

RUNNING TO ACHIEVE: ENGAGING STUDENTS IN LITERACY
AND PHYSICAL ACTIVITY THROUGH AN AFTER-SCHOOL
LEARNING COMMUNITY

by

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ABSTRACT

The purpose of this participant-observation study is to describe rural, southern, 3rd-5th grade children's engagement in running and writing in an after-school learning community called *Running to Achieve*. This study provides insights into links between physical activity and writing by using one to engage students in the other. Three characteristics that emerged through data revealed that the learning community was a place where running and writing were social activities, teacher-student relationships were fostered, and self-efficacy was developed. Motivation and engagement styles were identified and shaped as students demonstrated growth in running and writing as a result of their participation. The results of this study suggest that future research focus on the following areas: examining the benefits of physical activity in learning, establishing learning communities in elementary schools, and shaping identities through participation in learning communities.

DEDICATION

This dissertation is dedicated to everyone who helped me and guided me through creating this manuscript. In particular, my family and close friends who stood by me throughout the time taken to complete my work.

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This dissertation would not have been possible without the influence of so many different people. It was these influences through many years of study that led me to discover my passion in education and assured me that this obscure interest was indeed worthy of pursuit. Without support and guidance, I might have never had the courage to embark on my own path in education research.

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CHAPTER I:
INTRODUCTION

As I stood in my old classroom for the last time, with tears in my eyes, I thought back to all of my students, and how they had impacted my teaching. I would be taking a piece of each of them with me to begin teaching in Alabama and embark on my doctoral study. In my hand I held two notes. One from a parent of, Maria, a child in my after-school running club, and one from Katherine, a student who had been in my third grade class, and had also been a part of my running club. The first read:

Dear Miss Vanzandt,

I wanted to take a moment to thank you for all you did for Maria, and all of the kids this year through Marathon Maniacs. It was a tremendous influence on Maria. The first part of her first grade year was very difficult and she hated school. One night I asked her just to think of one thing she liked about school. Her answer was "Miss Vanzandt's track team!" From that point on, that was our positive focus. Please tell Ms Kelley and all who helped you get this effort off the ground this year that it is much appreciated. You are affecting a lot of lives in a positive way! Thanks again!
Sincerely,

Susan (Maria's Mom)

The next, in her now fourth grade cursive, read simply: "Miss Vanzandt, it's always better when we're together."

Taken from a song by Jack Johnson that I often played for my students, this simple little note melted my heart, and it was then that the importance of relationships with students hit me the most. These two, unsuspecting students thought I was the one teaching them. However, what they taught me ended up shaping the next four years of my life, and this research.

Background Information

Running to Achieve, the focus of this study was an afterschool running and writing learning community that I began in September, 2009. This was the third running club I have begun in an elementary school. I began the prototype in 2006 after reading an article in *Runner's World* magazine and experimenting with running in my classroom instruction. At the time, I was a first-year, third-grade teacher in Raleigh, North Carolina, and as an avid runner, this was something that interested me. I formed a plan and met with my principal right away. By the beginning of the next school year, 2007-2008, I had created Marathon Maniacs. With over 120 participants, grades K-5, Marathon Maniacs met once a week for 25 weeks and ran a mile at each meeting. The end goal was a 1.2 mile race, conducted at our last meeting, which enabled the runners to complete the 26.2 mile distance of a marathon. Students tracked their progress through their own running journals, learned about healthy lifestyles, and trained for the race throughout the year.

At the end of that school year I found myself in Tuscaloosa, Alabama, pursuing a PhD in elementary education with an emphasis in literacy. As a reading coach at a local school in the 2008-2009 school year, I began to toy with the running club idea again, only this time I wanted to tie the running objectives to literacy objectives. I renamed it, *Running to Achieve* and it included over 70 students grades K-5 meeting weekly from January to April to train for a local 5k race and participate in literacy activities centered around running and healthy lifestyles. Simply from observing and being a part of the meetings, I saw that the learning community was enjoyable for all student, parent, and teacher participants. For this reason, I wanted to engage in descriptive research of the club and how it impacts participants.

In the 2009-2010 school year, I implemented *Running to Achieve* at another local elementary school to conduct this research. About 70 children, grades K-5, met once a week for an hour and a half after school in the fall and spring. Data collection for the study took place from January through May 2010.

The weekly meetings began with the first component, running, where participants learned about running and trained for the race. We trained for the same local 5k race that the previous club trained for the previous year. The race was hosted by the mayor of Tuscaloosa and raised money for the pre-K initiative in Tuscaloosa. The mayor gave his support of the club by having student participants serve as honorary starters of the race.

The second component was literacy. During the literacy component students participated in writing activities that centered on running and/or healthy lifestyles. The focus of writing was informational writing and poetry with the literacy-related end goals of creating an informational book about running for the school library, and a collective group poem about the running club experience. The learning community filled the need for writing instruction that is absent from Alabama curriculum, and physical activity that is being reduced.

Background of the Problem

In an educational setting that seems obsessed with assessing student performance on standardized tests, curricular focus may be narrowed to emphasize only what is being tested. Across the state of Alabama, writing instruction is often pushed aside to make room for longer, uninterrupted reading blocks. Recess may be taken out of Alabama schools because it takes away from instructional time, and PE may be reduced to a forty five minute block of time shared with an entire grade level, allowing for only a few minutes of actual physical activity for each child. Cutting back PE is problematic as Center for Disease Control (2011) recommends children and

adolescents need at least one hour of physical activity every day and childhood obesity rates are on the rise.

Obesity. Obesity is a major concern across the nation as 25.6% of adults are reported as being obese (Obesity in US Adults, 2007). Perhaps even more disturbing the childhood obesity rate has nearly doubled to 17% in the last 20 years (Center for Disease Control, 2007). The state of Alabama is among states with the highest obesity rates at 30.3%.

There are many health risks associated with obesity. Obesity in children and teens can lead to heart disease, type 2 diabetes, asthma, sleep apnea, and social discrimination (Center for Disease Control, 2011). Studies have also shown that obese children are more likely to become obese adults with the same health risk factors including a link to certain types of cancers (Center for Disease Control, 2011).

Literacy. While obesity rates are on the rise, literacy rates are declining. A recent survey from the National Association of Educational Progress revealed 37% of fourth graders are not proficient in reading (National Literacy Panel, 2009). Additionally, The National Center for Educational Statistics (2007) reported that by twelfth grade, only 24% of students are proficient in writing.

Alabama citizens are among the most illiterate. According to the National Center for Educational Statistics (2003), 15% of Alabama's residents lack basic prose literacy skills. This is reflective of the population of Tuscaloosa County where 14% of residents lack basic literacy skills (National Center for Educational Statistics, 2003).

Because of these alarming statistics, it is clear that both the issues of obesity and illiteracy of Alabama's children must be addressed. Access to both writing and physical activity, within the context of a learning community is the focus of *Running to Achieve*.

Learning communities, literacy, and embodiment. I formed the framework for *Running to Achieve* on the foundation of social learning theory (Barab & Duffy, 1998; Lave, 1996; Tracey & Morrow, 2006; Wenger, 1998). *Running to Achieve*, an after school learning community, engaged students through activities that taught them about healthy lifestyles, literacy, and training for a local 5k race.

