and impracticalities. This sentiment

is echoed by Muyingi (2014), whose case study explores students' varied levels of (in)appropriate use of technology depending upon factors including gender, age, and prior experiences on the Internet. As Muyingi writes, "instructors themselves must take charge of their classes and not tolerate digital distractive activities," and should instead "integrate [new] technologies into the curriculum to enhance learning" (2014, p. 13).

Data from the participants' interviews also explore how students' research process has shifted over time as a result of changes in technology. Nora suggests the dichotomy of how contemporary research practices are both easier and harder than in decades past: While expectations for critical thinking are higher for current research projects, current research also requires less "physical work" and effort to complete, as exemplified by the difference between the past experience of heading to the actual library where a student would be "literally on the floors, digging through books, looking at a card catalogue, going to the microfilm," to the present experience of accessing nearly any text necessary via Google and other databases that are "right at their fingertips" (interview, October 10, 2014). As Roco and Bainbridge (2013) explain, the advent of the digital age has magnified existing challenges (e.g., global economic crises and the spread of ideological intolerance), but has also given hope for a better future, "to transport the world away from suffering and conflict to prosperity and harmony" (p. 3). While these authors may not place the responsibility of the future solely on classroom teachers, one can argue that teachers should continue to find ways to use technology to benefit students and to push them toward critical thinking.

Laura, the general education research participant who teachers Multicultural Lit, takes note of the shifts in education resulting from technology:

I think that [my thinking] has changed. I think I always thought of critical thinking as

> kind of going beyond the obvious to kind of do different things with information. But I think our society has changed and particularly when you take in technology, the information gathering–like, we kind of almost take that step out of it now because it's irrelevant. And so, really, what they can do with that and how they can apply it and how they can make it relevant and meaningful, and I guess, just how much further it goes than I would've said...And so, as a teacher, you're forced to kind of discount—I mean not totally discount that but we know kids are a click of a button away from any information. And so now, so much of the teaching has had to shift to what can you do with information once you have it. (interview, October 30, 2014)

The excerpt indicates that Laura recognizes, as does Nora, the ways in which students' opportunities for critical thinking have changed recently. Laura seems to have not only recognized, but also embraced, these shifts, as she created her seniors' research project, Project Success, around multimedia and multiple technologies. The project asks students to create a multimodal presentation using articles, videos, and other media, and then to share their projects via an innovative, web-based presentation program (e.g., Prezi or Google Presentations instead of Microsoft PowerPoint) (observation, November 20, 2014). Laura's goal with the project is "to get them, before they go to college, to branch out a little bit more in what they consider a research source because I think kids miss a lot of really great sources" (interview, December 1, 2014).

Laura seems to understand the value of media and technology as a facilitator of, not simply a detriment to, critical thinking. This idea aligns with the literature by way of Newman's (2008) Talents Unlimited Model, which delineates six talent areas to foster critical thinking. While many of the six areas can connect to Project Success, the area of communication is most

applicable, as Laura's Project Success involves, first and foremost, students' abilities to communicate their career goals and personal ambitions to their classmates in a way that is relevant, both technologically and personally. The project, and its embedded critical thinking, also exemplifies Hodkinson's (2005) dismissal of the dualism of formal versus informal learning. Hodkinson argues that formal academic concepts, such as those bolstered through Project Success, do not exist solely in an academic bubble, but rather are dependent upon informal concepts that are propagated in everyday contexts. Thus, Project Success rejects the dualism because of its marriage of the educational and non-educational contexts while fostering critical thinking.

Identifying and labeling students. A final factor within the societal and institutional contexts involves how stakeholders in education identify and label students, particularly students with disabilities. The current study supports the finding that teachers' beliefs and thoughts about identifying and labeling students with disabilities may connect to their conceptualizations of critical thinking. For instance, Laura comments that in the 1970s when she was growing up, a student would not have been identified for services in special education "unless something was really obviously wrong" and "unless it was like a huge train wreck," and she also notes that to her memory, all classes with students with disabilities were "self-contained" (interview, October 14, 2014). Laura's remarks do not specifically address critical thinking, but they do relate to broader shifts in education, which then sets the context for critical thinking opportunities to occur (in)equitably for students with disabilities.

Laura also provides personal insight into how the identification of students with disabilities has shifted over the decades:

> I've been since diagnosed ADHD [Attention Deficit/Hyperactivity Disorder] as an adult. But looking back, with what we know now, I would've been diagnosed so fast it would have made your head spin. But back then, I wasn't a behavior problem. I did well in school. I was able to compensate...ADHD comes with a lot of self-loathing but I never knew why I was the way that I was. I just knew that I know that I'm smart, why do I do so many stupid things like a day, like how am I not smart enough to manage this? Or why do I keep forgetting my book?...And I think, back then, I'm sure there were kids that we thought were weird that were probably Asperger's-type kids or high-functioning autism. I'm sure there were other kids like me that we now know that ADHD–unless you were probably a boy, running around, making the teacher's life miserable, that wasn't a diagnosis that you really saw under normal conditions. So really, I feel like back then, unless you were a behavior problem that was causing the teacher some grief, you probably were just kind of grouped in and either considered odd, or weird, or forgetful, or for me spacey or, unmotivated, tired...most likely given a very negative label. (interview, October 14, 2014)

While Laura's tone does not indicate anger or pain, there is a sense of regret or frustration in the inability of the institution of education, for whatever reason, to accurately recognize her struggles as indicative of ADHD. In a subsequent interview, Laura reinforces her views about the ineffective practices of identification and labeling, and her wishes for better practices:

> Very rarely as a classroom teacher do I ever really see a kid's psych [psychological or psychoeducational testing] where I really see where the wires are crossing. I mean that's a big deal...I could really look at like "Where is the breakdown happening?"...That really could make a big difference with how you present material...A lot of times particularly

> now the kids' eligibilities were done so long ago that we kind of quit talking about really what was the heart of why they have that label in the first place and I think that's just really important information that could change things, if we had the time–like if we lived in a different world and we had the time to get through all that. (interview, November 12, 2014).

It appears that Laura believes that teachers and students would benefit from more up-to-date and more accurate labels for students with disabilities, as teachers could then provide more effective and more relevant opportunities for critical thinking that reflect students' unique needs. She also suggests, however, the realistic or even pessimistic viewpoint that a more accurate form of labeling is unlikely to come to fruition, assuming that educators and policymakers will always lack the time or resources needed to restructure the institutional system of identifying and labeling students.

Although Laura may have wished for identification and labeling as a child, and may desire more effective labeling today, Mary somewhat dismisses the importance of the disability label, when discussing specifically how critical thinking manifests differently for students with and without disabilities: "I think students without disabilities, there's a whole a lot of them out there that are just unidentified or they need help. Maybe they don't meet the requirements [for special education services] but they really need help (interview, November 13, 2014)." Mary adds in a separate interview that "there are lots of kids in General Ed classes that are not co-taught, that have learning issues...I think the teachers sometimes forget, all teachers–whether it's general Ed or special Ed–forget that not all kids can get to the same point" (interview, October 29, 2014). Despite Laura's earlier comments about the benefits of appropriate and accurate labels, it seems that she and Mary might agree that a label, regardless of its accuracy and

relevancy, should not unnecessarily divide students into groups, and that teachers should beware of making instructional decisions (e.g., how to implement critical thinking) based solely on disability labels.

Jeanne, the special education research participant in Multicultural Lit, conveys a similar feeling about identification and labeling, by minimizing the importance of labels and instead focusing on the students as individuals: "We're showing that these kids do have weaknesses. But there's other kids on the [General Education] side that I...spend even more time with than special ed kids that have weaknesses, but they just haven't been identified" (interview, November 11, 2014). Nora, Mary's general education co-teacher in 9th Lit, echoes Mary's and Jeanne's concerns as well: "I don't let those labels bother me because I've had students that are in special education but yet, there are some really bright kids" (interview, November 14, 2014). Nora also believes that parents sometimes use support systems, like special education, as a "crutch," and that "they are sort of pulling their kids back" (interview, October 30, 2014). In these participants' statements, they de-emphasize the value of identifying and labeling students with disabilities, and also suggest the outdated nature of the disability dichotomy (i.e., ideologically or conceptually separating students with disabilities from those without disabilities, or "my kids" versus "your kids").

Power and perspective. Many of the data related to identifying and labeling students with disabilities aligns with the literature. The opposing approaches to disability studies–the deficit- and the asset-based models–involve this same issue. Cory et al. (2010) and Linton (1998) describe how the deficit approach utilizes processes of labeling, stereotyping, and stigmatizing to keep certain groups (e.g., students with disabilities) on the edge on mainstream, normalized society, whereas the asset-based model looks to the institutions and societal

structures that may be responsible for marginalizing students with disabilities, as opposed to looking to the individuals. As reflected by many of the participants' comments, labeling can create unnecessary or unwarranted rifts among students, and cause teachers to create inequitable pedagogy for critical thinking in the classroom if the labels become more powerful than the students themselves.

The notion of power, in the context of identifying and labeling, relates to Linton's (1998) "faults and fault lines" (p. 526), which refers to the danger of focusing on an individual's disability in and of itself, at the expense of understanding the importance of the environment and the context (i.e., the institutions and social factors) in shaping how and why the individual's disability exists and manifests itself in the school setting. Ferri et al. (2005) echoes the significance of understanding how our scripts, or patterns of behavior that we use to reinforce our worldviews, may legitimize labels and stereotypes to such an extent that, again, the label becomes more meaningful, or more telling, than the child's personal dispositions and actions.

It seems, then, that these concerns about identifying and labeling reflect the same concerns held by the research participants, who have intimated their reservations about overemphasizing the dichotomy between students with and students without disabilities (as Mary, Jeanne, and Laura posited above). Regarding Laura, whose personal experiences with childhood and adult ADHD have contributed to her wishes for more information about her current students' disabilities, one could argue that her desire to better understand her students' learning needs represents a method of giving power back to the students themselves, as opposed to acting as just another instance of the label superseding the individual, in the sense that teachers would be more attuned to these students' learning needs, and that teachers would be less inclined to fall victim to the processes of stereotyping and marginalizing. Thus, the relationship

between the student and the label is complex: The student needs the specifics of the disability label in order for teachers to fully understand his learning needs (as suggested by Laura), but the student does not need to be labeled because of his disability (as argued by Jeanne, Mary, and Nora).

The complexity of students needing, but also not needing, a label is important when considering how identifying and labeling students with disabilities may contribute to (missed) opportunities for critical thinking in the classroom. The data reveal that the most salient manifestation of the dichotomy involves class rosters, which are the lists of students' names in the computer program used by the school for attendance and grading. The dichotomy centers on whether students with and without disabilities should be included together on one roster within a given class, or whether students with and students without disabilities should be split into two separate rosters. One might argue for split rosters using the logic that utilizing separate lists emphasizes students' differences such that teachers may more effectively target students' critical thinking abilities. On the other hand, one might instead argue that splitting rosters unnecessarily overemphasizes students' differences, thus creating an ideological or pedagogical rift between students with disabilities and students without disabilities. In other words, do split rosters exclude those students whom inclusion attempts to include?

Laura describes how, unequivocally, she sees split rosters—that is, having a roster for students with disabilities and another roster for students without disabilities—as unnecessary and inequitable for students with disabilities:

> I don't like [split rosters]...I don't know that that's ever really good for – I know that there is a reason why we need to have it, accommodations and different things like that. But I think once those things are in place, when you start having "These are roster A kids

> and these are roster B kids," I just, I don't know. I think in certain situations it embarrasses the kids...But I just think even from – instructionally, you know the kids and who they are but I think day after day after when it's roster A and roster B, it's my list and your [list]...I think it feels very divisive. And I don't think it's, you know, malicious, but I think that's the end result of it. (interview, November 12, 2014)

Despite her frustrations with split rosters, other participants feel differently. Nora suggests that the separate rosters are helpful: "I can just quickly see…those grades," and "it sort of targets those kids for me...because we have so many, [especially] now with RTI [Response To Intervention] on top of it" (interview, November 14, 2014). Her special education co-teacher, Mary, conveys a similar idea by stating that split rosters "might also be a good reminder for general ed teachers out there who forget there are special ed kids in their classrooms, because you always have those teachers out there" who teach without a co-teacher, "but there might be a couple special ed kids in the class" (interview, November 13, 2014).

If one were to interpret Nora's and Mary's feelings about the split rosters as a way to separate "my kids" from "your kids," Mary's remarks from another portion of the same interview debunk this interpretation, as she explains how well Nora, as the general education teacher, embraces all learners in the class: "She thinks like a special Ed teacher...She has a very good recognition of those kids–not just special Ed kids, but those kids that really struggle. She is probably more attuned sometimes than I am to particular areas"; she adds that she and Nora "take those lower [students] and those ones that have not been identified and try to help them out" (interview, November 13, 2014).

The blurring of lines between special and general educator, which mirrors the blurring of lines between "my kids" and "your kids," proves especially true for these two 9th Lit teachers

during one classroom observation. During the opening activity, which asked students to think critically by asking questions about and examining the presented scenarios to find their missing parts, Nora and Mary shared duties of leading the class, responding to individual students' answers, and managing the classroom (observation, October 23, 2014). Their almost-interchangeable roles continued throughout the various parts of the lesson, all the while suggesting that splitting rosters for attendance or gradebook purposes does not necessarily lead to pedagogical or ideological rifts among students with and without disabilities.

The nature of knowing. The issue of split rosters (i.e., separating students with disabilities from students without disabilities into two lists for attendance and grading purposes), as well as of the broader concern of divisiveness among learners, connects to the concept of personal epistemological beliefs (PEBs) in the literature. PEBs describe the nature of how individuals come to understand what they know, and why they know it (Fazey, 2010; Hofer, 2000). In the context of identifying students and splitting rosters, PEBs may serve as the basis for teachers to consider why they, individually, hold certain views of students with disabilities compared to students without disabilities–for example, why they see split rosters as divisive or as effective. But because educators influence each other, so it goes that PEBs extend beyond the scope of each individual teacher.

An epistemic culture describes the mechanisms and processes inherent in how the PEBs of individuals in a group become internalized and generalized by the collective group (Jones, 2007; Knorr Cetina, 1999, 2007; Muis et al., 2006). Again, in the context of split rosters and labeling in general, epistemic culture may explain how teachers obtain, and then maintain, their PEBs about the benefits of separating students in such a manner. In order to maintain the study's focus on teachers' conceptualizations of critical thinking and their influences on students with

disabilities, however, a more thorough analysis of PEBs and epistemic culture must be left for future research.

Theme 2: The Conceptual Context – Practicing Critical Thinking without Theorizing it

With the competing notions of the societal and institutional contexts explained, and with some of the broader factors relating to students' learning and students' disabilities explored, one must now consider more specifically the concept of critical thinking, both in terms of teachers' and students' theories and practices. Although the literature supports the notion that the concept of critical thinking remains elusive or nebulous (e.g., Cuban, 1984; Lewis & Smith, 1993; Rudd, 2007), it may prove beneficial to explore both the conceptual and the instructional components of critical thinking, as the current study seeks to investigate both its theories and its practices. To that end, the theme of this second section of cross-case data analysis refers to the researcher's assertion that teachers and students can practice critical thinking without necessarily understanding the theories behind it. To state the researcher's assertion another way, one might argue, in theory, that the theory of critical thinking would be vital for the practice of critical thinking, but in practice, the practice of critical thinking is most important.

Views of teachers' theories and practices of critical thinking. Determining how teachers' conceptualizations of critical thinking influence students with disabilities requires a thorough understanding of how the research participants theorize critical thinking and how they practice it as well. The data from the current study suggest that teachers need not reach consensus on the theories of critical thinking in order to understand its effectiveness in practice. Argyris and Schön's (1974) notion of espoused theory versus theory-in-use applies to this discussion of critical thinking on a conceptual level and a practical level, respectively. These

two terms from the literature, however, manifest themselves in the current study in such a manner that the data in some ways contradict the authors' intended meaning.

Argyris and Schön's (1974) framework of theory describes teachers' espoused theories as their theories of action drawn from knowledge or insight (i.e., conceptual knowledge), while their theories-in-use refer to their theories of action drawn from specific, observable behaviors (i.e., practiced actions), behaviors which do not always align with the espoused concepts behind them. If the data from the current study were to completely support this framework, the data would likely indicate a disconnect between an individual teacher's assertions and her actions. As subsequent discussion will suggest, though, the participants' espoused theories of critical thinking actually align with their theories-in-use of critical thinking. As evident from the data, however, not all participants converge on the theoretical construct of critical thinking, but the participants do converge on the implementation of critical thinking in practice, and they also converge on their assessment that other teachers' espoused theories do not align with these other teachers' theories-in-use of critical thinking.

Because of the fact that the current study involves the concepts of theory and practice to a great extent, it may be useful to use the literature to explain why the participants' espoused theories may align so well with their theories-in-use, despite what the research of Argyris and Schön (1974) might suggest. One explanation involves the limited scope of the study. Maxwell (1996) describes the limitation of key informant bias, which may occur with a limited number of participants and a limited duration of the study. In addition, Jones (2009) states that generic attributes–of which critical thinking is one example–are complex and implicit; as such, it is possible that a more thorough investigation would lead to clear differences between individuals' theories and practices. A final explanation involves reactivity–the researcher's influence on the

setting or participants (Maxwell, 1996)–and social desirability–the possibility of participants showing whatever version of themselves they believe will most closely align to the researcher's goals (Denzin, 1989). (For a more in-depth discussion, see the "Limitations" section of the manuscript.).

Having established a few explanations as to why the findings of the current study stand in contrast to the seminal research suggested by Argyris and Schön (1974), it is important to consider two major findings of teachers' theories and practices of critical thinking, suggested from the data: 1) the participants' theories of critical thinking do not always align with one another's theories, but their practices of critical thinking do align with one another's; and 2) the participants' theories and practices of critical thinking differ from their opinions of the theories and practices of other teachers. This second conclusion will be discussed at length in the fourth theme involving academic achievement, while the first one will be discussed presently.

Theory. Despite consensus on many of the practical elements of critical thinking, several comments from the participants' interviews reveal a lack of consensus on the theoretical conceptualization of critical thinking. Jeanne, the special education co-teacher in Multicultural Lit, describes critical thinking as utilizing inferencing from reading and providing more than just "yes" or "no" answers (interview, October 28, 2014), while her general education co-teacher, Laura, views critical thinking as the types of responses that involve the application of ideas and making connections among ideas (interview, November 30, 2014).

Mary, the special education co-teacher in 9th Lit, believes that students are utilizing critical thinking "if they're able to apply and take it to the next level when they answer their question rather than just a one-answer rote memory type [of answer]; if they're able to elaborate

on it and give an example" (interview, October 29, 2014). Nora, Mary's general education co-teacher, offers the most complete answer of the participants:

> When they pose questions...When they also to make a connection, to like their own life– "This reminds me of when this happened." When they kind of – don't take your answer as a final answer, but evaluate it and they'll say, "Well, what about this?" And then they'll offer like another argument to whatever we're doing, which I love...So you can kind of see that when you're walking around. You can kind of hear the questions that they're asking each other. (interview, October 30, 2014)

While these four responses are by no means unique, there are still diverging ideas about what critical thinking looks like in the classroom, with only two participants discussing the idea of making connections; only two participants discussing reasoning skills like inferencing or evaluating; and only one participant discussing communication with others. These diverging ideas support the literature, as the literature suggests that critical thinking is often understood differently (e.g., Bulgren et al., 2007; Crenshaw, 2010; Ivie, 2001; Khan & Inamullah, 2011; Mendelman, 2007).

