Self reflection: The story of its place for teacher and student practice

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Abstract

The purpose of this study is to better understanding how a teacher facilitates student reflection in her classroom, as well as, how students make sense of the role of reflection in their learning. The following research question and sub questions guided this study: What does it look like to engage in teaching which employs a meaningful engagement with self reflection? Sub-questions: How does a teacher describe the facilitation of self-reflection in her students? How does a teacher describe her understanding of how students learn to reflect on their learning? How do students describe their own reflective learning processes? The researcher utilized a descriptive case study to better understand how students make sense of self reflection in a sophomore English Language Arts classroom. The following findings emerged from the study—1). Creating a classroom culture of reflection requires detailed and purposeful planning; 2). Lesson specific resources, collaborative activities, and time provide a conducive environment for student learning; 3). Reflective processes are most meaningful when involving a feedback loop; 4). Reflective processes yielded student accountability and self-awareness; 5). Students recognized improvement in their learning due to reflection. The review of the literature aligns with the findings that meticulous planning is necessary when facilitating reflection, students need scaffolding when engaging in reflective processes, feedback is an essential part of reflection, and reflection yields accountability, self awareness, and improvement. This study provides insight for teachers, administrators, and students as to the impact of reflective processes on one’s learning.

Keywords: Feedback loop, reflective journal, reflective processes, self reflection
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“You and I, we're not tied to the ground
Not falling but rising like rolling around
Eyes closed above the rooftops
Eyes closed, we're gonna spin through the stars
Our arms wide as the sky
We gonna ride the blue all the way to the end of the world
To the end of the world
Oh, and when the kids are old enough
We're gonna teach them to fly
You and me together, we could do anything, Baby
You and me together yes, yes”

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Here’s to making John Dewey proud!
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Chapter 1: Introduction

Statement of the Problem

This study explored the myriad of ways students both encounter their learning and gain mastery in active learning through the means of student self-reflection. The repercussions of a competitive, numbers driven culture has impacted the engagement and value students associate with school and learning. As a result, an environment of apathy and lack of relevance has contributed to student passivity, lack of ownership of their own learning, and the elimination of partnering with their teachers to enhance their learning processes. Rather than on an active learning process, there is nation-wide attention to the product and end result of supposed learning—grades and grade point averages. When teachers are expected to teach a myriad of learning standards, the prioritization of meaningful learning of some standards results in the inability to adequately teach them all, and students lose their voice to participate in their own learning. Due to the relationship between learning standards and high stakes testing, teachers grapple with facilitating the active and authentic learning of all required curricula.

Despite the imbalance, teachers continue to seek how to both engage students in meaningful, active learning as well as undertaking a larger scope of material. With limited time, minimal professional development opportunities providing teachers with more student-centered resources, and the pressure of standardized testing, educators and schools feel coerced into prioritizing the shallow coverage of content and skills in order to ensure they expose students to all of the curriculum opposed to instructing and assessing for authentic student learning and allowing that data to inform calendar, curricular, and instructional decisions.

Research Problem
When we teach and equip students to pause and reflect on their thinking and learning, this skillset explicitly directs student focus to an examination of their own thinking giving ownership and voice back to the student. In addition, their learning process focus shifts from grades to the process of reflective thinking and learning partnering students with their teacher. As a result, students more meaningfully learn the content and skills while experiencing how to best self-regulate their own learning, a skill utilized well beyond high school.

Because learning is unique from student to student and involves a fluid and varied experience toward mastery, students need the opportunity to actively reflect and receive feedback from their teacher and peers on their learning processes through the means of formative assessment. Additionally, when a student begins to regularly view herself as a learner and someone engaged in learning something new, her approach to mastery becomes an active and exploratory one. For students to ponder and self assess their own learning, it is essential to know how students begin to engage in reflective metacognitive conversations.

The student action of regular self reflection is a direct repercussion of intentional teacher instructional practices when facilitating active learning. It is when instructional practices informed by formative assessments of student conversation and performance that teachers are best meeting the active learning needs of their students. If teachers wait until the end of the unit to assess for student mastery of content and skills, both teachers and students are unable to determine why or why not a student demonstrated mastery. In order to avoid the problematic assumption that students are able to adequately demonstrate mastery of content and skills without previously assessing or discussing with them as partners throughout the learning process, facilitating student reflection as a formative assessment affords teachers the ability to respond and intervene. For students to authentically learn, teachers must regularly formatively assess
student understanding throughout the learning process in order to inform instructional practices as feedback needed to improve learning and instruction.

**Justification for the Research Problem**

In the early twentieth century, educator psychologists and reformers alike promoted a more experiential and reflective classroom setting designating an active learning environment. John Dewey (1916), an advocate of experiential learning and self-reflection, stated that “the material of thinking is not thoughts, but actions, facts, events, and the relations of things. In other words, to think effectively one must have had, or now have experiences which will furnish...resources for coping with the difficulty at hand” (p. 156-157). Due to the vagueness in conducting more experiential and reflective educational settings, opponents desired for more concrete, objective-based standards to help guide instruction.

When shifting educational priorities and cultural expectations, the implementation to best impact students must be shared among all stakeholders and with support and resources from leadership. When that does not occur, educators find themselves caught between the expected status quo and what is meaningful for student learning, even if that requires an upheaval in planning and execution. When exploring a case around interaction with traditions in order to extract meaning to then lead to action and reform, Applebee (1997) depicted a supporting result. Applebee (1997) conveys a teacher’s shift in his conception of curriculum, from “a concern of coverage toward helping students participate in a set of living conversations” (p. 28).

For example, Arthur Applebee (1997) makes the following argument:

As we learn to participate in these [educational] traditions, we also gain the knowledge and power to reject or to change them—to move beyond the traditions we inherit rather than being restricted by them. If we rehabilitate tradition as at the heart of a progressive
education, we have taken a major step in reconciling the opposing notions of curriculum (p. 26).

The teacher observed that student inquiry and reflective collaboration yielded faster and more successes in student mastery.

The difficulty in quantifying self reflection paired with the fear of altering what is comfortable does not justify the persistence of traditional practices when research clearly defies it. Through the facilitation of student self reflection as a formative assessment used during a unit of study, students engage in an active learning process that provides a feedback loop partnering the teacher and student while giving ownership of the learning back to the student. Within this process, student learning is assessed and evaluated by both the teacher and student throughout a unit of study opposed to at the very end. Thus, when assessing at the end of the unit and giving a quantitative measurement of mastery, students have previously reflected and worked collaboratively with their teacher pertaining to their individual learning process throughout the unit.

**Deficiencies in the Evidence**

Despite the holistic prevalence of research advocating for the general practice of self reflection, there is limited research pertaining to the need for students in high school to practice self reflection in their learning. The majority of research available explores reflection as a student at the graduate level, during student teaching internships, or by practicing teachers in the field. Even then, the focus remains within the confines of traditional curricula.

Additionally, some researchers do not agree on how to define self reflection, and more research is needed to better understand reflection in-action and reflection on-action. Similarly, the relationship between metacognition and self reflection varies slightly among seminal authors.
Few studies directly explore the difficulty of fostering student self reflection and meeting the varied learning needs of all students within the confines of the traditional, public education system. If students are able to more frequently and continuously voice feedback to their teacher about their learning, then teachers are better equipped to meet the needs of their varied learners. In addition, students gain a sense of empowerment over their own learning when solicited to discuss their learning with their teacher. Students are not accustomed to ponder as well as articulate their own thinking, so this practice directly places students in a partnership with their teachers for the goal of their learning.

**Relating the Discussion to Audiences**

The reader of this study will gain a glimpse into how and to what extent do self reflective processes impact the learning of students and the instructional practices of the teacher. This study benefited students and teachers by conveying an experience examining learning processes through a lens of self reflection and metacognitive thinking. Consequently, this sort of thinking results in students observing teacher modeling and instruction in guiding them through the process.

Furthermore, administrators, parents, and researchers will benefit from the implications of the study regarding the reproducible effects of self reflection on individual learning processes and the importance of partnering with students in their learning. The presence of reflective and metacognitive processes and its impact on student learning potentially gives a concreteness to the concept of student-centered learning. When students engage in metacognitive processes, their learning becomes personal and unique to them, and when students are asked about their thinking and learning, they usually have a lot to say. As a result, students, by default, participate actively in their learning when reflection and metacognition is activated.
Culturally and at the societal level, we cannot seek truth in education as a fixed entity or an endpoint; this negates our purpose during this process of hermeneutics in education. Reflective dialogue provides the means of exploring, discovering, and listening. When committed to challenging traditional truths and assumptions about our education system, we begin embarking on new paths of making meaning through collaboration. Gobodo-Madikizela (2004) explains that “dialogue creates avenues for broadening our models of justice and for healing deep fractures in a nation by unearthing, acknowledging, and recording what has been done” (p.119). Participating in this process at the state and national levels of education can directly impact the development of a culture in public education conducive to reflection and growth. This is a necessity when not only wanting to ensure educational equity but for all of our students to be able to thrive and compete on a global scale.

Significance of Research Problem

In order to better understand the process of how students learn and master content and skills, both teachers and students need to actively participate in examining student learning processes. Because only the learner can speak to her experience(s), students need to possess ownership of their learning. Self reflection is initiated when one returns to an experience or practice and evaluates and responds to it (Bandura, 1986; Boud, et al., 1985). When students work cooperatively with teachers to explain the process in which they are experiencing, they take ownership of their learning by reflecting and articulating their thinking. This behavior, as a formative assessment, creates a dialogue between the student and teacher which provides an opportunity to clarify or reteach in an effort towards mastery. As a result, students learn to evaluate their own learning and make actionable decisions based on that reflection (Herrington, Parker, and Boase-Jelinek, 2014). If students understand themselves as participants in the
learning process, students can gain a more positive concept of self, improved attitudes about learning something new, increased work ethic to learn and excel, and better make connections when transferring their learning to other contexts (Bandura, 1986; Bruner, 1960; Herrington, Parker, and Boase-Jelinek, 2014; Loughran, 2002; Marzano, 1988; Mezirow, 2003; Phan, 2011; Schon, 1987). This feedback informs students on how to independently alter or enhance their own learning.

The potential enduring repercussions of prioritizing a culture of self reflection by students, teachers, principals, parents, and district leaders gives credence to this practice. For instance, Pajares (1996) advises that “what people know, the skills they possess, or what they have previously accomplished are not always good predictors of subsequent attainments because the beliefs they hold about their capabilities powerfully influence the ways in which they will behave” (p. 3). The skill and behavior of self reflection can possess leverage for life because of its benefit in improving learner capabilities and self concept. Phan (2011) explains that learning strategies that involve reflection can “enable deep meaningful learning…[and] in turn, scaffold individuals to develop positive senses of self beliefs for academic competence” (p. 238). These soft skills are important because “reflecting is a central part of learning, in which learners critically evaluate their practice as one step in an iterative process of exploring effectiveness. We do this more or less intuitively in our ‘everyday’ lives” (Baldwin, 2010, p. 452). “The imperative to do well academically discourages students from engaging in honest and open reflection” because students prioritize their grade point averages and test scores and not their learning processes (Hargreaves, 2003, p. 196). This process of reflection and possible reevaluation of teaching and learning allows for fluidity between theory, practice, and the psychology of learning should occur among the campus, district, and state leaders.
Research Central Questions

- What does it look like to engage in teaching which employs a meaningful engagement with self reflection?
  - How does a teacher describe the facilitation of self reflection in her students?
  - How does a teacher describe her understanding of how students learn to reflect on their learning?
  - How do students describe their own reflective learning processes?

Theoretical Framework

For this study, metacognition was used as the theoretical framework in order to better understand the thinking involved when students engage in reflective processes or activities. Although self reflection and metacognition are not synonymous with one another, metacognition is reflective in nature, and students often engage in metacognitive processes when reflecting on their learning and thinking. The researcher sought to better understand the metacognitive processes involved when students engage in self reflection about their learning.

Historical Trajectory and Seminal Authors of Metacognition

The early work of Plato offers preliminary insight into the characterization of reflective discourse in thinking and understanding. In the late nineteenth and early twentieth centuries, John Dewey introduced reflective thought within the context of learning. While reflective thought is not synonymous with metacognition because “it does not inherently contain the concept of executive control of one’s thought processes,” reflective thought does, however, encompasses the self-awareness of one’s thinking which exhibits metacognition (Hearn, 2005, p.28).
Additionally, during this time period, Lev Vygotsky, a Russian educational psychologist, argued that development in children came as a result of learning, whereas Piaget argued that learning followed development. This stance by Vygotsky serves as the early mentions and exploration of metacognitive processes—taking reflective thought a step beyond to awareness of one’s own knowledge and capabilities. Vygotsky advocated that standardization in education was not an accurate measurement of future growth and learning. Later, Donald Schon (1987), a seminal author of reflective practice “differentiates between two types of reflection: ‘reflection-in-action’ and ‘reflection-on-action’. He equates reflection-in-action with critical practice, as a dynamic process in which ‘thinking serves to reshape what we are doing while we are doing it’” (p. 26).

John Flavell (1977, 1978, 1979, 1981) depicts the seminal frameworks for identifying and defining metacognition based on cognitive strategies. Flavell “stated that metacognition is a function of learning and is associated with not only the learner, but the learning task and learning strategies” (Hearn, 2005, p. 26). In addition, he established four components of metacognition: knowledge of metacognition, experience with metacognition, learning goals, and learning behaviors.

Due to the lack of focus on the intricacies of how metacognition is exhibited in Flavell’s work, Ann Leslie Brown (1978, 1983, 1987) advocates for executive control. Executive control represents a learner’s ability to reflect on his cognitive abilities as well as regulate himself within a learning activity or task. Brown categorized metacognition under two domains—learners’ reflection on cognitive abilities and self-regulation engaged during a learning task.

Additional seminal authors of self-reflection, Boud, Keogh and Walker (1985), define reflection as: “those intellectual and affective activities in which individuals engage to explore
their experiences in order to lead to new understandings and appreciations” (p. 19). These activities usually consist of reflective dialogue in a collaborative setting which directly supports students in assessing their learning as a process and within a socially constructed setting (Clouder, 2000; Habermas 1972; Stewart and Richardson, 2010). Habermas (1972) advocates further that if reflection stops at the individual, it will be limited in scope and will serve only to maintain the status quo rather than promoting change. Hmelo-Silver (2004) most comprehensively conveys the benefits of groupings on student self-reflection:

When students work collaboratively in small group settings, they are able to review the group process and their own personal functioning in the group while seeking to understand how their learning and problem-solving strategies might be reapplied, and relate new knowledge to prior understanding. At the completion of a problem, students reflect on what they have learned, how well they collaborated with the group, and how effectively they directed their learning. As such, students learn self-reflection when they come proficient in assessing their own progression in learning.

Baldwin (2000) explains that “the Kolb model takes the learner around a cycle through concrete experience, reflective observation, abstract conceptualization, and active experimentation leading back into experience, after which the process repeats itself” (p. 452). This more dynamic approach to learning explicitly involves student self-reflection assessing the process of one’s learning and understanding (Baldwin, 2000; Boud & Knight, 1996; McDonald & Boud, 2010). When working collaboratively in groups, student relationships can enhance the group processes aiding students in learning how to internally self-reflect (Baldwin, 2000).

Contemporary Contributing Scholars
The work of Kluwe (1982) extends both Flavell’s and Brown’s research by explaining that students who can articulate their learning and cognitive processes, while understanding the context in which the learning occurs, is a self-awareness declarative in nature. When treating this thought process and awareness as systemic, it becomes a very intentional act. Kluwe (1982) refers to this as executive monitoring which parallels with Flavell’s (1979) and Brown’s (1978) metacognitive strategies. Marzano, et al. (1988) studied the influence of metacognitive processes on student learning and classroom behaviors. He defined metacognition as “being aware of our thinking as we perform specific tasks and then using this awareness to control what we are doing” (p. 9). In addition, Marzano advocates that commitment to learning is crucial; if a student commits himself to learning how to do a task effectively, he will transfer that commitment and practice to additional tasks. The act of regularly engaging in self reflection facilitates metacognitive thinking and awareness.

**Context of Study**

The teacher and students utilized in this study represent a secondary English Language Arts high school class in a large, public, and suburban school district north of Dallas. For this case study, the teacher served as a participating researcher describing her understanding of how students learn to reflect on their learning. The students in the study described their own reflective learning processes, and the the researcher analyzed for the presence or absence of metacognition. When analyzed by a metacognition framework, the evaluation of how the students describe their reflections offered insights into student perceptions about their learning after engaging in reflective processes.

**Positionality Statement**
The district in which I work actively prioritizes a small school model with no more than five hundred students in each grade level class while also prioritizing the student-teacher relationship—that we must genuinely know our students and meet their needs. Due to the rapid growth and inability to maintain a status quo, district leaders react by prioritizing the offering of a guaranteed and viable curriculum of core content areas across all schools. As a result, this creates a standardized curriculum with coverage at the forefront, which then counteracts the authentic work of meeting student needs and meaningful learning experiences. The teachers rely on the district provided curriculum and lack the autonomy, skill-set, and resources necessary to teach the required content and standards in a way that best serves their learners. To clarify, while teachers may possess the competency to cover the content necessary within a course, they may be unequipped to differentiate their instruction, provide additional scaffolding to students who need it, utilize a variety of instructional methods, or make learning relevant.

While serving as the campus’s English Language Arts Instructional Coach, I attempt to be more aware of how I affect others when trying to create and foster a culture of candor and security while also continuing to ask difficult questions and voicing ambitious growth opportunities for our students and schools. Ravitch and Riggan (2012) argue that marginalization may be reinforced by societal influences, which is the case in Frisco, an affluent and conservative community. Within my professional setting, I feel marginalized as someone who is less experienced and generally less adequate as a woman. Beyond my professional setting, I experience guilt being white and privileged, and I grapple with what I can offer to those different from me. I easily sympathize with others when they allow their guards down. I watch people—their eye contact, their body language, and their reactions to others. As I learn more about what
makes people feel more comfortable, safe, and valued, I attempt to utilize my observations in order to create a situation or context in which others can begin feeling more like themselves.

As an educational leader, I practice awareness of my organization’s culture and the importance of empathy and collaboration daily. This cognizance in prioritizing the health of an organization directly affects the success of a shared vision. Dialogue and deliberate questioning is essential in order to grow trusting and open professionals who want to work for the learning of our students.

Our public education fails our 21st century students from the traditional bell schedule and classroom setting, and the lack of regard for the critical thinking, problem solving, creativity, and collaboration needs for the workplace of today—all of which require a level of self-awareness and mindfulness. Our education system is already inherently unequal; it was designed for middle to upper class, white males. Due to this, I yield to John Dewey for reason and guidance. I believe psychology and sociology exist more as a crucial component to education than we treat as such. We prioritize curriculum or the coverage of content over research based instructional practices and emotional intelligence and then wonder why the students are not learning.

As a scholar practitioner, my goal is to achieve the following—1). To contribute to a larger body of research that explicitly presents the characteristics and needs of effective schools that foster authentic and meaningful learning experiences; 2). To contribute to a larger body of research that clearly depicts the urgent need for priorities to shift in traditional, public education schools towards a more learner centered environment; 3). To provide concrete evidence to the district, in which I work, of what our students need and continue our work towards achieving that; 4). To persist as a change agent within the school district with the hope that our district can
serve as a replicable model of a large, traditional public school district fosters an environment of meaningful learning while meeting the needs of our students.
Chapter 2: Review of Literature

The following literature portrays a comprehensive description of self reflection in an educational setting. The review will introduce its history and seminal authors then transition into the value and purpose of student self reflection. As the review progresses, more detail will be given to the facets that comprise reflection—formative assessment, learning objectives, feedback, and supporting and facilitating student self reflection. Finally, additional literature will outline how self reflection fits within authentic learning, self regulated learning, metacognition, self assessment, and collaborative reflection.