Social learning perspectives enabled researchers and educators to view effective teaching as facilitating social interaction necessary to meaning-making. Many perspectives have sought to define what occurs in the learning process and what practices encourage students' learning. Barab and Duffy (1998) presented a situational perspective where practice is not separate from learning. Lave (1996) asserted that learning occurs when students change their participation in changing social situations or communities of practice. Barab and Roth (2006) emphasized that students lose interest in learning because they disconnect from the learning situation. Therefore, students should be engaged with the environment in order to find meaning and value in learning.

Freebody, Luke, and Gilbert (1991) urged teachers to take steps in placing literacy in the social context rather than encouraging basic textual competencies. In social learning perspectives, learning is viewed as a social process created through interactions and experiences. Wenger (1998) explored the idea of what would happen if learning was placed within the context of lived experience. Cheville (2005) carries this idea even further by placing the body at the center of learning in her theory of embodied cognition. Cheville (2005) examined the important role of the body in regards to learning and argued that it has been long overlooked in theories of learning. Social learning theories, learning communities research, and embodied cognition informed and shaped this research as it examined learning within a community that engages students in literacy through physical activity.

After-school clubs. In a high-stakes testing centered environment, providing children with multiple ways to engage with literacy that motivate them to read and write for meaningful purposes can be challenging. After-school clubs have been shown to increase academic achievement and impact behavior of students who participate (e.g., Gieselmann, 2008; James-Burdumy, Dynarski, & Deke, 2008; Prosser & Levesque, 1997; Rahm, Martel-Reny, & Moore, 2005).

After-school or in-school running programs are becoming more popular (e.g. Degan, 2000). However, research about their effectiveness (Xiang, McBride, & Bruene, 2004) is limited. Research has suggested that increased physical activity has significant impact on students' educational achievement (Running & Fit News, 2009). This study by the Texas Education Agency also found that higher levels of physical fitness are correlated with higher achievement scores.

Purpose Statement

The purpose of this participant-observation study was to describe rural, southern, 3rd-5th grade children's engagement in running and writing in an after-school learning community called *Running to Achieve*, and to provide insights to links between physical activity and writing by using one to engage students in the other. I will describe the community in terms of its characteristics, benefits to participants, engagement in running and writing activities, and changes in running and writing through participation.

Research Questions

The following questions guided the research:

1. What are the characteristics of this learning community;
2. How do student, parent, and teacher participants describe the learning community experience;
3. In what ways are students engaged in running and writing; and
4. How does students' writing change through their experiences with literacy activities and running?

Definition of Terms

As the purpose of this study is to describe the community in terms of characteristics of the community, benefits to participants, engagement in running and writing activities, and changes in writing activity and running through participation, it is helpful to have a shared understanding of what a learning community is and what engagement in writing and in running means.

Learning community. A learning community is a group of people who share common values and beliefs, and are actively engaged in learning together and from each other. A learning community includes mutual engagement, joint enterprise, and shared repertoire (Lave, 1996; Wenger, 1998).

Engagement. Guthrie (1996) identified an engaged child as one who is involved, curious, and social.

Engagement in writing. I use the term engagement in writing to describe students' active participation in the writing activities during the meetings. This can take several forms such as

participating in discussions, asking questions, thinking about and planning writing, using the time to write, making changes to writing, and sharing writing.

Engagement in running. Engagement in running is students' active participation in the running training component of the meetings. This can also take several forms such as consistently running with only minimal breaks, focusing during running, encouraging peers, using what is learned about running and applying it during the run (running form, hydration, stretching, pacing), and consistently improving the amount of running during each meeting.

Motivation. Motivation is either intrinsic or extrinsic. Intrinsic motivation is the desire to learn that comes from within a person. Extrinsic motivation creates a desire to learn because of an external reward.

Self-efficacy. In the context of this study, self-efficacy refers to a student's belief about their abilities in relation to writing or running (Bandura, 1993). It is important to note that this does not include self esteem.

Informational writing. Informational writing is expository writing that shares or recounts information. It might include certain text features such as headings, subheadings, pictures, captions, bolded words, tables, graphs, and diagrams.

Journal writing. Journal writing involves reflecting on one's experiences.

Traits of writing. Writing pieces in this study were assessed using *6+1 Traits of Writing* (Culham, 2003). Ideas includes assessing topic selection, focus of the piece, development, and detail. Organization is the structure of the piece. Voice is the tone of the piece and the writer's natural style. Word choice involves the use of precise, genre and topic specific words that add to the reader's experience. Sentence fluency is the flow of the piece. This includes the rhythm and patterns of writing.

CHAPTER II: REVIEW OF LITERATURE

Introduction

I began the following review of social learning perspectives by discussing Social Constructivism and Social Cognitive Theory. I then included research on embodiment as this study moves beyond a connection of the mind and environment to include the role of the body in regards to learning. Engagement, motivation, and teacher impact are all important to the study relative to both writing instruction and physical activity. The impact of physical activity on learning is also key. Because *Running to Achieve* is situated within a learning community, I drew upon the work of Lave and Wenger's notion of communities of practice (1991; 1993; 1996; 1998) to provide a lens to present my data.

Social Learning Perspectives

Social learning perspectives have evolved since the 1960s to answer the question of how social interaction impacts knowledge and learning. Learning is a social process in which children create meaning through interactions with others and experiences with curriculum. Wenger (1998) summarized social learning perspectives by stating that learning is a natural process of meaning negotiation. It involves experiences and social interactions that change our identities and connect our past and futures. Learning involves engagement, imagination, and making connections.

During the time of social learning perspective development, educational institutions treated learning as separated from our daily activities and social lives (Brown, Collins, & Duguid, 1989; Wenger, 1998). Schools tended to treat learning as an individual, isolated activity

that was not affected or influenced by the context of instruction (Brown, Collins, & Duguid, 1989). This narrow view learning shaped a curriculum centered on the individual, rather than valuing the social nature of learning. Rogoff and Lave (1984) argued that research focused too much on changes within learners without considering the context of the learning.

Resnick (1987) advocated a move from cognitive learning theories that focused solely on the individual's development irrespective of the environment, to a more broad view of social interactions and meaning development. She stated that learning is situational and learning in schools should match learning that occurs outside of schools. Resnick (1987) contended that there is a need for schools that merge how learning occurs outside of schools into their instruction and curriculum. For example, rather than schools focusing on individual, isolated learning, schools should mimic outside learning that is social. Outside of schools learning occurs through experience and social interaction. This type of learning rooted in experience and social interaction should be applied in classroom instruction. Wenger (1998) also explored the idea of what would happen if we opened up our vision of learning and placed it within the context of lived experience. Perhaps we would find that, "learning is as much a part of our human nature as eating or sleeping, that it is both life-sustaining and inevitable, and that given a chance we are quite good at it" (Wenger, 1998, p. 3). From the day we are born we learn through social interactions. We learn how to talk, how to walk, social norms, behaviors, without a teacher dictating to us. In this respect, we are all natural learners.

Social learning perspectives encompassing sociolinguistic theory, socio-cultural theory, social constructivism, social learning theory, and critical literacy theory informed this research (Tracey & Morrow, 2006; Bandura, 1986, 1997). As a framework for this study, I will explore Vygotsky's Social Constructivism, and Bandura's Social Cognitive Theory.