In subsequent remarks in the interviews, however, the participants mirror these diverging ideas of how to identify critical thinking when directly addressing the question of whether consensus exists in how teachers define critical thinking. Jeanne claims that "everybody has a different idea of what they think critical thinking is. Yeah, I don't think there's a consensus for that" (interview, October 28, 2014). Laura suggests that one's understanding of critical thinking depends upon where and when one attended college, particularly the focus of the research that was prevalent at that time; she also talks about a generational shift that has occurred for teachers, with younger teachers having been exposed to more concrete college-level instruction and more

specific research about critical thinking (interview, October 30, 2014). On the other hand, Nora conveys the sense that teachers do share an understanding of critical thinking as a classroom tool, even if not an understanding of its definition per se:

> It's a tough term really to put your finger on, how would you define it...I think all of us, I don't know that we've ever sat down in a seminar and talked about how to define it. We know that it's part of our curriculum. That's the underlying–making inferences and things like that...I guess if you were to put us all together and we had a brainstorming session, some probably great things would come out of it, talking about what is critical thinking. But I think we would all pretty much recognize it if we say it out loud. (interview, October 30, 2014)

Finally, Mary does refer to teachers' collective knowledge of critical thinking, as she states, "I think there's a general consensus about educators' understanding what critical thinking is." She mentions, however, a concept which will be explored in details in the subsequent theme: "But I do think there's an expectation difference amongst teachers, very definitely" (interview, October 29, 2014). Thus, the participants provide various comments about whether teachers in general agree on how to define critical thinking.

In addition to the interview data, this lack of consensus of the theoretical construct of critical thinking is reflected in the participants' visual data. The reader may recall that along with the participant interviews and classroom observations, participants were each instructed to create visual representations of how they conceptualize critical thinking, which were then discussed at the final interview. Although the visual representations connect to the research sub-questions of how teachers frame the aptitude and achievement of students with disabilities, as well as how and when teachers incorporate critical thinking into the classroom, the visual

representations most closely address the research sub-question of how teachers define, understand, and view critical thinking.

As the visual data suggest along with the participant interviews, teachers diverge in terms of the theoretical construct of critical thinking. For instance, two of the teachers–Nora and Laura, the general educators–utilize mainly educational terminology on their visual representations of critical thinking, while two of the teachers–Jeanne and Mary, the special educators–utilize mainly everyday language on their visual representations. Regarding educational jargon, Nora, who created a computer-generated, color flow chart which shows pictures to visualize each grouping of words (see Appendix J), employs terms like evaluate, inferencing, synthesis, and formulate hypothesis. Her flow chart appears in the shape of an exponential growth chart, meaning that the slope of the line becomes steeper when moving along the line. Attached to each set of words, which appear in a rectangular bubble of various colors, is a picture to illustrate the set of words in the bubbles. Nora includes a total of seven groupings of words, beginning with purpose/topic and ending with point of view (visual representation, December 2, 2014).

Like Nora, Laura, who used black pen on printer paper to create a sketch of what resembles an hour glass (see Appendix H), includes educational jargon like inferring, analyzing, conceptualizing, and associating. Laura's sketch, oriented in landscape position, begins at the top with raw materials as a header, and includes several descriptors underneath it (e.g., facts, knowledge, and information). Continuing downward, Laura includes other headings, under which she lists relevant descriptors. Down-pointing arrows show the flow between each of the headings. Finally, the hour glass shape which holds the terminology is labeled as filtration system, with the word critical extending down along the left side of the hour glass, and the word

thinking extending down along the right side of the hour glass (visual representation, December 1, 2014).

In contrast to Nora's and Laura's use of educational jargon, Jeanne, who created a sketch of a reverse pyramid using blue pen on printer paper (see Appendix G), includes everyday terms like remember, understand, and apply. The pyramid is comprised of five subsections, each of which decreases in size as the pyramid reaches its point at the bottom of the page. The edges of the pyramid are jagged and layered, as if Jeanne went over her own lines a few times. Also, in terms of the orientation of the pyramid, she explains why she thinks she should have flipped it 180 degrees so that the lower-level thinking skills appear before the higher-level ones: "If [students] don't understand what they've read or they don't understand what [Laura] is asking them to do, then the critical thinking is just going to be that much more difficult (interview, December 1, 2014; visual representation, December 1, 2014).

Finally, Mary's computer-based slideshow (see Appendix I), which she generated using Microsoft PowerPoint and printed in black and white paper, includes everyday terms as well; these terms include ask questions, gather together relevant information, reach conclusions/solutions, and effectively communicate. Her printed slideshow is comprised of five rectangular boxes, each with white font on black background. In between each of the boxes are hand-drawn arrows to show the sequence of movement from one box to another. The fifth box, containing the term critical thinking, is twice as wide as the boxes above it, making it appear more significant (visual representation, December 2, 2014). The limited scope of the current study prevents the researcher from speculating whether the two general educators' use of educational jargon, contrasted with the two special educators' use of everyday language, is coincidental or is, instead, indicative of a bigger trend. Perhaps this is a topic that could benefit

from further research.

In addition to the type of language included on the sketches, PowerPoint slides, and flow chart, the pinnacles (i.e., points of highest interest or the conclusions reached) of the visual representations may also speak to a lack of consensus of critical thinking. Mary's PowerPoint slides suggest that the pinnacle of critical thinking is being able to effectively communicate solutions to others (visual representation, December 2, 2014), which reflects an interpersonal skill, while Laura's sketch concludes with the intrapersonal skills of metacognition (visual representation, December 1, 2014). The pinnacle of Jeanne's sketch is the expressive or artistic concept of creating (visual representation, December 1, 2014), and Nora's flow chart concludes with point of view, a combination of intrapersonal and interpersonal skills (visual representation, December 2, 2014). It is also interesting to note that unlike the other three participants, whose visual representations seem to reflect the notion of critical thinking as a process, Mary's visual lists critical thinking as a goal. Although one could interpret the four participants' visual representations in different ways, it does seem evident that the visuals depict a lack of consensus about how to define critical thinking as a theoretical concept.

The literature supports the finding that critical thinking is a difficult term to define with any sort of alignment among stakeholders. Several authors have described the elusiveness or complications of defining critical thinking (e.g., Cuban, 1984; Lewis & Smith, 1993; Rudd, 2007), and few scholarly articles about critical thinking provide concrete explanations of the term, although many articles discuss its related practices (e.g., Bulgren et al., 2007; Crenshaw, 2010; Ivie, 2001; Khan & Inamullah, 2011; Mendelman, 2007). The literature and the data also suggest that rote memorization and fact-driven lessons do not lend themselves to critical thinking (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004; Snyder &

Snyder, 2008). Finally, teachers must take care to ensure that their preconceptions and thought processes of critical thinking, particularly in terms of students with disabilities, do not lead to lowered expectations or to an overemphasis on lower-level skills (Bulgren et al., 2007; Torff, 2006).

Practice. Although the data may suggest a lack of consensus among teachers' theorizing of critical thinking, the data do suggest that consensus exists on the importance that teachers place on the practice of critical thinking. Regarding how Jeanne's understanding of critical thinking has changed over the years:

> Well, I think I thought or became more aware of it because it's been kind of in the standards and we've been asked to do more critical thinking. I don't know if I've thought about the term critical thinking. Maybe–I mean, I asked questions [in the past] that I hoped would challenge the kids but I don't know [if we called it that]. (interview, October 28, 2014)

Jeanne's remarks reflect the idea that despite a certain uncertainty about terminology, critical thinking has found its way into everyday pedagogy. Nora echoes Jeanne's comments about the inclusion of critical thinking into the classroom by stating that critical thinking is "kind of the basis for what we're trying to get them to do," and that the importance of practicing critical thinking is evident "in our department for sure, because our standards too are guided towards looking at our essential questions that we have, that we've either done together or have come down from workshops or whatever" (interview, October 30, 2014). Indeed, these practices of critical thinking are supported by the literature. Snyder and Snyder (2008) suggest that teachers emphasize the learning process itself in order to promote critical thinking, while many authors agree upon the importance of scaffolding students' critical thinking through more challenging

learning opportunities (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004). Similarly, other authors claim that teachers need to tap into students' higher-order thinking skills, such as judgment, analysis, and synthesis, during everyday classroom moments (Duplass & Ziedler, 2002; Hemming, 2000; Snyder & Snyder, 2008; Wong, 2007).

The visual data seem to depict consensus on the practice of critical thinking as well. For instance, without any guidance from the researcher (other than the prompt), the participants all created visual representations that are sequential and hierarchical in form, whether organized as a group of PowerPoint slides with arrows among boxes (Mary, visual representation, December 2, 2014), as a sketch of an inverse pyramid leading to higher levels of though near the point (Jeanne, visual representation, December 1, 2014), as a sketch of a self-described filtration system, sifting down to critical thinking (Laura, visual representation, December 1, 2014), or as a computer-generated flow chart showing the cognitive processes leading up to formulating opinions and solutions (Nora, visual representation, December 2, 2014).

Furthermore, although the participants do differ in terms of using everyday language versus educational terminology, all but one participant included the concept of problem-solving as an important step for the practice of critical thinking. All participants also included some iteration of the process of gathering data or materials to then utilize in order to reach higher levels of thought (visual representations, December 1-2, 2014). Thus, it seems that interview data and visual data support the notion that teachers reach consensus on the practice of critical thinking.

Views of students' theories and practices of critical thinking. The second theme of the current study's findings (i.e., practicing critical thinking without theorizing it) involves students' theories and practices of critical thinking in addition to teachers' theories and practices.

Students' awareness in theory. The data suggest that participants' opinions vary regarding students' understanding of the theory of critical thinking, but their answers are unified regarding all students' need to practice critical thinking (as supported by the previous section). Jeanne explains how students do not have a clear understanding of critical thinking "unless we really state that this is what we're looking for. It's almost like you have to kind of model it for them" (interview, October 28, 2014). Laura, Jeanne's general education co-teacher in Multicultural Lit, shares a similar sentiment: that only "real high-level students" would understand the concept of critical thinking; she clarifies her belief that "part of [the reason] is maturity. But I think as teachers, we keep the lingo on our side of the fence a lot….So I don't really think it's their fault" (interview, October 30, 2014). Nora explains how critical thinking does not register for students as a concept, but as an innate ability:

> I don't think they're very aware of it...I don't really think that when they come in and they're questioning or whatever, I don't think that they are aware that they are critically thinking. It's kind of like when we have the activity where we were asking the questions based on the little Stories with Holes [from the first classroom observation in 9th Lit]. You know, I don't think they're sitting there and thinking, "Okay, what can I ask that's going to show that I'm a critical thinker?" I just think they do that, just naturally. (interview, October 30, 2014)

In the excerpts above, Nora, Jeanne, and Laura convey different positions regarding the nature of students' lack of awareness of the concept of critical thinking, but all seem to agree in the value of critical thinking for their students. The literature suggests that in order to help students grasp critical thinking more effectively, and to move from lower to higher levels of thinking, teachers

must encourage students to judge, analyze, and synthesize (Duplass & Ziedler, 2002; Hemming, 2000; Snyder & Snyder, 2008; Wong, 2007).

Students' awareness in practice. The participants' aforementioned comments about teachers consciously or subconsciously hiding the theory of critical thinking from students connect to the broader implications of students' inabilities to recognize critical thinking in practice. As Laura explains, students will only become aware of the classroom-level practices of critical thinking "if you break it down and give them a vocabulary. I don't think that they're incapable of understanding it. I just think that we haven't really [given them the lexicon to discuss it] (interview, October 30, 2014)." To this end, possibly, she does include in her sketch many terms that teachers do often share with students, including questioning, inferring, perspectives, reason, constructing, concluding, and assessing (visual representation, December 1, 2014).

Similarly, Nora's flow chart includes terms that should be equally familiar to all students, thus enhancing the likelihood of them understanding the practices of critical thinking: goals, objectives, purpose, topic, questioning, reflection, and point of view (visual representation, December 2, 2014). As implied by including everyday terms related to critical thinking on her flow chart, Nora's remarks also convey her opinion about students' abilities to recognize the practice of critical thinking: "I think they probably would [recognize it], kind of along the same lines–like [Mary] asked, 'When do you think you would need this kind of line of questioning?'" (interview, October 30, 2014). Nora's reference to her co-teacher's question about having students to provide examples is mirrored by Jeanne's point about the benefit of examples:

> I think they need to see an example to really understand. Like–say, in writing, if you want to push the...complex thought and, like, transitions and citations, I just think you

> have to push them to show them that...this is what we expect from you. This is a good paragraph. (interview, October 28, 2014).

Their remarks seem to suggest, then, that providing students with examples of critical thinking goes a long way to helping them better understand critical thinking. This prompts the question, though, of whether providing examples of critical thinking and even modeling its processes are effective enough methods of helping students recognize critical thinking, or do teachers need to explicate critical thinking more directly?

(Not) explicating critical thinking. When considering students' awareness and understanding of critical thinking, it is important to consider the degree to which teachers should explicate the processes of critical thinking. Regarding whether students' engagement in critical thinking will improve if teachers explain to students the level of critical thinking that will be required during a lesson or a unit, Jeanne states, "I think you hope it [improves], but I don't think [students] think of it like that, that it's going to be harder"; she further explains that she wishes students' efforts would increase upon realizing that the unit tasks will get more complicated, not simpler, but that the knowledge of the end goal (e.g., a three-page research paper) stifles any motivation that students might have experienced (interview, November 11, 2014).

Jeanne's general education co-teacher, Laura, expresses a view that contradicts Jeanne's, however. Laura's comments come from the context of a particular writing task, a This I Believe essay:

> I think it depends on the kid...There were some [students] that really just I think it did kind of help putting them in that mind–because I think sometimes for some kids, it puts them on kind of notice–kind of...makes them pay a little bit more attention or maybe kind of raises the expectation for what they're doing. (interview, November 12, 2014)

Regarding the contradiction between Jeanne's and Laura's comments, perhaps their different opinions are related to their positions as special and general educators, respectively, or perhaps Jeanne spoke in generalities, while Laura spoke in specifics about that particular lesson. The contradiction between these Multicultural Lit co-teaching partners may reflect the complexities that teachers face when determining how to maximize instructional effectiveness for a class which may include learners with many different abilities and needs.

Another interesting element in the discussion of if and how to explicate critical thinking processes for students involves Laura's aforementioned remark about keeping critical thinking on the teacher side of the fence. Laura explains the disconnect between teachers' intentions of providing critical thinking opportunities, and students' awareness thereof:

> I think when we talked at the last interview we talked about how much of the scaffolding and the building of higher-order thinking is on one side of the wall...Really truly, that doesn't even occur to them...And so I think a lot of times they think, "If I come in even though I was absent for step one and two in the lesson, I can write a paragraph–I don't need this special [instruction]"...It doesn't occur to them that there is anything else, like they just think, "I can read, I can write" and they'll just jump into a reading activity or writing activity [without appreciating] that there might be things that they need, like talking about cultural context or historical context or key vocabulary. It doesn't dawn on them, that really is necessary to get the level of comprehension we're trying to get. (interview, November 13, 2014)

In this excerpt, Laura appears to feel some level of frustration with students' inability to find the value in completing the scaffolding steps toward the end goal, almost as if her students wished

she would have just explicated the critical thinking embedded in the final step of the task without any acknowledgment of the prior steps.

Laura attempted to minimize her own frustration about her students' tendencies to bypass necessary steps by spending class time to review the prior steps of the This I Believe essay, instead of just assuming that students were prepared to complete the next step. The prior steps that she reviewed included reading a short story, completing comprehension questions and an accompanying graphic organizer, reading and listening to a couple of example essays, and outlining three life lessons learned by the main characters in the story (observation, November 5, 2014). Laura's sketch also suggests the importance of grasping the basic elements of a multi-step task before moving on to the more complex components that are probably more rich with critical thinking opportunities: She begins her sketch with raw materials, which include, in her view, facts, knowledge, information, and observations. Given the sequential nature of her sketch, she might believe that, as with the This I Believe essay assignment, students must have a firm grasp on the raw materials before moving forward (visual representation, December 1, 2014).

During the same observation of Multicultural Lit in which Laura explains the prerequisite steps for the This I Believe essay, she does demonstrate a desire to explicate the critical thinking process for her students, perhaps to help ensure that they remain motivated throughout the duration of the unit. She used phrases such as "going one step up the thought ladder" and "taking the same text [the short story upon which the essay is built] and ratcheting it up a bit" (observation, November 5, 2014). These concepts align with the hierarchical nature of Laura's sketch, which uses phrases such as raw materials to considering to building and manipulating to

depict the progression from simpler ideas to more complex ones (visual representation, December 1, 2014).

During an observation of 9th Lit, Mary makes a similar comment about explicating critical thinking to those of Laura: "You need to put your critical thinking hats on" (observation, October 23, 2014). As Laura's observed comments reflect her own sketch, so do Mary's observed comments reflect her outline of PowerPoint slides. The Stories with Holes lesson, which occurred on the same day as Mary's comments above, asked students to carry out the same critical thinking processes that Mary included on her PowerPoint outline. Some of these processes include asking questions (i.e., students asking Mary and Nora "yes" or "no" questions about the puzzles), gathering relevant information (i.e., students using the clues provided by Mary and Nora), reaching conclusions in order to solve the puzzles, and communicating with others (i.e., students bouncing ideas off of one another) (observation, October 23, 2014; visual representation, December 2, 2014). The literature supports these classroom processes (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004; Snyder & Snyder, 2008), especially when these processes can build students' knowledge base for their post-secondary lives. Considerations of the real-world context will be addressed with the subsequent theme.

Theme 3: The Real-World Context – Preparing Students inside the Box for Life outside the Box

The third theme related to how teachers' conceptualizations of critical thinking influence pedagogy for students with disabilities is centered on the real-world context. With more international competition in the marketplace and the workplace, it seems that critical thinking is becoming more important than in the past (Carr, 2010; Greenfield, 2009; Law & Kaufhold, 2009; Marzano, 2010; Snoke & Underwood, 1999; Wagner, 2008). With this recognition either

consciously or subconsciously on the minds of teachers, it is valuable to consider how the participants prepare students within the secondary world for their lives in the postsecondary world. A finding from the current study is that teachers exist and operate completely within the framework of our educational system (i.e., the educational box), yet the role of teachers, one can contend, is to prepare students for everything outside of the educational box. The two ideologies supported by the data that reflect the participants' opinions and values regarding this finding are 1) that educators should teach the fundamentals of literacy in order to prepare students for the critical thinking needed after the basics are mastered, and 2) that educators should teach critical thinking in order to prepare students for the real world.