Self Reflection

Prevalent in education, nursing, and parts of the corporate world, self reflection continues to gain momentum as does the renewed desire to critically analyze experience to inform future actions. While many agree on the necessity to implement reflective practices, theorists vary in definition and execution.

History and Seminal Authors of Reflection

While several educational theorists, influenced by the work of Dewey, Habermas, and Freire, propose reflection as a learning tool, few research studies focus on the process of reflection (Atkins & Murphy, 1993; Boud et al, 1985; Boyd & Fales, 1983; Goodman, 1984; Van Manen, 1977; Mezirow, 1981; Schon, 1991). When discussing reflection, most authors convey the process in terms of stages or levels of reflection (Atkins & Murphy, 1993; van Manen, 1977; Mezirow, 1981; Boyd & Fales, 1983; Goodman, 1984; Boud et al, 1985; Schon, 1991). Some researchers advocate the utilization of reflection may foster the integration of theory and practice regarding educational research (Clarke, 196, Champion, 1991; Atkins & Murphy, 1993; Finlay,

Notable researchers, Boud, Keogh and Walker (1985), define reflection as “those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations” (p. 19). Those activities refer to the following three stages—returning to the experience, attending to feelings, and reevaluating the experience (Boud, Keogh and Walker, 1985). Kemmis (1985) explains that we intentionally contemplate and consider actions based on the significance of the situation. Bandura (1986) argues that through the process of self reflection, individuals evaluate their experiences since their self concept of capability ultimately impacts their behavior. Schon (1987) proposes (in a professional context) that learners either reflect in action or on action. Smyth (1992) emphasizes that reflective understanding occurs through questioning and investigation.

**Real World Purpose and Value of Reflection**

Baldwin (2010) argues that self reflection is a central part of learning and something we “more or less intuitively do in our everyday lives” (p. 452). Furthermore, researchers indicate that adequate reflection enhances student motivation and academic performance (Boud, Keogh, & Walker, 1985; Kemmis, 1985; Paris & Ayres, 1994; Entwistle, 1987). Strengthening a student’s ability to self reflect aids students in authentic learning and facilitates their approach to inquisition with approaching their own thinking, interactions with others, and transferability of knowledge and skills (Lin Wen, Jou, & Wu, 2014; Moon, 2002; Quinton & Smallbone, 2010). This reflective practice not only aids one’s self appraisal but gives students a greater sense of

Through practice and intentionality, self reflection requires one to reflect introspectively and freely in their return and evaluation of thinking and experiences (van Manen, 1990; Boud et al., 1985). Herrington, Parker, & Boase-Jelinek (2014) advocate that reflection becomes a culture when reflection is intentionally prescribed as a part of curriculum providing students the opportunity to engage both individually and socially. This practices lends itself to teachers seeking additional ways to support and facilitate active student learning. Researchers advocate that when students engage in reflective thought within self assessment, the reflection is integrated with the learning task allowing students to communicate their own learning and track their progress (Herrington and Oliver, 2000; Roberts, Farley, & Gregory, 2014; Black & William, 1998; Stiggins & Chappuis, 2009, Chan et al., 2014).

**Models of Reflective Practice**

Quinn (1988, 2000) suggests that the varying reflective models all tend to involve three fundamental processes: ‘retrospection: i.e. thinking back about a situation or experience; self-evaluation, i.e. critically analyzing and evaluating the actions and feelings associated with the experience, using theoretical perspectives; reorientation, i.e. using the results of self-evaluation to influence future approaches to similar situations’ (Quinn, 2000, p. 82)” (Finlay, 2008, p. 7-8). The transparent alignment model of reflection entails examination of elements and expectations of curriculum in order to refine reflective activities appropriate to the context (Coulson & Harvey, 2013). This requires a partnership between the students and teacher while focusing on clarity and structure.
Ghaye and Lillyman (1997) share Schon’s reflection-on-action with their five types of reflective thinking—structured, hierarchical, iterative, synthetic and holistic. Gibbs’ Reflective Cycle (1988), built from Kolb’s experiential learning cycle, proposes that theory and practice enrich one another in a recursive cycle (Finlay, 2008, p. 8). Boud, Keogh, and Walker’s (1985) three stage model focuses within an individual’s introspection and not in a social or collaborative sense. Critics argue that this approach limits the reflective understanding to on-action rather than in-action as well as stifles reflective thought by not engaging in collaborative reflection with others—reflection-in-action refers to reflective practices during the experience whereas reflection-on-action refers to reflective practice following the experience (Finlay, 2008). Since the stages 1). returning to the experience, 2). attending to feelings, and 3). reevaluating the experience, the outcome is usually learning of some sort. Mezirow (1981) describes this third stage as a perspective transformation. Boud et al (1985) explains that the affective and cognitive changes may or may not lead to behavioral changes (Atkins & Murphy, 1993). Atkins and Murphy (1993) additionally explicate that while the stages are presented in a linear process, they are integrated in practice. By understanding each stage separate from the others, learners are able to utilize reflection as a tool and can better understand the skills required for that particular stage.

Additionally, it is worth considering the variation in the depth and complexity of how one engages in reflective thought (Brookfield, 1995; Mezirow, 1981; Kreber & Castledon, 2009; Paris & Winograd, 2003). Paris and Winograd (2003) and King (2002) argue that the capacity to critically reflect is associated with higher order cognitive processes of self-regulation and metacognition indicating the highest level of abstract learning. Redmond (2004) who credits Dewey, Habermas, Freire, Brookfield, Kelly, Polanyi, and Boud, as influences on her work, argues that there is an interconnectedness among their work regarding reflective thought and
metacognition although there may be variation in definition and process. For instance, Ixer (2000) poses three different paradigms: ‘reflection in action’ (pragmatists Mead, Dewey and Schon); ‘reflection as social process’ (Kant and Kemmis); and ‘reflection as dialogue’ (Habermas and Freire)” (p. 21). Despite which models or stages guide reflective thought, those developing reflective capacity should focus and practice with scaffolding help from a teacher or mentor (Coulson & Harvey, 2013).

Fook, White, and Gardner (2006) synthesize that most models involve scaffolding levels of reflection beginning with a more descriptive level, then advancing to a more reflective level, then finally culminating in a transformational level (p. 14). Mezirow (2000) and Finlay (2008) caution that concentrating too closely on a specific and simple technique of reflective thought could result in ineffective or superficial understanding. In order to avoid this, intentional and meaningful practice must occur allowing a feedback loop between the student and teacher (Mutch, 2003; Hounsell et al., 2008). This is especially effective when students engage in discussions with concrete outlines via journals, portfolios, or blogs (Herrington and Herrington, 2006).

**Facilitating Reflection**

While researchers agree on the purpose and value of self reflection, there still remains uncertainty on the best method to teach and implement self reflection. Some researchers have dedicated their work to exploring this very topic—the how of facilitating and supporting self reflection—and agree on the following variables—context and clear intentionality, purpose for learning objectives, formative assessment, feedback, partnership between teacher and student, transparency, and reflective writing,
Context and clear intentionality.

In order to best facilitate reflective thinking in students, “different models are needed, at different levels, for different individuals, disciplines and organizations, to [be] used in different contexts…applied selectively, purposefully, flexibly, and judiciously” (Finlay, 2008, p. 10). Since varying models and typologies are offered, selecting one deliberately to best support student understanding is crucial based on learning context (Coulson & Harvey, 2013). By engaging in conversations and working towards providing more authentic and meaningful learning experiences for students, a new climate must evolve with new priorities. Self reflection and collaborative experiences with peers persist as continual threads of discourse within all three of the approaches.

Currently in public education, educational leaders advocate for more student-centered classrooms with differentiated instruction. Encouraging educators to engage in self reflection helps grow a student-centered learning mindset. For example, Wiggins and McTighe argue that deliberate and focused instructional design requires teachers and curriculum writers to make an important shift in thinking about the nature of our job. In teaching students for understanding, educators must grasp the key idea that teachers are coaches of student ability to play the ‘game’ of performing with understanding, and not merely tellers of our understanding to them on the sidelines. Only after having specified the desired results can we focus on the content, methods, and activities most likely to achieve those results (2005).

Researchers agree that by providing students differentiated curriculum with a variety of opportunities to learn including verbal, kinesthetic, visual, individual, small group, and whole class, students learn for themselves which areas interest and best serve them (Chamberlin & Powers, 2010; Goodnough, 2009; Kutnick, Blatchford, and Baines, 2005; Tieso, 2005).
Since engaging in reflective practice can be uncomfortable and disorienting, delineating clear boundaries is essential for those developing their reflective practices (Hunt, 2001, p. 275).

Quick and Winter (1994), Richmond (1990), and Bransford, et al (1999) advocate that it is the teacher’s role to explicitly teach students about the learning processes as well as how to engage in these processes. The variation in definition and approaches to reflective thinking can pose a difficulty for learners developing their self reflection skills if the teacher is not clear about the purpose and process of reflection (Boud and Knights, 1996; Bringle and Hatcher, 1999; Coulson & Harvey, 2013; Fook, White, & Gardner, 2006). Stefani, L.A.J., Clarke, J., & Littlejohn, A.H. (2000) argue that

If as teachers and tutors we cannot share with our students a concise operational definition of the concept, it is difficult to present reflective learning as a highly valued means of dealing with the complexities, challenges and uncertainties inherent in personal and professional development. Encompassed within the concept of continuous personal and professional development are the processes of self-assessment or self-evaluation. However these terms are relatively new to the classroom (p. 164).

Although the need and value in self reflection is evident by researchers, the absence of a clear definition and process creates difficulty for teachers to facilitate and support this thinking in their students.

**Purpose for learning objectives and learning models.**

Designated learning outcomes and objectives provide the necessary framework in which student learning and grouping occurs. This ensures that student learning is closely examined over the course of a unit of study and is guided by standards.
Franklin Bobbitt published *The Curriculum* (1918) and outlined principles of curriculum planning, defining it as “a series of things which children and youth must do and experience by way of developing abilities to do things well and make up the affairs of adult life” (Bobbitt, 1918, p.42). His method for choosing educational objectives and developing curriculum are often applied today and evidenced in the Backwards Design framework —1) choose objectives that are for all students, not just a few, 2) emphasize objectives that are important for adult living and successes, 3) choose practical objectives, 4) avoid objectives that disagree with the community, 5) involve the community when choosing objectives, and 6) establish criteria for objectives (Bobbitt, 1918). McMillan (2011) defines criteria as “the specific behaviors or dimensions that are evidenced to successfully attain the standard” (p.34). By establishing guidelines for choosing objectives, teachers can determine whether students have the abilities to attain the objectives (Bobbitt, 1924).

Harold Rugg, the chairperson of the National Society for the Study of Education (NSSE), argued, “imagine how much more probable would be the emergence of a generation of people informed and trained to think if the curriculum of our schools not only prepared adequately for life, but actually anticipated the problems of the generation of youth now growing up (Rugg, 1926, p. 7). In order to fulfill this vision, Rugg created four tasks in planning curriculum—1) statement of objectives, 2) a sequence of experiences to achieve the objectives, 3) subject matter found to be…the best means of engaging in the experiences, and 4) statements of immediate outcomes of achievements, defined the role of curriculum specialist (Rugg, 1926, p. 52-53). Outcomes are goals that refer to a destination rather than the path taken to get there. A goal that truly describes an outcome explains why we do what we do (Suskie, 2009, p. 116-117).
Similarly, Wiggins & McTighe (2005) suggest, “an intended outcome is a desired result, a specific goal to which educators commit” (p. 346).

Wiggins and McTighe’s backwards design curriculum model most closely supports Ralph Tyler’s theory of behavioral objectives and learning experiences. In Ralph Tyler’s (1949) *Basic Principles of Curriculum and Instruction*, Tyler devised a two dimensional chart for specifying varied types of objectives according to the subject-matter content and the behavioral aspects of the objectives; the relationship of two aspects of the objectives, behavioral and content. Tyler outlined five general principles in selecting learning experiences—1). The learning experience must give students the opportunity to practice the desired behavior. If the objective is to develop problem solving skills, the students should have ample opportunity to solve problems. 2). The learning experience must give the students satisfaction. Students need satisfying experiences to develop and maintain interest in learning; unsatisfying experiences hinder their learning. 3). The learning experience must “fit” the students’ needs and abilities. This infers that the teacher must begin where the student is ability-wise and that prior knowledge is the starting point for new knowledge. 4). Multiple learning experiences can achieve the same objective. There are many ways of learning the same thing. A wide range of experiences is more effective learning than a limited range. 5). The learning experiences should accomplish several learning outcomes. While students are acquiring knowledge of one subject or concept, they are able to integrate that knowledge in several related fields and satisfy more than one objective (Tyler, 1949).

Curriculum can be organized into three major components: objectives, content, or subject matter, and learning experiences. Objectives serve as a road map (“where” we are going), content as the “what” of curriculum, and learning experiences as the “how”. The
The interrelationship of each of these components is examined using Tyler’s classic curriculum model (Lunenburg, 2011). “The real contribution of stating objectives for learning is to think of how each objective can be achieved by students through the content or subject matter they learn” (Lunenburg, 2011, p. 2). Tyler defined the term learning experiences as follows:

> The term “learning experience” is not the same as the content with which a course deals nor the activities performed by the teacher. The term “learning experience” refers to the interaction between the learner and the external conditions in the environment to which he/she can react. Learning takes place through the active behavior of the student (pg. 63).

Tyler argues that the teacher’s obstacle is to select learning experiences that will foster active involvement in the learning process in order to accomplish the expected learning outcomes.

In his model, Harold Rugg places priority on objectives and learning experiences before the designation of subject and content. Similarly, Ralph Tyler’s Basic Principles of Curriculum and Instruction (1949) theory of behavioral objectives and learning experiences examines the relationship between the two aspects of behavioral and content varying types of objectives in regards to the learning experience. Tyler advocates that a learning experience occurs when the learner actively interacts with external environments and reacts to these experiences. While Tyler offers a more experiential learning dimension to Rugg’s advocacy for more objective based curriculum, the Kolb model incorporates more observation and reflection during the learning experience based on designated objectives.

Baldwin (2010) explains that “the Kolb model takes the learner around a cycle through concrete experience, reflective observation, abstract conceptualisation, and active experimentation leading back into experience, after which the process repeats itself” (p. 452). This more dynamic approach to learning explicitly involves student self-reflection assessing the
process of one’s learning and understanding (Baldwin, 2010; Boud & Knight, 1996; McDonald & Boud, 2010). When working collaboratively in groups, student relationships can enhance the group processes aiding students in learning how to internally self reflect (Baldwin, 2010).

Chan et al. (2014) extends Stiggins (2002) urge to shift the instruction and assessment dynamic in a way that promotes student ownership so that assessment goes beyond the assessment of learning and is used as an assessment for learning (Chan et al., 2014, p. 106). Teachers can work towards this by developing and communicating clear learning targets promoting goal setting and self-evaluation. This provides a systemic approach to facilitating reflection in self-assessing performance on the learning targets. In addition to providing students additional and routine opportunities to practice reflective skills, teachers can provide support and resources such as peer tutoring, feedback, clarification of questions, and rubrics and checklists for self-evaluation (Chan et al., 2014). Chan et al., (2014) highlights the importance of posting learning objectives along with targets of mastery and progress to give ownership back to the student since this communication indicates what comes next in their learning (p. 111). It is imperative that the learning objectives are clearly communicated and understood by students so they can use them as a guide for engaging in self reflection.

**Formative assessment and feedback.**

Alexander et al. (1991) defines feedback as “information with which a learner can confirm, add to, overwrite, tune, or restructure information in memory, whether that information is domain knowledge, metacognitive knowledge, beliefs about self and tasks, or cognitive tactics and strategies” (Butler & Winne, 1995, p. 275). Black and William (1998) argue that in order to implement effective formative assessments, a redesign of teaching and learning must occur (p. 158). Formative assessment has to be purposeful and possess a focus on an immediate task in
order to learners to gain feedback (Black and William, 1998; Quinton and Smallbone, 2010). It is the responsibility of the teacher to provide feedback in an effort to construct a dialogue between teacher and student (Nicol, 2010). Without the feedback component, the concept of formative assessment is void of the ownership piece for the student and the partnering between the teacher and student.

Peterson and Irving (2007) explain “when students talked about the purpose of assessment, an assessment—feedback—learning loop was evident. That is, assessment was primarily useful because it led to information/feedback, which led to more learning that was subsequently re-assessed, keeping the learning cycle going. Hence assessment, feedback and students’ learning were inextricably linked” (p. 243). The value of feedback depends on how students respond and know how to improve (Chan et al., 2014; Handley, Price, and Millar, 2011). Pittaway and Dowden (2014) caution teachers to be mindful in their written feedback since students filter their responses through their emotions. As a result, clarity and intention is crucial when giving feedback, particularly in writing. In order to be effective, students must understand the purpose of feedback, and the feedback must be timely, clear, and of value so the student can complete the feedback loop (Black and William, 1998; Quinton and Smallbone, 2010; Sadler, 1998).

Peterson and Irving (2007) discuss that students want honest and concise feedback; however, it is a challenge for teachers to provide them this sort of feedback without overwhelming the student and then ignoring it. Furthermore, students may not always know what to do with the feedback making feedback the need to be actionable and task specific (Brookhart, 2008). Teachers must take the time to teach students how to utilize feedback since students must
be able to analyze the results of their own assessments and apply the feedback on their own 
(Chan et al., 2014).

Quinton and Smallbone (2010) encourage the teaching of reflection as an integration into 
student learning with opportunities to practice reflection and receive feedback. Continuing the 
feedback loop offers students an experiential base for reflection (p. 125). When facilitating 
feedback, teachers must explicitly prepare students for how to respond to feedback in order to 
ensure effectiveness of the feedback loop. In order for this to occur, however, teachers must be 
clear and purposeful in their feedback, as well in how they want students to utilize the feedback 
(Chan et al., 2014).

Supporting Reflection

Coulson & Harvey (2013) explain the importance in supporting learners in the 
development of their capacity for reflection since it can enable learners to navigate the inherent 
complexities of learning through experience (p. 403). Finlay (2008) echoes this and emphasizes 
that since effective reflection processes are difficult to teach, teachers must be mindful in how 
they motivate and support students with time, resources, opportunities to practice, and 
appropriate methods. Researchers further urge against combining reflective activities with 
assessment in the preliminary stages of understanding (Finlay, 2008; Hobbs, 2007; Stewart and 
Richardson, 2000).

Strategic and timely scaffolding helps to support learners in their development of self 
reflection (Moon, 2004; Larrivee, 2008). These interventions allow students the opportunity to 
develop the skill of self reflection over time yielding a more active, meaningful, and 
transformative learning experience (Coulson & Harvey, 2013). According to Phan (2009), the 
reciprocity between critical thinking and deep processing conveys “the relationship between
agency, metacognition, and the ability to develop and apply reflection for learning” (Coulson & Harvey, 2013, p. 403).

Modelling serves as an effective scaffolding tool allowing teachers to adopt the reflective process to the curriculum and learning context by sharing their own reflective thinking (Boud & Knights, 1996; Bandura, 1986). Additionally, providing exemplars to portray reflective thinking can assist students in understanding the levels or stages of reflection (Moon, 2004; Coulson & Harvey, 2013). The exercise of modelling also presents authentic experience to the students which helps to convey the purpose of reflective thinking. If students simply regard reflection as the completion of a worksheet, they will miss the purpose all together (Quinton & Smallbone, 2010).

Researchers argue for authentic opportunities to practice reflective skills particularly when reinforced with formative feedback challenging the thinking of the student (Bain et al., 2002; Finlay 2008; Loughran, 2000). Finlay (2008) explains that “the point is to recapture practice experiences and mull them over critically in order to gain new understandings and to improve future practice” (p. 1). As a result, students become more self aware and critical in evaluating their own thinking and experiences which can lead to change in behavior or perspectives (Zeichner and Listen, 1996).