Social Constructivism

Vygotsky is most famous for his theory referred to as Social Constructivism that posits that learning occurs through social interactions. Vygotsky believed that children learn through interactions with more capable peers (Vygotsky, 1978). Zone of proximal development and scaffolding are two significant features of Social Constructivism. The zone of proximal development refers to the level at which a child can experience success with appropriate support (Tracey & Morrow, 2006). This zone does not include tasks that students can complete on their own, without the assistance of a teacher or more skilled peer. If a task can be completed independently, that task will not promote development. The key to stimulating learning is to target an area where the student can experience success with task completion with assistance. This will promote the most development in the child. Beyond that zone, the task is too complex and will not promote learning. Scaffolding is directly related to the zone of proximal development as it involves appropriate levels of assistance from peers and adults during tasks to achieve the desired learning (Tracey & Marrow, 2006). The more proficient a student becomes, the less assistance needed. As Tracey and Marrow (2006) stated, "children learn during experiences within the zone of proximal development as a result of others' scaffolding" (p. 109). The term scaffolding was developed by Wood, Bruner, and Ross (1976) to describe instruction given by a teacher or peer to support student learning. In other words, learning results through interactions with others as they scaffold learning for the child within the appropriate level of task difficulty.

Social Cognitive Theory

Albert Bandura added another layer to social learning perspectives with his Social Cognitive Theory (formerly referred to as Social Learning Theory). Within this theory,

Behaviorism is intertwined with social learning. Bandura created this theory because behavioral explanations of learning did not take into account the social aspect of learning (Tracey & Marrow, 2006).

From the social side of the theory, Bandura believed that observing others plays a significant role in learning. In his theory, the people being observed are "models" and perform the "modeling" for the learners. "In modeling, people pattern their styles of thinking and behaving after the functional ones exemplified by others" (Bandura, 2005, p. 11). However there are misconceptions about Bandura's theory involving modeling. One misconception is that observing a model simply leads to mimicry. Research has dispelled this misconception proving that once individuals learn from modeling, they naturally generate new versions of the behavior that they adjust to meet their needs (Bandura, 1986; Rosenthal & Zimmerman, 1978). Another common misconception is that modeling stifles creativity. However, research showed that each observer's unique way of thinking informs their interpretation and reproduction of the behavior in a unique way (Bandura, Ross, & Ross, 1963). Therefore two observers might develop a different behavior by combining different models in their own, unique way.

Self-efficacy and self regulation are also tenets of Social Cognitive Theory. Self-efficacy is a person's personal beliefs about his abilities and it shapes his life and the path he takes (Bandura, 2005). It is important to note that self-efficacy is not self esteem. Self-efficacy is a "judgment of personal capability," not a "judgment of self worth" (Bandura, 2005, p. 26). Levels of self-efficacy influence how individuals see their environment. Those with high self-efficacy view an environment as an opportunity while those with low self-efficacy see it as a risk (Krueger & Dickson, 1994). Self regulation is related to self-efficacy in that it is the process of an individual evaluating his behavior in terms of his own personal standards or beliefs about

what he can do (Bandura, 2005). This evaluation of achievement is essential for growth in self-efficacy.

While individuals assess their own abilities, there is also a notion of collective self-efficacy. This is the belief in the abilities of a group that an individual belongs to (Bandura, 2005). This belief in the group is essential in Social Cognitive Theory as individuals learn from one another within their environments often within learning communities.

Embodiment

While social learning theories consider social interaction and the role of cognition, they do not consider the impact of the physical body on learning. Teaching and learning has long taken the stance that the mind is separate from the body. For this reason, most curriculum and teaching is centered on purely the mind, and does not value the body or recognize the influence of the physical characteristics of learning. Le Grange (2004) compared mind-body separation to that of theory and practice. This is the idea that theory is preoccupied with the mind's thinking of ideas whereas practice is the acting out of the ideas. Le Grange (2004) argued that there cannot be a separation of the two. Theory does not exist without action. In the same way, learning cannot exist without action, thus the connection between the mind and body is made. Embodiment merges the mind and body as inseparable and influential on one another.

Horn and Wilborn (2005) stated that embodied learning involves "describing learning, knowing, and doing as observations and descriptions that depend upon observers and describers who act only from within physical and social contexts that provide a world of potential distinctions" (p. 748). This observing, describing, and acting creates cognition, and cognition develops knowledge (Horn & Wilborn, 2005). Creating knowledge involves not only observing the world, but it also involves our experiences in the world and how each individual interprets

his or her experience. Horn and Wilburn call for an understanding of the ðmind, body, and environment as inextricably-embedded systems whose boundaries and characteristics emerge from a continuous mutual shaping process that, at each level, remains self-organizing and autonomousö (p. 749). Embodied learning does not separate the body, environment, and our own histories. They are all present in our creation of learning.

Horn and Wilburn (2005) identified three basic principles of this theory of embodiment: learning within closed organizations, learning by interactions with social components, and learning with other learners who are connected to an environment. These principles take into account the social nature of learning, while the learner stays connected with the environment as well. We are not merely in the world, but the world is in us as well. As we interact with the world, it becomes a part of who we are. Therefore the world and the body cannot be separated. In the same way that a mind and body cannot be separated, the role the body has in learning must not be underestimated or denied.

Embodied Cognition

While theories of embodiment embrace the social and cultural aspects of learning, Cheville (2005) took the idea a step further in her theory of embodied cognition. Embodied cognition is a theory that explains how the body influences the mind (Cheville, 2005). Cheville identified two competing theories of embodiment: one represents the body within cultural constructs, while the other represents cognitive functions that evolve from bodily activity. Cheville combined the two and ðlocates the human body at the intersection of culture and cognitionö (p. 86). Embodied cognition demonstrates how the body, while an object of culture, still influences the mind (Cheville, 2005).

To demonstrate the theory, Cheville conducted an ethnographic study that analyzed athletic learning of members of a women's basketball team. In her study, Cheville documented players' learning through social and physical activities. While her study was exclusive to athletic learning, this same theory of embodied cognition will be used in this study with a focus not only on athletic learning, but also on literacy acquisition.

Social interactions and embodiment shape our understanding and help us make meaning. *Running to Achieve* employs these theories in the planning of writing and physical activity. In the following sections I outline research in writing and physical activity, respectively.

Writing

Through the evolution of social learning perspectives, writing is no longer seen as an isolated, individual activity, but is instead viewed as a social practice made up of apprenticeships, procedural tools, and communities of practice (Englert, Mariage, & Dunsmore, 2006). Apprenticeship of writing involves the teacher using explicit teaching to give students access to procedures through think alouds to guide writing instruction (Baker, Gersten, & Graham, 2003; Daniels, 2001; Scribner, 1997; Wells, 1999). In a meta-analysis of studies of writing, researchers have found explicit instruction of the writing process does impact writing performance (Baker et al., 2003; Gersten & Baker, 2001; Vaughn, Gersten, & Chard, 2000). Beyond mere explicit instruction, Hillocks (1984) found that blending explicit instruction with engaging activities was most effective at helping students understand the purpose and form of writing. Social interaction is imperative in this form of instruction as novices (students) learn from experts (teachers and peers) through social participation (Englert, Mariage, & Dunsmore, 2006). In fact, Gould (1996) stated that writing instruction is built around dialogue between teachers and students as they work together to build meaning.