Teaching fundamentals to prepare for critical thinking and the real world. Within this first ideology, the data illustrate the idea that students, especially those with disabilities, lack the basic skills necessary for success with critical thinking in the real world, and the data also consider if and how basic skills instruction and critical thinking instruction can co-exist in the classroom.

Jeanne, the special educator in Multicultural Lit, describes how students with disabilities struggle in English class: "Well, literature, it's just their reading ability. They don't enjoy reading because they struggle with reading. So therefore, they don't understand. They're not comprehending what they're reading...Writing is, well – same thing... It's so overwhelming [for them]" (interview, November 11, 2014). In another interview, Jeanne states that instead of focusing so much on longer writing, such as a research paper, students would be better served to write more short papers that will be less overwhelming (interview, December 1, 2014).

While Jeanne's remarks focus on a vicious cycle of poor skills, lack of motivation, and feeling overwhelmed, Mary, the 9th Lit special educator, describes how the school system may have its priorities out of order, and how it does not do justice to some struggling learners:

> I do think a number of our kids, all kids, fall through the cracks because they are lacking in basic reading and writing skills, and I think we put too much emphasis on other studies...You don't have to write research papers [in the real world], but when you can't fill out an application correctly and neatly for somebody to read for a job, you've got issues. And I don't think we address that lower-end population unless they're special ed. (interview, October 29, 2014)

In a subsequent interview, Mary continues to take issue with the institutional system of education and its policies, in light of students' inabilities to receive the kind of instruction that she believes is most necessary for them in the future:

> [Struggling students] can't read and they can't write. Somehow they have been passed on through the system, to high school, and they don't understand what they're reading. Their vocabulary is limited, and because they haven't become big readers, they're very poor writers. They don't have any experiences to pull from...In my opinion, they should, in elementary and middle school, forego all these extra classes until they can make sure students can read and write, because they're passing these kids on to high school, and then what do we do? We pass them on and get [them] out...Social promotion, even through high school...And yet when they leave us, they're really no better off in their reading and writing. (interview, November 13, 2014)

Mary mentions a lack of literacy skills for some students, but her concerns indicate frustration directed toward the nature of the school system, or what sort of education is valued through

institutions of learning. In her mind, it seems, students would be better served if teachers and policymakers worked to ensure a solid foundation literacy, perhaps at the expense of elective classes or of the emotional comfort of social promotion, before moving on to expecting critical thinking. Several authors echo Mary's concerns about the importance of literacy for future success, and about basic skills acting as prerequisites to critical thinking (Bulgren, 2006; Fischer, 2003; Law & Kaufhold, 2009).

A classroom observation of Multicultural Lit reflects the idea of teaching basic skills before more complex ones, as Laura and Jeanne required students to read and understand several informational articles on the topic of poverty before allowing them to progress to the timed writing response on how to ameliorate poverty (observation, October 21, 2014). Jeanne, in describing her sketch, echoes the importance of focusing on basic skills before critical thinking, as the observed lesson suggests. She argues that remembering and understanding, the lowest levels of her sketch of critical thinking, are "the most important" for students with disabilities, and that if they "don't understand what they've read or they don't understand what [Laura] is asking them to do, then critical thinking is just going to be that much more difficult. [Basic tasks] must be accomplished prior to any other more complex tasks" (interview, December 1, 2014; visual representation, December 1, 2014). Laura's sketch aligns with Jeanne's, although Laura uses the terms raw materials and considering instead of remembering and understanding (visual representation, December 1, 2014). In an interview, Laura elaborates on the importance of basic skills: "When we're talking about raw materials, to have an endgame, you've got to have raw materials, and what [Jeanne] talked about was those skills or the basic understanding that you can't go further until you have that" (interview, December 1, 2014).

The participants' positive opinions of basic skills before critical thinking somewhat refutes the literature in terms of the dangers of emphasizing lower-order thinking skills at the expense of higher-order thinking skills. More specifically, several authors contend that when teachers focus on basic skills instead of more complex ones, they unknowingly reinforce the existing perceptions of students with disabilities, including these students' inabilities to engage in critical thinking (Bulgren, Marquis, Deshler, Schumaker, & Lenz, 2006; Bulgren, Deshler, & Lenz, 2007; Torff, 2006; VanTassel-Baska, Bracken, Feng, & Brown, 2009; Zohar, Degani, & Vaaknin, 2001). Perhaps in order to reconcile these two ideas that appear contradictory, the authors and the participants may agree upon the need to emphasize, but not over-emphasize, basic skills.

Laura, the Multicultural Lit general educator, describes the disparity between basic skills and critical thinking that exists for students with disabilities, in that they "think at high levels," but "their reading isn't where their thinking is," which illustrates "one of the greatest challenges that we see" (interview, November 12, 2014). Laura adds that, despite their abilities to think critically, the writing process can be very challenging, especially in terms of organization, because "there are so many moving parts." She continues by stating that for students with disabilities, the writing process "takes something that is pretty overwhelming for a normal kid and makes that even more overwhelming and just makes it more arduous than it would be for a typical kid" (interview, November 12, 2014). Laura's comments seem to indicate that she recognizes the contradiction of teaching students with disabilities who have the potential to think critically, but who become bogged down in the lower-order thinking processes or in the magnitude, if not complexity, of the task at hand.

Reflecting the seemingly contradictory nature of providing critical thinking opportunities to students who may lack basic skills, Laura and Jeanne display, on the walls of the Multicultural Lit classroom, a fill-in-the-blank chart for the grammar lesson of "good" versus "well," whose lower-order thinking contrasts with the potential for critical thinking afforded by the mini-unit on poverty prevention and the related timed writing response (observation, October 21, 2014). A similar contrast becomes evident when, during a different observation, Laura tells students that they will receive feedback on multiple writing elements from their This I Believe essays. These elements include the basic skills of story comprehension, grammar, usage, and mechanics, but also the more complex skills of perspective, organization and flow, and reflection of higher-order thinking (observation, November 5, 2014).

Despite the aforementioned explanation of how the data contradict the literature in terms of the dangers of over-emphasizing basic skills, the data do support the literature in other respects. For example, Glaser's (1984) discussion of curricula programs, which foster students' reasoning and problem-solving skills, includes a description of instructional programs that challenge the idea that basic skills and critical thinking are separate entities with no crossover between them. Based on the data, these two levels of cognition are in fact interdependent, in the sense that the participants often suggest that critical thinking cannot be attained, or at least not to the same extent, without mastering basic skills as a prerequisite. Similarly, Bulgren (2006) and Ivie (2001) provide models in the literature–CERs and CTMs, respectively–within which students utilize increasingly complex thought processes, mirrored by the hierarchical configuration of the models. These models connect to the participants' visual representations, as these visuals are also constructed with a hierarchy in mind, a hierarchy that moves from basic skills to more complex ones, as the authors' models intend as well.

Teaching critical thinking to prepare for the real world. The current study's findings regarding the theme of the real-world context also reflect the belief that teachers can foster critical thinking for students with disabilities without necessarily establishing the firmest foundation in basic skills. Data suggest that, instead, teachers should focus on exposing students to the complexities and complications of the real world, even at the expense of instructional time dedicated to basic literacy skills.

Critical thinking as invaluable and (un)shifting. The data suggest that critical thinking is a pursuit with lifelong value, and one that may shift in function or form, but not in importance. Nora, the 9th Lit general educator, explains the seemingly contradictory notion that both nothing and everything is different with critical thinking since she began teaching over thirty years ago. She states, "Yeah, I think it's changed...maybe with the standards, getting more or stepped up, I guess," but also claims that "there's always been that, just, ability to know what you want kids to do. How you wanted them to just be thinking and even being aware of, that, they know what they're thinking" (interview, October 30, 2014). Later in the same interview, Nora discusses her opinion on the value of critical thinking throughout one's lifetime:

> I don't think the value changes. I think all of [the reasons to think critically, or contexts in which it occurs] are equally as valuable–it's just, I mean, the degree of what a young elementary school student, how they can critically think. I mean, obviously, it's not going to be on the same level as an adult. But for that age and what they're able to do, I think that's equally as important in their development as it is for an adult. (interview, October 30, 2014)

Laura, the Multicultural Lit general educator, echoes Nora's remarks about shifting function, yet unshifting value, and explains that, as an adult, "you're always having to manage your life and

think critically about things," which is a skillset that adults carry with them throughout their lives (interview, October 30, 2014). As Nora and Laura suggest, even though the purpose or form of critical thinking may shift over time, it remains invaluable throughout life.

Mary and Nora reinforce the value of critical thinking in the future in one of the 9th Lit classroom observations. As Mary introduced the Stories with Holes activity, which asks students to problem-solve, she conveyed to them the importance of asking good questions in the real world, and then provided the example of having to figure out how to quickly fix a broken-down car. She then described the value in probing deeper in the workplace, before concluding that students need to be able to go beyond just answering the question, and also address how and why a given answer is correct (observation, October 23, 2014).

The participants' perspectives on the value and (un)shifting nature of critical thinking is strongly supported by the literature. For instance, the research panel established by Facione, one of the leading authors in the field of critical thinking, concludes that critical thinking is valuable in building an equitable, democratic society (Facione, 1990). Also, the first of three curricula programs to foster students' critical thinking, outlined by Glaser (1984), reflects the goal of developing students' long-term reasoning and metacognitive behaviors, which connect to Mary's preface to the Stories with Holes activity in 9th Lit, as she encouraged students to think more deliberately about the questions they pose and about how to solve real-world problems (observation, October 23, 2014). Others support the value of asking good questions, because asking the right questions leads not only to better answers, but also to improved thinking processes (Ciardiello, 2003; Marzano, 2010).

The literature reflects the current study's finding in a broader sense as well. Cobb (1994) and Alexander (2000) discuss notions how we acquire knowledge over time in the real world–

that our individual ideas are mitigated by social structures, but still characterized by our idiosyncratic understandings of our world, which extend beyond any particular context. So, then, does our knowledge and utility of critical thinking shift throughout our lives, free from contextual boundaries in the sense that critical thinking remains valuable; but our knowledge and utility of critical thinking is also dependent upon the social world, in the sense that the contexts in which we exist will undoubtedly influence how we enact critical thinking. The data also relate to the idea in the literature of the dual domains of critical thinking–domain specificity and domain generality (Hodkinson, 2005; Hofer, 2000, 2006)–as the data support the value of critical thinking both within the specific domain of the classroom (e.g., for solving problems in the Stories with Holes activity), but also in terms of the general domain beyond the classroom (e.g., for solving problems with a broke-down car) (observation, October 23, 2014).

Seeking wider perspectives. Another finding of the current study is that teaching critical thinking provides students with a wider sense of perspective and a greater sense of humanitarianism. During the joint interview, Mary and Nora, the 9th Lit co-teachers, discuss their experiences of seeing "light bulbs" in students' eyes, especially during the class discussion surrounding Martin Luther King, Jr., the Civil Rights Movement, and issues of race and socioeconomic status, because students were encouraged to consider new ideas with which they could potentially identify (interview, December 2, 2014). As Nora and Mary facilitated the class discussion, students touched on many topics, including how to change the world, how to advocate for individuals' rights, and how to rise above challenging circumstances (observation, November 6, 2014). This discussion provided students the chance to consider pop culture figures and celebrities within the context of social change, which allowed them to think critically

through activating their prior knowledge (Bulgren, 2006; Crenshaw, 2010; Fischer, 2003; Glaser, 1984).

The opportunity for 9th Lit students to gain wider perspectives was also evident during a classroom observation in which Nora and Mary asked the students to consider how Elie Wiesel, author of the memoir, *Night*, survived the Holocaust. They prompted students to consider ideas such as the anti-Semitism and hardships endured by Wiesel, the question that lingers for Wiesel after his survival, and his purpose in writing the memoir. Nora then connected the Holocaust to the tyranny of the Islamic State of Iraq and Syria (ISIS), and the inhumanity thereof (observation, November 19, 2014). These class discussions on the Civil Rights Movement and on Wiesel's *Night* may reflect the teachers' goals of helping students think critically by opening up their eyes to new ideas, or at least new viewpoints of existing ideas.

The concept of seeking wider perspectives appears in Nora's computerized flow chart, and in her discussion thereof. She explains her reasons for including synthesis, inferencing, and evaluating, as these terms involve students looking "at their own values, their beliefs, their personal experiences that they have." Nora also includes reflection, which, as she states, "is where a lot of the kids don't get that chance to really move to that [higher] level or even [recognize it]" because they may not have the opportunities for thinking metacognitively (interview, December 2, 2014; visual representation, December 2, 2014). By providing enriching class discussions, however, Nora offers her students those chances to demonstrate their metacognition as well as the consideration of new perspectives. The benefits of metacognition for critical thinking are described in the literature, as metacognition demonstrates students' ability to recognize their own thought processes (Crenshaw, 2010; Ennis, 1993; Facione, 2000).

The value of considering new perspectives is supported by the Multicultural Lit teachers as well. Jeanne, the special educator, discusses how many of the Multicultural Lit students reached profound realizations about the local impact of poverty after reading related informational articles. She believes that the lesson on poverty "really opened their eyes up to how much poverty there is, even in [the local community]," and that students started considering how some children in poverty are sleeping in cars and doing homework under the streetlights. Jeanne then explains how she thinks that students "had to use more critical thinking in that because they need to come up with ideas of how to help with the poverty issue" (interview, December 1, 2014). As Jeanne suggests, teachers can foster students' critical thinking abilities when they utilize engaging lessons that allow students to see an existing environment, such as a neighborhood, in a new light. Bulgren et al. (2007) include "the construction of new perspectives and understandings" (p. 121) as an essential component of critical thinking, an idea which the participants would likely support.

Another lesson in Multicultural Lit involved asking students to write the This I Believe essay from the point of view of one of two characters in Amy Tan's short story, "Two Kinds." During this observed lesson, Laura, the general educator, talked to the class about how people constantly shift their beliefs and perspectives based upon new life experiences (observation, November 5, 2014). In an informal conversation with the researcher, Jeanne revealed that one of the This I Believe model essays, which described a father who contemplated suicide, was emotionally moving for a student in the class, who almost attempted suicide herself (interview, November 5, 2014). From the aforementioned data surrounding Multicultural Lit, it seems that Laura's and Jeanne's interest in expanding perspectives extends beyond students' abilities to

connect others' life experiences to theirs, but also to reach new understandings about the power of their own lives and values.

Considering alternatives to the educational "box." A final finding of the real-world context involves recognizing and offering alternatives to the mainstream goals that are supported by the school's culture and by broader society. For instance, Laura, the Multicultural Lit general education co-teacher, conveys her frustrations with the static nature of the institution of education, despite fruitless attempts to modernize over the years:

> I think that the nature of our system is incredibly archaic. And we keep taking an archaic system and adding technological bells and whistles and trying to make it something that's not totally archaic. But we're sitting in school rooms that are the same as one hundred years ago. They just have computers and document cameras and everything. But if you look at really how things operate, it doesn't reflect as many years and as much research as has gone by. (interview, October 30, 2014)

Laura seems to recognize that instead of just expecting the systems of education to improve through modernizing media centers and computer labs, we must first grow "who kids are. I don't know that our system does that, but I think in an ideal world, [we] could take who a kid was born to be and grow that." She adds, "I just think about, like, about how amazingly talented some of our kids are that drop out because that's not what we value in education" (interview, October 14, 2014). Laura appears to feel that schools should adapt to the changing times and to changing needs, instead of holding onto old patterns and policies.

This sentiment aligns with the emphasis in the literature on an asset-based model of disability, as opposed to a deficit-based model of disability. The asset-based model seeks to recognize and embrace students' strengths and avoids placing blame or responsibility on

individuals for their disabilities (Cory, White, & Stuckey, 2010; Ferri et al., 2005; Harry & Klingner, 2007; Linton, 1998). Finally, Armstrong (2012) argues for finding students' genuine interests and helping them to pursue these interests, even when they may not fit particularly well within the typical school environment or within the mainstream ideologies of education.

Jeanne, Laura's special education co-teacher, echoes Laura's arguments for providing students with more individually-appropriate educational options to encourage their critical thinking for the real world, particularly for "these kids that you know are kids…who don't love school." Instead, she would "rather give them something as, almost like an alternative" that still meets the course standards, but that lets "them feel like they have some say in what they're doing" (interview, October 10, 2014). Similarly, Mary, the 9th Lit special educator, believes that "there needs to be a different diploma for kids other than just college prep" and that schools should provide more opportunities for preparing for various occupations in addition to offering computer classes (interview, October 29, 2014).

While Jeanne and Mary suggest the need for flexibility of curricula programs, Nora, the 9th Lit general education co-teacher, emphasizes the idea that students with disabilities "may not be finding success in 9th Lit, but maybe in Horticulture, they're learning another skill, a lifelong skill, [with which] they can go on and be successful" (interview, November 14, 2014). Laura's comments mirror those of Nora, in that some students with "severe learning disabilities" are "still great critical thinkers." But, Laura continues, these students often become accustomed to being the "dumb kids because they don't read well," and that "sometimes, without a little bit of a push, they don't really get there with critical thinking." Despite how some students with disabilities seem to internalize negative labels, Laura has seen these students demonstrate

impressive problem-solving skills and other related skills, such as being able to use effective inference skills when reading stories with ambiguity (interview, December 1, 2014).

These aforementioned examples from the data, which consider the participants' wishes to consider alternatives to the typical format of secondary education, support the literature. Armstrong (2012), in writing from the context of neurodiversity, constructivism, and an asset-based model of disability, argues for teachers' engagement in "positive niche construction" (p. 13), which involves teachers' willingness and dedication to seeking out students' strengths, helping them become aware of their own strengths, and then cultivating these strengths through the appropriate practices or programs. Based on the data, it appears that the participants recognize and appreciate the idea that students who struggle with reading and writing may very well possess skill sets that will benefit them in other contexts, especially real-world ones. As Armstrong (2012) suggests, teachers must take responsibility for encouraging these skills, even if the skills are less relevant to English classrooms. In the subsequent chapter, a fourth and final theme will be considered, one which is situated within the context of academic achievement. This theme will delve further into these notions of how teachers perceive the abilities and needs of students with disabilities, and how teachers make instructional decisions related to critical thinking in light of their own perceptions and values.

Chapter 6: Cross-Case Findings in the Academic Achievement Context

Introduction

The previous chapter, chapter five, focused on three themes that have served to frame the cross-case results of the current study. The first theme discussed new problems that exist with the old problems of education; the second theme explored how teachers can practice critical thinking without theorizing it; and the third theme considered how educators within the

educational setting prepare students for life outside of the educational setting. With a deeper understanding of the complex nature of how these three themes are situated within the social and institutional, conceptual, and real-world contexts, respectively, the current chapter is focused on the fourth and final theme, which is situated within the context of academic achievement. This fourth theme illustrates the idea that not every student can reach the goal, but every student can reach a goal. Finally, as a point of distinction between this theme and the preceding ones, the fourth theme focuses more specifically on the academic achievement, or teachers' perceptions thereof, of students with disabilities. The three themes from the previous chapter certainly connect to students with disabilities, and while many of the data from chapter five involve students with disabilities, this fourth and final theme emphasizes students' unique abilities and needs to a greater degree.