Utilizing varying ways to practice reflection invites the consideration of vehicles that provide learning experiences (Loughran, 2002). This can refer to reflective journals, collaborative dialogue, group tasks, or communication technology, such as blogs. Dedicating class time to reflection and making it a routine aspect of the class culture emphasizes the importance of the skill and process. In order to offer ongoing opportunities for practice,
reflective processes should be embedded within the curriculum and instruction of a course (Quinton & Smallbone, 2010).

Furthermore, opportunities for reflection should be accompanied by clear criteria and explicit direction so students can learn to appropriately evaluate their performance and thinking in order to result in transformative behavior (Stefani, 1998). Stefani et al. (2000), elaborates that this can pose a challenge to educators to translate learning objectives into concepts of self evaluation (Stefani, L.A.J., Clarke, J., & Littlejohn, A.H., 2000). Stefani et al. (2000), also emphasizes the ownership that accompanies meaningful reflection since students who do not authentically engage within the guidance and process learn later that the process was to their benefit and not the benefit of their teacher.

**Student and teacher partnership.**

In order to facilitate a teacher-student partnership, intentional scaffolding and intervention is necessary to support students in their learning progression while encouraging self regulation (Moon, 2004; Larrivee, 2008, Brown and Harris, 2014). This active approach to engage in thoughtful dialogue between teacher and student, promotes active learning and reflective thought on the student.

In many traditional classrooms, much of the learning is teacher led and done formally to the students and not with them (Chan et al., 2014). Cunningham et al. (2009) explains that if teachers are not receptive to new approaches to teaching, then it will be difficult for them to acquire knowledge of what is effective for student learning. If teachers are preoccupied with covering curriculum by moving students from activity to activity assuming they are learning, they are not present with the learning happening with their students at that time in class. It is by “being present” that ensures continuity of that student learning (Johnson, 1998). This echoes
Dewey’s sentiment that the teacher should be ‘alive’ both to students’ ‘bodily expression of mental condition’ (Rodgers, 2002, p. 236). It is when the teacher is fully present that she can respond more effectively to student learning by providing that external feedback (Rodgers, 2002). Rodgers (2002) admits how the “tremendous contextual forces that teachers operate under,” such as tests, grade point average culture, and coverage of required knowledge and skills can compromise the impact of more active student learning environments (p. 251). This encourages teachers to solicit structured feedback from students in order to distinguish between what they think they are teaching versus what students are actually learning (Rodgers, 2002, p. 230). By avoiding canned instruction, teachers are able to more authentically promote student reflection into their learning.

Many teachers continue to seek and pursue instructional methods that help bring organization and reflection to their students (Hoban and Hastings, 2006; Herrington, Parker, and Boase-Jelinek, 2014). According to Agran et al. (2003), by involving students in the goal setting progress, their awareness, decision making, and self evaluation of achievement and growth increases. As a result, students are more likely to self assess and document their own learning as they progress toward mastering the learning objective(s) (Chan et al., 2014). Brookfield (1995) and Beresford (2003) encourage teachers to use a classroom questionnaire or inventory in order to solicit feedback from students giving them ownership and voice, ultimately focusing a dialogue between student and teacher. Bidokht and Assareh (2010) advocate that learners should participate alongside their teacher when constructing and designating meaningful assessments and in developing the criteria and learning objectives necessary for high quality work. By building this relationship between teacher and student, this relationship process and collaborative dynamic models for students how to collaborate and partner effectively (Baldwin, 2010).
Collaboration among educators can also foster partnership between students and teachers. Ermeling’s (2010) study suggested that collaborative teacher inquiry yielded an investigation of shared problems which led to discoveries of cause-effect connections between instructional plans and student outcomes. As a result, this information led to changes in teachers’ practices (p. 387). This inquiry experienced by both teachers and students alike provides more authentic learning experiences for students and helps to maximize student engagement.

Transparency.

In order to truly facilitate student learning, teachers must focus their attention on the learning opposed to their role as the possessor of knowledge (Black and William, 1998). When teachers focus their instruction directly on student learning, they assess for learning opposed to using assessment of learning, and students gain more ownership and their learning becomes more active and authentic (Stiggins, 2002). Black and William (1998) argue that if we expect students to learn the standards to the degree of mastery evaluating with criteria the teacher designates, we must be transparent in explicitly articulating these with students.

Potter and Kustra (2012) describe learning objectives as student-friendly statements that “indicate what a student will know or being able to do by the end of the course” (p. 1). A teacher can facilitate student understanding of the learning objectives by listing out observable learning outcomes that will be expected of the students. Potter and Kustra (2012) continue that from the learning objectives, teachers can infer mastery from cognitive, performative, and affective perspectives engaging students in a more holistic study. Similarly, Rodgers (2002) emphasizes that when teachers are more present during student learning, teachers begin differentiating their instruction in an effort to respond more actively and specifically to student learning. Dialogues with students serve as vehicles for giving feedback and experiencing learning as students
experience it opposed to solely assessing the instructional perspective (Rodgers, 2002; Loughran, 2002; Fendler, 2003; Hoban and Hastings, 2006).

**Results with writing reflection.**

Lew and Schmidt (2011) studied the positive effects of reflective writing on self reflection and learning with the definition of reflection as the “processes that a learner undergoes to look back on his past learning experiences and what he did to enable learning to occur, and the exploration of connections between the knowledge that was taught and the learner’s own ideas about them” (p. 530). This process allows for students to set and track their own goals and progress while making connections between knowledge and one’s own thinking (Lew and Schmidt, 2011; Moon, 1999).

Reflection journals provide a documented and tangible means to integrate reflection into curricula while documenting one’s thinking over the course of time (Thorpe, 2004; Moon, 1999; Quinton & Smallbone, 2010). Gleaves et al. (2008) explains that reflective journal writing enables students to critically evaluate and potentially transform their own thinking, perspectives, or behavior. Gibbs (1988) designed an exercise prompting students to reflect in a more systemic and structured way. This encourages students to document their thinking in order to separate out emotional and rational thoughts regarding their reflection (Quinton & Smallbone, 2010). Over time, this systemic approach becomes experience and can improve and impact future reflective thinking (Boud et al., 1985). For instance, McCrindle and Christensen (1995) and Lew and Schmidt (2011) found positive correlations between students who engaged in journal keeping and the utilization of more cognitive strategies during a learning activity.

**Reflection in Authentic Learning**
This portion of the literature review includes information about reflection in authentic learning and self regulated learning (SRL) since student experience is more robust in a more authentic learning environment. Additionally, scholars agree that reflection is an inherent component of authentic learning, so it is necessary to discuss one with the other.

**Purpose and Definition**

Reflection is a necessary part of an authentic learning environment (Herrington, Reeves, & Oliver, 2010; Lombardi, 2007). Experiential learning enables students to develop reflective habits which transfer to the workplace and their personal lives (Quinton and Smallbone, 2010). John Dewey defines an experience as “a transaction taking place between an individual and what, at the time, constitutes his environment” (Dewey, 1938, p. 43). The practice of self reflection offers an authentic learning experience which provides a meaningful and immediate remedy to student learning and teacher instruction in and of itself.

**Reflection in Self Regulated Learning**

Similar to its role with authentic learning, reflection has roots in self regulated learning since one cannot self regulate without engaging in self reflection. As a result, the researcher looks to self regulated learning as a guide to facilitating self reflection since more research is needed in that area.

**Purpose and Definition**

Zimmerman (2000) argues that self regulation, “refers to self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (p. 14). Paris and Paris (2001) indicate that “research during the past thirty years on students’
learning and achievement has progressively included emphases on cognitive strategies, metacognition, motivation, task engagement, and social supports in classrooms” (p. 89). These sociocognitive processes develop as a result of guided participation, scaffolded assistance, and apprenticeship (Paris & Paris, 2001). The broad and indefinite scope of SRL appeals to researchers and educators “who seek to understand how students become adept and independent in their educational pursuits” (Paris & Paris, 2001, p. 89). Additionally, Butler and Winne (1995) argue that SRL is an inherent component of learning and occurs naturally when students are engaged in active learning processes, such as, reading, writing, task engagement, and self assessment. According to Butler and Winne (1995), the most effective learners are self regulating since they are aware of their own knowledge, beliefs, motivation, and cognitive processing and can learn more effectively (p. 245). Paris and Paris (2001) argue that teachers can provide students opportunities to be more strategic, motivated, and independent as a result of learning SRL skills that emerge from experience (p. 89).

**History of Self Regulated Learning**

It is argued that self regulated learning fits within varying learning theories and approaches, such as Piaget’s constructivist theory, Vygotsky’s sociocultural theory, social learning theories, and information processing theories (Paris & Paris, 2001). Due to this wide relevance, researchers Zimmerman and Schunk (1989, 2001) studied these different approaches by asking authors to examine SRL from varying theoretical stances. Paris and Paris (2001) explain the need in research to synthesize findings in educational psychology linked directly to learning and instructional practice. This stems from educational psychologists learning that “teaching students to use strategies appropriately involved metacognition, motivation, domain-specific knowledge, and features of the classroom tasks” (p. 91). As a result, and due to the
popularity in exploring the learning and cognitive benefits of self regulated learning, there is a need to identify practical applications of SRL to classrooms (Paris & Paris, 2001). Researchers agree that there is evidence supporting that students can improve their self regulation skills through self assessment (Andrade, Du, and Wang, 2008; Andrade, Du, and Mycek, 2010; Brookhart, Andolina, Zuza, and Furman, 2004).

Models

Models of self regulated learning specify the need to return to learning, engage in reflection, and initiate understanding of their experience or learning. For instance, the Kolb model “takes the learner around a cycle through concrete experience, reflective observation, abstract conceptualisation, and active experimentation leading back into experience, after which the process repeats itself” (Baldwin, 2010, p. 452). Boud and Knight (1996) encourage self assessment in relation with others in a group context. Furthermore, “Boud notes the importance of affect in his dynamic approach to learning, which involves the development of understanding through ‘returning to experience’, ‘attending to feelings’, and developing understanding by ‘recognizing implications and outcomes’ from experience” (Baldwin, 2010, p. 452).

Self Assessment, Ownership, and Active Learning

The appeal of SRL transcends researchers and educational leaders due to the benefits to both students and teachers (Paris and Paris, 2001). Once students are aware of the designated learning standards and task engagement, they learn how to measure progress toward mastery. This SRL contains strategies and devices utilized during the learning process, such as, learning journals, metacognitive devices, and formative assessments (Black and William, 1998). Black and William (1998) continue that “not only is it necessary to know what are appropriate
standards and criteria, it is necessary to be able to detect the extent to which the work one has produced meets them” (Black & William, 1998, p. 161).

Furthermore, Black and William (1998) argue that when learning outcomes are determined, self assessment strategies, determination of criteria, and self identifying cutes allow for the giving and receiving of feedback. Chan et al., (2014) and Pearson and Battelle for Kids (2012) explain that clearly focused learning outcomes written in student friendly language helps active student engagement, which can look like rubrics, checklists, self monitoring forms, students giving each other feedback, teacher sharing an exemplar of student work, and being self reflective and self reliant to advance their learning.

Self regulated learning promotes ownership since students collect evidence of their learning and can experience their growth and achievement. When learning objectives are clearly defined in student friendly language, students are able to reflect on their growth or where they stall in order to get feedback to move forward (Chan et al., 2014). For instances, teachers can facilitate SRL through formative instructional practices, such as, conferences where the teacher and student can partner. This kind of process should include preparation with a focus on the learning objectives and their own formative assessment data (Chan et al., 2014). It is through these formative activities that students are able to deliberately practice taking action, set goals based on learning objectives, monitor their own progress, and adjust their learning experience as necessary (Brown et al., 2005).

Self assessment, tracking progress, and obtaining feedback are all associated with improved motivation, engagement, and efficacy (Griffiths and Davies, 1993; Klenowski, 1995; Munns and Woodward, 2006; Schunk, 1996, Sadler and Good, 2006; Towler and Broadfoot,
Brown and Harris (2014) encourage training for both teachers and students prior to engagement with self assessment as a contributor to self regulated learning.

**Feedback and Self Regulated Learning**

Researchers argue that traditional research on feedback has been too limited to the effects of feedback on achievement rather than the process (Butler and Winne, 1995, Schunk and Swartz, 1992). Advocates of feedback within SRL, Butler and Winne (1995) conclude that students struggle with monitoring and utilizing internal feedback when engaged in their learning which can inhibit the effectiveness of SRL. The feedback component is a catalyst for SRL and thus serves as the crux of self regulated learning. Butler and Winne (1995) continue that future research on feedback and self regulated learning should be “tightly coupled” considering the facets of both (p. 245).

Within the self regulated model, Butler and Winne (1995) specifically study feedback monitoring and conclude four issues: “(a) how students monitor, (b) types of internal feedback students generate while monitoring, (c) how well students monitor, (d) difficulties that can arise during monitoring” (p. 247-248). Despite these obstacles, SRL encompasses how feedback blends with pre-existing knowledge that may affect a learner’s understanding of the content, task, or learning process.

**Reflection in Self Assessment**

Since reflection is inherent in self assessment within self regulated learning, much is gleaned from self assessment research regarding the role of reflection as well as in facilitating and supporting student reflection.

**Purpose and definition.**
While self assessment alone is not the sole answer to facilitating effective learning, it is, however, helpful in teaching students how to reflect on their learning (Baldwin, 2010; Schon, 1983; Boud et al., 1985; Goud & Taylor, 1996). According to Baldwin (2010), self assessment is a method for “facilitating the process of knowledge acquisition” and should be viewed separately as a concept and a process (p. 452). “Self assessment in the Kolb model, would be a key part of ‘reflective observation’, the opportunity that students have to think about their practice and make sense of it in an organised fashion” (Baldwin, 2010, p. 451). Boud (1986) defines self assessment as “the involvement of students in identifying standards and/or criteria to apply to their work and making judgments about the extent to which they met these criteria and standards” (p. 5). By practicing the ability to self assess, students are accumulating foundational skills for lifelong learning and thus able to become lifelong self assessors (Sadler, 1998; Boud, 2000).

Reflecting is a central part of learning, in which learners critically evaluate their practice as one step in an iterative process of exploring effectiveness. This more dynamic approach to learning explicitly involves student self reflection assessing the process of one’s learning and understanding (Baldwin, 2010; Boud & Knight, 1996; McDonald & Boud, 2010). Within the context of this particular study, the focus of self assessment is not on the accuracy of students’ ability to assess but rather on the engagement in reflection and self evaluation of one’s performance. The focus of self reflection and evaluation focuses self assessment within the context of the learning process and gives students the responsibility for assessing their own work (Paris & Paris, 2001; Lew, Alwis, & Schmidt, 2010; McDonald and Boud, 2010).

**Shift in thinking.**

In order for self assessment to be an effective formative assessment, teachers have to alter their traditional thinking about assessment (Black & William, 1998). The goal of self assessment
is for students to “internalize standards of [learning]…and reflect on their progress, enabling them to regulate their learning more effectively” (Lew, Alwis, & Schmidt, 2010, p. 136). This can lead to the development of metacognitive skills (Lew, Alwis, & Schmidt, 2010).

Kraayenoord and Paris (1997) advocate that one of the main purposes of authentic assessment is to encourage students to become involved more actively in monitoring and reviewing their own performance. Lew, Alwis, and Schmidt (2010) emphasize that self assessment is the key aspect of the evaluation of the products as well as the processes of daily learning so that students learn to reflect on their work and to evaluate their effort, feelings and accomplishments, not just their past grades (p. 136). When students are afforded the opportunity to move their learning forward as a result of self assessment, teachers are provided the opportunity to refine the feedback they provide the student (Chan et al., 2014, p. 110). Boud (1989), Sadler (1998), McDonald and Boud (2010) similarly express that effective learners possess a realistic sense of their own strengths and weaknesses and are able to use this information to direct their lifelong learning when self assessing. As a result, learners begin developing more autonomy and responsibility in their learning (Lew, Alwis, & Schmidt, 2010, p. 136).

Mok et al. (2006) and Paris and Paris (2001) associate self assessment with self regulated learning, metacognitive, and reflective thinking which all affect thinking to improve one’s deficiencies. Orsmond, Merry, and Reiling (1997) discuss how their study supports previous work showing the effectiveness of self assessment in reaching learning goals when treated as a formative assessment tool. Additionally, McDonald and Boud (2003) emphasize the importance of intentionally teaching students how to self assess especially since those who are taught how outperform their peers with no such training. The purpose is for learners to successfully develop
explicit self assessment skills in order to become more critical and sound about their own learning (Boud, 1989, Sadler, 1989; Smith and Pilling, 2007, Quinton and Smallbone, 2010). For instance, Sullivan and Hall (1997) report positive student response when finding self assessment useful when reflecting upon their own learning and work.

**Teacher facilitation.**

Students must be taught how to effectively self assess in order to determine areas of need or weakness (Chan et al., 2014; Minute Math). Furthermore, McDonald and Boud (2003) emphasize that the difficulty is in monitoring the self regulated task since the internal feedback involved generates the pattern of a learner’s engagement with a task (p. 275). Traditionally, teachers are the knowledge givers and students are the recipients with a summative assessment at the end of a unit of study. As a result, students are unable to partner with their teacher and take an active role in their own learning. Self and peer assessment is a step towards a more authentically student-centered classroom inviting students to participate in their own learning (Black and Harrison, 2001; McDonald and Boud, 2003). Teachers can integrate self assessment training into their existing curriculum as a form of formative assessment to aid students in the practice of strengthening their self assessment skills (McDonald & Boud, 2003, Ross, 2006).

Schunk (1996) explains that self assessment consists of three processes—1. Students make self observations specific to their performance on a particular standard; 2. Students self judge determining how well they met their goals; 3. Students self reflect by making interpretations of the degree of goal attainment. When training students in self assessment, emphasis should be on the focus of particular aspects of performance with regards to learning objectives and using a rubric, scale, peer, or teacher feedback. This practice encourages ownership (Sullivan, K. & Hall, Cedric. 1997). Ross (2006) argues that it is more work to self
assess than to be a recipient of teacher appraisal, and self assessment of the student is where the skill develops with support from the teacher. Sullivan, Hall, and Cedric (1997) emphasize that it takes time and practice to obtain the skillset for self assessment—it has to be a part of the culture, routine, and consistent.

**Feedback and peer assessment.**

Black and William (1998) explain that there is a need to emphasize student understanding versus performance goals, such as grades, since grades do not give specific feedback to what the student knows and achieved. Additionally, Black and William (1998) emphasize that it is not enough to possess a feedback loop between teacher and student. The feedback loop must occur enough times for the student to understand their achievements as authentically demonstrating the desired outcome (p. 158).

Lew, Alwis, and Schmidt (2010) explain how regular and timely feedback provided “optimal conditions for learning self-assessment” since students could receive cues and feedback from their peers and teacher (p. 152). For instance, when students are able to self assess, track their progress, and communicate the learning, the impact on their performance is great (Black & William, 1998; Stiggins & Chappuis, 2008).

Boud (1986) explains that peer assessment allows students the opportunity to observe their peers’ learning process allowing them to gain a more nuanced understanding of self assessment. While peer assessment encourages the review and clarification of understanding one’s work, Lew, Alwis, and Schmidt (2010) warn that students may view peer assessments as unfair and should not factor into grades.

**Limitations of research.**
Much of the research pertaining to self assessment discusses individual teachers’ action research lacking explicit discussion about the imperative training component to fostering self assessment (McDonald and Boud, 2003). Additionally, existing research explores accuracy of student self assessment when compared to teacher assessment, which defies the purpose of self assessment in a reflective sense (Boud and Falchikov, 1989). These studies primarily exist within the context of primary school or higher education, not secondary school.