In order to build meaning, students need certain procedural tools. These tools support development as they provide steps and methods of organization that students can use to self-regulate their writing (Pea, 1993; Roth, 1998). Bereiter and Scardamalia (1987) found the procedural tool of cue cards were useful in helping students monitor and assess their own writing. They found the cueing system enabled students to achieve at higher levels than they would have without the system. Other examples of procedural tools used in classroom instruction might vary from graphic organizers to poster prompts about the writing process.

Finally, research suggests that writing development is best encouraged when situated within a community of practice. Through participation in communities, learners adopt the community's social practices and values (Roth, 1998). Students are given opportunities to engage with their teacher and peers through writing and receive feedback from those who are more knowledgeable (Dalton & Tharp, 2002; Mercer, 2002). Engaging students in their own learning through participation in communities of practice is more likely to promote higher levels of thinking in regards to literacy while also promoting growth in other disciplines (Alvermann, 2000; Englert, Mariage, & Dunsmore, 2006). Most research about writing within communities of practice has taken place within the context of science instruction. However, results from these studies suggest that experimental groups made significant gains beyond control groups and these gains benefited written performance (Brown, Ash, Rutherford, Nakagawa, Gordon, & Campione, 1993; Guthrie, Wigfield, & Perencevich, 2004; Palincsar, Magnusson, Manaro, Ford, & Brown, 1998; Roth, 1998; Scardamalia & Bereiter, 1994; Wells, 1999).

While there is research on communities of practice involving science and writing, more research needs to be done on how communities of practice might support writing and literacy

development. This study used a community of practice framework to engage students in writing through an interest in physical activity.

Motivation and Engagement in Writing

When teachers provide students with well-established goals and real world connections to self selected, interesting texts, students will engage in literacy learning (Guthrie, 2000). These elements are crucial in fostering literacy learning as engaged readers are typically higher achievers and spend 500% more time reading than non-engaged readers (Guthrie, 2004). Fostering engagement in literacy learning has been overshadowed by demands of high-stakes testing that produces shallow instruction with lower-level activities that do not enhance motivation in students that leads to engagement (Anderson, Heibert, Scott, & Wilkinson, 1985; Brophy, 1983; Doyle, 1983; Goodlad, 1983). Engagement in literacy learning is far more complex than preparing students to pass state mandated tests, and results from students having motivation, having conceptual understanding, using cognitive strategies, and being involved in social interaction (Guthrie, 1996).

Guthrie (1996) identified an engaged child as one who is involved, curious, and social. Curiosity and involvement can lead to long term engagement, while being motivated simply to comply with social norms will not produce life-long engaged readers (Guthrie, 1996). External motivators, such as completing a task simply for a grade, or so a child does not get in trouble with the teacher, do not have lasting impacts on engagement, while internal motivation tends to lead to life-long engagement. Teachers' demands and rewards will lead to engagement that is externally motivated and short-lived, while interest-based engagement endures.

Process. As mentioned previously, motivation is key in promoting engagement in literacy activities. However, in relation to writing, many young writers feel anxiety and fear which leads

to avoiding writing altogether (Cleary, 1991). While there is still a need for more research specific to motivation in writing, there is agreement on the process of writing and what it encompasses. Writing is a process in making meaning and instruction has shifted from a focus on the mechanics of writing to the communicative purpose of writing (Applebee & Langer, 1984; Elbow, 1994; Langer & Allington, 1992). Writing is recognized as a complex process involving planning, text production, and revision (Flower, Stein, Ackerman, Kantz, McCormick, & Peck, 1990). Writers must balance and navigate a variety of constraints such as audience and purpose all while critically thinking and also adhering to conventions (Hayes, 1996). Because of the complex nature of writing, the thought of engaging in writing can be daunting, thus providing motivation for student writers is imperative.

Value. A starting point for motivation in writing is a belief that writing has value (Gambrell & Coding, 1996). Students need to believe that there is a purpose for what they are writing and that it has value in their lives. Value beliefs influence students' behavior as they are less likely to engage in an activity they do not value (Wigfield, 1994). However, feeling that writing is valuable and has rewards is not sufficient in promoting writing proficiency as studies have shown that students do value writing in upper elementary grades and remains high well into high school and college (Pajares & Johnson, 1996; Pajares, Millier, & Johnson, 1999, Pajares & Valiante, 1997), but are still not reaching levels of proficiency. The National Center for Education Statistics (2007) reported only 24% of twelfth grade students are at or above proficient level in regards to writing. Therefore while research indicates students value writing, value is not enough to promote proficiency.

Goal setting. Providing students with goals increases their writing confidence and leads to an increase in writing (Bandura, 2003). Bandura categorized goal setting behaviors as

performance-approach and performance-avoid. In performance-approach styles, students want to do well to demonstrate their ability, while performance-avoid styles include students who perform tasks to avoid showing their lack of ability. In a study by Pajares, Britner, and Valiante (2000), performance-approach styles were associated positively with self-efficacy, while performance-avoid styles were associated negatively with self-efficacy. Their study showed that students need to have positive experiences and feedback with writing in order to develop positive self-efficacy to lead to motivation and engagement in writing.

These two approaches to goal setting are similar to those referred to as task-mastery versus performance (Duda & Nicholls, 1992; Nolen, 1988), task versus ego (Nicholls, 1984), learning versus performance (Dweck & Elliot, 1983), and mastery versus ability (Ames & Archer, 1988). The principle of these goal setting theories is that one refers to a student who is motivated intrinsically to learn, and the other refers to a student who is motivated by avoiding consequences, or by outperforming others. For example, the task-mastery category describes students who are motivated by a desire to improve their ability, while with performance goal category describes students motivated by outperforming peers and gaining attention for their accomplishments. A third construct, the work avoidant category, describes students who complete tasks with little effort or in an attempt to simply avoid doing anything at all (Duda & Nicholls, 1992).

Self-efficacy. Self-efficacy is directly linked to goal setting. Students with high self-efficacy view tasks as a challenge and work to improve their ability and master a skill. Those with low self-efficacy might attempt to avoid the task altogether (Schunk, 2003). However, personal goals and motivation shapes learning. An academically motivated child might benefit from teacher modeling, while a socially motivated child might benefit from interaction and

modeling from peers (Schunk, 2003). Knowing our students' motivation and engagement styles is imperative in order to provide instruction and activities that will meet students' needs and help them experience success, which in turn will increase their self-efficacy.

Belief in one's own competence in writing, or self-efficacy is critical in motivation (Bandura, 1993). In a study by Pajares and Johnson (1994), students' beliefs about their own writing skills was the most predictive indicator of writing performance. However, apprehension about writing impacts a student's confidence, it does not impact their writing performance (Pajares & Johnson, 1994).

Modeling, as discussed in Bandura's (1993) Social Cognitive Theory, is also an important method for increasing self-efficacy. Cognitive modeling involves a teacher modeling a behavior while thinking out-loud (Meichenbaum, 1977). However, modeling is most effective when the behavior results in positive feedback. Environment also influences self-efficacy greatly as teacher and peer feedback impact students' beliefs in their abilities (Schunk, 2003). Teacher feedback should help guide students to improve their skills without punishment or making them feel they lack the ability for achievement. In writing, as in other areas of learning, students develop beliefs about their capabilities based on feedback and set goals based on those beliefs (Bandura, 1993). These goals become their motivation.