Theme 4: The Academic Achievement Context – Not Every Student Can Reach the Goal, but Every Student Can Reach a Goal

The fourth and final theme involves cross-case analysis of how teachers' conceptualizations of critical thinking influence teachers' beliefs and actions regarding the academic achievement of students with disabilities. This fourth section of the data analysis reflects the finding that not every student can succeed to the same extent or to the same degree, but every student can succeed relative to her own level of improvement.

Achievement in mind. This subsection focuses specifically on the beliefs, values, and thought processes that teachers possess relating to the broader notion that students can find success with critical thinking, as long as the ways in which teachers reach and measure this success reflect individualization, fluidity, and compassion.

All students can succeed. Data from the current study indicate that all four participants possess strong opinions about students' abilities to think critically and to succeed academically. During one of her interviews, Nora, the general education co-teacher in 9th Lit, emphasizes the importance of students making progress toward success with critical thinking, more so than obtaining a certain level of independence from teachers:

> I do want them to be able to do things independently. But at the end of the day, I want them to learn, and read, and...find some success, find these [literary] elements that we're looking for because I think when we're done, they can do that. And then hopefully, that will spill over when they do have a passage that they have to read on their own. They'll have a little more comfort knowing, "You know what, I can do this." (interview, November 14, 2014)

In this excerpt, Nora appears to place more value on students' finding success with complex tasks than with being able to work without teachers' direct guidance.

A classroom observation of 9th Lit with Nora and Mary mirrors Nora's point about students finding success with critical thinking that is relative to their skill sets. In the class discussion on the modern relevance of Martin Luther King Jr.'s "I Have a Dream" speech, a female student made some very thoughtful, compelling arguments involving the complexities of racial issues and issues of socioeconomic status, while a male student, who had difficulty articulating his thoughts, was eventually able to defend his position in a simplistic, straightforward manner (observation, November 6, 2014). Although one may view the female student's comments as better, Nora's philosophy of individualized success would suggest that both students' responses were equally successful, in that both responses pushed students to think critically, even if not to the same degree. Zohar and Dori (2003), researchers who conducted a

quantitative study in Israel, found that, as Nora's views suggest, what matters is not whether lower achievers reach the same level of critical thinking as higher achievers, but whether lower achievers can make "considerable progress" toward their goals (p. 145).

This idea aligns with the thoughts of Nora's special education co-teacher, Mary, as well: When asked if or how her conceptualization of critical thinking has shifted over the years, she says that it has "definitely changed working with special needs kids because I now realize there are many different levels of critical thinking with special needs kids" (interview, October 29, 2014). Mary adds that the individual successes experienced by students with disabilities should be recognized and celebrated, "because not everybody is going to be up there [at the top level of critical thinking]" (interview, October 29, 2014). Mary's comments suggest an understanding that students can achieve a measure of success, but a measure based on their individual abilities, instead of expecting all students to achieve some pre-established level of success. The literature validates this idea of individual success through the research on teacher dispositions, which suggests that teachers construct their beliefs about students based upon their own prior knowledge, experiences, and contexts (Hand, 2012; Martin, 2007; Stinson, 2008). In other words, teachers might be more likely to view success as an individually-constructed goal as opposed to a group one if their broader dispositions support this notion as well.

Jeanne, special education co-teacher in Multicultural Lit, reinforces Nora's and Mary's beliefs about the importance of individualized success for all learners:

> Every kid can be successful. You may have to modify what they're doing, but – that you just can't say, "Oh this kid just can't do it"... [Their work] may not be to the standards of obviously your higher level kid...But you don't give up on any of them...I just think all kids should be able to see success...Just a smile on their face when they finally get that

> project done, they're like so happy and I just think you cannot ever give up on any kid, on any student. (interview, November 11, 2014)

Jeanne's remarks suggest how she feels rewarded upon seeing students reach higher levels of thought, but her remarks also may indicate a high degree of empathy toward students who struggle academically. Jeanne's general education co-teacher, Laura, explains a similar sense of compassion that has developed within her in more recent years:

> My first few years of teaching, I feel like the kids probably lost IQ points. I was a disaster. I regret the period of time, I would say, almost before I was a parent...But I think I'm much more empathetic now because I have the filter of, how would I want somebody to handle this if this were my kid?" (interview, October 14, 2014)

The compassion that Laura has gained through her experiences of motherhood is not reinforced directly by other participants, but one may argue that all four participants' their views as professionals have both influenced and been influenced by their personal experiences. For instance, Beijaard, Verloop, and Vermunt (2000) explain the degree to which "teachers' personal life experiences in the past interact with their professional lives" (p. 753; see also Clandinin, 1986; Elbaz, 1983; Goodson, 1992). Similarly, Huberman (1993) suggests that teachers become more tolerant toward students when teachers have children themselves.

These notions of compassion and empathy also seem to embody the spirit of the asset-based model of disability, in contrast to the deficit-based model. Jeanne's and Laura's comments might reflect their feelings and beliefs about the importance of valuing students' individual abilities and needs, without placing blame on the students for any struggles or difficulties that they may face (Cory, White, & Stuckey, 2010; Ferri et al., 2005; Harry & Klingner, 2007; Linton, 1998). Perhaps future research could explore the connection between teachers'

perceptions in the classroom and their family lives, or between teachers' perceptions of students with disabilities and these teachers' own academic abilities and needs.

The research participants discussed in interviews and demonstrated in observations how they do their best to work within the system to help students find success with critical thinking at whatever measure possible. For example, Laura expresses frustrations about the difficulties of helping students find individualized success within a rigid institutional framework, as she laments how students can either meet the standard and pass, or not meet the standard and fail, "and I think that that's a huge flaw in education right now, is that we can't be more flexible with that...We're kind of hogtied a little bit right now" (interview, October 14, 2014).

In a subsequent interview, Laura indicates that teachers could do more to combat the generic nature of classroom accommodations for students with disabilities, toward helping students meet their individual potential:

> If we could focus more on different kids...I just think when we do accommodating, we just kind of default to the same things: We're going to post our notes on the blog, we're going to give extended time. But really, it's very similar to what we just do to with everybody anyway. I don't think it's really because of [information] we know about a certain individual kid. (interview, November 12, 2014)

These excerpts may indicate that Laura harbors negativity toward the institution of education, yet she and her special education co-teacher, Jeanne, work to ensure that students receive individual attention in Multicultural Lit. During observations, both teachers seemed to enjoy the one-on-one relationship with students, as exemplified by their cheerful demeanors, their attention to individual questions, and their patience (observations, October 21, 2014 and November 5, 2014). These two teachers' dedication to individual students, including those with disabilities, reflects

Cook et al.'s (2000) teacher attitudes of attachment (i.e., feeling close to students and enjoying to teach them) and concern (i.e., embracing the students who require the most support), as opposed to the teacher attitudes of indifference and rejection.

While most of the data involving achievement beliefs relate to teachers' beliefs about students, other data also reflect teachers' beliefs about the content itself, and to what extent it reflects teachers' values regarding the importance of individualized success with critical thinking. For instance, Mary explains that although teachers may promote uniform objectives for all learners using uniform methods, that approach may not be realistic. Instead, Mary argues that "you have to look at the ability level of some kids and it may be a pre-established objective, but you might reach it a different way" (interview, October 29, 2014). Nora echoes Mary's remarks about the impracticalities of all learners meeting the standards using the same methods, and about the value of individual progress:

> With Common Core. I mean we have these standards that we're supposed to meet. And if you as a ninth grader don't meet those standards, then you're not considered on level or whatever. So I think we're driven by that. I don't want to say I ignore it...But there are definitely some students who I see making tremendous progress, but yet is it at the ninth grade level that all the other kids are doing? Maybe not so. But I do feel like they've risen to the occasion beyond what they've been able to do before. So the expectation is still there to have them critically thinking, but am I expecting them to be able to do what everybody else does? We hope with the accommodations that they're able to do it. But in some cases, I mean, just having them write a good solid paragraph, no fragments or run ons–I mean, those are successes that I'm proud of at the end of the day...They've at

> least made progress and achieved and we just keep working, and we keep trying. (interview, October 30, 2014)

Nora's comments suggest that she sees value in helping students find some success, sometimes despite the rigidity of curricula and standards.

In a subsequent interview, Nora reinforces this idea that if students are not able to accomplish all of your projected tasks, it is important to accept that reality: "We all want to get all these things done, check them off our list," but teachers should keep "looking for ways to try to make it a level playing field, I guess is what we call it, and just [be] okay with that" (interview, October 14, 2014). It seems that Nora and Mary do face pressure to align their lessons and instructional accommodations with course standards. They both appear comfortable and confident, however, in their position that all students can achieve some level of success, even if it does not reflect their peers' level.

The Optimist and the Realist in teachers' minds. Related to the idea that all students can succeed is knowing when to push students further with their thinking, and knowing when to pull back to give them space. A finding of the current study is the dichotomy that effective teachers should embody characteristics of both the optimistic and the realistic personality types. Jeanne, special education co-teacher in Multicultural Lit, describes her experiences with the optimistic/realistic dichotomy:

> Sometimes you know how much you can push it. And you might start off by asking a question and you don't get a response and then you kind of just re-say it, not that you're dumbing it down but you're just trying to get them to just think more and think critically; but you kind of reach and then if it doesn't work, you come down a little bit but...And sometimes you know that you've – I mean, sometimes you're pleasantly surprised and

> other times you know that maybe you've reached a little bit far for them and then you have got to just bring it down a little bit…[But] you still want them to have to try to think critically. (interview, October 28, 2014)

As Jeanne suggests, teachers sometimes need to push toward high expectations of the optimist, while also pulling back toward the tempered goals of the realist.

Mary, special education co-teacher in 9th Lit, articulates how, as Jeanne mentions, teachers must recognize when to pull back toward realistic goals:

> Well, I think you can have to set a baseline when you first get the student and be a little more informed about their background whether it's special Ed or not, try and get as much information. If you notice, they're struggling right off the bat, try and get as much as background information as you can...And if that appears that it's [a lifelong struggle], then chances are, they're not going to come in and do as well as kids that have done really well in their CRCTs and they've done well with their grades. (interview, October 29, 2014)

Jeanne's and Mary's comments seem to indicate a sense of balance between the optimistic and realistic points of view. As Bulgren et al. (2007) and Torff (2006) suggest, teachers must take care to set appropriately-leveled expectations so that students with disabilities can find success in the classroom without fear of feeling singled out because of coursework that seems either too easy or too difficult. In addition, as articulated by several authors who discuss the asset-based and deficit-based models of disability, teachers should work to highlight students' abilities and strengths as learners instead of displaying negativity toward students or blaming students for any struggles they may face in meeting the expectations of the course (Cory, White, & Stuckey, 2010; Ferri et al., 2005; Harry & Klingner, 2007; Linton, 1998). Finally, Armstrong (2012)

argues for finding students' genuine interests and helping them to pursue these interests, even when they may not fit particularly well within the typical school environment or within the mainstream ideologies of education.

It appears that this balance is something that Nora, Mary's general education co-teacher, strives to achieve through her approach in the classroom. During one of the observed lessons in 9th Lit, while students were working in groups of three or four to solve ten-minute mysteries, Nora stopped at one of the groups' tables and looked at their progress. Nora then told the group to "go ahead and put that answer down," but that they should also take another look at their "line of thinking" (observation, October 23, 2014). The former direct quotation may reflect a realist point of view (i.e., "That answer isn't great, but good enough), while the latter may reflect the optimistic point of view (i.e., "That answer is good, but I think you can do better"). Nora's flow chart connects to this particular instance in the classroom as well, because Nora places the term reflection at the penultimate level of thinking, second only to the term point of view. Asking students to reconsider their answers may constitute the process of reflecting, and students' engagement in reflection may lead them to higher levels of critical thinking. In the literature, Facione (1990, 2000) and Ennis (1993) describe the notion of reflective thinking, which uses on the process of metacognition to help students monitor their progress and self-regulate their thinking, as Nora probably hoped her students would do as well (see also Crenshaw, 2010; Ivie, 2001; Magno, 2010).

Other teachers' lowered expectations. Despite the participants' views of their own balancing acts between the optimist and realist points of view, they repeatedly articulate in the interviews the sense that other teachers sacrifice high expectations in order to ensure some level of success, or that other teachers lack the pedagogical wherewithal to push students to higher

levels of critical thinking. This finding of the participants' beliefs about other teachers is complex because the participants argue against teachers who set lower expectations for students with disabilities, while also appearing concerned when these same teachers are unwilling to demonstrate flexibility for students with disabilities. The data also suggest, though, that the participants are concerned about other teachers' assumptions about the critical thinking abilities of students with disabilities, as opposed to being concerned about the adjusted expectations in and of themselves. As supported by the data below, the finding supports participants' apparent view that lowering expectations is appropriate, as long as it is done at the right time, and for the right reasons–reasons which might preclude preconceptions and stereotypes.

Jeanne, the special education co-teacher in Multicultural Lit, speaks about other teachers' lowered expectations, especially those who are less familiar with students with disabilities:

> And I think everybody's capable of some critical thinking, but I'm not sure that all teachers feel that way...You always have to be thinking about a way that challenges a kid no matter their disability...I think some teachers, maybe, that have not worked in, like, a co-taught classroom, they just don't – I don't think they feel that they can push these – the kids – the special needs kids as much. But I think that if they tried more often, they'd be surprised they can get more out of them...I think there's probably a lower expectation with some. (interview, October 28, 2015)

Jeanne's comments may indicate a feeling of frustration directed toward teachers who have less experience around students with disabilities, while also a warning toward teachers make assumptions about students with disabilities. Jeanne's general education co-teacher in Multicultural Lit, Laura, shares a similar sentiment in her conversation about the dangers of expecting less of students with disabilities because of the special education label. She talks

about how her experiences in co-taught classes "always reinforce that all kids are really different...I think that you just can't have expectations just because they are on a certain roster; you really have to be careful not to let the color how you see the kid." She then adds that "kids are going to rise and fall to meet that expectation. So I think when you walk into the door [with preconceptions of students with disabilities]...I do think there's a fulfilling prophecy when teachers teach that way" (interview, November 12, 2014). During the same interview, Laura clarifies her position regarding the notion of students with disabilities being unable to perform at the highest levels of critical thinking: "There are times when that is certainly true or more things are required for that to happen. But I think that that assumption [of the special education label indicating lower abilities] would be the biggest bias [students with disabilities face]" (interview, November 12, 2014). Like her co-teacher, Laura appears concerned about the degree to which teachers allow their own assumptions of students with disabilities to color their approaches to classroom instruction.

The literature supports the notion that teachers' preconceptions of students with disabilities influence their pedagogy, as authors have suggested that teachers may be inclined to emphasize lower-level skills at the expense of higher-level skills (Bulgren et al., 2007; Torff, 2006). Similarly, Zohar et al. (2001) describe the potential development of a self-fulfilling prophecy, as Laura discusses, which results when students begin to internalize, and then reinforce and maintain through academic (in)action, the very preconceptions that are imposed upon them in the classroom. These preconceptions are closely tied to Cook et al.'s (2000) four teacher attitudes (i.e., attachment, concern, indifference, and rejection). The authors found that students with disabilities are significantly underrepresented in the attitude of attachment (i.e., students whom teachers value the most) and are significantly overrepresented in the attitude of

rejection (i.e., students whom teachers value the least). These findings suggest that teachers are more likely to reinforce negative preconceptions about the critical thinking abilities of students with disabilities if a disproportionately high number of teachers possess the attitude of rejection, and a disproportionately low number of teachers possess the attitude of attachment, toward students with disabilities.

Returning to the challenge of balancing students' individual needs amid a structured curriculum, all the while engaging students with disabilities in critical thinking, consider the activity called Socratic circles. Jeanne and Laura have utilized Socratic circles in Multicultural Lit to review class readings, and the activity is, according to Jeanne, "a good way for students to listen and hear how some kids will answer some of these critical reading questions. And maybe they don't feel comfortable doing it on their own, but at least they are exposed to [critical thinking]." Jeanne adds that "you don't want to lose them, like you're always pushing and they don't feel comfortable...So you do have to lower your expectations a bit." Jeanne then underscores how important it is for students with disabilities to think critically, although "it just may not be at the level that your top students can" (interview, October 28, 2014). Like the Socratic circles activity, Crenshaw's (2010) research speaks to the value of Socratic questioning, which ask teachers to act as moderators instead of lecturers and to encourage students' deep thinking.

The belief in at least exposing students to critical thinking seems reflected in Jeanne's and Laura's Project Success assignment, which gives students the freedom to not only decide upon the types of research they utilize in support of their future goals for adulthood, but also to decide upon the methods of presentation and to listen to peers' presentations. This degree of choice and this ability to hear others' ideas seem to accommodate students' varied ability levels.

The assignment allows students to maximize their areas of strength and minimize their areas of weakness when conducting their research and constructing their presentations, all the while seeing and hearing examples of presentations involving higher levels of thinking from higher-achieving students (observation, November 20, 2014). The instructional approach that Jeanne and Laura utilize for Project Success relates to Crenshaw's (2010) notion of exploratory questioning, which fosters' students critical thinking through activating their prior knowledge about a topic (e.g., students' existing knowledge about whatever goals they hope to pursue in adulthood), to then improve their knowledge on that same topic (e.g., widen and deepen their understanding of their goals).

Although Jeanne and Laura seem to have created an assignment in Project Success that taps into and fosters critical thinking without overwhelming the students, Laura suggests that teachers do not always do enough to create opportunities for critical thinking in their classrooms:

> My personal thought is there are a lot of teachers who just have different levels of commitment to this profession and that's horrible, probably blasphemous to say…It's hard. So where you get the overwhelmed teacher, where you get the new teacher [is where problems arise]. It takes a lot of practice to really develop some of the techniques that we use to teach [critical thinking]. (interview, October 30, 2014)

In her remarks, Laura indicates a number of complications with maintaining high expectations for promoting students' critical thinking, but she does not seem to feel that she struggles with this. On the other hand, Nora, the 9th Lit general educator, does discuss her own personal concerns, as well as her concerns about other teachers, in trying to maximize students' critical thinking:

> I don't think that all teachers do as much as they could. I'm including myself. I think there's probably other things that I could do. But just I always feel like I'm under the gun as far as time goes. And so, I'm sure that [other teachers] feel that same way, too. But there are times when I really just would like to put on the brakes and say, "Hey, let's go back and re-visit this and do this." But just time alone really sort of keeps you from doing that. (interview, November 14, 2014)

Laura's and Nora's remarks seem to reflect their concerns about some of the impediments to critical thinking, which are evident in the literature as well. Bakioglu and Dalgic (2013) and Snyder and Snyder (2008) suggest several external barriers that are relevant to these participants' comments, including an increasingly challenging workload and a lack of training or expertise. Gerber's (1988) instructional tolerance theory relates to their concerns as well, as the theory describes the zone within which, or degree to which, teachers can deliver effective instruction with limited resources and with various learning needs.