**Metacognition and its Relationship with Reflection and Self Regulated Learning**

According to the American Psychological Association (1997), metacognition is recognized as one of the more important factors contributing toward effective learning. The review suggests that as “students’ metacognitive abilities develop, so do their abilities for self reflection and self regulation of learning, which in turn will lead to improvements in academic performance” (Lew, Alwis, & Schmidt, 2010, p. 136). Coulson and Harvey (2013) emphasize that the development of metacognitive skills and reflective thinking is the result of scaffolding and intention given to the learning of the skills. Researchers concur that reflection is inherent when learning from experience since it involves feelings and cognition, which are closely linked (Bout et al, 1985, Mezirow et al, 1990). When one critically reflects, self analysis and openness to new ways of thinking or approaching the world occurs which is not something all students innately possess. This higher order thinking of cognition is the result of self regulation and metacognition (Paris and Winograd, 2003; Coulson and Harvey, 2013).

Marzano (2004) argues that student learning cannot be successfully benefitted by metacognition unless students are authentically committed to their learning, the learning process, and learning the task at hand. McAteer and Dewhurst (2010) report from their study the participating teacher’s epiphany to see reflection as an essential part of the learning process. In
order to enable students to learn, she purposefully brought the process of thinking and learning to the forefront, so students could gain ownership and organization of their learning. According to Atkins & Murphy (1993), the cognitive and affective skills of self awareness, description, critical analysis, synthesis, and evaluation are necessary when engaging in reflection. van Kraayenoord and Paris (1997) conclude that “students who are proficient at self appraisal also have more positive attitudes about school and greater intrinsic motivation” (p. 527). For instance, Moon (2006) discusses how journaling gives both ownership and promotes metacognition. Authors also discuss Mok, et al’s, (2006) study in Lew, Alwis, & Schmidt (2010) saying that via interviews with students that metacognitive approach supported their learning. The inclusion of metacognition within a discussion of self reflection is appropriate due to the overlapping analytical and emotional skills involved which also provides an extended body of research to consider.

**Importance of the Opportunity to Reflect and Receive Feedback**

According to Hattie and Jaeger (1998), feedback is the most powerful single factor that enhances achievement (Quinton & Smallbone, 2010, p. 127). Furthermore, Yorke (2003) argues that the extent that educators involve themselves in reflective processes affects the effectiveness of their feedback to their students. Similar to providing regular opportunities to practice reflection, receiving feedback, too, must exist as a regular and ongoing aspect of the classroom environment (Mutch, 2003; Gustafson and Bennett, 1999). Quinton and Smallbone (2010) add that while students may be aware of patterns in the feedback they receive, they may not know what to do with the feedback. The presence of a routine feedback loop between the student and teacher would help to curtail this potential issue.
Trust and Vulnerability Involved in Collaborative Reflection

Seminal authors of student self reflection, Boud, Keogh and Walker (1985), define reflection as: “those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations” (p. 19). These activities usually consist of reflective dialogue in a collaborative setting which directly supports students in assessing their learning as a process and within a socially constructed setting (Clouder, 2000; Habermas 1972; Stewart and Richardson, 2010). In order for this to occur, educators must commit to utilizing intentional grouping strategies to best foster an experiential learning environment for self reflection and student achievement (Clouder, 2000; Herrington, Parker, and Boase-Jelinek, 2014; Kemmis, 1989; Stewart and Richardson, 2010).

When affording students the opportunities to learn within differentiated small group communities, their ability to internalize their own learning as well as their peers’ significantly aids their self awareness and academic achievement. As a result of this process, students begin recognizing the need for building an environment of trust in order for students to authentically experience the learning and reflecting more fully (Stewart and Richardson, 2010).

Empathy provides others a safer environment when outwardly acknowledging ideas and evidence that may make a new initiative or philosophical shift frustrating. Ferrazzi (2014) discusses the influence of candor and how it can directly impact the team’s productivity. As a result of this sort of culture, members feel they can share honestly which eliminates the after meeting conversations. Theorists agree that the trait most valuable of all is empathy (Goleman, 2001 & Salovey, 2008). Dr. Peter Salovey of Yale University (2008) argues that empathy evokes trust. Similarly, Goleman (2001) explains that if we lack empathy, we are less likely to be effective in relationships. As a result, it becomes increasingly important to practice empathy and
awareness in understanding how our own emotions interact and affect others and their emotions and performance.

Apple (1985) explains how day to day routines compound over time determining policies and cultures. Researchers agree that in order for meaningful collaborative reflection to occur, guided processes and activities facilitate the experience. For example, Williams and Power (2010) emphasize that repeating similar questions at the beginning of each collaborative session helped deepen the reflections of the participants. Furthermore, by repeating similar questions and question stems, a cyclical process and method facilitated the reflection process as well as its depth of dialogue. Participants felt safer taking risks because of the familiarity of the experience as well as the more interpersonal environment (Williams and Power, 2010). Teachers feel more comfortable in the reflection process after doing it regularly and begin developing sensitivities to one another (Bevins, Jordan, and Perry, 2011; Freese, 2006; Williams and Power, 2010).

Danielowich (2012) similarly explains how patterns in responses to their peers’ work revealed a wide variety of orientations towards recognizing different ways to make sense of teaching. As a result of participating in a collaborative and reflective process, teachers diversified their thinking about others’ teaching learning how to better articulate their thoughts. Educators must commit to utilizing intentional grouping strategies to best foster an experiential learning environment for self reflection and student achievement (Clouder, 2000; Herrington, Parker, and Boase-Jelinek, 2014; Kemmis, 1989; Stewart and Richardson, 2010). When working collaboratively in groups, student relationships can enhance the group processes aiding students in learning how to internally self reflect (Baldwin, 2010). Finlay (2008) discusses collaboration as an approach to reflection and references Ghaye, 2000 (Finlay, 2008, p. 7). Collaborative
reflection not only provides students the opportunities to practice reflecting within a more supportive environment with peers, students also experience varying models of reflection since so much of reflection is unique to the individual.

**Limitations in Reflection Literature**

In reflective research, there is a lack of clarity regarding the definition and concept of reflection and few studies depict what the reflection process looks like (Atkins and Murphy, 1993). Researchers agree that there needs to be more empirical research studies demonstrating evidence for the practice of reflection (Hargreaves 2004; Ixer 2000; Mamede and Schmidt 2004; Fook, White, & Gardner, 2006). Fook, White, and Gardner (2006) criticize the under researched nature of reflection despite its common use in educational settings. Furthermore, researchers highlight that many published studies do not detail the methodologies used in examining reflection and its process (Fook, White, and Gardner, 2006; Hargreaves, 2003; Moon, 2000). Hargreaves (2003) takes the void of research further arguing that it is difficult to combat the culture of academic performance and grade point averages since students prioritize that over the learning and engaging in honest reflection without a body of research to support the prioritization of authentic learning and reflection. Lastly, additional researchers critique the absence of examples or guidance on how to assess reflection (Boud, 1985, Schon, 1987, and Ghaye and Lilliman, 1997). With more replicable studies available pertaining to the implementation of self reflection, more teachers and researchers can more impactfully contribute to the research as a whole.
Chapter 3: Qualitative Methodology

Qualitative case study methodology within a constructivist or interpretivist paradigm promotes the pursuit of a descriptive study. Meadows (2003) states that “the aim of qualitative research is to help understand social phenomena in a natural setting” rather than an experimental one (p. 398). Similarly, Creswell (2003) explains that the researcher of a qualitative study should, however, be aware that the questions may evolve and change during the study since the observations occur in a less controlled setting.

This intrinsic case study methodology promotes the pursuit of a descriptive case study in a naturalistic setting in order to better understand the phenomenon of how students make sense of self reflection in a sophomore English Language Arts classroom.

Research Questions

Central Question:

- What does it look like to engage in teaching which employs a meaningful engagement with self reflection?

Sub-Questions:

- How does a teacher describe the facilitation of self reflection in her students?
- How does a teacher describe her understanding of how students learn to reflect on their learning?
- How do students describe their own reflective learning processes?

Research Design

The purpose of a single site intrinsic case study method is to gain a holistic view and description of the complexity of a phenomenon within its naturalistic or real life context in order
to better understand what, how, or why something occurs (Baxter & Jack, 2008; Boblin, Ireland, Kirkpatrick, & Robertson, 2013; Johansson, 2003; Patton, 1981; Noor, 2008; Yin, 2012). This naturalist approach best fits the pursuit of understanding how students describe and make sense of their own learning in an active learning, real life, and reflective context. At the beginning of the study, the researcher will adapt a curricular unit of study in an on-level English II classroom in order to include regular and intentional formative assessments that invite student reflection.

The planning of the unit occurred in the following phases—backwards planning from the summative assessment by unpacking and categorizing the TEKS (state standards) involved in the assessment, determined the criteria of mastery for prioritized TEKS, created a pre-assessment based on that criteria, took pre-assessment data and plan instruction and lessons including an element of reflection in each, created formative assessments based on the lesson plans to be reflective in nature, and analyzed the formative assessment data to inform continued instruction and lessons where students continue to engage in reflective lessons and formative assessments. This meticulous and deliberate planning of lessons and opportunities for self reflection was contingent on student data collected throughout the study.

There exists an assumption that all students describe the reflection on their own learning in a uniform manner. Experiences vary based on the students facilitating a more active learning approach. This study’s purpose was to describe how a teacher and students make meaning of self reflection during a unit of study in a sophomore English Language Arts classroom.

**Research Tradition**

In Constructivism-Interpretivism, knowledge is subjective, constructed, and based on shared signs and symbols which are recognized by members of a culture. Since multiple realities are presumed, different people experience these differently, yielding varying valid results. The
research focus is on the exploration of the way people interpret and make sense of their experiences in the world and how the context of events and situations within wider social environments have impacted one’s constructed understandings.

Similarly, case study methodology possesses roots in social sciences. The task of the social scientist is to “appreciate the different constructions and meanings that people place upon their experience” in order to capture the complexity of a case (Noor, 2008, p.1602). Within the social sciences, the legitimacy of case study methodology is still up for debate in some circles. Some view case study as solely a prelude to determine if a topic is worth investigating. In addition, there is also a perceived lack of trust in the credibility and reliability of the analysis and conclusions drawn from the evidence collection.

Yazan (2015) explains that Yin demonstrates more positivist leanings in his perspective of case study, whereas, Stake and Merriam possess more constructivist epistemologies valuing people’s experiences and how they make sense of them, as varying as they may be. As a result, Yin’s approach to case study possesses more emphasis on the methodology than on the details of the case being studied. This involves prioritizing construct validity, internal validity, external validity, and reliability in order to maintain quality control (Yazan, 2015). Furthermore, Yin argues that researchers are mindful of these components throughout every phase of the study. In contrast, Stake and Merriam prioritize more flexibility in the design and approach since multiple perspectives need to be represented. In echoing Stakes argument for flexibility throughout a study based on the data collection and analysis, Johansson (2003) explains that “it is characteristic of case study methodology that the boundaries, and even the focus of the case, change through the research process” (p. 14). Due to the flexibility that Stake (1995) argues for within the case study design, he explains that the thinking that motivates the research questions
should be carefully accounted for since it determines the path of the study even though changes can occur within the study (Eisenhardt, 1989; Yazan, 2015).

Yin categorizes case studies as explanatory, exploratory, or descriptive while also differentiating between single, holistic cases versus multiple case studies (Baxter & Jack, 2008). Stake (1995) explains that for an intrinsic case study, the case is the dominant focus with the researcher uninterested in generalizing the findings (Baxter & Jack, 2008; Johansson, 2003; Yazan, 2015). Researchers differ in their emphasis of the case study components. While Yin places more emphasis on the method and technique(s) employed in the case study, Stake emphasizes the object of the case as defined by the interest of the researcher (Johansson, 2003; Yazan, 2015). While there is little consensus among researchers on the design and implementation of case study, all seem to agree that careful development of research questions is a crucial component to the study (Yazan, 2015).

Participants

The high school used in this study serviced over 1,300 students in ninth through eleventh grades. Since this study occurred in its third year open, it only housed ninth through eleventh grade. The high school is one of nine high schools in a suburban North Dallas community serving 15,500 high schoolers. The total enrollment in the district is almost 56,000 students.

The twenty-one sophomore students, ages 15-16 years of age, fifteen boys and six girls and the teacher of one class were recruited for this case study. The researcher anticipated three to five student participants along with a participating researcher, their teacher. The sample size was intended to be small to protect the validity and reliability of the results. Additionally, the sample size promoted the replicability of the study. Although a small sample size made the study
manageable for analysis, it poses limitations. The most notable limitation referred to the range of implications as a result of the study.

**Data Collection**

According to Stake (1995), in order to obtain a holistic understanding of a phenomenon, a variety of sources was collected and analyzed. Pursuing a variety of data collection methods yielded rich convergent or divergent conclusions (Eisenhardt, 1989; Stake, 1995; Yin, 2012). Data collection procedures included direct observations, focus group interviews, researcher memos, notes of informal discussions with subjects, and student artifacts.

Since case studies are based on experiences and are established within a profession, it was important to perceive the collection as contribution to a repertoire of cases for the same researcher or other researchers to use (Baxter & Jack, 2008; Eisenhardt, 1989; Johansson, 2003; Yazan, 2015). This was not only important for documentation purposes, but so much of understanding the convergence and divergence of evidence was based on thorough understanding and analysis of pre-existing literature, particularly qualitative data.

**Observations**

While a common and oftentimes fruitful approach, direct observations also entail a risk of researcher bias and unreliability of data. The researcher’s participatory role was an important component requiring that interpretation and possible bias was accounted for in the study. This was overcome by continuous self evaluation of one’s positionality and bias, in addition to the use of analytic memos, an observational instrument. The researcher coded the observations similarly to coding a transcript. Observations for this study included classroom observations and lesson plan notes.
Documents

In order to better make sense of student learning and teacher instruction, the researcher utilized student reflective journals, reflective formative assessments, observation and discussion notes, lesson plan notes, and researcher analytic memos for this study. The specific protocol(s) and appendices are included during the data collection portion of the study.

Data Storage

Although there were no identifiable risks for conducting and participating in this study, adherence to the below measures were put in place to affirm confidentiality. The identities of all participants involved in the study were kept confidential, and pseudonyms were used.

The participating researcher made classroom and lesson notes on the lesson plans during and directly following class. Observations and discussions with students were documented by hand and then transcribed into a document. Analytic memos were written and maintained in a Google document. Student artifacts, hard copies and/or digital copies, were duplicated after receiving written permission. Additionally, recordings, transcriptions, and another other documentation or notes regarding data and confidentiality were stored in multiple coded folders on the researcher’s personal laptop. Transcripts, artifacts, and any notes were destroyed a week after final submission of the thesis. No one besides the researcher should need access to the information during the study.

Data Analysis

Coding Process
Coding, unique to the researcher, was essential to conducting this case study. The researcher conducted several levels of coding of study artifacts by hand. The researcher intended to read and code meticulously in her coding analysis in order to get to the nuance and individuality of the participant’s responses. Once the data accumulated varying codes, the researcher sorted them, then organized based on more general topics. These topics yielded themes. Assessing for patterns and discrepancies in the data was crucial to the reliability and validity of the study. The researcher attempted to alter the language of the themes to adequately represent the content within the topics since the language of a theme must be careful and prescribed.

**Interpretation Process**

For this study, the researcher coded by hand to increase reliability. In literature, since the case study approach is not accompanied by a set of routine procedures for analyzing data, researchers develop their own coding approach by determining guidelines and boundaries. This analysis can occur simultaneously with collecting. Yin and Stake agree, with regards to coding, that it rests on the researcher to determine the codes and procedures for piecing together the coded evidence into broader themes in order to create one’s own unique algorithm (Stake, 1995; Yazan, 2015; Yin, 2012).

**Trustworthiness**

The researcher anticipated grappling with her role as an interviewer and observer due to her belief that through self reflection and dialogue with others our compassion and understanding intensifies. The researcher’s role as a district secondary English Language Arts curriculum writer benefits this clarification of potential bias, since she utilized the school district’s curriculum as a
foundation. Since the researcher conducted qualitative research, she accounted for bias by completing daily analytic memos. This not only captured any stream of consciousness within the researcher regarding the study but ensured she was asking pertinent questions and doing the thinking required to see the full potential of the work the students produce.

In addition, the researcher was mindful of the assumptions she made about the students’ capability of engaging in this sort of thinking. Students usually must be taught how to truly reflect and change behavior as a result of the reflection. Merriam (1998) explains that the author’s conclusions need to “make sense” to the reader; that maintaining the audience throughout the writing helps to ensure this occurs (p.199). The explicit discussion of how the evidence and findings fit within the current existing literature gave reliability to the researcher’s conclusions (Baxter & Jack, 2008; Yazan, 2015). Grades were not given to students regarding the reflective components of the unit of study in order to avoid compromising the internal validity of the study.

**Conclusion**

Within the study of understanding student learning processes and utilizing a case study, the interpretivist paradigm allowed for variation within a pool of valid conclusions and results. This project was an interesting one due to its meticulous study of impact on student achievement after receiving either direct instruction on cognitive strategies versus integrated instruction with cognitive strategies. This study reinforced the importance of student-centered learning driving instruction, which was an imperative component to the use of reflective and metacognitive strategies within the classroom.
Chapter IV: Research Findings

The purpose of this research was to better understand how a teacher facilitates reflective processes in her classroom and observes how student participants make sense of their own self reflection. The data collected included participating researcher analytic memos, student daily reflection journals, student lesson reflections, student final reflections at the end of the study, and informal researcher observations and dialogue with participants. The following chapter conveys context for each reflective process and component of the study followed by participating researcher findings, a comprehensive discussion of patterns and themes from all of the data, and finally participant vignettes portraying the dominant findings from each participant's reflections. The following research questions guided this qualitative teacher action research study:

Central Research Question:

What does it look like to engage in teaching which employs a meaningful engagement with self reflection?

Sub Questions:

- How does a teacher describe the facilitation of self reflection in her participants?
- How does a teacher describe her understanding of how participants learn to reflect on their learning?
- How do participants describe their own reflective learning processes?

Summary of Study Site and Participants

This case study allowed the participating researcher, a high school English Language Arts teacher, to examine what it is like to plan for and facilitate student reflection in addition to better understanding how participants make sense of their own reflections on their learning. The
student participants discussed in this study consist of four males and one female, all sophomores enrolled in on-level English II. The participants were selected to represent an average student—not a high achieving student, nor a low achieving student. Additionally, participants were selected due to the fact that they were not absent during the study, thus providing the researcher a complete set of data. The participants were a part of the participating researcher’s first period English II class. The study was conducted at a public high school in a north Dallas suburb with an enrollment of 1500 students.

**Discussion of Major Findings**

After examining the data from the participating researcher and student participant reflections, the following five themes emerged:

1. Creating a classroom culture of reflection requires detailed and purposeful planning by the teacher.
2. Thoughtful resources evidenced support of student learning.
3. Reflective processes are most meaningful when involving a feedback loop.
4. Reflective processes yielded student accountability and self awareness.
5. Self reflection support students’ awareness of growth.

**Creating a classroom culture of reflection requires detailed and purposeful planning by the teacher.** The following findings come from the participating researcher’s analytic memos from before the study and during the study. As the participating researcher, I realized that in order to create a classroom culture of reflection, detailed and purposeful planning was necessary prior to the study and throughout the duration of the study.

**Before the study.** Before the study, I learned quickly how meticulous it is to effectively plan curriculum and instruction considering the varying components in English Language Arts—
reading, writing, analysis, and creation. It was very important to me to be thorough and intentional in all of the planning to conduct this study. A part of this process was accounting for logistics, such as required grades by the school district, the amount of paper resources students were receiving and required to maintain, and the organization of systems enacted to promote a class culture of reflection. More specific to the study, I prioritized additional planning that would more directly impact the participants’ experience—pacing of each curricular unit within the qualitative study, the calendar, establishing a culture of reflection, gradual release of skills with teacher modelling, sentence stems and probing questions for reflection, designating an appropriate amount of time to complete tasks, curriculum planning and spiraling of skills and concepts, and learning targets and goals. I wanted participants to see the purpose of each unit and the connections within the units to student learning targets, provided resources, and reflective processes.