Conceptual understanding. Conceptual understanding also drives engagement and relies on motivation. Conceptual learning is intrinsically motivating as interest in a topic will enhance engagement (Guthrie, 1996). Beyond simply reading about topics of interest, conceptual understanding involves a need to explain. For example, merely reading about a topic does not automatically give a learner a conceptual understanding of what was read. This understanding evolves through being able to explain the concept along with explaining how the learner feels

about what was read. This ability to express their feelings about learning in writing is crucial to literacy engagement (Guthrie, 1996).

Social interaction. Social interaction also leads to sustained engagement in writing. Interacting with peers leads to an increase in a sense of belonging, and an increase in self determination, all of which lead to increased engagement (Guthrie, 1996). Effective writing classrooms that include social interaction place literacy learning at the center of instruction, encourage working together, and create project centered activities that give students responsibility for their learning (Bruning & Schweiger, 1997; Calfee & Patrick, 1995; Guthrie & Alao, 1997; Guthrie & McCann, 1997; Graves, 1991; Turner, 1995). Collaboration with peers can also foster intrinsic motivation and learning goal orientation (Guthrie, 2000). All of this, in turn, influences engagement.

Teacher impact. One cannot discuss engagement and motivation and the promotion of self-efficacy without including the importance of the role of the teacher. Teacher involvement refers to a teacher who knows about the student's personal knowledge and interests, cares about each student's learning, and holds realistic, positive goals for student's effort and learning (Guthrie, 2001, p.8). When students perceive a teacher as involved, they tend to be more engaged and take ownership of their role in the classroom as a learner. In fact, engagement has been directly linked to whether a student perceives their teacher as caring and interested (Skinner & Belmont, 1993). In order to foster learning, the teacher must be invested in the relationship with the student (Muller, Katz, & Dance, 1999). The teacher is an integral part in shaping student's goal setting and building self-efficacy. Because the teacher is usually the evaluator, how she interacts with students is key. Evaluation is a concept that is often misused and can actually deter engagement. Rather than simply evaluating standards, Guthrie (2000) urged a more student-

centered approach that evaluates student effort and personal goals. This moves students away from comparing themselves to others, and gives them ownership of their learning and practice. Teachers should foster caring and nurturing relationships, while helping students set goals and evaluate their own success. This leads to an increase in engagement and builds self-efficacy.

Promoting motivation and engagement is not a onetime objective but is a continual process with lasting implications. While there are many ideas for increasing engagement in literacy such as speed writing, book clubs, or specific curriculum programs, (i. e. Luse, 2002; Teale & Gambrell, 2007) there has not been research linking physical activity within the context of literacy learning.

Physical Activity

With the emphasis on standardized testing and meeting benchmarks, physical education and recess are being limited to make way for more instructional time (Action for Healthy Kids, 2004). However the lack of importance placed on physical activity is just one of many obstacles to engaging students in physical activity. While studies have shown a link between physical activity and academic performance (i.e. Etnier, Salazaw, Landers, Petruzzello, & Nowell, 1997; Hanson & Austin, 2003), factors such as motivation, teaching methods, and access limit the amount of physical activity students engage in. Attending to student interest and motivation, teaching methods, and student access to physical activities can result in increased and sustained engagement in physical activity.

Motivation and Engagement in Physical Activity

Lack of engagement in physical activity could be based on a lack of interest and motivation, and a lack of associating meaningful connections to life experiences (McCaughtry & Rovegno, 2001). As with literacy engagement, intrinsic motivation is an important determinant

in engagement in physical activity (Ferrer-Caja & Weiss, 2000). Ferrer-Caja and Weiss (2000) define intrinsic motivation as based on, "people's needs to be competent and self-determining" (p. 267). Self-determination relates to a person's feeling of having choice. Positive feedback also enhances a child's intrinsic motivation, while coercion, through reward, as with external motivation, can be seen as manipulation, and have an adverse affect (Ferrer-Caja & Weiss, 2000). "Intrinsically motivated persons will maximize effort and persistence in optimally challenging activities and experience interest and enjoyment that increases and sustains participation" (Ferrer-Caja & Weiss, 2000, p. 268). A study by Ntoumanis (2001) that examined self-determination in physical education classrooms corroborates Ferrer-Caja and Weiss finding that intrinsic motivation was enhanced through positive feedback, while external motivators had negative impacts on engagement.

Motivational orientations. Feelings about one's abilities shapes one's individual theory of achievement. As previously mentioned, Nicholls's (1984) work on achievement theory is also useful to consider motivation in physical activity. He suggested that task-oriented individuals focus on developing and learning new skills and becoming their best at them. A task-oriented individual believes that ability comes from exerting maximum effort. Ego-oriented individuals focus on outperforming peers and only put forth minimum effort (Duda & Nicholls, 1992; Nicholls, 1984). This will be important in this study as I examine motivational styles of students and place them into engagement styles based on observed behaviors exhibiting task-oriented, ego-oriented, and performance avoid styles.

Xiang, McBride, and Bruene (2004) examined a running program within an elementary school physical education class to determine students' motivation and found that task-oriented motivation improved sustained interest and participation in the running program. Having task

orientation is associated with, working hard, choosing challenging tasks, persisting in the face of difficulty, and attributing success to effort (Xiang, McBride, and Bruene, 2004, p. 254). This supports the popular view that encouraging task-oriented achievement in instruction may sustain long lasting engagement (Duda & Nichols, 1992).

Motivational climates. Epstein (1988) and Ames (1992) listed elements used for forming a task-oriented motivational climate. The elements task, authority, reward, grouping, evaluation, and timing determine whether or not a child will perceive a climate as task-centered or ego-centered. In ego-oriented climates, students are given the same task and the teacher determines goals, while in task-oriented climates students select their tasks and goals. Ego-oriented climates involve the teacher making learning decisions, choosing equipment, and evaluating students, while task-oriented climates involve the students making learning decisions, choosing equipment, and evaluating themselves. Recognition is public in ego-oriented climates and private in task-oriented climates. Students are ability grouped in ego-oriented climates while flexible grouping is used in task-oriented climates. Evaluation is based on rank and time limits are set in ego-oriented climates, while evaluation is improvement based and time limits are flexible in task-oriented climates.

Although research has demonstrated the need for task-oriented motivational climates, it is often hard to create within the context of a physical education course, or in teaching physical activity. For example, students cannot always set up and choose equipment, and the very nature of sports, with a winner and loser, lends itself more to the reward and evaluation nature of ego-oriented motivation. Supporting this claim, Todorovich (2009), discovered five themes that were prevalent in pre-service physical education teachers' beliefs about themselves. These teachers believed they must maintain control of the classroom, the best students should be recognized,

physical education should be taught in isolation from other subjects, physical education and athletics are connected, and teachers of physical education should grade on effort. Most of these perspectives on teaching fit into the ego-oriented approach, and might not encourage long-term effects for engagement in physical activity for those students who are naturally task-oriented.

Most classrooms and school setting climates are geared toward an ego-oriented student. Because students naturally have a preferred orientation, it is key that teachers balance the classroom motivational climate to meet all learners. Task orientations are strengthened in students in a task-oriented climate, while ego orientations are strengthened in ego-oriented climates (Todorovich & Curtner-Smith, 2003). Students have a natural tendency toward one orientation over the other and that needs to be fostered in classrooms.