Gerber's (1988) theory may apply to teachers' attempts to think critically as well, and Nora explains how some other teachers can become frustrated with the challenge of getting students with disabilities to find some success with critical thinking:

> I think that sometimes, there are some teachers that feel like student with disabilities can't do the same work as some of the other students...At least I feel like I've seen people that sort of set the expectations lower. And then if they don't set their expectations lower, then they're aggravated that they're not reading on their own or meeting the standards that we're hoping that they'll meet…[Some teachers] want to do things one way, and that's the only way they want to do it. (interview, November 14, 2014)

Nora's comments in both excerpts above indicate her own concerns with other teachers' frustrations that they point toward students with disabilities. In a separate interview, Nora admits that, in past years of her three-decade teaching career, she fell victim to the same frustrations aimed at students with disabilities. Nora describes how some teachers will simply say, in the face of learners who struggle to succeed with critical thinking, "This is it. You can't do it. Too bad"; she then explains that she is as guilty as the people to whom she is referring from the past, who would say, "You don't read it, tough. You're going to get a zero. I'm going to give you a quiz, and you're not going to pass it."

And so, as Nora describes, she "just went on and [these students] could never be in a discussion because they haven't read it. But I got the zero down and we just went on" (interview, October 30, 2014). Based on Nora's remarks above, it seems that her own shift in point of view (i.e., away from these other teachers') results from a greater understanding of the aforementioned impact of students' home lives upon their intellectual and academic development. The seminal works of Copeland et al. (1994) and Peterson and Clark (1978) describe how teachers such as Nora may shift their own thought processes and decision-making processes over time, depending on contextual factors and on classroom experiences.

Nora's special education co-teacher, Mary, expresses similar concerns about teachers' thought processes—specifically, about the importance of teachers recognizing students as individuals. Mary claims that "there are teachers out there, though, that do not differentiate. They don't specialize any instruction. They just deliver [the content] for everybody the way it is. If we don't get it, 'too bad, so sad.'" She continues by describing how some students "are just never going to ask for help, so they miss the boat the whole time...And some kids are going to [fail assessments] anyway...unless you write the paper for them or take the test for them." Yet,

she then argues, teachers could do a better job of creating varied learning opportunities for students in an attempt to maintain engaging classrooms and ultimately foster critical thinking (interview, November 13, 2014). Findings from deBettencourt's (1999) study support Mary's last point, in that teachers in the study, in general, "did *not* use several strategies that research suggests facilitate academic achievement for students with mild disabilities" (p. 33, emphasis in original).

Mary's concerns, as reflected by deBettencourt (1999), extend past teachers' lack of individualization and student engagement, however. For instance, Mary argues that some teachers in the school "don't bother to inform themselves [about the needs of students with disabilities] and I think they don't necessarily really care at times." She then states, "[Some teachers] want to do things one way, and that's the only way they want to do it" (interview, November 13, 2014), as Nora conveyed above. Mary contends that low expectations exist beyond school walls as well:

> People that are not knowledgeable about students with disabilities have a big misconception of what that is. A lot of people don't think they can go to college. Now, these are people that are not educated, maybe don't work with students with disabilities. I think a lot of people think that they either have very bad behavior problems or they're so low, they can't go to any type of post-secondary situation. So I do think that [is true] outside of the educational environment. (interview, November 13, 2014)

Mary's remarks about the average citizen's opinions may reflect the idea that stereotypes and assumptions of students with disabilities, particularly in terms of what levels of thinking they can reach, may involve a broader context than the classroom or the school.

The literature bridges this broader context of society's view of students with disabilities to teachers' lowered expectations in classrooms, particularly regarding the notion of institutional discourse as an influence on teachers' knowledge and power. Ball (1990) describes how discourses, by their very nature of dictating what can be said and thought in various contexts, can give unspoken power to ideologies that may not necessarily represent the most equitable ideas or practices, if those ideologies are propagated throughout discourses that are situated in broader, institutional levels of society. Similarly, Drew and Heritage (1997) argue that asymmetrical discourses (i.e., discourses that favor one group or one set of values at the expense of another) can cause a trickle-down effect on the classroom. To put these notions of discourses in terms of critical thinking, if social environments and institutions beyond the school building perpetuate negative stereotypes of students with disabilities, then teachers are more likely to internalize in theory, and enact in practice, those same stereotypes about the critical thinking abilities of students with disabilities. One can argue, then, that teachers are responsible for working within their classroom contexts to dispel the myths or preconceptions that exist beyond the school walls.

Achievement in action. Now that teachers' achievement beliefs of students with disabilities have been explored, it is important to consider how these beliefs translate into achievement actions, or practices. Note that theme two (the conceptual context) focuses on how teachers view critical thinking concepts and practices, and how teachers view students' understanding of the same, while this section of theme four (the academic achievement context) focuses on pedagogy: specific instructional strategies and approaches that teachers utilize in order to foster critical thinking for students with disabilities.

Modeling and scaffolding. Another finding of the current study is that modeling is an effective classroom practice to promote critical thinking. For example, Jeanne, the Multicultural

Lit special educator, claims that in order to support students with disabilities, "you have to hit all senses. I mean, you have to [provide support] for the auditory learner and for the visual learner... I think modeling does help for a lot of these kids" (interview, November 11, 2014). In a subsequent interview, when talking about the potential need to make immediate adjustments to lessons, Jeanne explains that she and Laura, her general education co-teacher, do not need to adjust much, because "it's almost like [Laura] models everything, so they really should have a good idea of that they're doing" (interview, December 1, 2014).

Erickson (2011) and Paterson (2007) write about in-flight thinking, or teachers' in-the-moment thinking processes, which connects to Jeanne's remark about not needing to make immediate adjustments to lessons because of the modeling done ahead of time to minimize the need for in-flight thinking. Laura confirms their consistent use of modeling, but also presents a different outlook on this process of fostering critical thinking:

> [Modeling occurs for] writing tasks, almost always. That seems to be huge with kids, and I don't know how I feel about it really. Because I appreciate a model, but sometimes I don't like to give a model, because then they just copy the model. And then to ask, "I'm looking for higher-order thinking and creativity," it helps some kids, but sometimes I think it kind of puts some limitations on kids. (interview, November 12, 2014)

As Laura indicates, modeling allows students to see exemplars to better understand teachers' expectations, but sometimes this comes at the expense of students' creative control and sense of freedom.

Despite the dangers to students' creativity, Laura and Jeanne do use models in their Multicultural Lit class. During a classroom observation, they modeled a This I Believe essay based on *The Wizard of Oz*. The exemplar seemed to be successful, in the sense that the students

were exposed to a very familiar story, but a story different enough in content and theme that it may have nullified any concern of the model stifling students' creativity (observation, November 5, 2014). Mary and Nora, the 9th Lit co-teachers, also utilize modeling, as evident by the classroom observation in which Nora modeled the first question/answer combination on the *Hound of the Baskervilles* literary elements handout, which asks students to match definitions of literary elements to their examples from Sir Arthur Conan Doyle's story (observation, October 23, 2014). Based on these two observations, both models were successful, in that students in both classes displayed minimal verbal or non-verbal confusion (observation, October 23, 2014; observation, November 5, 2014).

These two observed examples of modeling support the notion of sameness. Sameness is a cognitive process associated with the research on critical thinking, and it describes how individuals can note commonalities among concepts and schemas (Carnine, 1991). Regarding the *Hound of the Baskervilles* activity, for instance, the 9th Lit teachers asked students to utilize critical thinking by recognizing similarities between the literary terms and the novel. In addition, Grossen (1991) discusses analogical reasoning and logical reasoning, which are tied to sameness, in that analogical reasoning requires students to identify commonalities among ideas, while logical reasoning requires students to apply the commonalities to other situations or experiences. In the context of the This I Believe essay modeled from *The Wizard of Oz*, students must utilize critical thinking via analogical reasoning as they connect the concepts from the story to the essay, and they must utilize critical thinking via logical reasoning as they build new connections to their own lives or their own values from the existing concepts.

Aside from modeling, one finding from the current study is that scaffolding represents another pedagogical tool that teachers may utilize to bolster critical thinking for students with

disabilities. In Multicultural Lit, Jeanne and Laura gave scaffolding handouts to students in order to prepare them for a timed writing response which asked them to develop a plan to ameliorate poverty. Near the beginning of this particular lesson, Laura reviewed the handouts for the timed writing. The handouts included guided reading questions for Gary Soto's short story entitled "The Jacket," which was used as the basis for the discussion on poverty, a graphic organizer to visualize the power of diction, notes on poverty, and informational articles on different forms of poverty (observation, October 21, 2014). Given the complex nature of the writing task, which requires a combination of persuasive and expository writing styles, it seems that students needed these scaffolding materials in support of their critical thinking on the task. Indeed, several authors discuss the benefits of scaffolding for critical thinking, and to help avoid lower-order thinking modes like memorization and factual recall (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004; Snyder & Snyder, 2008).

Another finding of the current study is that, for students with disabilities in particular, teachers are concerned with students' abilities to access language that is appropriate and accessible to them. Jeanne mentions that one method of scaffolding for more difficult language–whether verbal or written language–is to ask questions that are more literal and that are written in more straightforward language to ensure that they grasp the topic before moving on to more complex questions with more complex language, because "I think some of them are afraid to answer, thinking they're going to be wrong" (interview, November 11, 2014). Nora describes a similar process of scaffolding in order to support students' struggles with written language:

> Well, I mean I think, like, Doyle [author of *Hound of the Baskervilles*], for instance, is a pretty tough read, but if we do it together and kind of walk them through it, then they begin to see that they can do it, and they begin to understand the language...They do seem

> to then begin to know a little bit and kind of understand [the content, with scaffolding]. (interview, November 14, 2014)

Jeanne's and Nora's remarks seem to indicate that they are comfortable beginning with lower-level questions in order to support students' language deficits.

The idea of scaffolding a challenging text is reinforced by Laura, the Multicultural Lit general education co-teacher, as well. She suggests pairing a challenging text with an accessible one, because starting with a more accessible text will help students build their confidence and provide them context for the theme of the article or story. Then, when students encounter the same theme in the more difficult text, "they may not be able to fully access that text, but they can usually at least kind of start to form a connection, and then as a teacher, you have got to scaffold more" (interview, November 12, 2014).

Although the participants' comments do often focus specifically on helping students with disabilities, the data also suggest the finding that, as mentioned within the section on theme one (the societal, institutional context), drawing a line between students with and without disabilities may be unnecessary or irrelevant. Mary, the 9th Lit special education co-teacher, explains that she and Nora cannot simply consider whether students receive special education services when determining how to help them:

> I do think the scaffolding is very important for a lot of these kids whether they're special Ed or not. I think it's very important that you have that tool available to them if they struggle with reading comprehension or getting to the right idea, that you can kind of scaffold in reading and writing...We just pull out the kids that need that scaffolding whether they're special Ed or not… because there are plenty of special Ed kids who aren't leaving the room [for pull-out support]. (interview, November 13, 2014)

As Mary intimates, teachers should make informed decisions about what sorts of instructional support their students need, but these decisions should rely upon more information than simply whether students are identified in special education.

Similar to Mary, Laura remarks that in Multicultural Lit, making separate instructional decisions for students with and without disabilities is too simplified of a lesson plan. When planning, Laura says that teachers should "always look at trying to include multiple levels of thinking" based on "the varied ability levels" in the classroom, and that "if you just kind of went for the upper part of the scale, you'd miss all these kids." She also states that "even for the kids that are capable of really kind of upper-level critical thinking skills, I think that a lot of those kids have to be scaffolded up there" (interview, December 1, 2014). This discussion of providing multiple avenues for students to reach higher levels of thinking also relates to deBettencourt's (1999) use of the aforementioned instructional tolerance theory, because teachers' goals of providing sufficient scaffolding can become challenging amid limited resources and within a classroom composed of students with various learning styles.

Differentiation. Another finding of the current study is that educators may teach to students' various learning styles, and facilitate critical thinking for students with disabilities, through the instructional practice of differentiation. As one model of teachers' cognitive processes suggests in the literature, teachers subconsciously follow a cyclical pattern of thought, in which they must consider a series of instructional accommodations and adaptations in order to best facilitate critical thinking for all learners (Snow, 1972; as cited in Peterson & Clark, 1978). This section describes, then, some examples of differentiation within the co-taught classrooms– examples that are conceived from teachers' in-flight thinking and systems of meaning-making (Erickson, 2011; Paterson, 2007).

In 9th Lit, Mary and Nora utilize the pull-out method (i.e., pulling students out of the classroom for small-group teaching) in order to maximize the effectiveness of their instruction. Nora describes the problems inherent in attempting to teach to a wide variety of learners, particularly with high-achieving students who have chosen to avoid Honors English: "It's a sort of juggling act and that's when some days, [Mary] would take a group out and do the [audio]tape [of the reading] or individual reading, where the rest were just reading or doing something different" (interview, November 14, 2014). Mary echoes Nora's remarks about the benefits of the pull-out method: "Some kids don't ever want to answer questions... Sometimes, I do better by pulling the kids out into smaller groups...and then they feel, I guess, more comfortable to ask questions" (interview, November 13, 2014). Mary clarifies in a subsequent interview that when pulling students out, "the expectation is the same" (interview, December 2, 2014). These excerpts from Nora and Mary suggest that they view the pull-out approach as a viable method of differentiation, especially when teachers pull students out purposefully and with the goal of focusing on the learning process (Snyder & Snyder, 2008).

Although the data suggest that the pull-out method is effective for fostering critical thinking, it is worthwhile to consider other forms of differentiation that do not require student movement, as it seems that the practicalities of the building may make it challenging to implement the pull-out method on a consistent basis. During a 9th Lit observation, Nora and Mary provided certain students with a word bank to accompany a handout given to all students, which helped these particular students to follow the informational video on Martin Luther King, Jr. The accompanying handout lists sentences with blanks for phrases, to help cue the students to insert certain key ideas from the video, and the word bank simply lists all of the possible phrases that students could use to fill in the blanks on the handout (observation, November 6, 2014).

Although one might argue that the word bank limits students' creativity by imposing a set of words upon them, Nora and Mary might contend that the word bank provides an appropriate level of extra support for those who need it most. Indeed, Bulgren (2006) claims that students with disabilities often require more support due to weaker skills than their peers require.

As a second example of differentiation from 9th Lit that does not involve student movement, consider Nora's and Mary's decision to allow their students to self-select the subject of their narrative writing assignment, even if the subject contains, per Nora's example, more gore than she and Mary would otherwise appreciate; Nora states the value of "just giving that freedom to just be as bloody as they want to be or whatever, just that freedom, then they began to get engaged. And I know that sounds crazy, but it's true" (interview, November 14, 2014). Similarly, Jeanne and Laura provide an example of differentiation from Multicultural Lit that relates to their Project Success assignment. Not only could students select their own topics, but they could even choose the electronic platform with which to create their presentations (observation, November 20, 2014). The literature supports the idea of student-selected writing topics and project topics, as several authors describe the value of tapping into students' prior knowledge in order to facilitate critical thinking (Bulgren, 2006; Crenshaw, 2010; Fischer, 2003; Glaser, 1984).

Another finding of the current study is that teachers can make adjustments to the pacing of content in order to support critical thinking. As Mary explains, sometimes the pacing proves challenging for students with disabilities, and sometimes, for these students, teachers need to remove "a good portion of the extra stuff so they can get down to the meat of what they really need to know, because I do believe they can learn it, but they don't need all the [bells and

whistles]" (interview, November 13, 2014). Mary's general education co-teacher, Nora, echoes Mary's concerns about pacing for struggling learners:

> The processing [is an issue]. I think that a lot of times they can't move at the same pace... I think if some of the special ed students had a little more time, and not just special ed; there are other students who don't process this fast. But if they just had those little moments where they could think about it, then I think they could come up with the answers too, but they're just not as quick. So then they're perceived to having – not knowing– the answers. (interview, November 14, 2014)

Mary's and Nora's comments suggest the importance of whittling down and slowing down, respectively, in order to support the critical thinking of struggling learners.

Jeanne, the Multicultural Lit special education co-teacher, conveys a similar sentiment in terms of how to improve pedagogy for students with disabilities: "We have to slow down a little bit. I feel like we're sometimes on this pace that I feel, like, it's a little bit overwhelming...We need to cut down on the quantity and go more for, like, the quality" (interview, November 11, 2014). Jeanne's general education co-teacher, Laura, explains the need to slow down the pace during a recent, particularly challenging and in-depth writing assignment:

> And we have this big, grand plan about how the kids were going to read these things and synthesize and then there's going to be unicorns and rainbows and it was going to be awesome. But we very quickly realized that it wasn't happening in the way that we – if we realized that if we were going to really get the complex level of thought that we had to slow down and force them to really like dig into the text. And so I think for situations like that the pacing does – we stopped to force them to do something that if we went more quickly, may or may not have happened. (interview, December 1, 2014)

It seems that all of the participants recognize the importance of adjusting the delivery of the content in order to facilitate critical thinking for students who struggle, for which Snow (1972) argues through his model of teachers' cognitive processes (as cited in Peterson & Clark, 1978).

Another finding of the current study is that teachers might modify the content, not only the pacing. Jeanne, for instance, knows she will need to modify content for kids who read at a very low level (interview, November 11, 2014). One such modification could include providing certain students with simpler questions to be answered during in-class discussions, which Nora suggests will help students feel comfortable in the class: "I'm not going to give [a student] a really complex question that I feel will struggle. So I try to…[let them] find some success" (interview, November 14, 2014). Nora also discusses how she, as the general educator, feels equally responsible for adapting the curriculum as necessary:

> I'm there to help support the students who need the modifications or accommodations or whatever that may be. And if that's reducing the number of questions on a test, I know some teachers would probably frown at that. But we look at it as again, giving them some success when they only have three choices instead of four on a word bank. (interview, November 14, 2014)

Jeanne's and Nora's remarks indicate a high degree of comfort with modifying content in Multicultural Lit and 9th Lit, respectively, and this comfort is evident in the classroom as well.

During a 9th Lit observation, Mary and Nora utilized ability grouping in order to differentiate content, with each group received a different ten-minute mystery, some of which required more critical thinking than others (observation, October 23, 2014). Likewise, in Multicultural Lit, Jeanne and Laura differentiated the content by allowing students to choose their own topics of study and their own methods of presentation (observation, November 20,

2014). These examples reflect the participants' ability to adapt the content as necessary to facilitate critical thinking for all students, but particularly those with disabilities and other struggling learners.

These two classroom observations relate to Glaser's (1984) description of three types of curricula programs to promote students' critical thinking. The 9th Lit mystery lesson exemplifies Glaser's process-oriented type of program, which aims at developing "habits of reasoning and skills of learning to improve performance of a general metacognitive, self-monitoring character" (1984, p. 95), in that the ten-minute mysteries require students to think critically about how to solve the scenarios presented to them, and to reflect upon their thought processes if they, in fact, solve the problem incorrectly. In addition, the Project Success assignment in Multicultural Lit aligns with Glaser's description of programs that are not bound to particular content knowledge, and that utilize prior knowledge instead, because students are afforded the chance to construct their own projects, with unique content, based upon their own life experiences and backgrounds.