In order to focus my thinking and planning, I prioritized each lesson being planned and focused in relation to the learning targets and the participants’ goals. It was important to me that the participants were able to see the purpose and value in the processes and work, so I knew that the planning must be tight and organized. I understood the necessity of having clear and aligned learning targets based on the standards of the curriculum. Crafting the learning targets took more work than anticipated, since they functioned as the participants’ goals, and thus the ongoing thread throughout their learning during each unit. This planning took forethought on my part to ensure alignment and focus of standards, learning targets, goals, and lessons.

I adapted the Gibbs’ Reflective Model for the purpose of guiding and scaffolding students through the process of reflection. While all reflective processes were based on this model, the lesson reflection depicts it explicitly and step by step. The students received an
accompanying handout with probing questions for each step of the process. I made an effort to make sure I documented the need to make revisions but also understood letting the routine and processes evolve and unfold. Ultimately, I wanted to strike a balance between being too hasty by jumping to conclusion and responding appropriately to students’ needs throughout the study.

**During the study.** During the study, I had to remind myself to be focused on the task at hand and allow myself some grace when encountering distractions or surprises in the classroom. This mindset aided me when I had to be flexible and responsive to the uncertainties that can occur in the classroom, such as distracted students due to St. Patrick’s Day and March Madness, a fire drill interrupting class, or Spring Break, which delayed the habit of a routine of reflection. Since a significant component of this study was to foster a class culture of reflection, I had to balance being flexible but also persistent with the reflective processes. This occurred due to consistency, and I learned that behavior alongside the students. I learned to be mindful of the adjustment to allocating class time to reflection and its processes, which consumed a decent amount of time from each class period when one is not accustomed to running her class in that manner. In response, I learned how to over plan, anticipate hiccups and student questions, and create a tight timeline for each class.

It was imperative that the class routines and procedures specific to the study were clear and maintained. For instance, the participants viewed an agenda at the beginning of each class period which helped to focus their thinking and set the pace for the lesson. Some procedures were new to me, so I had to account for how long they would take, what materials the students would need, and what logistics I may not account for prior to doing them. In addition, there were three instances early in the study when I forgot a daily reflection or ran out of time for a lesson reflection. In one instance, the students reminded me. That was exciting because it seemed to
indicate that the process was becoming routine for them. This was important because establishing a class culture inclusive of reflective thinking was a key focus for this study.

Additionally, I prioritized a clear agenda for each day and was mindful of reviewing it with the participants throughout the class period. I revisited the importance of reviewing the agenda with the participants, so that they are able to see the alignment and purpose of the lesson to the learning targets and their goals. It felt difficult to get into a routine as the teacher. I solicited feedback on how the process was going for the participants and reflected that although the reflective processes at times felt rote due to the repetition, the processes were requiring participants to learn how to reflect and how to reflect more in depth. I recognized that the participants were getting more focused instruction as a result of this study. I needed to give more time limits and more explicit directions due to all of the moving parts within a single class period.

I prioritized student practice when it came to reflection and feedback. To scaffold adequately, I planned to gradually release the process of reflection by modeling the thinking for the participants first and then guide them through structured practice of reflection. Over time, I recognized that modeling was not always necessary throughout the study since participants experienced continual guided practice. For many of the processes, time was a necessary component for making reflection meaningful for students. For instance, the lesson reflection felt cumbersome the first time it was done. Over time, the students seemed more comfortable with the process. I reflected in the analytic memo how well participants engaged in reflection since many, if not all, participants were learning how to reflect for the first time. I facilitated this learning by providing participants sentence stems and probing questions. I wondered if there was power and value in doing these processes over and over. I reflected that even if participants do
not improve on their reflection, they were benefitting from the feedback loops within the processes.

**Thoughtful resources evidenced support of student learning.** When participants reflected on the lesson, they often expressed what they valued about the lesson or class period and commented on how it affected their learning.

**Benefit of resources.** Participants valued how class impacted improvement, particularly due to lesson specific resources. Participants reported the benefit of resources that helped to scaffold their thinking. Jack explained in his lesson reflection,

> I liked that we took it step by step so that was pretty easy and understandable. I'm happy we had more time and an outline to base our evidence off of rather than coming up with something out of the blue. The process and outline of the evidence and thesis paper made it much easier to provide a more relevant and good thesis.

Additionally, participants enjoyed resources that they could easily apply to their learning. Participants reflected on the effectiveness of class or lesson resources, particularly if they helped their learning or not. Brandon and Megan reflected on the benefit of a using a checklist provided by the teacher to facilitate peer revision and editing. Brandon explained in a lesson reflection, "I feel like the checklist that was given to us was very beneficial for us. I think that most would agree with me." Megan reflected in both the daily reflection journal and lesson reflection stating, "Class went well; I got things done, and I learned that the checklist helps my essay and makes it better." She specified, "The checklist helped me overall for my essay [because] it clearly stated what was needed and what wasn't...it points out what I need to work on and fix to make my essay better. I needed to fix my thesis, and I did!"
Participants described effective resources as ones with characteristics of specificity and clarity. One lesson involved students brainstorming a thesis statement with accompanying evidence in response to an essay prompt. A graphic organizer with an outline was provided to help scaffold the students’ thinking. Brandon, Jack, and Megan reflected on how this resource helped their learning. Brandon wrote, "At first, it was somewhat difficult to think of examples, but the sheet helped guide my thoughts and helped me think more efficiently. He elaborated, "The sheet helped because it has categories for evidence. This helped me think back to examples in my life." Participants reported that helpful resources scaffolded steps of thinking with an appropriate allotment of time given for each step. In his daily reflection journal, Jack reflected, “It went well because the steps were broken down in a way I understood [and] how to make my thesis and evidence better. The amount of time for each part made it much easier than the first time we wrote the essay." Megan similarly reflected in her journal, "I felt like [the activity] made it easier and it's more clear to me now to make my thesis." As a result, this process helped alleviate the pressure making the learning easier and more accessible to them.

**Benefit of peer work and peer feedback.** Participants reflected regularly and emphatically on the benefit of peer work and peer feedback. Participants seemed to understand and appreciate the purpose of peer review being to help them to improve and to give useful feedback. From their daily reflection journals and lesson reflections, four of the five participants reflected on how peer work was helpful to their learning. Specifically, Jack and Megan demonstrated an understanding of the purpose of peer work and peer feedback and how it benefitted their learning. Jack stated that "[Peers] can see and tell me about mistakes I may have grazed over," and Megan similarly expressed, "Peer editing helps, so they can catch any mistakes that you didn't catch."
They also valued the reciprocity of peer review and that the purpose is for both parties to improve aiding students in learning how to internally self reflect. Nathan and Brandon explained how they each were helped by engaging in peer revision and getting feedback on how to improve. Jack reflected multiple times on the benefit of peer work and peer feedback. He explained how "The peer editing me and my partner did was beneficial to both of us, so now we know what to work on and what to keep." In another entry, Jack welcomed the opportunity to receive feedback—"I was ready for a new set of eyes to look at my essay. I felt focused because I'm trying to help my classmate as well. It ultimately will help my essay and learning in the long run." He also reflected specifically on what about the collaboration was beneficial to him--"[Revising my partner's thesis made my thesis better because of] finding simple mistakes such as grammar and punctuation he may have skimmed over" and "Revising my partner's thesis and him revising mine only helped my thesis become better."

**Benefit of time.** Participants also reflected on the benefit of time recognizing that time helped their productivity. Participants explained how taking their time in class yielded improvement of learning and achievement of goals. Participants also explained how taking their time during class aided their improvement and achievement of their goals. Another time, Jack expressed needing more “time management skills.” He also explained needing to slow down when completing his work—"I think I really need to read the passage slowly and deep to fully understand the content from now on." Similarly, Brandon reflected on his need to be focused and take his time saying, “To prevent this next time, I will be more focused at the beginning of class because that is when I'm slowest.” Some participants discussed the need to spend more time to produce meaningful work. Jack stated, "[my] evidence needs to be developed and planned so it can be relevant to my thesis. Spend more time on it."
Participants valued having time dedicated to their improvement and recognized the importance of spending one’s time wisely. Participants recognized that time helped their productivity. They valued having time dedicated to improvement and also noted that spending this time wisely increased productivity. Jack explicitly reflected on the benefit of having time to work in class. Jack reflected on his own work saying, "The most important event that happened for me today was I got more time to work on topic sentences and my thesis" and "Today, I did everything I could in the amount of time, and I think it's decent." At other points in the study, Jack reflected his contentment about class due to the allowance of time. Jack explained, "I'm happy we had more time and an outline to base our evidence off of rather than coming up with something out of the blue." Andrew similarly echoed this insight saying, “I feel like I got better at writing because we worked for so long."

Participants also valued having time and the autonomy to decide how to spend it. At two different times in the study, Brandon reflected on his peers’ behavior utilizing time and observed, "I think many achieved their goals because everyone had been silently working in class" and "I think beside the fact that some were off task, the free time helped for those who worked." Nathan and Jack expressed the desire to have more time to work to complete their goals. Other participants reflected on the want to manage their own time but for different reasons about the time. For instance, Megan reflected about the quality of her “essay” being compromised “because of being rushed.” Contrastly, Nathan and Andrew reflected multiple times throughout the study that they both valued finishing their work quickly and wanted the ability to manage their time to achieve that. Nathan stated, "I would like to finish my paper that way I [get] a free study hall next class." Another time, he reported, "Something stopped me from finishing sooner was being paired with someone not done."
Reflective processes are most meaningful when involving a feedback loop. In addition to prioritizing a culture of reflection in the classroom, the study included a significant focus on feedback, specifically the feedback loop. The success of this, too, is due to scaffolding, practice, and creating a class culture of giving and receiving feedback.

**Organic feedback loop.** Establishing more opportunities to engage in a feedback loop came as a revision during the study. Previously, I had planned for a feedback loop to occur using the lesson reflection—the students would complete the sheet, I would reply, usually with questions, and they would respond. I quickly realized the feedback loop was not occurring fast enough, but it was not realistic to conference with each individual student every class period. One student asked if I would reply to his daily reflection journal. I loved the idea but worried about how much time it would take and if it could be something realistically practiced by teachers. After doing it a few times, I found that the process went faster than I anticipated and was perhaps one of the most impactful processes of the study.

**Structured feedback loop.** Participants valued how the lesson reflection functioned as a feedback loop when getting feedback from their teacher. Nathan more broadly explained that "It was positive to get feedback," while Brandon specified that "Feedback helps me prepare mentally for the next class." The participants understood and exercised their ability to express themselves and gave pointed feedback to their teacher in the daily reflection journal and lesson reflection. Brandon explained that "[The reflection sheets] help me learn because I [am] able to get feedback on everything I write," and Megan similarly expressed that "[The reflection sheet] has helped my learning by getting feedback." All five participants reflected on the benefit of feedback and the feedback loop processes, but they did not specifically name the processes like Brandon and Megan did.
Platform to express one’s self. Since the daily reflection journal is less content specific and is more informal than the lesson reflection, students took advantage of utilizing it as a platform to give feedback to me regarding their learning, my instruction, how class went, and their improvements or their challenges. By replying, I had a documented, ongoing dialogue with each student. Participants explicitly reflected on the benefit of having a platform to express themselves. When participants reflected on class or the lesson, they tended to explain what was helpful to their learning. Andrew and Brandon discussed the benefit of the daily reflection journal and lesson reflection for being platforms to express themselves. Andrew explained that the "[The reflection sheet] helped because I can say what I think went wrong," and "[The daily journal] helps because I can say if I don't understand something." The reflective processes allowed for participants to reflect on the class period and their learning, and it felt meaningful to them knowing someone else was reading their reflection. While Andrew valued the opportunity to express confusion, so the teacher would know, Brandon, valued the opportunity to express “what I need to do better in class.” Not only did it allow for them to express themselves, it allowed for me to clarify and respond. Some of the most meaningful responses came in the shape of mini lessons or resources to address student learning concerns or misunderstandings.

Partnership with teacher. Participants reflected that over time a partnership and dialogue emerged since the student could give immediate feedback to the teacher regarding their learning and progress. Four of the five participants specifically discussed how receiving feedback from the teacher was helpful to their learning. Megan and Brandon explained similarly how receiving feedback from the teacher “helps because then my teacher knows what I need to work on” and “helps me point out what I need to work on in class…. [and] further guides my thinking by answering the questions.” Jack reported that "[Receiving feedback from the teacher] helps
because it makes me work hard," and Nathan detailed that "[Receiving feedback from the teacher] helped [because] you know that [the teacher] looks at the paper and gives feedback because it shows that you care and that you want to understand how to help."

Participants not only commented on receiving feedback but also on replying to teacher feedback. Megan and Nathan gave pointed feedback to the teacher when saying, "I wish you would have responded to give clarification that you read it [and] are willing to help," and "I feel like I need a response, so I know what else I need to work on." Nathan elaborated that "Replying to [teacher] feedback is really good because it answers any questions the teacher has. It is super helpful to me because it means you'll fully understand." Megan similarly valued how replying to teacher feedback “affects my thinking by knowing what thoughts and questions my teacher has for me." Andrew appreciated the completion of the feedback loop when replying to the teacher “because we get to see what she wants us to write about.” Brandon expressed two reasons for finding teacher feedback helpful—it “lets the teacher understand what a student's goal is for future classes" and “helps the teacher [to] better pinpoint what to teach in depth." Brandon and Andrew also gave feedback to the teacher on the lesson or instruction. Brandon explained, "I feel like other saw today as a day where you work for your own benefit.” Andrew suggested, "Having a list for what goes into an essay [would help me] to think about what goes into an essay," which led to the creation of the essay checklist for revising and editing.

**Reflective processes yielded student accountability and self awareness.** Participants reflected on their productivity and achievement of goals in their daily reflection journals, lesson reflections, and goal setting. As a result, the students seemed to express multiple benefits from each process, specifically, increased accountability and self awareness.
**Increase in accountability.** Students experienced an increase in accountability as a result of the reflective processes. Participants saw improvement in their understanding in reflecting on the class period as a whole. This seemed to help them to recall their thinking and experiences during that class period because reflecting gave them immediate feedback on their day making them accountable. Nathan and Megan discussed how the daily reflection journal and lesson reflection processes helped them to reflect on the day as a whole. Nathan explained that "[The daily journal] is super helpful as it helps me understand how I've done each day and also helps to know how I'm doing each day especially individual days with a lot of individual work." Similarly, Megan explained how "[The reflection sheet] has affected my thinking by thinking about what I did today and what helped me in class, also what I learned." This clarity gave ownership back to the students.

Additionally, participants explained how setting goals and reflecting on them on a daily basis helped to hold them accountable. Since students had the autonomy to set goals of their choosing, based on the learning targets, participants felt ownership and thus motivated to achieve their goals. Jack and Nathan explained more specifically that the reflective processes of the daily reflection journal, the lesson reflection, and the process of setting goals helped their accountability. For instance, Jack liked how "[The reflection sheet] allows for me to pick and choose individual goals to work on before STAAR." He elaborated saying, "[Setting learning goals helps] identify your strengths and weaknesses and you're putting responsibility on yourself." Nathan shared a similar reflection explaining how "[Setting my own goals] helps me a lot because it tells me what I need to work on."

Participants also reflected that reflecting daily helped their productivity by holding them accountable. Participants also reflected on how the daily reflection journal entries naturally
tracked their progress informing their accountability. They valued reading over previous entries which gave them a kind of “self talk” regarding their improvement. Jack and Megan agreed that the daily reflection journal helped productivity and accountability. Jack explained that the daily reflection journal “makes me productive because when I say I'm going [to] do something, I do it." Megan similarly stated, the daily reflection journal“ has affected my thinking by helping me get my goals done." Jack also stated the desire to "Find a way to remind myself to work on my essay even if I think it's good enough. Studying and going over what we're doing in class will help make my essay better."

**Increase in self awareness.** Students become more self aware after engaging in self reflective processes. The participants demonstrated self awareness when discussing and reflecting on their improvement. Oftentimes this thinking was facilitated by the use of provided sentence stems and probing questions as part of Gibbs’ Reflective Cycle.

Participants seemed comfortable articulating self-awareness and feelings in their reflections, and some used the sentence stems “I learned…,” “It’s important…,” and “I feel…” For example, Brandon conveyed, “I learned that I subconsciously try to work as independently as possible which isn't always helpful whenever I get stuck." He elaborated, "I learned the importance of getting everything finished in class, so that I do not just throw an essay together to get it done. It's important for me because I never end up doing quality work on assignments that I don't end up finishing in class." Andrew reflected, "I learned that I struggle with coming up with a good thesis." Jack expressed, "When revising and editing, I feel I must have it perfect, so it often stresses me out." Brandon reflected, "I feel like everything that I have learned this year in English has helped me a lot. This essay hasn't been quite as unorganized as my others." Andrew seemed comfortable expressing when he felt “frustrated, bored, or challenged” in four different
reflective entries. Andrew also expressed when he felt he improved, "I felt like I got better at understanding about writing passages."

Some of their self awareness was the recognition of behaviors within one’s self. Participants were making explicit connections between behaviors and results. I observed that many of the student reflections were in response to what they felt they “needed” to learn or on which to improve. Megan reflected on her desire to improve in two areas, 1). "I need to add new text evidence to go with my literary elements that I chose. I need to be able to turn in the essay, have everything done" and 2). "I need to improve on my be verbs and how to rephrase the sentence without the be verbs.” Andrew expressed his “need to develop a sense of focusing." Jack and Andrew also stated the need to review their work. Jack stated, " I need to go over hook sentences in the first paragraph of my essay," whereas Andrew reflected “I need to go over the steps to an essay."

Not only would participants articulate a challenge they experienced, they would include a suggestion of how to improve or fix it. Participants seemed comfortable reflecting on problems they encountered in their learning and in giving suggestions on what would help them to improve. The participants usually used the verbiage, “could” or “could have.” Jack engaged in this kind of reflection on three different occasions discussing how he “could have utilized resources, done his homework on time, and spent more quality time in class focusing on his work.” Andrew explained, "I realized that [the essay] wasn't as good as I thought. I could explain a little more. I thought my essay was good, but there were some things wrong." Megan reflected, "I could have found different evidence rather than two historical figures that did almost the same things." Like Andrew, Nathan was also reflective throughout the study in what challenged him and his learning and commonly reflected on with what skills he struggled hindering his
improvement. Nathan stated, "Something I could've done differently was I could've worked on my goals instead of doing something easy." The utilization of the sentence stems seemed to evoke self awareness.

As a result of documenting self reflection, student recognized improvement in their learning. After reflecting daily, participants inferred that sustained focus led to an increase in their productivity and improvement, specifically with their goals. As a result, the participants found class to be effective and a positive experience. Additionally, participants seemed to notice improvement that occurred immediately, as well as, improvement that occurred over the course of time. Many participants saw a correlation between making a plan to improve and experiencing improvement.

Focus yields productivity and improvement. Students recognized that focus yields productivity and improvement. Many participants seemed to equate focus with productivity because prioritizing being focused caused them to be productive in other ways. Brandon, Jack, and Andrew reflected specifically on the effect of focusing in class. Brandon stated, "I think it was [successful] because I tried my hardest to jump on task as quickly as possible at the beginning of class," and Jack reflected how he should focus in the future saying, "I think I really need to read the passage slowly and deep to fully understand the content from now on." Andrew also reflected on what he could have done stating, "I think if I had read over my paper more, I could have noticed things." Since focused practice creates improvement, participants felt more productive, which is a satisfying feeling of achievement.