Participation styles. There has been much research on participation styles in physical education research (Bain, 1985; Bennett, 2000; Griffin, 1984, 1985; Zmudy, Curtner-Smith, & Steffen, 2009). In his study of a college weight training class, Bennett (2000) identified six styles of participation within the two categories of *slackinø* and *sweatin.* The *slackin* group included the *socializers*, *manipulators*, *underachievers*, and *minimalists*. The *sweatinø* group included the *sidekicks*, and *ex-athletes*. Each name given to the participation style exemplifies that specific behavior. For example, the *socializers* were characterized by constant conversations with other students in the class, while the *manipulators* gave the appearance of working hard, when in fact they were accomplishing very little.

Similarly Griffin (1984, 1985) observed participation styles of girls and boys in middle-school physical education courses. She identified six participation styles in girls: *athlete*, *JV player*, *cheerleader*, *femme fatale*, *lost soul*, and *system beater* (1984). Five styles emerged when observing boys. These included *machos*, *junior machos*, *nice guys*, *invisible players*, and *wimps*

(Griffin, 1985). Correspondingly, Bain (1985) also classified students she observed. These groups included *serious runners*, *serious walkers*, *social interactors*, and *absentees*. All of this research suggests that different participation styles in relation to physical activity do exist and do influence each student's individual experience in the context of physical education. More research is needed to explore how a student's motivation orientation might impact their participation style.

Teacher impact on physical activity. While teachers need to be aware of the motivational climate they are creating, teachers should also be aware of their own behaviors and the impact they might have on students. Martinek and Karper (1986) researched how teacher expectations affect student behaviors in the physical education context, and found that teacher expectations directly impacted teacher behaviors that served to motivate students. Low teacher expectations could reinforce a sense of learned helplessness in lower performing students (Martinek, 1989). If a student develops a low perception of his or her abilities based on low expectations from the teacher, this perception could have more of an impact on physical performance than their actual ability. In fact, this low perception could even get in the way of the child, or teacher, even knowing the child's true ability level. For this reason, beyond creating a motivational climate for students, teachers should be aware of how their perceptions and behaviors toward students can directly impact student achievement.

Access to physical activity. Even with self motivation, a well rounded motivational climate, and encouraging teacher behavior, some students still have a roadblock to overcome when it comes to physical activity. That roadblock is access. While schools are cutting back recess and physical education programs, many children who would only have access to physical activity at school, do not have that access in their homes. Many studies cite access as one of the

main determinants of whether children participate in physical activity (Sallis, Prochaskas, & Taylor, 1999; Trost, Pate, Saunders, Ward, Dowda, & Felton, 1997; Wilson, Kirtland, Ainsworth, & Addy, 2004). Particularly in rural or urban lower-socioeconomic families, access is a hurdle to overcome. Walking trails in rural communities have helped to meet this need on some level (Brownson, Houseman, Brown, Thompson, King, Malone, & Sallis, 2000). However, other determinants besides access to facilities such as perceptions of the neighborhood environment still cause barriers in many rural and urban communities (Giles-Corti & Donovan, 2002).

These are important factors to consider particularly in this study where the school is located in a rural area. Running in the neighborhood is not a reality for many of the participants in the running club. In fact, the time they run in the running club, for some, is the only time they run during the week. Even though the school provides this club for students, many who wish to participate cannot due to transportation problems. Therefore, the nature of the after-school club gives access to some students who might not have it, however still does not provide access to others to participate.

Linking physical activity and learning. Besides the obvious health benefits to participation in physical activity, physical movement plays a significant role in cognition and learning. However, in a time of high stakes testing with No Child Left Behind, physical education and recess are being cut from schools (National Association for Sport and Physical Education & American Heart Association, 2006). In a nation where childhood obesity rates are climbing, an increase in physical activity is called for.

Physical movement delivers more oxygen to the brain, increases nerve growth, increases dopamine, which enhances mood, and produces new cells allowing the brain to be at its best

(Jensen, 2008). These conditions impact mood, cement memory, and enhance connections within neurons (Jensen, 2008, p. 39). No cognitive activity produces such a response (Jensen, 2008). In fact, research has shown that the exercise is the equivalent of a prescription drug in fighting depression and anxiety (Landers, Butler, & Fagen, 2001).

A healthy brain benefits from physical activity. Research shows that exercise can enhance thinking skills and increase a person's willingness to engage in challenging activities (Landers et al., 2001). In fact, athletes constantly use cognitive-behavioral techniques that are directly linked to psychological thinking. The most common skills are self-talk, goal setting, and imagery or visualization (Landers et al., 2001). With self-talk, athletes control negative thought and replace it with positive thinking. Another skill is goal setting. Athletes set clear, measurable goals that are based on their skill level (Landers et al., 2001). Finally, athletes also combat negative thoughts by visualizing themselves achieving their goals (Landers et al., 2001). These psychological thinking skills used by athletes tie directly to psychological thinking needed to produce positive learning experiences in the classroom. Self-talk and visualizing could help learners control negative thoughts, goal setting could help learners measure and assess their learning.

Physical movement has tremendous benefits for learning. Increased amounts of physical activity could provide students with necessary levels of brain neurotransmitters, and perhaps structural changes in the brain, that promote improved mood state, which in turn results in improved cognitive functioning (Landers et al., 2001, p. 349). In a world where students live more sedentary lifestyles than ever before, with TV, video games, and internet at their beck and call, and where access to physical activity is not available to all, it has never been more important for schools to value and give attention to physical activity and its benefits.

Theoretical Framework

Running to Achieve was created to engage students in writing and physical activity. Drawing on research in social learning perspectives, writing instruction, and physical activity, the purpose was to fill a gap in the current curriculum where writing instruction and physical activity are pushed to the side. This purpose was fulfilled within the context of a learning community. For that reason, the theoretical lens used to shape this study will draw upon Lave and Wenger (1991) and their work with communities of practice. Within social learning perspectives and embodiment practice, learning, and meaning are all intertwined in a context or community. Lave (1993) stated that being a member of a community motivates and shapes learning. These communities emphasize relationships between an individual, the world, activity, meaning, cognition, learning, and knowing (Lave & Wenger, 1991).

Learning Communities

A proponent and leader of research in social learning is Jean Lave. From an interest in studying apprenticeships, Lave (1996) developed the idea of communities of practice. She questioned practices in formal education when studying practices of informal education with apprenticed Liberian tailors. Lave took aim at the notion that apprenticeship, or informal education, does not produce knowledge but rather "reproduces existing practice" (Lave, 1996, p. 152). Contrary to this long-standing belief that apprenticeship does not produce knowledge, she found that rather than simply reproducing existing knowledge, apprentices were learning many complex ideas, and all at once (Lave, 1996). Placed in the context of a real world setting, the apprentices were learning life skills in their ongoing activities while interacting with one another. Lave applied what she learned from her study to teaching in formal educational settings. She contended that traditional teaching is not enough to promote learning. It drives a wedge between

the teacher and the student and disregards the social nature of learning that takes place among all participants, including the teacher (Lave, 1996). It was from this idea that situated learning and communities of practice emerged.

People belong to different communities of practice that exist everywhere. These communities exist in homes, jobs, schools, and extracurricular activities where people work together to advance the group's knowledge (Wenger, 1998). Wenger (1998) described three dimensions to these communities: mutual engagement, joint enterprise, and shared repertoire. Mutual engagement includes the participants that are brought together out of a joint enterprise, or shared goal. From this goal, a shared repertoire emerges with its own routines and practices (Wenger, 1998). In short, communities of practice involve a group of individuals with mutually-developed practices working toward a shared goal.