Building students' comfort and confidence. Aside from scaffolding and modeling and differentiation, the data support the need to foster students' comfort and confidence in order to make gains in students' critical thinking. Jeanne, the special education co-teacher in Multicultural Lit, describes the lack of confidence often experienced by students with disabilities:

> I just don't think they have the confidence that other kids have. And I mean they know they're sitting there...Some kids, [the label of special education] doesn't bother, but I would say the majority, it probably does bother them. And they're afraid of being wrong.

> They might have ideas, but they're afraid of raising their hand and thinking they might make – like, say something that's going to sound stupid. (interview, November 11, 2014)

Jeanne's remarks about the lack of confidence may explain her feeling, expressed later in the same interview, that she is "that voice of kids who don't want to ask [questions] because they don't want to look like, 'Am I the only one that doesn't really understand?'" Jeanne then states that while she is happy to work with all students, "I feel like I am in there for the kids that do struggle more" (interview, November 11, 2014).

It may be out of this same need to ensure struggling students' comfort that influences Laura's views about her role during the Project Success presentations in Multicultural Lit. When discussing her approach of keeping the mood relaxed during presentations, she explains that "when you see a kid that's nervous, I feel like students are much more comfortable in a conversation or answering a question than just going raw and just delivering." She then discusses how she is not afraid to ask students to clarify something or rephrase something from their presentations, because doing so "takes some of the nerve out" of the experience (interview, December 1, 2014). During one Multicultural Lit observation, Laura and Jeanne make several of these interjections, which seem to have helped the presenters calm their nerves and boost their self-esteem.

One presenter discussed his desire to be a "family man," and Laura interjected to say that many of the presenters have talked about the positive or negative impacts of parenting, and that "good parenting and good marriages take intentionality; they don't just happen." During the next presentation, Laura comments on her appreciation for the presenter's maturity displayed by his ability to distance himself from his friends who, according to Laura, "take his elevator down." When another presenter seems to get down on himself for being an introvert, Laura

builds up his self-esteem by complimenting his attitude and approach to others. Jeanne makes interjections as well, such as when a student struggles with wording her remarks, so Jeanne offers her suggestions (observation, November 20, 2014). Helping students in such a fashion seems especially important for Jeanne, who, during an informal conversation with the researcher, discusses how so many of their students in Multicultural Lit are "emotional," needing confidence boosts on a regular basis (interview, November 20, 2014).

Based on the presenters' body language and verbal remarks following the teachers' interjections, one may argue that Jeanne and Laura accomplished their goal of making students feel calm and confident during moments of stress. The interjections also seemed to contribute to the light, relaxed mood of the class, as exemplified by presenters' acceptance of and appreciation for Jeanne's and Laura's interjections, by presenters' acceptance of audience members' appropriate interjections (e.g., when a student in the audience commented that it's good that one presenter wishes to patch up his relationship with his mother), and by the general respect provided by the audience members (observation, November 20, 2014).

Like the Multicultural Lit co-teachers, Nora and Mary created opportunities for critical thinking for students with disabilities by, first and foremost, making students feel safe and comfortable in 9th Lit. For instance, during a lesson supported by an anticipation guide for Martin Luther King's "I Have a Dream" speech, Nora set a comfortable mood by initiating the class discussion with this question: "Has America improved since the days of the Civil Rights movement?" (observation, November 6, 2014). During another lesson, Nora and Mary utilized an activity called Alphabox, which asks students to choose one significant word from Elie Wiesel's memoir, *Night*, for every letter of the alphabet. The activity seemed successful, based upon the number of students who shared their answers aloud, and based upon the depth of their

answers (observation, November 19, 2014). As Mary indicated in an interview, the Alphabox "wasn't a difficult format to answer and I think a lot of [students], it gave them the opportunity to not be afraid to answer (interview, December 2, 2014). Following the lesson, Mary engaged in an informal conversation with the researcher, and she discussed her happiness about the fact that a student with a disability who had not read much of *Night* was able to open up and share some of his Alphabox words, thus reinforcing their hope that students would feel comfortable enough to express themselves and be able to reach higher levels of critical thinking (interview, November 19, 2014).

The literature reflects the importance of ensuring students' comfort and confidence as well. Dillon (1998) suggests that in order for critical thinking to thrive, teachers must create an interrogative mood in which students feel comfortable asking questions and taking academic and social risks in the classroom (as cited in Ciardiello, 2003). For fourteen- and fifteen-year-old students in 9th Lit, following Nora's and Mary's requests to speak about broad social justice issues related to the Civil Rights movement seems to represent academic and social risks–risks which would probably yield poor results if it were not for Nora and Mary setting the appropriate mood. Similarly, Beyer (1998) argues that teachers need to maintain a positive atmosphere, such as by responding to students' answers with authentic commentary, as illustrated by Jeanne's and Laura's interjections during the Project Success presentations (observation, November 20, 2014).

Conclusion

Through the lenses of four themes, one may begin to understand the complexities inherent in the processes and in the mechanisms by which teachers' conceptualizations of critical thinking influence pedagogy for students with disabilities in secondary English inclusive classrooms. The current study's findings are presented through each theme and are also framed

by four contexts, which represent the most salient environments or conceptual areas within which the researcher has situated the analysis of the participants' interviews and conversations, observed lessons, and visual representations.

The first section of the previous chapter, chapter five, exists within the social, institutional context, and supports the dichotomous finding that education is facing new problems with the old problems. This section of the chapter considers factors influencing students' abilities to succeed, the impact of technology on critical thinking, and the processes of identifying and labeling students (including subsections on the perceptions of labels and on the issue of whether to split student rosters into those with and without disabilities).

The second theme of chapter five speaks to the current study's finding of practicing critical thinking without theorizing it, and is embedded within the conceptual context. This section of the chapter focuses on views of teachers' theories and practices of critical thinking (including separate subsections on theory and on practice), and views of students' theories and practices of critical thinking (including subsections on students' awareness in theory, on students' awareness in practice, and on (not) explicating critical thinking.

The third theme of preparing students inside the box for life outside the box involves the real-world context, and frames the finding that two separate ideologies are held by teachers in terms of critical thinking for students with disabilities. The first ideology describes how educators teach the fundamentals of literacy to prepare students for critical thinking and for the real world, and the second ideology examines how educators teach critical thinking to prepare students for the real world, including subsections on the invaluable and (un)shifting nature of critical thinking, on the process of teachers seeking wider perspectives for students, and on the

consideration of alternatives to the mainstream approaches to educating secondary students with disabilities.

The current chapter, chapter six, includes findings of the fourth theme, which is situated within the academic achievement context. The fourth theme suggests that although not every student can reach the goal, every student can reach a goal. This theme is divided into two parts. The first part discusses achievement of students with disabilities in teachers' minds (including subsections on how all students can succeed, on the co-existence of the optimist and the realist in teachers, and on other teachers' lowered expectations for the critical thinking abilities of students with disabilities). The second part discusses achievement of students with disabilities in action (including subsections on modeling and scaffolding, on differentiation, and on building students' comfort and confidence).

Chapter 7: Discussion

Summary of Study

The overarching research question asked, How do general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms? The research question explored two distinct elements of pedagogy of secondary English inclusive teachers: theory and practice. Both theory and practice were important aspects of the current study, because the researcher was interested in exploring how, in short, theory influences practice in a specific context. There were three sub-questions embedded within the overarching research question; the first two sub-questions related to theory, and the third sub-question related to practice.

The two theory-based sub-questions were, How do teachers define, understand, and view critical thinking?; and How do teachers frame the aptitude and achievement of students with

disabilities in light of their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking? The first sub-question related to teachers' theories of critical thinking on a conceptual level, and explored how teachers have come to reach their own ideas of what critical thinking is, and what it means to think critically in a given context. The second sub-question, on the other hand, focused more specifically on teachers' theories of students with disabilities, in connection with their conceptualizations of critical thinking. Because of its emphasis on students, not just concepts, this second sub-question related to teachers' attitudes and beliefs in addition to their theories. Thus, both of these theory-oriented sub-questions illuminated a slightly different aspect of the overarching research question, with the first sub-question focusing more on teachers' conceptualizations of critical thinking, and the second sub-question focusing more on the intersection of teachers' belief systems of students with disabilities and teachers' conceptualizations of critical thinking.

The third sub-question embedded within the overarching research question, which was focused on the aspect of practice, asked, How and when do teachers incorporate critical thinking into the classroom for students with disabilities? Unlike the first two sub-questions, this third sub-question sought to explore specific ways in which teachers utilize critical thinking in order to support students with disabilities. Although teachers' theories of critical thinking and beliefs of students with disabilities remained important aspects of the study, this third sub-question related to the instructional practices and classroom procedures that lead to (missed) opportunities for students with disabilities. Taken together, the three sub-questions (i.e., the two theory-centered ones and the practice-centered one) served to guide the process of data collection, and also helped to frame the findings of the study.

The purpose of this investigation was to reach a stronger understanding of how teachers' decisions to explicitly and/or implicitly embed critical thinking into English course content for students with and without disabilities at the secondary level are influenced by teachers' conceptualizations of critical thinking. Case study methods seemed most appropriate for the current study because of the researcher's prior interest in the relevant topics of the study, and, as Stake (1995) expresses, a case study allows the researcher to refine his own understanding of the topic, with a greater depth than he possessed previously, as opposed to creating a brand new understanding. The bounded system, or particular context of the study, involved inclusive English classrooms within one high school (Creswell, 1998; Stake, 1995).

The methods involved four separate cases within the high school, with each case dedicated to one participant. The participants were two general and two special educators from 9th Lit and Multicultural Lit (a senior-level literature course). In other words, the four participants existed as two co-teaching partnerships, with one general educator and one special educator teaching as a 9th Lit co-teaching partnership, and with the other general educator and the other special educator teaching as a Multicultural Lit co-teaching partnership. The forms of data included in-depth biographical and semi-structured interviews, participant-generated visual representations of critical thinking, and anecdotal classroom observations and informal conversations with the participants. The data collection process was divided in four phases.

Phase one of data collection included the following: one administered, in-depth biographical interview per participant, which focused on participants' personal and professional experiences and background information; one prompt for visual data distributed to each participant, which asked participants to represent visually how they conceptualize critical thinking (see Appendix D), using an illustration of some sort (e.g., flow chart or schematic); and

one classroom observation for both co-teaching partnerships (i.e., one observation of the 9th Lit classroom and one of the Multicultural Lit classroom). Next, phase two of data collection began, which included the following: one semi-structured interview per participant, which focused on the sub-question, How do teachers define, understand, and view critical thinking? and a second classroom observation for both co-teaching partnerships (i.e., one observation of the 9th Lit classroom and one of the Multicultural Lit classroom). Following the second phase, phase three of data collection began, which included the following: a second semi-structured interview per participant, which focused on the sub-question, How do teachers frame the aptitude and achievement of students with disabilities in light of both their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking? and a third classroom observation for both co-teaching partnerships (i.e., one observation of the 9th Lit classroom and one of the Multicultural Lit classroom).

Finally, phase four of data collection was implemented, and it included the following: a third semi-structured interview conducted as co-teaching partnerships (i.e., the general and special educator that comprise the 9th Lit co-teaching partnership were interviewed together, and the general and special educator that comprise the Multicultural Lit co-teaching partnership were interviewed together), which focused on the sub-question, How and when do teachers incorporate critical thinking into the classroom for students with and without disabilities? and the four participants' submissions of their visual data (i.e., their individually-created visual representations of critical thinking). Discussions surrounding the participants' visual representations were embedded within the semi-structured, partnership interviews as well.

The researcher utilized the process of data triangulation via these data sources (i.e., classroom observations and conversations, semi-structured and in-depth biographical interviews,

and visual data to reflect participants' representations of critical thinking), as data triangulation is an essential strategy to ensure validity and reliability of a study (Merriam, 2009; Yin, 2009). In order to establish credibility, the researcher adhered to Brantlinger et al.'s (2005) quality indicators for qualitative research, which include choosing appropriate research settings with minimal intrusion by the researcher and maximum acceptance of those observed; choosing appropriate participants; asking appropriate questions with adequate methods of recording and transcribing; ensuring confidentiality; and using relevant documents and storing them appropriately. The study has sought to achieve dependability through the use of thick description (Merriam, 2009; Stake, 1995; Wolcott, 2009), the clarification of data points to authenticate participants' beliefs and behaviors, and comparing and contrasting the current study to the related literature, to either refute or support the literature (Maxwell, 1996). Finally, the current study's findings that were revealed through the data analysis process were instantiated through the research questions, from which the researcher then derived the interview questions, observation protocol, and the prompt for participants' visual data. Chapters four and five of the manuscript offer several examples to substantiate each of the four themes that frame the researcher's assertions, which are discussed below.

Discussion of Findings

The assertions illuminated through data analysis can be framed using themes that are revealed through seemingly contradictory ideas. Conceptualizing the study's findings through the frame of these themes speaks to the complexities in research participants' ideologies and instructional practices for students with disabilities in secondary English inclusive classrooms, and, more broadly, to the oft-inherent complications in educational policy and practice. The

assertions were organized into four separate themes, each of which operates within a unique educational context.

The first theme resides within the societal and institutional contexts, and reveals the truth that new problems exist with the old problems of education. These problems of past decades, which the study's findings suggest have become reformed or reimaged in today's classrooms, involve three separate elements: students' home lives, the impact of technology, and notions of identification and labeling processes of students with disabilities. The study's findings suggest that each element directly or indirectly influences teachers' perceptions and implementations of students' critical thinking abilities. The literature supports these findings, as Alexander (2000), Sfard (1998), and Hodkinson (2005) all emphasize the connection between students' home lives and school lives; Muyingi (2014) reiterates the importance for teachers to recognize the power of technology and its influence in the classroom; and Cory et al. (2010), Linton (1998), and Ferri et al. (2005) echo the value in recognizing the impact, for better or worse, of identifying and labeling students with disabilities.

The second theme, which involves the conceptual context, finds truth in the contradiction that teachers and students may practice critical thinking without theorizing it. The study finds that teachers' theories of critical thinking do not always align with other teachers' theories, yet teachers' practices of critical thinking do align with other teachers' practices. This contradicts Argyris and Schön's (1974) framework of espoused theories versus theories-in-use, in the sense that the authors contend that teachers' conceptual knowledge will not align with their own practiced actions. The current study, however, does not suggest any misalignment between individual teachers' espoused theories and their own theories-in-use, but rather the relationships between teachers and other teachers, and the perceptions of one group of teachers about another

group. The researcher also asserts that variation exists in teachers' opinions of students' awareness of critical thinking and in teachers' opinions of how much to explicate critical thinking for students, but that alignment exists in teachers' opinions of the importance of the practices of students' critical thinking abilities. Several authors from the literature express the idea that critical thinking is often understood differently, even if its related practices are discussed more clearly (e.g., Bulgren et al., 2007; Crenshaw, 2010; Ivie, 2001; Khan & Inamullah, 2011; Mendelman, 2007).

The third theme, which involves the real-world context, speaks to the dichotomous notion that teachers must work within the educational system to prepare students for life outside of the educational system. The study reveals two ideologies that comprise this assertion about the real world. First, high school educators must teach the fundamentals of literacy to prepare students for critical thinking in the real world. The literature supports the finding that students need the prerequisite basic skills to be successful in the future (Bulgren, 2006; Fischer, 2003; Law & Kaufhold, 2009). On the other hand, several authors contend that focusing too much on basic skills can compromise students' abilities to engage in critical thinking (Bulgren, Marquis, Deshler, Schumaker, & Lenz, 2006; Bulgren, Deshler, & Lenz, 2007; Torff, 2006; VanTassel-Baska, Bracken, Feng, & Brown, 2009; Zohar, Degani, & Vaaknin, 2001).

The second ideology of the third theme, high school educators must teach critical thinking to prepare students for the real world. This second ideology includes three sub-sections: that critical thinking is an invaluable asset for the real world, and that it is shifting in some respects, but remaining consistent in others; that critical thinking allows students to seek wider perspectives; and that critical thinking has great value in alternative settings aside from the typical academic environments. Facione (1990) describes the value of critical thinking toward

building an equitable, democratic society, and Ciardiello (2003) and Marzano (2010) argue that asking good questions will lead to improved thinking processes, which seem beneficial for the real world. Finally, other authors, including Bulgren (2006), Crenshaw (2010), Fischer (2003), and Glaser (1984), support the current study's finding about the importance of considering alternative settings that may be more applicable and relevant to students, because of the link between prior knowledge and critical thinking.

The fourth theme is situated within the context of academic achievement, and conveys the contradictory truth that although not every student can succeed to the same degree as their peers, every student can succeed relative to his or her own prior level of academic achievement. The section for the fourth theme is divided into two subsections: achievement in mind and achievement in action. Findings involving achievement in mind (i.e., in theory) include three distinct ideas. First, all students can succeed, provided that teachers utilize approaches of individualization and fluidity toward instruction and compassion toward students. In support of this finding, the literature suggests a link between teachers' compassion and/or empathy and their own personal lives (Beijaard et al., 2000; Huberman 1993). Second, in order to best meet students' needs in terms of critical thinking, teachers should embody the characteristics of both the optimist and the realist (i.e., possessing high expectations for students, while also recognizing individual limitations). Third, some teachers, according to the research participants, either sacrifice high expectations for students' (lowered) success, or teachers lack the ability to push students forward to higher levels of critical thinking. Bulgren et al. (2007) and Torff (2006) argue for an appropriate balance between high expectations and a sense of comfort for students with disabilities, Facione (1990, 2000) and Ennis (1993) describe the notion

of reflective thinking, a process in which students can engage no matter their current levels of academic achievement.

Achievement in action (i.e., practice), the second sub-section of the fourth theme, includes two ideas, as suggested by the study's findings. First, teachers utilize the instructional strategies of modeling, scaffolding, and differentiation in order to promote critical thinking. Erickson (2011) and Paterson (2007) describe the process by which teachers make immediate adjustments to their lessons, often via modeling, scaffolding, and differentiation. Furthermore, several authors describe the benefits of instructional strategies for student achievement (Celuch & Slama, 1999; Daz-Iefebvre, 2004; Ennis, 1993; Kang & Howren, 2004; Snyder & Snyder, 2008). Second, teachers must bolder students' comfort levels in the classroom and confidence in their own abilities in order to maximize critical thinking. The literature supports this finding, as Dillon (1998) argues that teachers must establish an interrogative mood in which students feel comfortable asking questions (as cited in Ciardiello, 2003), and Beyer (1998) describes how teachers must maintain a positive atmosphere in the classroom in order to support students' emotional well-being.

Implications for Practice, Policy, and Future Research

Because the current study focused on both practices and theories of critical thinking, it is necessary to consider the implications of the findings for both of these elements. In addition, although the four cases that comprised the current case study were bounded by two classrooms within the same high school, it is important to consider the broader implications of the findings—those that exist beyond the walls of the classrooms and the school, to enhance the current study's generalizability and to facilitate readers' abilities to make connections to their own experiences and own contexts (Merriam, 2009; Stake, 1995). Finally, suggestions for future

research will be presented, as the findings of current study have called attention to related ideas and issues that require further inquiry and investigation.