Brandon seemed to consider an effective class period with one when he is focused and able to improve and achieve his assignments and goals. "[Today went] very well. I was able to stay focused on the passages and answer the questions accurately." He reflected on his behaviors
in class and how his behavior(s) impacted his focus on class and the lesson. Regarding running out of time, "to fix this, I could prioritize my tasks during class in order to be more efficient. I could do this by preparing better or get more sleep. It does help knowing this so that I don't spend the beginning of class day dreaming." Megan expressed the value of focusing and its impact on her productivity and achievement stating, "By working on the brainstorm and reviewing prompt in class made me understand the prompt so much better, which made it easier for me." Four of the five participants reflected regularly on their association with focused practice, productivity in class, and improvement in their learning. Brandon explained that the ability “to get in quality independent work without rushing through work” helped him to “accomplish a lot.” Nathan described his class improvements with verbiage such as, “productive,” “impactful,” “positive,” and multiple mentions of “figuring [something] out.” Participants found that they experienced sustained focus when experiencing success or improvement.

Participants also reflected that goal setting helped to focus their thinking on how to be productive every class period because having a goal to focus on gives them somewhere to focus their thinking. For instance, Brandon explained that "Goals have helped me because I know what to personally focus on in class." Megan reflected similarly saying, "[Setting goals] helped my learning a lot because I can work on my weaknesses and improve" and "[Setting goals] has affected my thinking by trying to get better at my goal." Participants also reflected on behaviors that could impact achievement of their goals. They began recognizing that certain behaviors yielded improvement and engagement. Brandon reflected that focus and engagement impacted or could impact the achievement of their goals. He explained, "In order to achieve my goals next class, I will jump right into my assignment at the beginning of class. It helps me get in the
groove of focusing rather than spending the class lost." About the practice of goal setting, Nathan explained how "Setting my own goals helps me a lot because it tells me what I need to work on more." They reflected that when they shifted behaviors with their goal in mind to improve, the class period felt more effective, and they became more self aware. On his behavior, he reflected, "Something I could've done differently was I could've worked on my goals instead of doing something else." Participants seemed comfortable expressing their desire to improve their learning and to achieve their goals. As a result of setting goals, participants reported feeling more engaged throughout the class period which affected their behaviors in class.

When participants desire to produce and improve, their thinking and behavior is more focused, and they feel a sense of achievement. For instance, participants valued the ability to make revisions or corrections to their work because they were able to immediately experience productivity and improvement. Nathan explained in his lesson reflection, "Something that went well was that I had only missed two questions, and the correct answers for them were understandable…I think the reason the [corrections to questions on the STAAR practice] went well [because] I understand the corrections needed." Brandon reflected, "The most important event that happened for me today was making corrections to my thesis. The most important thing about class was reading and analyzing our peer's paper and receiving feedback." In two separate entries, Megan reflected, "I like how I got to see what I got wrong on each passage, so then I can work on my mistakes and improve," and "I thought today was easy and helpful, so I can finish my essay and review any errors." Andrew explicitly associated a “positive” or “helpful” class with his ability to improve. Their perceptions of class going well directly correlated with how focused and productive the participants felt as a result of their want to improve.
Furthermore, when the participants identified problems to remedy or improve, they found benefit in having a specific plan to address them because a plan focused their thinking and behavior. Participants explained that preparation and planning prior to class helped to focus their thinking. Throughout the study, Nathan, Megan, Andrew, and Jack discussed in their daily reflection journals and lesson reflections what they would like to achieve or focus on the following class period, usually using the sentence stem, “Next class…” These behaviors included “having my be verbs eliminated,” “sentence structure and theme,” “have evidence ready,” and “preparation and knowing what to do prior [to class].” The fifth participant, Brandon, also reflected on what to work on the next class period, but he emphasized the importance of staying focused during class: "In the future, I plan to try my best to stay on task throughout the class period." "In order to achieve my goal next class, I will jump right into my assignment at the beginning of class." The participants saw benefit in their learning when engaging in actionable forethought.

**Recognition of immediate improvement and improvement over.** Students recognized immediate improvement and improvement over time as a result of documenting their reflection. When reflecting on practice and improvement, participants tended to explain in terms of an immediate experience or one in which they reflected on practice and improvement over time. For instance, one participant set a daily goal of talking less, so she could sustain focus. She experienced immediate improvement as a result of achieving her daily goal of talking less. Other participants often reflected that practice with appropriate resources helped yield their improvement and that they could experience it within a single class period. Megan and Brandon reflected on the immediate experience of practice yielding improving during a single a class period or lesson. Participants often specified an aspect of the lesson. Megan had two particular
experiences. Megan conveyed in her daily reflection journal that she “will write an essay. I will get it done by talking less." She reflected at the end of the period that “[I talked less] and it helped." Additionally, and in a different context, Megan specifically reflected on the benefit of a brainstorming lesson which “made it more clear to me now to make my thesis better." Brandon reflected on two writing assignments in class saying, “they showed me that not just any thesis or evidence will work in an essay."

At other times, participants reflected on their improvement over time due to ongoing practice. Participants attributed improvement to ongoing and focused practice pertinent to what they were learning. Sometimes participants explained that they noticed their improvement because practice became easier. Brandon, Nathan, and Megan articulated their reflection of improvement over time due to practice. Megan specifically articulated in different reflective contexts the benefit of practice. She explained, "[Practice helps] because you can work on your weaknesses." During a feedback loop, I asked her: "How will you get better?" Megan replied: "By working on weaknesses and practicing." In a lesson reflection, Megan stated, "I will get better at my goals now because I practice them.” Megan’s reflection over the course of several class periods conveyed specific improvement. After one lesson, Megan reflected, "I felt that the Malala passage was easy, and I am happy that we are practicing for STAAR because I needed to practice before the EOC." Another time, Megan reflected, "Class went well today. I just didn't understand the prompt for the CBAP. It didn't make sense to me and just wrote what I think it meant." The following class period, Megan reflected that "Today went well, and it helped me find better evidence. By working on the brainstorm and reviewing prompt in class made me understand the prompt so much better, which made it easier for me." Nathan also reflected on writing focused lessons explaining, "I feel like it was great to write the paper as it is more
practice writing about a book.” Two class periods later, Nathan reflected "I feel like today was pretty simple mostly because doing writing corrections feels simple to me, which is odd, since I have dyslexia." Brandon used words such “a lot easier” and “helped me a lot” when explaining his improvement. Additionally, participants reflected that when they saw themselves improving, they experienced greater confidence and self efficacy. This reflection had a greater impact on the participants when they looked back over the course of time and realized their improvement.

Nathan conveyed that it is “great...see[ing] how I am changing as a person.” Jack described his improvement as “giv[ing] me new confidence.” The recognition of improvement in one’s self boosted their self efficacy.

**Participant Vignettes**

This study also detailed patterns of reflection specific to each student participant.

**Nathan**

Nathan was most reflective at the end of the study in the final reflection opposed to the day to day reflection entries. In this final reflection, Nathan predominantly discussed how being self aware and engaging in a feedback loop was the most helpful to him.

When reflecting on the goal setting process, Nathan explained how "setting my own goals helps me a lot because it tells me what I need to work on more," which helped him to focus in class with his work and reflection. Nathan also noted improvement as a result of the daily journal reflective process. He discussed how "[the daily journal] is super helpful as it helps me understand how I've done each day and also helps to know how I'm doing each day especially individual days with a lot of individual work."

In addition to the reflective processes, Nathan expressed his appreciation for the teacher-student partnership, particularly the feedback loop. Nathan stated in a daily reflection journal
entry, "My 'ah-ha' moment was when I was told what things I'm doing right and things I'm doing wrong." When reflecting on the feedback processes, Nathan primarily discussed the value in receiving feedback from the teacher and in replying to the teacher. For instance, he stated, "replying to [teacher] feedback is really good because it answers any questions the teacher has. It is super helpful to me because it means you'll fully understand." He also valued the feedback loop and partnership with me when receiving feedback—"[Receiving feedback from the teacher] helped [because] you know that [the teacher] looks at the paper and gives feedback because it shows that you care and that you want to understand how to help."

**Brandon**

Throughout the study, Brandon often reflected on the importance of being focused for him to learn best. In addition, he expressed how he valued class resources and feedback.

Brandon valued being focused in order to plan meaningfully for future classes. He attributed that behavior to setting "goals...because I know what to personally focus on in class." He exhibited in his reflections a balance of preparing for future classes while reflecting on each class and learning experience. He explains, "in order to achieve my goals next class, I will jump right into my assignment at the beginning of class. It helps me get in the groove of focusing rather than spending the class lost." This kind of self awareness is prevalent throughout his reflections. He discussed how he learned “that I subconsciously try to work as independently as possible which isn't always helpful whenever I get stuck." He was aware of when he improved his learning or understanding and recognized how his thinking and behavior had changed when working through a challenge.

Brandon found meaning in class, specifically in the scaffolding, class resources, and peer work. He explained, "I feel like everything that I have learned this year in English has helped me
a lot. This essay hasn't been quite as unorganized as my others." Brandon explicitly discussed his value of time to improve and to get focused. He also noticed that he worked more efficiently when he prioritized his tasks and “when I work independently, I feel that I focus and absorb information easier." On one of his lesson reflections, Brandon wrote, "At first, it was somewhat difficult to think of examples, but the sheet helped guide my thoughts and helped me think more efficiently." I replied asking, "Which parts of the sheet helped that?" He answered that "the sheet helped because it had categories for evidence. This helped me think back to examples in my life." This feedback loop demonstrated his ability to engage in reflective thinking about what helped his learning in class.

Brandon also explained that he valued the feedback loop and feedback from his teacher. Brandon explained that engaging in a feedback loop with his teacher is helpful because the "feedback lets the teacher understand what a student's goal is for future classes…[and] can better pinpoint what to teach in depth." It also helped focus him on what specifically he needs to work on. He emphasized that "feedback helps me prepare mentally for the next class." Brandon also valued feedback when working with others in creating a feedback loop. He recalled that "while writing essays in the past, I never really thought too much about connecting to the thesis throughout the essay. Working with a partner helped remind me of what I needed to include in my essay."

Andrew

While Andrew articulated throughout the study how he saw the benefit of taking his time, he grappled with wanting to work faster. He often said, "I think I did well because I took my time" or "Because I took my time, I got to understand everything," but he also stated his preference to work faster—"I feel like I could've worked faster" and "Something that could've
gone better was that we could've gone through it faster." He commented frequently on speed, either on his own performance or when reflecting on how much time something took in class. For instance, he said, "I felt really bored because we were working on the essay for a long time, [but] I feel like I got better at writing because we worked for so long."

Andrew is also reflective on the importance of focusing. He pondered, "I think if I had read over my paper more, I could have noticed things," and even admitted on separate occasions, "I wasn't as focused as I should have been. [If I] focused more on the passage, I would've known more about the passage. I need to develop a sense of focusing."

Andrew seemed comfortable expressing his value in having a platform to express himself and valued participating in a feedback loop with his teacher. "[The reflection sheet] helped because I can say what I think went wrong. [Replying to the feedback from the teacher] helps because we get to see what she wants us to write about." He valued being able to express himself and valued engaging in a feedback loop.

**Jack**

Jack discussed focus, autonomy, and accountability within his reflections. These values were prevalent in his responses in the daily reflection journal and lesson reflections. When reflecting on practice, Jack said, "This kind of practice was something I used to struggle on, but based on the way today went, it has given me new confidence." In another instance, he explained that “I'm good at finding textual evidence. It's just sentence structure and theme is something I need to work on.” This self-awareness was prevalent throughout his journal entries.

Jack was reflective and self aware when it came to his improvements and shift in behavior in order to improve. "I liked that we took it step by step so that was pretty easy and understandable. I'm happy we had more time and an outline to base our evidence off of rather
than coming up with something out of the blue." He also reflected on his shift in thinking—"I could've started with my thesis, then evidence, but I changed it up and did evidence followed by thesis. It helped my thesis a lot. I just felt it made my thesis more organized with relevant evidence." Jack repeatedly conveyed the importance of preparing for class and taking one’s time. He recalled, "If I had done my homework two classes ago, I would be more confident because I wouldn't have any be verbs." He also reflected two different times on the importance of taking his time. He explained, "I think I need to really read the passage slowly and deep to fully understand the content from now on." In another entry, Jack recalled, "In the past, I would just skim the passage looking for the answers rather than actually reading it properly." He acknowledged that he understands that "preparation and knowing what to do prior helps tremendously."

**Megan**

In Megan’s reflective entries, she seemed comfortable articulating what was helpful to her in class and how feedback helped to focus her thinking. She wanted feedback saying, "I feel like I need a response [from the teacher], so I know what else I need to work on." Megan valued practice and liked to articulate her plan for each day as well as make plans for the next class period. For instance, she said, "By working on the brainstorm and reviewing prompt in class made me understand the prompt so much better, which made it easier for me...Next time, I will think of more and different evidence or go more in depth with the evidence I already have."

Megan also valued having a platform to express herself and to engage in a partnership with the teacher to establish a feedback loop. She explained that, "[replying to the feedback from my teacher] affects my thinking by knowing what thoughts and questions my teacher has for me...[and she] knows what I need to work on." Megan repeatedly evaluated the effectiveness of
class and the lessons on her learning. Specifically, she discussed regularly in her daily reflection journals and lesson reflections the benefit of reviewing concepts, the utilization of resources, and the ability to practice. For instance, Megan recalled that the brainstorming lesson “made it easier and it's more clear to me now to make my thesis better." After the following class period, she explained how, "the checklist helps because it points out what I need to work on and fix to make my essay better. I needed to fix my thesis, and I did!" She attributed this work to being able to witness her own improvement and growth.

Megan also was not shy to reveal that she was aware of needing to consistently stay on task and be focused. She admitted on several occasions that “[she] would have gotten more done if I stayed on task.” Additionally, Megan discussed how the daily reflection journal “has affected my thinking by helping me get my goals done." She reflected on resources that helped her to stay focused and explained that "[Setting learning goals] has helped my learning a lot because I can work on my weaknesses and improve." She valued setting goals to improve and expressed how it helped to reflect back. "[The reflection sheet] has affected my thinking by thinking about what I did today and what helped me in class, also what I learned.”

Summary of Findings

This chapter detailed the findings yielded from the data in this study. The purpose of this study is to better understanding how a teacher facilitates reflective processes in her classroom, as well as, how students make sense of the role of reflection in the learning. The participating researcher maintained a journal with analytic memos from before and during the study. She detailed all of her considerations when constructing the study and her observations and reflection in the duration of the study. The majority of these entries comprised of reflections regarding feedback and instruction.
This study also entailed student participant data as a result of engagement within several different reflective processes. The participants regularly recorded reflective entries in their daily reflection journal, lesson reflections, and in the end of study reflection. This data consisted of five themes: 1). Creating a classroom culture of reflection requires detailed and purposeful planning by the teacher; 2). Lesson specific resources, collaborative activities, and an appropriate amount of time provide a conducive environment for student learning; 3). Reflective processes are most meaningful when involving a feedback loop; 4). Reflective processes yielded student accountability and self awareness; 5). Self reflection support students’ awareness of growth.

Within each finding within the data, accompanying sub themes emerged. 1). When explaining how creating a classroom culture of reflection requires detailed and purposeful planning by the teacher, the findings were divided up by the teacher’s analytic memos before the study and the memos during the study. 2). The data pertaining to lesson specific resources, collaborative activities, and an appropriate amount of time providing a conducive environment for student learning included specific discussion of the benefit of resources, the benefit of peer work and peer feedback, and the benefit of time. 3). When the participating researcher and participants discussed how reflective processes are most meaningful when involving a feedback loop, they highlighted the aspects of an organic feedback loop, a structured feedback loop, a platform for students to express themselves, and the importance of the teacher-student partnership within the feedback loop process. 4). The participants seemed to convey that the reflective processes yielded student accountability and self awareness. As a result, the students experienced an increase in accountability and an increase in self awareness. 5). Finally, as a result of documenting self reflection, student recognized improvement in their learning. Specifically, participants noted that focus and practice yield productivity and improvement, and
participants reported witnessing immediate improvement as well as improvement over the course of the study.

The end of the findings section exhibits student vignettes discussing more in detail the patterns of participant reflections. These vary from participant to participant but share the component that each student participant reflected on his or her learning and experiences in class.
Chapter V: Discussion of Findings

In this chapter, I will discuss the major findings as a result of the themes and patterns outlined in the chapter four. Additionally, I will discuss the findings in relation to the literature review and theoretical framework of metacognition. Finally, this chapter will exhibit implications for practice and future research.

Revisiting the Problem of Practice

The repercussions of a competitive, numbers driven culture has impacted the engagement and value students associate with school and learning. As a result, an environment of apathy and lack of relevance has contributed to student passivity, lack of ownership of their own learning, and the elimination of partnering with their teachers to enhance their learning processes. Rather than on an active learning process, there is nation-wide attention to the product and end result of supposed learning—grades and grade point averages. When teachers are expected to teach a myriad of learning standards, the prioritization of meaningful learning of some standards results in the inability to adequately teach them all, and students lose their voice to participate in their own learning. Due to the relationship between learning standards and high stakes testing, teachers grapple with facilitating the active and authentic learning of all required curricula.

Despite the imbalance, teachers continue to seek how to both engage students in meaningful, active learning as well as undertaking a larger scope of material. With limited time, minimal professional development opportunities providing teachers with more student-centered resources, and the pressure of standardized testing, educators and schools feel coerced into prioritizing the shallow coverage of content and skills in order to ensure they expose students to
all of the curriculum opposed to instructing and assessing for authentic student learning and allowing that data to inform curricular and instructional decisions.

When we teach and equip students to pause and reflect on their thinking and learning, this skillset explicitly directs student focus to an examination of their own thinking giving ownership and voice back to the student. In addition, their learning process focus shifts from grades to the process of reflective thinking and learning partnering students with their teacher.

Through the facilitation of student self reflection as a formative assessment used during a unit of study, students engage in an active learning process that provides a feedback loop partnering the teacher and student while giving ownership of the learning back to the student. Within this process, student learning is assessed and evaluated by both the teacher and student throughout a unit of study opposed to at the very end.

Review of the Methodology

This intrinsic case study methodology promoted the pursuit of a descriptive case study in a naturalistic setting in order to better understand the phenomenon of how a teacher as the participating researcher and her students make sense of reflection in a sophomore English Language Arts classroom.

Central Research Question:

What does it look like to engage in teaching which employs a meaningful engagement with self reflection?

Sub Questions:

- How does a teacher describe the facilitation of self reflection in her students?
- How does a teacher describe her understanding of how students learn to reflect on their learning?
How do students describe their own reflective learning processes?

The study occurred at a public high school in North Dallas and within the participating researcher’s first period English II class. The five participants were selected to represent a sample of average students—not necessarily high achieving nor low achieving. Additionally, the participants were selected due to their lack of absences from the class, yielding a complete set of data. Despite the study only including findings from five student participants, the entire class experienced the study.

The data from this study consists of participating researcher analytic memos from before the study, during the study, and after the study; student daily reflection journal entries; lesson reflections from students; and a final student reflection over the reflective processes from the study. The daily reflection journal, lesson reflection, and final reflection each consisted of specific questions with accompanying sentence stems or probing questions intended to facilitate more meaningful student responses.

Once the study was complete, all of the data was coded, recoded, and then organized into patterns and themes. The student data and participating researcher data was kept separate from one another. The researcher also organized the data by student participant in order to analyze for patterns over time from one’s experience in the study.