While it has been established that communities of practice exist everywhere, and we are members of many communities, such communities take many forms in schools. Barab and Duffy (1998) discussed how, in an attempt to bring this idea into the classroom, communities of practice can be misused and misinterpreted as a "practice field," where it is viewed from a psychological perspective. The notion of the practice field occurs in classrooms in the form of hands-on problem solving, or problem-based learning. With problem-based learning, students work in small collaborative groups and learn what they need to know to solve a problem (Hmelo-Silver, 2004). The problems might have a real world application, but are void of an authentic real world setting. This constitutes more of a situated activity rather than a community of practice where the focus is on the individual's relation to the community. Barab and Duffy (1998) explained that with practice fields emphasis is on, "learning and grades, not participation and use, and identity being developed is one of students in school, not a contributing member of the

community who uses and values the content being taught (p.9). For example, reciprocal teaching, jigsaw method, and scaffolding are all attempts at creating learning communities in educational institutions (Cope & Kalantzis, 2000). These methods involve teachers and students working together to learn from one another. Although they make an effort toward learning communities, they lack certain characteristics, and mimic the "practice field" approach.

Barab and Duffy (1998) affirmed the pure "community of practice" is viewed from an anthropological perspective with the following characteristics with a focus on each individual's relationship to the community. The members of the community are learners and produce meanings through participation in their everyday world. The overarching goal is to meet the community's needs. This is in stark contrast with the practice field or psychological view as described above that takes place in classrooms. Within the psychological view the focus is cognition as opposed to relationships; the learners are seen as students rather than members of a community; the unit of analysis is the activity rather than the community as a whole; only meaning is produced rather than identities and communities; and the learning arena is limited to schools instead of the world. The goal is on the future rather than immediate needs (Barab & Duffy, 1998). This values a preference for a pure model rather than a practice field approach.

However, Sfard (1998) argued that perhaps choosing one over the other, the "practice field" over the "community of practice," is not the best way to go either. Sfard described the "practice field" with an acquisition metaphor involving individual enrichment, acquiring learning, and being a recipient of knowledge. The community of practice is explained through a participation metaphor that encompasses community building, apprenticeship, practice, and being a participant of learning. Rather than choose one method over the other, Sfard urged that both have a place in education. Because all students and teachers are diverse, and no two are

alike, Sfard warned against placing one idea of learning on a pedestal above the other. No one theory can encompass all areas and meet all needs.

Deeply rooted in social learning perspectives, communities of practice, or learning communities, have evolved from apprentice-shaped frameworks into classrooms of situated learning. While there is debate about whether or not a pure learning community framework is best for learning, it is clear that they have great potential for fostering student learning, and their application in classrooms should be studied further.

After-school Clubs, Learning Communities, and Literacy

Theories on communities of learning recognize that such communities are difficult to fully enact in the regular school setting (Barab & Duffy, 1998). Curriculum standards and prescribed curricular materials can make it difficult for teachers to embrace communities of learning. Furthermore, increased demands upon teachers for ensuring students reach proficiency in reading and math could prohibit teachers from providing rich learning environments. After-school clubs provide an opportunity to overcome these barriers to instructional change to build communities of learning and engage students in literacy activities. In order to engage students in literacy and communities of learning, an argument can be made for extending research from classroom instruction into after-school clubs, which are also learning communities.

Research has shown after-school clubs can increase academic achievement and impact behavior of students who participate (Gieselmann, 2009; James-Burdumy, Dynarski, & Deke, 2008; Leto, 1995; Prosser & Levesque, 1997; Rahm, Martel-Reny, & Moore, 2005). Many of these clubs take the form of tutoring programs. Leto (1995) gave a recipe for after-school tutoring programs that included funding, common goals, energized participants, a home for the program, an understanding of literacy, supportive institutions, supportive parents, safe

environment, and structured format. Leto specifically identified a community of learners as a key component.

While research has shown that after school tutoring clubs have been effective in promoting academic achievement (Gieselmann, 2009; James-Burdumy, Dynarski, & Deke, 2008; Leto, 1995; Prosser & Levesque, 1997; Rahm, Martel-Reny, & Moore, 2005), the framework of a tutoring program does not open the experience up to all learners because it is limited to those who can afford tutoring. Therefore there is a need for research about after-school clubs that offer all learners the opportunity to engage in literacy activities, within a community of learning framework.

Summary

Given what we know about social learning perspectives, writing and physical activity engagement, and the role after-school clubs play in supporting academic achievement and providing access to students, this study sought to examine each of these components within the context of a learning community that uses running and writing to engage students activities. While engagement in writing and engagement in physical activity have been studied in isolation, there are no studies linking the two. This study sought to merge the two, and provide insights into how learning communities can be enacted and support achievement in both writing and physical activity.

CHAPTER III: METHODOLOGY

The purpose of this study was to describe students' engagement in literacy and running in an afterschool running club-learning community called Running to Achieve. I will describe the community in terms of characteristics of the community, participants' engagement in running and writing activities, and changes in students' running and writing that might be attributed to participation. The study was designed to provide insights to links between physical activity and writing by using one to engage students in the other. The following research questions guided the study:

1. What are the characteristics of this learning community;
2. How do student, parent, and teacher participants describe the learning community experience;
3. In what ways are students engaged in running and writing throughout the year; and
4. How does students' writing change through their experiences with literacy activities and running throughout the year?

Study Design

The inquiry paradigm that framed this study was social constructivism. Creswell (2007) defined a paradigm as the beliefs of the researcher brought to the research. These beliefs include philosophical assumptions, epistemologies, and ontologies (Crotty, 1998). It is these beliefs that shape a study. Through the paradigm of social constructivism, meaning is subjective and rooted

in experience, and is formed through interaction with others (Creswell, 2007). Researchers who work within a framework of social constructivism understand how their own background shapes interpretations and they acknowledge this in their research (Creswell, 2007). They usually have the unique role of both the participant and researcher (Guba & Lincoln, 1994). Due to the social nature of the paradigm, researchers position themselves within the social contexts of the individuals being studied, while recognizing how their own background and history shapes the study (Creswell, 2007). The researcher and the participants are interactively linked so that the findings are literally created as the investigation proceeds (Guba & Lincoln, 1994, p. 111).

This study describes the particular case of the group *Running to Achieve*. Given the nature of the club as a learning community, the social constructivism paradigm worked well as I examined social interactions within the group. I was in the unique position of participant and observer as I fully participated in and planned all club meetings. This role shaded my interpretations and will be addressed in my positionality statement.

In order to gain as much rich data as possible for this study, I employed case study methodology. Merriam (1988) described it as a descriptive, non-experimental study of a bounded system. Merriam (1988) further identified four characteristics of case studies: they are centered on a particular situation, phenomenon, or event; they give thick description; they add to a reader's understanding; and they include findings that are data driven. This study fits the criteria of case study research as defined by Merriam (1998) in that it was centered on a particular situation, *Running to Achieve*, it includes thick descriptions of the group, it adds to the readers understanding of engagement in running and writing in relation to one another, and all findings were driven by extensive data collection. Creswell (2007) supports this idea of case

study asserting it involves "the study of an issue explored through one or more cases within a bounded system" (p. 73).

Creswell (2007) stated that data collection in case study research is "extensive, drawing on multiple sources of information" (p. 75). For this reason, multiple sources of data were collected and analyzed such as interviews, observations, and documents of student writing to provide a thick description of the case.