Teachers' ideologies and theories. The current study has implications for teachers' beliefs and ideologies about students with disabilities and students' struggles in general, as well as implications for teachers' theories and conceptualizations of and related to critical thinking. First, there are implications involving the societal and institutional contexts, reflected through theme one (i.e., new problems with the old problems), that speak to teachers' thought processes about the struggles faced by students with and without disabilities. The study's findings suggest that teachers make distinct parallels between students' home lives and their abilities for academic success. With a greater awareness of the outside influences on classroom performance, teachers may deepen or shift their points of view about the difficulties that students face, thus becoming more sympathetic to their needs, particularly for students with disabilities, who often are at a greater risk of academic failure (Bulgren, 2006). The findings from the four participants also indicate that teachers' personal lives and prior experiences influence their classroom practices and ideologies. This connection between home and school may serve to reinforce for practitioners the importance of obtaining and maintaining healthy, positive relationships beyond the school walls, so that they can nourish similar relationships with colleagues and students within the school walls.

While the link between students' home lives and their success in school has implications for teachers' beliefs about students' struggles, the notion that technology influences student achievement has implications for teachers' viewpoints regarding critical thinking. As suggested by the findings of the current study, technological advancement, as a phenomenon in the institutional context of education, has both improved and threatened students' opportunities for

critical thinking. Because of how the current study has exposed this duality of the academic impact of technology, teachers who are familiar with this study may reconsider or expand their viewpoints about the function or value of technological advancements. In some cases, teachers may realize that technology can hinder students' critical thinking, as suggested by a research participant's comments regarding how traditional forms of communication have diminished with the ubiquity of cell phone use in classrooms, for example (Mary, interview, October 13, 2014). In other cases, however, teachers may discover that technology can improve students' opportunities for critical thinking, as suggested by another participant's comments about how the use of the Internet has allowed students to focus on more complex elements of the research process (Nora, interview, October 10, 2014).

Implications related to teachers' theories and ideologies can be drawn from the theme involving the conceptual context (i.e., practicing critical thinking without theorizing it) as well. One finding of the current study is that despite common beliefs about the practice of critical thinking and about the capabilities of students with disabilities, teachers may possess different understandings of critical thinking. By extension, this finding suggests that teachers' conceptualizations of critical thinking reflect only one factor among many factors that influence teachers' pedagogy for students with disabilities. In other words, teachers' beliefs and thought processes about student achievement and instructional approaches derive from a complex array of conceptualizations and theories, not just those of critical thinking. The implication herein is that acknowledging this complexity may help teachers better understand their own philosophies and ideologies, a reflective practice and a form of self-generated judgment that supports personal and societal growth (Facione, 1990, 2000). Similarly, in acknowledging the current study's related finding that teachers possess varying opinions of students' awareness of critical thinking,

teachers may be able to more clearly recognize how they have formed their own understandings about students' knowledge bases. Again, this metacognition can be a productive process—not only for teachers, but for anyone looking to grow as an individual (Facione, 1990, 2000).

Finally, the fourth theme (i.e., not every student can reach the goal, but every student can reach a goal), which involves the context of academic achievement, has implications for teachers' theories and ideologies. The first instance to support the implications within this context involves participants' remarks and actions that illuminate the current study's finding that teachers must embody the characteristics of both an optimist and a realist. While it appears that this assertion is contradictory and that it is impossible for a teacher to possess traits from both of these personality types, a deeper understanding of this dichotomy reveals that teachers need to maintain a certain degree of flexibility with regard to their perspectives on their students.

This implication is significant because it acknowledges how, in the realm of education, teachers often have to negotiate between two or more competing points of view that may reside within their own minds and hearts. These negotiations became clear during some of the participants' interview responses, in which they often seemed to accuse their colleagues of failing to hold students with disabilities to high academic standards, while at the same time accusing them of failing to demonstrate compassion and flexibility for these same students. Illuminating divergent ideas for educators—such as the optimistic viewpoint that students with disabilities can accomplish the same goals and students without disabilities, and the realistic viewpoint that teachers may need to provide students with disabilities with a more manageable goal compared to students without disabilities—affords educators the opportunity to better understand the complexities of these different points of view. An increased knowledge of these perspectives, then, may reinforce or alter teachers' own decisions and actions in the classroom.

Teachers' practices. As with teachers' theories relating to critical thinking, the current study has implications for teachers' instructional practices relating to critical thinking as well. First, implications exist in connection to the second theme (i.e., practicing critical thinking without theorizing it) and the conceptual context. For instance, the findings of the current study indicate that teachers agree upon the need to foster critical thinking in practice without necessarily possessing clear, consistent understandings of critical thinking from a theoretical standpoint. As one participant explains, critical thinking has become more embedded into the standards in recent years (Nora, interview, October 30, 2014). The inclusion of critical thinking into top-down standards may explain teachers' comfort in implementing classroom practices that are rich in critical thinking without possessing a firm theoretical understanding of it.

This notion speaks to the implication that K-12 education is driven by practice more so than theory, as teachers can feel confident and comfortable in their instructional practices, and even reach consensus therein, without the same degree of knowledge or agreement from a theoretical standpoint. This implied emphasis on practice over theory is not inherently troublesome, as long as teachers remain vigilant about improving their craft based upon students' needs, administrative feedback, and meaningful policy shifts. However, if teachers focus too heavily on classroom practices at the expense of at least a modest understanding the theoretical basis for these practices, then teachers may begin to lose touch with professional development initiatives, research-based practices, significant changes to policy, and other theory-driven facets of education.

Related to teachers' theories and teachers' practices is the current study's finding, also connected to the second theme, that teachers may share an understanding of the practices of critical thinking without agreeing upon the degree to which teachers should attempt to improve

students' awareness of critical thinking as a construct or skill, as opposed to only focusing on improving students' content knowledge. The research participants' remarks and instructional practices suggest that there is not one definitive placement along the continuum of when and how to explicate critical thinking. For instance, Jeanne and Laura, the two teachers who comprise the Multicultural Lit co-teaching partnership, express opposing opinions on this topic, even though they agree on most other topics that arose during interviews (interview, November 11 and 12, 2014). Teachers must consider many factors including the pacing, difficulty, and duration of the specific learning objectives, students' familiarity with the content, and the strengths and weaknesses of the students themselves. These factors probably lead to different viewpoints on how much instructional time to dedicate to students' awareness of critical thinking.

This blurred continuum of explicating critical thinking, then, has implications for educational practice in general. It seems to reflect the idea that teachers are constantly negotiating within themselves, and among each other, about how to best meet students' needs, and that the notion of what is best seems to require almost constant traversing among continuums such as these. This traversing may happen so often not because teachers change their attitudes or beliefs about students, but rather because the nature of the profession demands flexibility and negotiation from teachers on a daily basis.

The fourth theme, which involves the context of academic achievement (i.e., not every student can reach the goal, but every student can reach a goal), relates to implications for teachers' practices of critical thinking as well. The current study's findings suggest that the instructional practices of modeling, scaffolding, and differentiating remain effective methods of fostering critical thinking, but that these practices may exist to help students succeed relative to

themselves as opposed to a pre-established notion of success. In other words, participants in the current study accepted, or even promoted in some cases, the idea that their adjustments to lesson content, pacing, or delivery were made to help students reach their highest potential instead of to reach some level of achievement established by the school or the state or by the standards themselves. This idea of individual achievement over group achievement leads to the implication, then, that teachers continue to put students' unique needs above the needs of the school's or society's collective notions of what success should mean and how it should be measured. As schools are, in many respects, still encouraged or obligated to measure student performance using hard data that can be compared and contrasted among neighboring communities and beyond, it seems authentic and noble that teachers recognize students' individual needs, especially the needs of students with disabilities, and that teachers work to help them maximize their unique meanings of achievement.

Educational policy. The current study has implications for educational policy as well as for teachers' ideologies and theories and practices. Implications are evident in the third theme (i.e., preparing students inside the box for life outside the box), which involves the real-world context. One of the current study's findings of theme three is that teachers disagree upon the degree to which secondary educators should teach the fundamentals of literacy as prerequisites to the critical thinking needed in the post-secondary real-world, and the degree to which secondary educators should teach critical thinking skills in order to prepare students for the real world. In other words, should educators teach the basics now so that students can grasp more complex ideas later, or should educators teach more complex ideas now so that they understand other complex ideas later? The teaching practices and the remarks of the research participants in the current study indicate a lack of consensus on this idea. Laura, the Multicultural Lit general

educator, describes the essence of the topic at hand, when suggesting that "one of the greatest challenges that we see" is figuring out how to continue to push students to higher levels of thinking despite their weaker understanding of basic skills (interview, November 12, 2014).

This challenge, as described by Laura, has implications for schools' and school systems' policies regarding enacting social promotion versus grade retention; providing professional development on intensive programs for basic literacy skills versus on professional development on life skills and post-secondary options; and offering books for students that may be of low interest but of appropriate reading level versus books that may be of high interest but of inappropriate reading level. In all of these suggested dichotomies within educational policy, teachers are ultimately the stakeholders who are held most responsible for what and how to teach students, and which policies should be most effective and least effective. Holding teachers (in)directly accountable in such a manner leads to another implication positioned within this discussion of how to best prepare students for post-secondary life: This responsibility held by teachers is both a burden and a privilege, and it reinforces the notion that teachers can act as one of the most powerful influences on young people's lives.

Moving beyond the four specific themes and contexts thereof, the study may benefit educational policy by illuminating some of the processes and mechanisms by which teachers solidify and/or modify their own thoughts, values, and instructional pedagogy. Practitioners may compare and contrast their own experiences with those of the four research participants, such that practitioners reach a better understanding of their own teaching. A stronger recognition of their own and others' conceptualizations of critical thinking may lead to reconceptualizations of their teaching craft, followed by reconceptualizations of the policies that reify and reinforce their practices. In other words, teachers may see their own teaching theories and practices in a new

light after spending time reflecting on the (dis)connections they make to the experiences and values expressed through the research participants, and their new perspectives may lead to policy shifts.

The study allows teachers to focus on the intersection of their own personal epistemological beliefs about the nature of teaching and the nature of learning, their conceptualizations of critical thinking, their attitudes toward students with disabilities, and their related pedagogy for students with disabilities. Focusing on this intersection may facilitate practitioners' recognition of educational inequity that exists in the policies of the school system. They may especially consider certain inequities for students with disabilities. For instance, practitioners may become aware of any missed opportunities for complex learning that are propagated on a more systemic level of policy. This might occur if policy dictates that struggling learners focus heavily on basic literacy programs at the expense of rich, meaningful, real-world content.

Another potential inequity in policy for students with disabilities involves the notion of asset- versus deficit-based approaches to learning disabilities. While the asset-based perspective seeks to remove the disability stigma from students identified with disabilities, the deficit-based perspective often prevails. For example, it seems that the rhetoric of special education focuses on skills that students lack in a given context (e.g., terms like "deficit area," and "behavior issues"), as opposed to harnessing the skills that they possess in another context. Finally, policy inequalities for students with disabilities involve issues of power that infiltrate the classroom level from broader, institutional and societal contexts. For instance, it seems that many of the post-secondary scholarships and awards that are given graduating seniors only widen the gap between high-achieving students and low-achieving students, as struggling learners may lack the

financial resources or social capital to receive these same accolades. While the current study may inform practitioners of everyday classroom practices that support critical thinking for students with disabilities, it also may inform practitioners of the more sweeping and less classroom-centered factors and policies that indirectly influence students' abilities to think critically.

Suggestions for future research. Despite the benefits to practitioners and to policymakers, future research is necessary in order to more fully discover how teachers' conceptualizations of critical thinking influence their pedagogy for students with disabilities. For instance, it may be worthwhile to collect data from students in English courses through interviews and focus groups or through surveys, instead of relying solely on teachers for data. Utilizing students as participants would likely yield valuable findings about how students' understandings of critical thinking mirror and/or refute those of teachers. In addition, future researchers could explore teachers' conceptualizations of critical thinking in other classroom environments besides English courses, such as mathematics, science, or social studies, accelerated courses (which still may contain students with disabilities), or in elementary or middle schools. Even with the same methods as the current study, researchers may reach unique findings in a different classroom environment.

Future researchers may also wish to extend a study beyond the walls of a single school by considering cross-case analysis (Miles et al., 2014). One might conduct cross-case analysis among secondary English inclusive classrooms in two or more schools (e.g., urban, suburban, and rural environments). Utilizing multiple settings for data collection, especially settings whose student populations differ considerably, may lead researchers to uncover trends about the relationship between critical thinking for students with disabilities and student and community

demographics. Also, one could conduct research that involves local school boards, assistant superintendents, or other central office staff. Soliciting data from such individuals, who arguably possess more institutional power than teachers, may allow researchers to illuminate broader issues of power, privilege, or policy-making, which could, in turn, indirectly influence teachers' pedagogy for students with disabilities.

Conclusion

The current study, which utilized case study methods with four participants who teach in co-teaching pairs, has sought to consider how general and special educators' conceptualizations of critical thinking influence their pedagogy for students with disabilities in secondary English inclusive classrooms. Research sub-questions have addressed the theories behind teachers' conceptualizations of critical thinking and, relatedly, behind teachers' framing of the aptitude and achievement of students with disabilities, and a final sub-question has addressed the practices behind teachers' facilitation of critical thinking for students with disabilities. Built from the foundation established by the research questions, the data collection process yielded major assertions which can be framed by an understanding of the complex nature of the system of education, as well as the contexts in which each theme resided.

The study revealed the following four themes: 1) In the societal, institutional contexts, new problems exist with the old problems, in terms of the factors that influence student achievement and critical thinking; 2) In the conceptual context, teachers and students may practice critical thinking without theorizing it, and may understand critical thinking differently; 3) In the real-world context, teachers prepare students for life beyond secondary school from within the secondary school, and either prepare students for critical thinking and the real world via teaching fundamentals, or prepare students for the real world via teaching critical thinking;

and 4) In the academic achievement context, not every student can reach the goal, but every student can reach a goal, meaning that teachers may measure achievement on an individual, as opposed to a collective, level.

The current study may most directly benefit teacher-practitioners by providing opportunities to view their own teaching in a new light and to reconceptualize their thought processes, values, or pedagogy regarding critical thinking for students with disabilities. However, policy-makers and other stakeholders may also benefit from the study, if they can recognize how the classroom-specific practices and the teacher-specific theories of critical thinking can extend beyond the building walls into broader contexts. Finally, and most significantly, students may benefit from the current study. Through teachers' and stakeholders' potentially new understandings of how conceptualizations of critical thinking influence related pedagogy, students, especially those with disabilities, may receive more opportunities for critical thinking in secondary English inclusive classrooms, which can then improve students' chances for success in the short and long term.

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Appendix A: Consent Letter

I agree to participate in the dissertation research project entitled, "How General and Special Educators' Conceptualizations of Critical Thinking Influence their Pedagogy for Students with Disabilities in Secondary English Inclusive Classrooms," which is being conducted by Jeff Wheeler; 3001 Hembree Road, Marietta, GA, 30062; 770-578-7900; jeffrey.wheeler@cobbk12.org. I understand that this participation is voluntary and that I may withdraw my consent at any time without penalty. I am at least 18 years of age.

The following points have been explained to me:

1. The reason for the research is to explore how high school English inclusion teachers' views and understandings of critical thinking informs the opportunities for critical thinking that they provide to students with disabilities. Although there will be no direct benefit to you for taking part in this study, I may learn more about how English teachers improve students' critical thinking skills in order to make them more successful in high school and beyond.

2. The procedures are as follows: I will observe your classroom for three classroom periods. During these sessions, I will remain an unobtrusive observer, avoiding any substantive conversation with students or teachers. I will also conduct three interviews individually (which includes one in-depth biographical interview and two semi-structured, open-ended interviews), as well as one interview with your co-teaching partner, with each interview lasting 20 to 30 minutes. In the in-depth biographical interview, I will ask you about your personal experiences that have led you to where you are today, what your life was like growing up, important moments in your life, etc. In the semi-structured interviews, I will ask you a series of questions regarding your perceptions of critical thinking (theory), and your related pedagogical decisions (practice), such as: 1) what does critical thinking mean to you?; 2) what does critical thinking look like in your classroom?; 3) how are the needs of students with disabilities different from those without disabilities regarding critical thinking in your classroom; 4) how to you foster critical thinking for students with disabilities (are there differences in pedagogy for students with and without disabilities)? Finally, I will ask you to create a visual representation of critical thinking (i.e., a schematic or flow chart that illustrates your viewpoint of critical thinking in relation to other terms in education). I will also collect classroom materials (unit and/or lesson plans, student handouts, etc.) as instruments to facilitate data collection.

3. The discomfort or stress that may be faced during this research is an unlikely possibility that you may feel nervous with me observing the class setting, or that some discomfort may arise during the interviews if we discuss frustrating topics related to educational practice, philosophy, or policy. I understand that I may withdraw at any time.

4. The only risk that participation entails is discussed in #3.

5. All interviews will be audio-recorded using a digital device in the possession of the researcher, then transcribed for further analysis by the researcher. Furthermore, all interviews will occur in a private location within the school building to ensure participants' privacy.

6. The results of this participation will be anonymous; pseudonyms will be used. The results will not be released in any individually identifiable form without your prior consent of the participant unless required by law. Data (transcripts, schematics and audiotapes) will be stored in a secure, protected location at my residence, and will be destroyed one year following the completion of the investigation. At that time, paper data will be shredded and electronic data will be erased.

7. Inclusion criteria for participation: I am choosing inclusion high school English teachers (both general and special educators) for my research for their content knowledge in the area of literature and the arts, and for their experience in a co-teaching setting.

_____

Signature of Participant or Legally Authorized Representative, Date

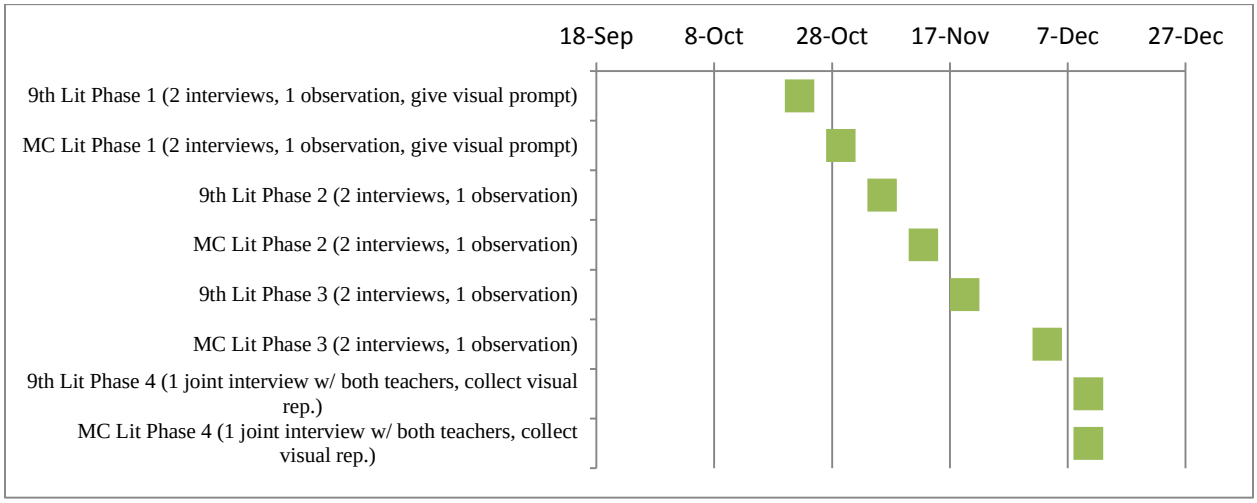
_____

Signature of Investigator, Date

PLEASE SIGN BOTH COPIES OF THIS FORM, KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #0112, Kennesaw, GA 30144-5591, (678) 797-2268.