Discussion of Findings with Relation to the Research Questions

The data yielded from this study comprised of two primary bodies of data—the participating researcher’s analytic memos and the participating students’ written reflections. Since the analytic memos were unstructured and of open ended, stream of consciousness nature, many of my thoughts were in relation to the sub question—how does a teacher describe the facilitation of self-reflection in her participants? It seems I was most preoccupied with the design
and the details of facilitating student reflection before the study and during the study. As a result, little attention was paid directly to the sub question—how does a teacher describe her understanding of how participants learn to reflect on their learning? Much of the data that answers this question was as a result of analyzing the participants’ reflections for the purpose of chapter four thus it came too late and cannot exist as its own body of data to be analyzed. I would have liked to have had a system for documenting my analysis of the participants’ reflections in my analytic memos throughout the study, which would have yielded richer data answering the sub question, how does a teacher describe her understanding of how participants learn to reflect on their learning? Instead, I was limited to some analytic memos that answered this question, but it was usually during two particular moments—during class in reaction to observing the participants and when reviewing the participants’ reflections. If I had included a more structured method of responding to this question, the data would be richer with regards to how a teacher describes her understanding of how participants learn to reflect on their learning. Finally, a bulk of the data gathered from the study answered the sub-question—how do participants describe their own reflective learning processes? When analyzing this data, I had to infer based on how the participants utilized the Gibbs’ Reflective Cycle sentence stems and by the coded patterns within the content. The reflection over reflection process at the end of the study directly answered this sub question, but it did not create a comparable mass of data compared to the daily reflection journal entries and the lesson reflections.

**Discussion of Major Findings in Relation to the Theoretical Framework**

When discussing reflection, most seminal authors explain the process in terms of stages or levels of reflection (Atkins & Murphy, 1993; van Manen, 1977; Mezirow, 1981; Boyd & Fales, 1983; Goodman, 1984; Boud et al, 1985; Schon, 1991). Paris and Winograd (2003) and
King (2002) argue that the capacity to critically reflect is associated with higher order cognitive processes of self regulation and metacognition indicating the highest level of abstract learning.

For this study, metacognition was used as the theoretical framework in order to better understand the cognitive thinking involved when students engage in reflective processes. Although self reflection and metacognition are not synonymous with one another, metacognition is reflective in nature, and students often engage in metacognitive processes when reflecting on their learning and thinking. The researcher sought to better understand the metacognitive processes involved when students engage in self reflection about their learning.

It is challenging to assess for and measure metacognition since the difference between reflection and metacognition is very nuanced; therefore, I assessed the entries against three commonly shared definitions of metacognition in order to determine if the participants’ reflective entries were of metacognitive nature. 1). Hearn (2005) explains that reflective thought is not synonymous with metacognition because “it does not inherently contain the concept of executive control of one’s thought processes,” but reflective thought does, however, encompasses the self awareness of one’s thinking which exhibits metacognition (p.28). 2). Flavell “stated that metacognition is a function of learning and is associated with not only the learner, but the learning task and learning strategies” (Hearn, 2005, p. 26). 3). Marzano, et al. (1988) defined metacognition as “being aware of our thinking as we perform specific tasks and then using this awareness to control what we are doing” (p. 9).

Data from this study that exhibited metacognitive thinking are organized below into the following categories:

- Planning Learning
- Monitoring Learning
• Evaluating Learning

Planning learning.

Participants demonstrated metacognitive thinking in their reflections when making plans to alter their behavior for the following class period. When participants made a specific plan detailing behavior in order to achieve a specific goal, this thinking demonstrated forethought and recognition of effective behaviors. One participant expressed when discussing running out of time, "to fix this, I could prioritize my tasks during class in order to be more efficient." Another participant prioritized, "Next class, I need to have my be verbs eliminated that way I can start my final draft." Several participants detailed the need to be focused and on task the following class period to improve. For example, one participant stated, "To prevent this next time, I will be more focused at the beginning of class because that is when I am slowest." These participants expressed their plan for the next class period including the behavior to be focused and on task while detailing their rationale of why. This rationale revealed self awareness. As a result, the participants conveyed that they cognitively understood the impact of specific behaviors, particularly in relation to their own self awareness when learning.

Monitoring learning.

Participants exhibited metacognitive thinking when reflecting and evaluating their behaviors during learning. In the data regarding the monitoring of their own learning, the data conveyed a pattern of evaluating one’s behavior and a pattern of rethinking one’s behavior. This often led to self awareness. While the two are similar, the evaluation of behavior exhibited more insights into how behavior affected one’s learning, whereas the rethinking of behavior detailed participants’ reflections on what they could do differently to better impact their learning.
When evaluating their behavior, participants reflected on the value of having a plan and practicing, the benefit of peer review, the benefit of time, and the importance of staying on task. One participant expressed self-awareness when monitoring her learning stating, "Preparation and knowing what to do prior helps tremendously. I'm good at finding textual evidence. It's just sentence structure and theme is something I need to work on." Another participant demonstrated self-awareness in relation to practice when monitoring his learning:

I liked how I got to see what I got wrong on each passage, so then I can work on my mistakes and improve. [I like that] because I got to practice what I got wrong or weakness. I need to practice more to do well on the test and learn tips to answering the questions.

A couple of participants conveyed how peer review aided their learning because “it gave me a new view on my essay" and “because of peer editing, I know exactly what to work on."

When monitoring their learning, several participants reflected on the benefit of time on their learning. One participant stated, "Because I took my time, I got to understand everything." Two other participants demonstrated self-awareness when recognizing the benefit of time—"I think that I need to put more effort into transition words. I was not able to do this because I ran out of time” and "I think I need to really read the passage slowly and deep to fully understand the content from now on."

Finally, multiple participants detailed the benefit of being focused and on task when monitoring their own learning. One participant reported that "staying on task and getting efficient work done made it smooth. Because of this, it helped me to better understand the mistakes I made on my essay.” Another reflected, "I learned the importance of getting everything finished in class, so that I do not just throw an essay together to get it done. It's important for me
because I never end up doing quality work on assignments that I don't end up finishing in class."

As exhibited in the data, participants elaborated on why being focused and on task was beneficial to their learning. This demonstrated self awareness of one’s behaviors, as well as, seeing the cause and effect relationship between the behaviors and the learning.

**Evaluating learning.**

There was also presence of metacognitive thinking when participants evaluated their thinking and behaviors when learning. These evaluations included how students overcame challenges, their demonstration of self awareness, the recognition of helpful resources, the recognition of achievement and growth, and finally, the rethinking of behavior.

When detailing how participants overcame challenges, they usually stated what was challenging and then detailed how a shift in behavior yielded improvement. For instance, one participant stated, "The article was challenging due to the fact that I couldn't find what would be considered evidence and what wouldn't. I overcame this by just picking out a few pieces of evidence." Another participant explained how "It was challenging as some words going from past to present wouldn't look right. I ended up using words similar to the present tense version." This kind of reflective thinking also revealed self awareness within the participants.

All of the participants evaluated the benefit of resources to their learning. These resources ranged from in class activities or documents to detailing the benefit of setting goals and engaging in feedback loops. When participants elaborated on the benefit of in class resources, they often said the resource “made it much easier,” “helped me think,” “helped me figure out,” “made it more clear,” and “helped guide my thoughts.”

When participants evaluated the effectiveness of feedback, they discussed the benefit of peer review, receiving feedback, and giving feedback. When evaluating peer review, a
participant stated, "It was helpful to have someone else edit it. It changed my essay and made it better and more effective." Participants also evaluated the benefit of receiving feedback on their learning. Participants detailed that receiving feedback “helps further guide my thinking by answering the questions" and “helped me point out what I need to work on in class." Another participant stated that, "Feedback helps me prepare mentally for the next class," while another participant explained, "My 'ah-ha' moment was when I was told what things I'm doing right and things I'm doing wrong."

Participants also demonstrated metacognitive thinking when stating their recognition of achievement and growth. Participants often associated an effective or successful class period with one where they witnessed their own learning and improvement stating—"Today was successful because I contributed to my goal of writing a better introduction and conclusion;" "Today went well by working on the brainstorm and reviewing prompt in class made me understand the prompt so much better, which made it easier for me;" and "The most important event that happened to me today was that I was able to make better supportive evidence." Participants also articulated how they have witnessed growth in their learning over time. One participant said, "I feel like everything that I have learned this year in English has helped me a lot. This essay hasn't been quite as unorganized as my others."

Lastly, participants demonstrated evidence of metacognitive thinking when rethinking their behaviors when evaluating their learning. Sometimes this thinking was due to not achieving what the participant wanted to achieve, such as, "Yes, I benefitted from [the work]; however, I feel working on my goals would have been more beneficial” or "Something I could've done differently was I could've worked on my goals instead of doing something easy." Another participant attributed his shift in behavior due to help from a peer: "While writing essays in the
past, I never really thought too much about connecting to the thesis throughout the essay. Working with a partner helped remind me of what I needed to include in my essay.” Many participants used the language “could have” with an accompanying specific behavior when rethinking behaviors for their learning. This self awareness of their own learning and learning style allowed for participants to evaluate how they could improve upon their behaviors to improve more meaningfully. This demonstrated a cognitive understanding of how specific behaviors can affect specific outcomes.

**Discussion of Major Findings in Relation to the Literature**

After examining the data from the participating researcher and student participant reflections, the following six findings emerged:

1. Creating a classroom culture of reflection requires detailed and purposeful planning by the teacher.
2. Thoughtful resources evidenced support of student learning.
3. Reflective processes are most meaningful when involving a feedback loop.
4. Reflective processes yielded student accountability and self awareness.
5. Self reflection support students’ awareness of growth.

**Creating a classroom culture of reflection requires detailed and purposeful planning by the teacher.** In order to provide the participants a solid foundation for reflective processes, the Gibbs’ Reflective Cycle was selected to guide and scaffold the participants’ reflective processes. Since it was the teacher’s role to explicitly teach students about the learning processes as well as how to engage in these processes, this model of reflection was selected due to its scaffolded and intuitive nature since much of the emphasis of this study was on creating reflective processes as
routine and culture in the classroom (Bransford, et al, 1999; Quick and Winter, 1994; Richmond 1990). After determining the reflective model, the outcomes and objectives for each curricular unit during this qualitative study were designated. This ensured that student learning was guided by our state standards and was specific and clear enough for students to utilize the objectives to set individual goals in which to reflect (Potter and Kustra, 2012).

In order to facilitate a teacher-student partnership, intentional scaffolding and intervention was utilized to support the students in their learning progression while encouraging self regulation (Moon, 2004; Larrivee, 2008, Brown and Harris, 2014). These interventions allowed students the opportunity to develop the skill of self reflection over time thus yielding a more active, meaningful, and transformative learning experience (Coulson & Harvey, 2013). Additionally, modelling served as an effective scaffolding tool allowing teachers to adopt the reflective process to the curriculum and learning context by sharing their own reflective thinking (Boud & Knights, 1996; Bandura, 1986). The daily reflection journals provided a documented and tangible means to integrate reflection into curricula while documenting one’s thinking over the course of time (Lew and Schmidt, 2011; Thorpe, 2004; Moon, 1999; Quinton & Smallbone, 2010). When students engaged in reflective thought within self assessment, the reflection was integrated with the learning task allowing students to communicate their own learning and track their progress (Herrington and Oliver, 2000; Roberts, Farley, & Gregory, 2014; Black & William, 1998; Stiggins & Chappuis, 2009, Chan et al., 2014).

Mezirow (2000) and Finlay (2008) cautioned that concentrating too closely on a specific and simple technique of reflective thought could result in ineffective or superficial understanding. In order to avoid this, intentional and meaningful practice occurred allowing a feedback loop between the student and teacher (Mutch, 2003; Hounsell et al., 2008). Utilizing
varying ways to practice reflection invited the consideration of vehicles that provide learning experiences, such as the daily reflection journal versus the lesson reflection (Loughran, 2002). Dedicating class time to reflection and making it a routine aspect of the class culture emphasized the importance of the skill and process. In order to offer ongoing opportunities for practice, reflective processes were embedded within the curriculum and instruction (Quinton & Smallbone, 2010). The daily reflection journal processes allowed for students to set and track their own goals and progress while making connections between knowledge and one’s own thinking (Lew and Schmidt, 2011; Moon, 1999). Students self reflected by making interpretations of the degree of goal attainment. This practice encouraged ownership (Sullivan, K. & Hall, Cedric. 1997). As a result, the daily reflection journals provided a documented and tangible means to integrate reflection into curricula while documenting one’s thinking over the course of time (Thorpe, 2004; Moon, 1999; Quinton & Smallbone, 2010).

Since the the daily reflection journal and lesson reflection processes were formative in nature, they had to be purposeful and possess a focus on an immediate task in order for learners to gain feedback (Black and William, 1998; Quinton and Smallbone, 2010). After reflecting regularly on how to increase opportunities to give feedback to my students, particularly in an effort to construct a dialogue between teacher and student, modifications to the processes occurred, such as responding to the students’ daily reflection journal entries, which was not originally a part of the study. (Nicol, 2010).

**Lesson specific resources, collaborative activities, and an appropriate amount of time provide a conducive environment to student learning.** Finlay (2008) emphasized that since effective reflection processes are difficult to teach, teachers must be mindful of how they motivate and support students with time, resources, opportunities to practice, and appropriate
methods. If students simply regard reflection as the completion of a worksheet, they will miss the purpose all together (Quinton & Smallbone, 2010). The teacher gave the students additional and routine opportunities to practice reflective skills by providing support and resources such as peer tutoring, feedback, clarification of questions, and rubrics and checklists for self evaluation (Chan et al., 2014).

Additionally, in order to support a culture of reflection, the teacher utilized scaffolded activities with accompanying resources (Boud & Knights, 1996; Bandura, 1986). This timely scaffolding allowed students to immediately apply these resources to facilitate and support their reflective thinking (Moon, 2004; Larrivee, 2008). This helped to focus their thinking by providing regular practice engaging in these processes allowing students the opportunity to develop the skill of self reflection over time yielding a more active, meaningful, and transformative learning experience (Coulson & Harvey, 2013).

**Reflective processes are most meaningful when involving a feedback loop.** There existed a mindfulness of Mezirow (2000) and Finlay’s (2008) caution that concentrating too closely on a specific and simple technique of reflective thought could result in ineffective or superficial student understanding. To avoid this, intentional and meaningful practice occurred daily in forms of the daily reflection journal and lesson reflections that students could learn to rely on, thus creating a feedback loop between the student and teacher (Mutch, 2003; Hounsell et al., 2008). As students became more comfortable with engaging in this feedback loop, they would often comment on the effectiveness of the lesson on their learning or attainment of goals, and other times they would give feedback on the instruction or what more they needed from their teacher. Giving students a platform in which to express themselves on a daily basis provided
them ownership and voice, ultimately focusing a dialogue between student and teacher (Beresford, 2003; Brookfield, 1995).

Quinton and Smallbone (2010) encourage the teaching of reflection as an integration into student learning with opportunities to practice reflection and receive feedback. Rodgers (2002) emphasizes that when teachers are more present during student learning, teachers begin differentiating their instruction in an effort to respond more actively and specifically to student learning. These dialogues with students served as vehicles for giving feedback and experiencing learning as students experience it opposed to solely assessing the instructional perspective (Rodgers, 2002; Loughran, 2002; Fendler, 2003; Hoban and Hastings, 2006). By building this relationship between teacher and student, this relationship process and collaborative dynamic modeled for students how to collaborate and partner effectively thus lending itself to more meaningful engagements with feedback (Baldwin, 2010).

When participants reflected on the reflective processes, their entries often contained insights on the elements of feedback within the processes. Peterson and Irving (2007) discuss that students want honest and concise feedback. The value of feedback depended on how students responded and knew how to improve (Chan et al., 2014; Handley, Price, and Millar, 2011). Since Pittaway and Dowden (2014) caution teachers to be mindful in their written feedback since students filter their responses through their emotions, the teacher utilized sentence stems and probing questions from Gibbs’ Reflective Cycle in order to for written feedback to be clear and focused. This helped students to understand the purpose of feedback and the timeliness of feedback so the students could complete the feedback loop (Black and William, 1998; Quinton and Smallbone, 2010; Sadler, 1998).
Reflective processes yielded student accountability and self awareness. Since reflective processes yielded student accountability and self awareness, it is important to revisit the components of reflective thinking. Notable researchers, Boud, Keogh and Walker (1985), define reflection as “those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations” (p. 19). Those activities refer to the following three stages—returning to the experience, attending to feelings, and reevaluating the experience— which is evident in Gibbs’ Reflective Cycle utilized by the participants in this study (Boud, Keogh and Walker, 1985). Gibbs (1988) designed an exercise prompting students to reflect in a more systemic and structured way as a part of his reflective cycle. These written reflective processes enabled students to critically evaluate and potentially transform their own thinking, perspectives, or behavior (Gleaves et al., 2008). The students used Gibbs’ sentence stems when reflecting at each step of the cycle which encouraged them to document their thinking in order to separate out emotional and rational thoughts regarding their reflection (Quinton & Smallbone, 2010). Additionally, students set goals based on learning objectives. The learning objectives which were turned into student specific goals focused the students’ thinking and effort by knowing what specifically to work on in class (Potter and Kustra, 2012). As a result, this process allowed for students to set and track their own goals and progress while making connections between knowledge and one’s own thinking leading to an increase in accountability and self awareness (Lew and Schmidt, 2011; Moon, 1999).

Self reflection support students’ awareness of growth. When reflecting on the class period and one’s improvement, participants were able to recapture their experiences and make greater sense of them (Finlay, 2008). As a result, students became more self aware and critical in
evaluating their own thinking and experiences which led to a change in their behavior or perspectives (Zeichner and Listen, 1996). This is due in large part to all participants making specific plans of action to shift behavior or focus in order to achieve greater improvement. Due to strengthening the students’ ability to self reflect, they were thus facilitated in their approach to inquisition with approaching their own thinking and transferability of knowledge and skills yielding improvement over time (Lin Wen, Jou, & Wu, 2014; Moon, 2002; Quinton & Smallbone, 2010). This reflective practice not only aided one’s self appraisal but gave students a greater sense of ownership in their learning (Stefani, 1999, Boud 1995, Stefani, L.A.J., Clarke, J., & Littlejohn, A.H., 2000). Since there was evidence of the want to improve and the examination of how to better improve, the individuals seemed to evaluate their experiences since their self concept of capability ultimately impacted their behavior (Bandura, 1986). Due to taking the reflective processes seriously, participants experienced enhancement in their motivation and academic performance (Boud, Keogh, & Walker, 1985; Kemmis, 1985; Paris & Ayres, 1994; Entwistle, 1987).

**Implications of Findings to Practice**

This study was intended to describe the experience of fostering a culture of reflection in the classroom and to better understand how students describe their own reflective processes. As a result of the findings from the data in this study, the researcher identified four implications to practice:

1. Creating and maintaining a culture of reflection requires commitment and enough time for reflection to become routine.

2. In order to foster a reflective classroom, the teacher must participate in self reflection on a daily basis.
3. Self awareness and metacognition occur when reflective processes are ongoing, regular behaviors in the class culture and include a timely feedback loop.

4. Students must genuinely believe and experience that reflection is to their benefit and not the teacher’s in order to see student improvement and growth.

**Creating and maintaining a culture of reflection requires commitment and enough time for reflection to become routine.** In order to create a culture of reflection within a classroom, the teacher must understand the commitment and time necessary to dedicate to the process since it is truly a process. The designated reflective processes have to be practiced and experienced on a regularly basis, which means time will be taken from instruction and dedicated to reflection. If this process becomes inconsistent, it falls apart. This is due largely in part to the fact that reflection has to be taught to students—they will not be good at it until they have practiced regularly. Students also need scaffolding and modelling to know what meaningful reflection looks like. The teacher must be mindful that while students may be participating in the process, the reflection needs to be meaningful, not superficial, and students need to understand the difference. This takes time, commitment, and focus. The value of reflection is when students see and feel the benefit of it, and it begins impacting how they think and behave. This happens over time, and there is no way to expedite it since the value is in the process.