Appendix B: Timeline for Data Collection



Appendix C: Sample Interview Questions

Protocol for Interview #1 (In-depth, biographical interview)

- [Prompt for visual data introduced to participants, to be collected at fourth interview]
- Thinking back:
    - What life experiences, personal interests, or prior beliefs have helped to shape you into the educator you are today?
    - Thinking back to your own days as a student, what has changed between then and now in terms of *classroom expectations, interactions, or behaviors*?
    - Thinking back to your own days as a student, what has changed between then and now in terms of *broader societal trends* that may have influenced the classroom?
- Personal dispositions:
    - What do you find most intriguing or enjoyable about teaching?
    - What do you find most frustrating or laborious about teaching?
    - What descriptors do you think best reflect your values or your ideologies as an individual, and why?
    - What descriptors do you think best reflect your strengths as an educator, and why?
    - As an educator, what makes you proud?
    - As an educator, what, if anything, do you regret?
- Personal experiences with students with disabilities:
    - Thinking back to your youth, what, if any, experiences have you had with students with disabilities? How have these interactions reinforced or shaped your perceptions of students with disabilities?
    - As an adult, what, if any, personal experiences or interactions have you had with students with disabilities, other than because of teaching in an inclusive classroom? How have these interactions reinforced or shaped your perceptions of students with disabilities?

<u>Protocol for Interview #2</u> (First semi-structured, open-ended interview; focused on the sub-question, How do teachers define, understand, and view critical thinking?)

- Lesson reflection/follow-up:
    - Will be tailored to each teacher depending on the content and pedagogy of the first observation
- Understanding critical thinking:
    - How do you know when students have been thinking critically?
    - What are some non-examples of critical thinking?
    - Can you explain how or when you think you arrived at your understanding of critical thinking?
    - Has your understanding of critical thinking changed throughout your career? If so, in what respect(s)? If not, how/why has it remained static?
    - Does the value or importance of critical thinking change depending on a person's life stage (that is, does critical thinking hold different value for a high school student, for a college student, or for an adult in the workplace, etc.)? If so, how does the value change? If not, why does it remain static?
    - How much, or to what degree, do you think your understanding of critical thinking is dependent upon your knowledge and skills as a teacher of literature and composition?
- Consensus among educators:
    - To what extent do you believe consensus exists among how educators define critical thinking? Please elaborate.
    - To what extent do you believe consensus exists among how educators foster/implement critical thinking? Please elaborate.
- Students' awareness:
    - To what extent are students aware of what critical thinking means, from a conceptual standpoint?
    - To what extent are students aware of what critical thinking looks like, from a practical standpoint?
- Criteria-based achievement versus individual achievement:
    - In what ways, if any, do educators or educational policy promote the belief that all students should strive to achieve the same, pre-established objectives or measures of success in your classroom?
    - Conversely, in what ways, if any, do educators or educational policy promote the belief that all students should strive for higher individual achievement, even if this level of success or achievement differs from student to student?
    - Where do you fall on this spectrum (i.e., between set standards for all students versus individual growth)? Please explain your reasoning.

<u>Protocol for Interview #3</u> (Second semi-structured, open-ended interview; focused on the sub-question, How do teachers frame the aptitude and achievement of students with disabilities in light of both their philosophies, ideologies, and attitudes and their conceptualizations of critical thinking?)

- Lesson reflection/follow-up:
    - Will be tailored to each teacher depending on the content and pedagogy of the second observation
- Stereotypes of students with disabilities:
    - What, if any, stereotypes or prevailing notions of students with disabilities exist in the teaching profession? If misconceptions exist, where are they propagated (e.g., media, individuals, in schools, etc.)?
    - Can you provide examples from your experience that reinforce and refute/contradict one of these notions? Please explain.
- Challenges of students with disabilities:
    - In your experience, what challenges do students with disabilities face in literature/composition?
    - In contrasting students with disabilities and those without disabilities, do they differ in their own *abilities* for critical thinking, and/or in the type of *scaffolding* needed for critical thinking?
- Reading assignments for students with disabilities:
    - What types of reading assignments have you found to be most accessible for students with disabilities, and are which the most challenging? Please explain.
    - Which type of reading assignments (i.e., accessible ones or challenging ones), best lends itself to fostering critical thinking for students with disabilities?
- Writing assignments for students with disabilities:
    - What types of writing assignments have you found to be most accessible for students with disabilities, and are which the most challenging? Please explain.
    - Which type of writing assignments (i.e., accessible ones or challenging ones), best lends itself to fostering critical thinking for students with disabilities?
- Suggestions for improvement (content and pedagogy):
    - In terms of English content knowledge or curricula, in what respects, if any, do teachers need to improve in order to better support students with disabilities?
    - In terms of pedagogical knowledge or instructional delivery, do teachers need to improve in order to better support students with disabilities? If so, how?
- Co-teaching partnership:
    - As the (general or special) educator in the classroom, how do you view your roles/responsibilities and your co-teacher's?
    - In terms of supporting students with disabilities, what are your co-teacher's strengths? What, if anything, have your experiences in a co-teaching partnership taught you?

<u>Protocol for Interview #4</u> (Third semi-structured, open-ended interview; focused on the sub-question, How and when do teachers incorporate critical thinking into the classroom for students with and without disabilities?)

- Lesson reflection/follow-up:
    - Will be tailored to each teacher depending on the content and pedagogy of the third observation
- Planning stage:
    - To what extent are you able to anticipate most of the adjustments to the difficulty, pacing, or delivery of the lesson(s) that will be needed for particular students?
        - What sort of adjustments are most commonly needed?
        - For whom are these adjustments most commonly needed?
    - On the continuum between completely deliberate/intentional versus completely accidental/unconscious, how would you describe your inclusion of critical thinking into your planning process?
        - If and when adjustments (of difficulty, pacing, and/or delivery) occur once the unit is underway, to what extent are critical thinking processes changed as a result of these adjustments?
- Specific lesson handouts and planning documents:
    - With what concepts or skills have your students struggled the most?
        - To what extent do you attribute students' struggles to a lack of certain content knowledge versus a lack of a particular skill set?
        - To what extent are these struggles related to critical thinking?
        - To what extent are these concepts of skills more troublesome for students with disabilities?
    - Please identify any future opportunities for critical thinking that are scaffolded through these documents.
- Co-teaching partnership:
    - In what ways do you view your co-teaching partnership as typical?
    - In what ways do you view your co-teaching partnership as *atypical*?
- Collect visual data from each participant, then ask the following questions:
    - To both educators: Look at your visual representation, created from the prompt.
    - To general educator: Describe your representation; explain what your representation suggests about critical thinking and why you chose this representation.
    - To special educator: Describe your representation; explain what your representation suggests about critical thinking and why you chose this representation.
    - To both educators: Compare and contrast your representation with your co-teaching partner's.

Appendix D: Prompt for Visual Data

Introduced during Interview #1

Prompt: Please represent visually how you conceptualize critical thinking, using an illustration of some sort (e.g., a schematic or flow chart). You might consider how critical thinking relates to other terms that you deem relevant to the task. Please take this prompt with you today, and bring your completed representation to your fourth (final) interview.

Collected during Interview #4

- To both educators: Look at your visual representation, created from the prompt.
- To general educator: Describe your representation; explain what your representation suggests about critical thinking and why you chose this representation.
- To special educator: Describe your representation; explain what your representation suggests about critical thinking and why you chose this representation.
- To both educators: Compare and contrast your representation with your co-teaching partner's.

Appendix E: Protocol for Classroom Observations

Classroom:	Day/Date:	Period:	Time:
Descriptive Notes		**Reflective Notes / Memos**	
Teacher Reflections		**Reflective Notes / Memos**	
Sketch of Classroom			

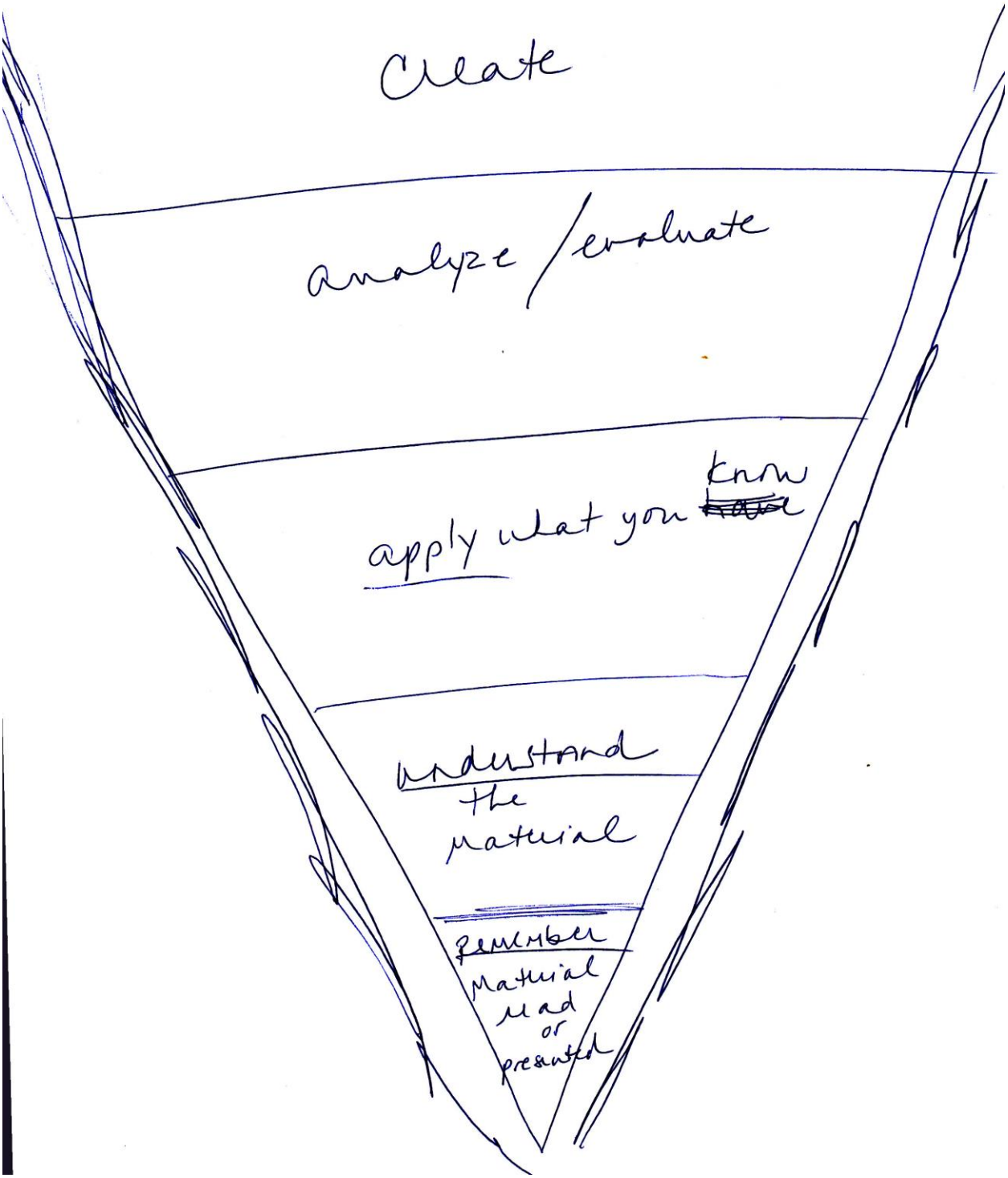
Adapted from Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, Inc.

Appendix F: Observation Protocol for Informal Conversations (Excludes observations)

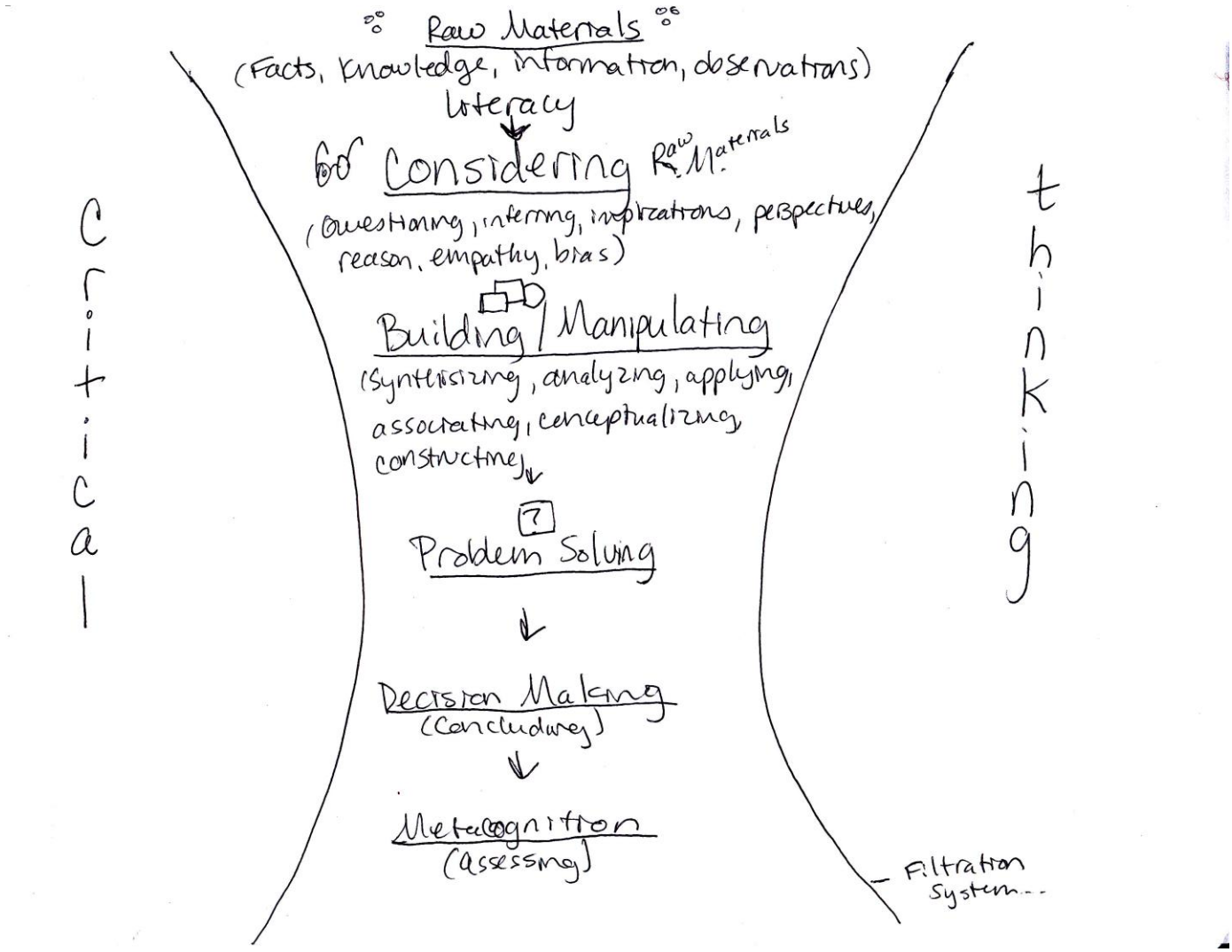
Location:	Day/Date:	Start Time:	End Time:
Notes (summarized from conversation)		**Reflective Notes / Memos**	
Description and Sketch of Conversation Location			

Adapted from Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, Inc.

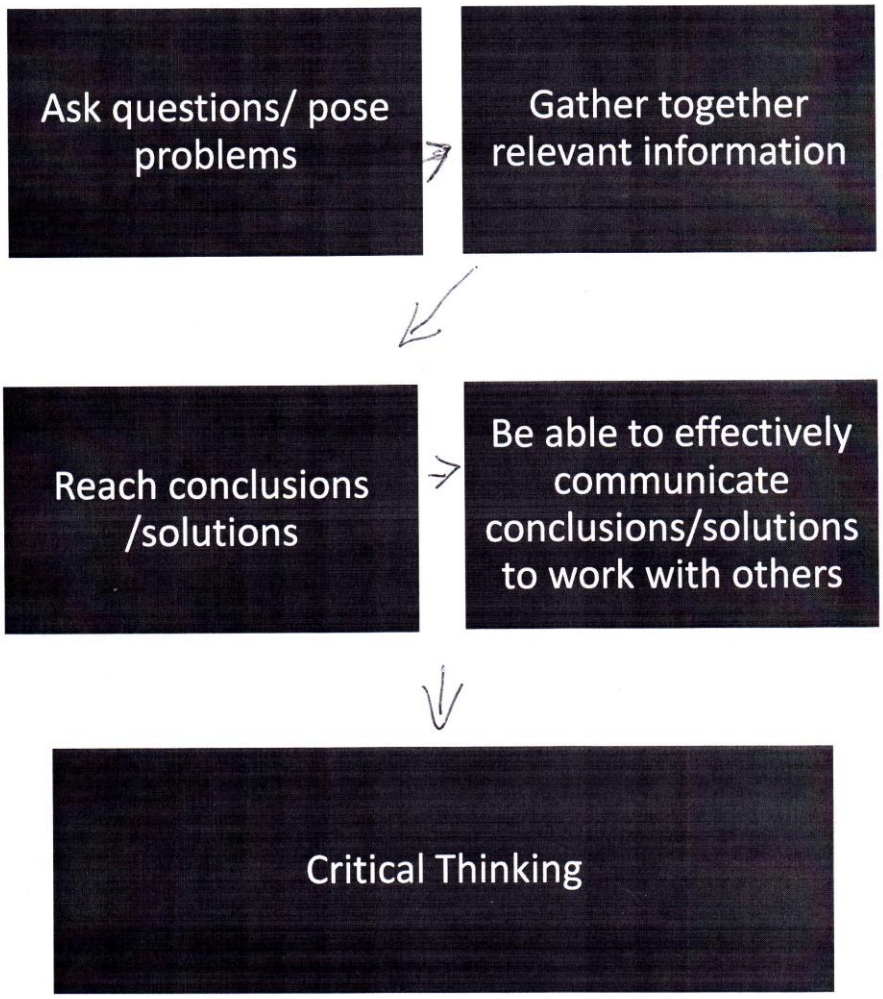
Appendix G: Jeanne's Visual Representation



Appendix H: Laura's Visual Representation



Appendix I: Mary's Visual Representation



Appendix J: Nora's Visual Representation