**In order to foster a reflective classroom, the teacher must participate in self reflection on a daily basis.** A teacher cannot effectively facilitate student reflection without engaging in regular reflection herself. This entails two kinds of reflection—reflection within herself making her a more reflective person, as well as, reflecting regularly on how to better facilitate her students’ reflective processes. The teacher is the steward when fostering a reflective classroom. She not only must model reflective thinking and behavior, she must make it apparent
to the students that she is actively seeking ways to increase and offer them opportunities to reflect. When a teacher is comfortable reflecting, she is able to articulate her own thinking and process to the students, which helps them to better understand its purpose and impact on learning. When a teacher exhibits reflective thinking and behavior, the students better understand its value since it is apparent to them that it is a priority and commitment to their teacher. Additionally, the teacher must continue to reflect on how effectively students are reflecting. She must look for opportunities to support them, provide a feedback loop, and engage in reflective collaboration for them to accumulate greater experiences of reflection.

**Self awareness and metacognition occur when reflective processes are ongoing, regular aspects of the class culture and include a timely feedback loop.** As previously stated in the first implication to practice, reflective processes must be ongoing and a natural part of the class culture. The impact and meaning in reflection is in ongoing practice. It cannot be done randomly and inconsistently. Reflective processes yield self awareness when they are ongoing because students improve their reflection over time. It is a way of thinking that does not come intuitively to students, and even if it does, the students need to know what to do with that thinking and how to apply it to their learning. Furthermore, much of the self awareness comes as a result of reflecting on their reflections. When students are able to look back and revisit a track record of their reflective thinking, they are able to reach conclusions and make insights based on that body of reflection opposed to an isolated or single reflective thought. It is when students begin seeing patterns within their own thinking that they are able to propose shifts in behavior and speculate how to greater improve their learning.

The feedback loop is a necessary part of this process because it does not leave students alone with their own reflections to make sense of. Engaging in a feedback loop or dialogue with
their teacher or peer allows for them to make more complete observations. Additionally, engaging in a feedback loop also increases one’s accountability. Since the student’s thinking is accompanied by another’s, they feel a greater sense of accountability to apply that insight directly to their thinking and behavior. The key to a feedback loop is that it must be timely. Students must be able to apply immediately the dialogue they engaged in with their teacher or peer. If the applicability is delayed, students lose seeing the impact of the feedback on their learning and possible improvement.

**Students must genuinely believe and experience that reflection is to their benefit and not the teacher’s in order to see student improvement and growth.** Students will not engage meaningfully in reflective processes unless they genuinely believe it is to their benefit and not someone else’s, particularly their teacher. Since students are so competitive and focused on grades, it takes time for them to understand that reflection is not assessed and that it is a genuine effort at increasing their learning and improvement. They do not truly believe in its benefit until they experience that benefit, which takes time and regular practice. Much of understanding the benefit of reflection is due to engaging in a feedback loop. Students come to rely on the dialogue with their teacher because they know the teacher is in tune with their learning and is a resource to support and help them. They also see the benefit when they use reflection and the feedback loop to give feedback to their teacher on the lesson or her instruction. When the teacher is able to respond instructionally to a student’s need, they feel valued, and their learning becomes more personal and increases ownership. Giving the students the autonomy to set their own goals helps to motivate them to reflect and improve. This process facilitates them in experiencing the benefit because they are able to explicitly reflect on how well they are achieving the goals they set for
themselves. As a result, students begin brainstorming how to shift their thinking to yield different or greater improvements. It is then when students understand the reflections are to their benefit.

**Significance of the Study for the Scholar Practitioner**

In an effort to better engage students in self-reflective processes, I convey in this section important takeaways for the scholar practitioner who desires to foster a reflective environment in her classroom.

Flexibility is needed when fostering a culture of reflection since the teacher must be able to adequately respond to her students. For instance, I felt the need to give feedback more immediately which is why the responses to the daily reflection journal occurred. That caused the daily reflection journal to become an even more valuable formative assessment because now it was accompanied by a feedback loop between the teacher and student. Students viewed the daily reflection journal as a more authentic means of reflecting because they knew they could expect feedback from their teacher. Pittaway and Dowden (2014) caution teachers to be mindful in their written feedback since students filter their responses through their emotions. As a result, clarity and intention is crucial when giving feedback, particularly in writing. Using sentence stems and probing questions to guide my own feedback in addition to guiding the student reflection helped to keep the purpose of feedback and dialogue focused because students do filter teacher feedback through their emotions.

Scholar practitioners need to be aware that being present with the students during the learning and reflection was a bit of an adjustment because of the pressures to cover curriculum and to have a minimum number of grades in the gradebook by certain times throughout the marking period of six weeks. Rodgers (2002) admits how the “tremendous contextual forces that teachers operate under,” such as tests, grade point average culture, and coverage of required
knowledge and skills can compromise the impact of more active student learning environments (p. 251). This encourages teachers to solicit structured feedback from students in order to distinguish between what they think they are teaching versus what students are actually learning (Rogers, 2002, p. 230). I found that I was able to be more present with them when I expressed to them how much I valued the reflective processes—to better partner with each student but to also see how it impacted and informed my instruction. I also recall thinking more about how I could aid student reflection or give more or better feedback opposed to being focused on how can I cover the unit faster, as many teachers tend to feel.

While it is uncertain how much of their thinking will be impacted for future practice, it seemed participants became more self-aware and some even saw a change in their behavior. Stefani et al. (2000) emphasized the ownership that accompanies meaningful reflection since students who do not authentically engage within the guidance and process learn later that the process was to their benefit and not the benefit of their teacher. The feedback loop seemed to occur enough times for students to see the benefit. The students seemed to genuinely understand that the reflective processes, goal setting, and feedback loops were to their benefit and not my own. Additionally, students understood the importance of the learning targets to drive the focus of each curricular unit and in turning some learning targets into goals. Their daily reflection journal each class period seemed to help to maintain this focus on reflection on achieving goals.

The basics of self-regulated learning helped to structure this study, but more work could have been done to focus more dominantly on self-regulated learning. While the foundation was laid for self-regulated learning, the study would have needed to go for a longer amount of time to get students to engage in self-regulated processes—a more cognitive component to reflection—especially to see the ownership side of self-regulated learning. Once students are accustomed to
that ownership, the self regulation would advance their learning because they experienced 
growth and achievement.

**Suggestions for Future Research**

I found myself wanting to brainstorm and contemplate what this study would look like if
it was a team of teachers working together to foster this thinking in their classrooms with their
students. Ermeling’s (2010) study suggests that collaborative teacher inquiry yielded an
investigation of shared problems which led to discoveries of cause-effect connections between
instructional plans and student outcomes.

In addition, it would be interesting to analyze this study through the lens of the utilization
of cognitive strategies in student thinking as a result of reflection. With utilizing a theoretical
framework of metacognition, I inferred nuances of this, but it would be interesting for it to
become an entire study of its own.

The study limited my understanding and analysis of improvement in reflection over time.
The length in which I did my study was focused primarily on allowing enough time to teach,
scaffold, and practice in order to get to some degree of meaningful, routine reflection. It would
be fascinating to see if the study continued, if we would see change in each participant’s ability
to engage in reflective processes. I would have liked to spend more time on teaching the students
how to apply their reflection to their learning, and in a longer study, this could occur.

Lastly, it is worth studying if I would have presented reflection as a process within self
assessment, the students would have understood the purpose and meaning behind reflection
better because within self assessment, the ownership piece in inherent. This would entail self
assessment more as a lens. I approached this study thinking that if students can learn how to
reflect, then they can begin engaging in self assessment, but I wonder if students were taught to
reflect within the system of self-assessment they would understand self-assessment prior to reflection. Furthermore, I wonder if students would be more apt to reflect “in action” opposed to solely reflecting “on action.”

**Researcher Reflection**

If I did this study over, I would like to include a more concrete process of students documenting their own learning aside from setting goals and reflecting on them. This could have engaged students in a more focused dialogue about the process of working towards their goals aside from the daily reflection journal and lesson reflections.

I could have spent more time and effort crafting a definition of reflection as the focus and purpose to guide the students’ thinking since the variation in definition and approaches to reflective thinking can pose a difficulty for learners developing their self-reflection skills if the teacher is not clear about the purpose and process of reflection (Boud and Knights, 1996; Bringle and Hatcher, 1999; Coulson & Harvey, 2013; Fook, White, & Gardner, 2006). I also would have provided exemplars of reflective thinking at each stage of Gibbs’ Cycle prior to modeling the thinking at each stage. While this would give students yet another resource to keep up with, it would be a helpful resource for them to reference when completing their own reflection cycle.

I also could have spent more time teaching students how to utilize the feedback. This is a challenge when a teacher has over thirty students in one class period, and the students have varying goals and are in varying places in achievement of those goals. To remedy this obstacle, I could have given students sentence stems guiding them in how to reply to feedback. While I did not realize it at the time, I assumed for the study that students would know how to reply and react to feedback. The use of a sentence stem would help yield a more thoughtful reply than a superficial, limited one.
The lesson reflection sheets, I think, felt more like a sheet to fill out. Many students did see its value over time, but they were not able to apply it immediately—the students engaged in a feedback loop but then it was delayed and oftentimes not applicable once the loop was completed. I wonder if the lesson reflections were scaffolded and stapled together from lesson to lesson, the students could refer back or could use the feedback loop for the next lesson.

I observed that students reflect almost exclusively on their achievement and not on how they are reflecting. Come to think of it, my feedback was also geared that way. It was not in how students can better or more meaningfully reflect, it was how they could better achieve. Students would be engaging in better self regulated learning if they were reflecting on how they reflect and not just on how they are achieving. Students would then see the benefit of engaging in self assessment as a means of reflection. While students did indeed do that, I could have been more explicit in my language and purpose of teaching the students that that is in fact what they are each doing—engaging in self assessment, then reflecting on it in order to make actions to improve and grow.

Finally, I could have utilized intentional grouping and group reflection sentence stems and processes, but I prioritized against it since that would have added an additional system. We did not get much into collaborative reflection, so I cannot attest to the guided reflective processes and the importance of empathy. I would have liked to do an adapted Gibbs’ model with Kolb’s model and with more emphasis on collaboration. Peer work seemed to be valuable to students, and I would like to have done more of it to see the impact over time because it becomes a culture in and of itself.
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Appendix

Summary of Resources Studied

The data from this study is comprised of multiple documents. I, the participating researcher, maintained a journal with analytic memos for prior to the study and during the study. The student participant data came from daily reflection journals, lesson reflections, and end of study reflection. Since participants had to manage various paper resources pertinent for this study, each resource was printed on a specific color of paper. The learning targets document was printed on orange; the daily reflection journal directions were printed on lime green; the Gibbs’ Reflective Model directions were printed on pink; and the daily lesson reflection sheet was printed on yellow. The daily reflection journal was composed of stapled notebook paper into a book. The final reflection sheet was printed on white paper. These resources acted as a part of the reflective processes and systems for the duration of the study. The learning targets document, the daily reflection journal directions document, and the Gibbs’ Reflective Model directions, and final reflection sheet were provided to students in order to guide and support their reflection.

Participating Researcher’s Analytic Memos

As the participating researcher and the participants’ teacher, I maintained a journal of analytic memos throughout the course of the study. I began making entries while crafting the reflection documents and resources and mapping out the classroom processes, structures, and curriculum. The entries continued throughout the study. I accessed the journal to make entries whenever I had an idea or was reflecting on an experience, thus the entries include “in the moment” reflections and not just entries at the end of each day.

Student Learning Targets
Prior to every unit, I created learning targets specific to the curricular unit based on the Texas Essential Knowledge and Skills standards (TEKS). The TEKS serve as the learning standards necessary to master the unit, and translating them into learning targets makes the language less technical for the participants. Rephrasing the learning targets from the TEKS also gives the participants a realistic amount of skills and concept to manage. Students were given a packet of learning targets specific to each curricular unit of study throughout the qualitative study. Within the study, participants experienced three units--1). *Things Fall Apart* Literary Analysis; 2). Creating a Persuasive Essay; and 3). *Julius Caesar* and Rhetoric. For each set of learning targets, participants would translate each target into “student friendly language” or language that made sense to them.

For the first unit, I modelled for the participants how to do this, and the participants followed along. For the second unit, participants worked in pairs to translate each learning target together. I actively monitored to ensure participants were not losing the meaning of each learning target during the process. For the third unit, participants completed the task individually while I facilitated making sure participants were accurately translating each target and were making meaning out of what is expected from them when mastering each learning target. From the learning targets, the participants set individual goals for the unit. Students were instructed to select the three learning targets they were the least comfortable with to become their goals. Once participants selected three learning targets to become their goals for the unit, they wrote each one in their daily reflection journal. Students needed a record of their goals, since they used the daily reflection journal to reflect daily on their progress in achieving their goals.

*Daily Reflection Journal*
The participants created a daily reflection journal comprised of stapled notebook paper to create a book. Students used this journal at the beginning and end of each class period to address their learning goals and to reflect on the class period. At the beginning of each class period, participants would revisit their goals for the unit. This was intended to focus their thinking at the beginning of class. Students would then complete the following sentence stem:

At the beginning of the next class, reread what you wrote, and write an “I will…” statement along with criteria of what it will look like.

Today, I will...

It will look like...

Share with a partner. Wish one another luck!

Figure 1A: Daily Reflection Journal

Finally, participants would read their “Today, I will…” and “It will look like…” statements to a partner in an effort for them to articulate their thinking and to help with peer accountability. This practice also helped to create a culture of goal setting and reflection.

At the end of class, participants would revisit their daily reflection journal answering the two following questions with accompanying probing questions as suggestions beneath each question:
How did class go today?

The most important event that happened for me today was …

Thinking back over the day what I valued most was …

I am not sure why we…

Something funny that happened was…

I felt really frustrated when…

I keep thinking about...

I really didn’t understand …

One of the things that surprised me was …

What I have learnt today reminds me about…

Something I have found out about myself is...

What do you need to do next class to work toward achieving your goals?

I would like to…

I hope I can learn to…

My teacher can help me by…

I can help myself improve by…

I learn best when…

I need to go over…

I need to ask for more help about…

I know I need to change the way I…

I really admire the way …

Figure 1B: Daily Reflection Journal

In addition to answering these questions, participants were encouraged to give feedback to their teacher on the lesson, their learning, or with any questions they wanted answered or clarified.

Originally, this process served to provide participants a platform to reflect informally and for that
reflection to potentially inform teacher instruction. Over time, the teacher and participants discussed the possibility of the teacher replying to create a feedback loop. This process became one that each party could count on daily.

**Lesson Reflection**

The lesson reflection document guided participants to reflect on a specific learning experience using the Gibbs’ Reflective Model. The sheet scaffolded student reflection and provided space for the teacher to respond and then for the student to respond back to the teacher.

Below is a miniature depiction of the lesson reflection sheet:

<table>
<thead>
<tr>
<th>Title of Lesson/Assignment</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Learning Objective(s):**

<table>
<thead>
<tr>
<th>Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
</tbody>
</table>

| Feedback |

| Student Response |

<table>
<thead>
<tr>
<th>Feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>This part describes personal feelings, thoughts, actions, and reactions.</td>
</tr>
</tbody>
</table>

| Feedback |

| Student Response |
## Critical Analysis

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>This part makes positive and negative judgments about an experience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td></td>
</tr>
<tr>
<td>Student Response</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td>This part tries to explain the causes and consequences of things that happened. Focus on causes of action and consequences of action.</td>
</tr>
<tr>
<td>Feedback</td>
<td></td>
</tr>
<tr>
<td>Student Response</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>This part sums up what was learned from the learning experience. Give specific details and avoid making general statements, such as “I didn’t know....”</td>
</tr>
<tr>
<td>Feedback</td>
<td></td>
</tr>
<tr>
<td>Student Response</td>
<td></td>
</tr>
</tbody>
</table>

## New Perspective

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>This part states actions designed to improve knowledge, ability, and experience. Be specific.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2: Lesson Reflection

To accompany the lesson reflection sheet, participants were provided a sheet with sentence stems and probing questions to guide them through the reflection process. This process was scaffolded beginning with a 1) description of the lesson, 2) explanation of feelings during the lesson, 3) an evaluation of the lesson on what went well or poorly, 4) an analysis of the lesson which expands upon student evaluation, 5) conclusion questions, which are more self-reflective in nature, and finally, 6) an action plan, where participants brainstorm steps or preparation for improvement or learning in the future. Below is the Gibbs’ Reflective Model resource the participants referenced when completing the lesson reflection sheet:
Gibbs’ Reflective Model

Purpose for Using this Model:

--To challenge your assumptions and promote self-improvement
--To explore different/new ideas and approaches towards doing or thinking about things
--By combining doing with thinking/applying knowledge

Use the following questions to help and guide you in your thinking and reflection.

Description:

● What happened?
● What did you do?
● What did other people do?
● What was the result of the situation?
● What happened? Give a concise, factual account.

Feelings:

● How do you feel and what did you think prior to the learning experience?
● How did you feel and what did you think during the learning experience?
● What do you think other people felt during the situation?
● How did you feel and what did you think after the learning experience?
● How can you explain your feelings? What was affecting them? Did they change? Why?
● How did they affect your actions and thoughts at the time?
● Looking back, have your views on this changed?

Evaluation:

● What went well during the learning experience?
● What went poorly during the learning experience?
● What was positive about this situation?
● What was negative?
● Try to stand back from the experience to gain a sense of how it went.
● What made you think something was good or bad?
● Examine your own judgments and what contributed to them. How do you feel about them now?

Analysis:

● Reconsider the things that went poorly and write why you think they went poorly (causes of action).
● Reconsider the things that went poorly and write what you think this led to (consequences of action).
● Think about what could have been done to have avoided these negative consequences.
● Reconsider the things that went well and write why you think they went well (causes of action).
● Reconsider the things that went well and write what you think this lead to (consequences of action).
● Think about how this positive action could have been further improved.
● Think about your contribution to the experience and say how useful it was and why it was useful (did a previous experience help you? can you compare it to a previous experience?).
● If you were unable to contribute to the experience say why.
• Think about other people present during the experience and try to assess whether their reactions were similar or different to yours. Try to say why they were the same or different.

**Conclusion:**

• What should or could I have done differently?
• What stopped me from doing this?
• What did I learn about myself during the experience (positive and/or negative)?
• What did I learn about my current knowledge or level of practice (strengths and weaknesses)?
• Did the experience achieve any of my learning goals?

**Action Plan:**

• What could I do differently next time and how could I prepare for this?
• What areas need developing or planning?
• What do I need to do in order to be better prepared to face this learning experience in the future?
• Even if the experience was positive and I did well, in which areas can I improve?
• What specific steps do I need to take in order to achieve these improvements?

**Figure 3: Gibbs’ Reflective Cycle**

**Reflecting on Reflection**

At the end of the qualitative study, participants completed a sheet which guided them to reflect on their reflection throughout the course. This document provided specific questions with follow up questions in order to elicit more detailed answers to avoid superficial ones. I attempted to make the questions specific enough for the participants to answer without the assumption that participants will elaborate, but not too specific in a sense that would lead or affect reliability in their answers. Additionally, participants were asked the purpose of each resource they completed throughout the study in order to convey to the researcher if there was any shallow understanding or misunderstanding. Below are the questions from the reflection sheet:
Reflecting on Reflection

What is the purpose of the daily journal?

Has it helped you and your learning?

Why or why not?

Please explain how it has affected your thinking in class.

What is the purpose of the lesson reflections (yellow sheet)?

Has it helped you and your learning?

Why or why not?

Please explain how it has affected your thinking in class.

What is the purpose of receiving feedback from your teacher?

Has it helped you and your learning?

Why or why not?

Please explain how it has affected your thinking in class.

What is the purpose of replying to the feedback from your teacher?

Has it helped you and your learning?

Why or why not?

Please explain how it has affected your thinking in class.

What is the purpose of setting learning goals?

Has it helped you and your learning?

Why or why not?

Please explain how it has affected your thinking in class.

Anything else you’d like to say?

**Figure 4: Reflection on Reflection (End of Study Reflection)**