Interviewing is a way of collecting data by having people talk about their experiences (Holstein & Gubrium, 2003). Interviews range from highly structured to casual conversations (Holstein & Gubrium, 2003). Marshall and Rossman (2006) define interviews in qualitative research as being more like conversations rather than structured and formal debate. The idea is to uncover participant views and opinions rather than the researcher's perspective. "The participant's perspective on the phenomenon of interest should unfold as the participant views, not the researcher views it" (Marshall & Rossman, 2006, p. 101).

Observation is an integral method in qualitative research (Marshall & Rossman, 2006). In the early stages of observing, the researcher has predetermined interest areas and possibly checklists of things to look for (Marshall & Rossman, 2006). After observations, the researcher identifies patterns and themes that emerge to explain behavior and relationships (Marshall & Rossman, 2006).

Documents vary from researcher's log to student artifacts. Creswell (2007) suggested documents should include the researcher keeping a journal throughout the research, having participants keep a journal, personal letters from participants, public documents, and biographies and autobiographies. Student writing samples, such as weekly journal entries and weekly writing activities fall into this category of document collection.

Context

Martin Elementary School

This study was situated within the larger school context of Martin Elementary School (a pseudonym), located in a rural area outside a mid-sized city in central Alabama. The school was built in 1972 with additions made in 2003. There are 28 homeroom teachers with 500 students in grades K-5. Martin has recently added 3 pre-K classes for students ages 3-4. The student population is fairly diverse in background (67% European American, 32% African American, and 1% Hispanic) and socioeconomic status (57% receive free or reduced lunch). The 70 running club members were similar to the school population in background and include an even mix of boys (47%) and girls (53%).

At Martin Elementary students do not receive recess, but they attend physical education classes once a day. These classes are over-crowded as an entire grade level attends at once, and due to budget cuts, classroom teachers help supervise the overwhelming number of students. During observations at Martin, I documented the amount of time each child was actually engaged in physical activity in one physical education class. Because of the nature of the large group, on average, each child was engaged in physical activity for approximately two minutes of the 45 minute block of time.

Through conversations with the school principal, I learned that writing instruction has a history of being neglected within school instruction as well. She stated that this change occurred with the implementation of the *Alabama Reading Initiative*, which placed an emphasis on an uninterrupted block for reading instruction and in her opinion, left out writing and pushed it to the side. Since identifying that problem, the school has recently begun an attempt at training teachers to incorporate writing instruction back into the curriculum. To do this, the school hired a

private writing instruction consultant. They are in their second year of training which has focused solely on grades 3-5.

The Learning Community

Running to Achieve was an after-school program I created and was funded through a Community Based Partnership grant through the University of Alabama. The club consisted of 70 students in grades K-5. Students participated in *Running to Achieve* throughout the fall and spring semesters. Volunteer teachers and university students assisted with the club as group leaders. The principal was a committed supporter and advocate and regularly attended meetings to encourage students.

Meetings were held weekly on Thursday afternoons immediately after school. Students were randomly placed in four different groups. There were two groups of K-2 students with about 20 students in each group, and two groups of 3-5 students with about ten students in each group. Meetings began with a running component where students received instruction on topics such as good running form and pacing. During the running component the students also ran a certain distance or for a certain period of time. The goal was for students to increase the amount of time running each week and to ultimately build endurance to complete a 5k run.

After running, the students took part in the literacy component. The literacy component began with a time in which students reflected in their running journals on their run and goals for the week. After journaling was completed, the literacy component moved on with reading a text, either as a read aloud by the teacher, or read individually or in pairs. The texts selected ranged from books about famous runners, to healthy eating, and motivation. After engaging with a text, students completed a writing activity that was tied to the text in some way.

Running to Achieve had two different sets of goals that the students were working toward throughout the year; a running goal and a literacy goal. The running goal was to compete in a local 5k race at the end of the year. Students trained each week to meet this goal. The literacy goal involved two components: creating an informational text about running for the school library, and creating a collective poem to be recited awards day at the end of the year. To make the informational text, weekly writing was collected and compiled into a book. The final collective poem was composed as a group.

Participants

Running to Achieve began in the fall of 2009 as a community outreach project. Students were given an informational flier about the club in August and a parent meeting was scheduled to inform parents about the club and the research being conducted. At the meeting, parents and students listened to a presentation about *Running to Achieve* and were shown a slide show from the previous year. At this time, I also informed parents of the research I was hoping to conduct and answered any questions they might have regarding their voluntary involvement.

Twenty students, grades 3-5, who were involved in the club were participants in the study. Third grade included four girls (1 African American and 3 European American), and three boys (2 African American, 1 European American). Fourth grade included four girls (European American), and four boys (1 European American and 3 African American), Fifth grade included four girls (1 European American, and 3 African American), and one boy (European American). All students volunteered to participate in the study and their parents granted permission. The following table includes a list of student participants. Pseudonyms have been used.

Table 1

Student Participant Information

Student	Gender	Grade	Ethnicity
Jay	M	3	African American
Penny	F	3	African American
Pam	F	3	European American
Tom	M	3	European American
Lynn	F	3	European American
Amy	F	3	European American
Andy	M	3	African American
Eric	M	4	European American
Kate	F	4	European American
Kim	F	4	European American
Jenny	F	4	European American
Devin	M	4	African American
Ray	M	4	African American
Andrea	F	4	European American
Matt	M	4	African American
George	M	5	European American
Becky	F	5	European American
Darcy	F	5	African American
Anna	F	5	African American
Mya	F	5	African American

Out of those 20 students, a small focal sample of five students and their parents was used for more intensive observation. The five students were selected because they were most consistent in their attendance during the fall semester of the club therefore they were asked to volunteer to participate in additional data collection activities. This volunteer group included three boys (1 African American, 2 European American) and two girls (1 African American, 1 European American). A summary of each participant involved in the focal group is provided in Table 2. All names have been replaced with pseudonyms.

Table 2

Focal Student Participant Information

Student	Grade	Parent
Tom	3	Ms. B
Penny	3	Ms. C
Pam	3	Ms. D
Jay	3	Ms. E
Eric	4	Ms. F

Additional participants include four of the adult volunteers, including myself, who led the groups. This was a mixed group of two classroom teachers and one volunteer graduate student from the University of Alabama. A summary of the teacher/volunteer leaders is provided in Table 3 below.

Table 3

Teacher Participant Information

Teacher	Description
Ms. G	Second grade teacher at Martin Elementary who volunteers with the club and led a group
Ms. A	First grade teacher at Martin Elementary who volunteers with the club and led a group
Ms. T	Graduate student at the University of Alabama who volunteers with the club and led a group
Ms. V	Researcher and participant who led a group

Materials

Materials used for the club included weekly lesson plans, books about running and healthy lifestyles, and weekly parent newsletters. I created all lesson plans and activities. Planning was guided by the weekly student observations. I also created weekly newsletters to give information to parents about what occurred in meetings, how they could support literacy activities and running and healthy lifestyles, along with any important announcements that I

needed to make. Texts were selected to match the lesson for each week. They ranged from texts about famous runners to texts about eating healthfully or reaching goals. The twelve lesson outlines are provided in Table 4. After assessing the first three weeks of informational writing samples, a decision was made to have students choose one of those pieces to take through the writing process. The first three weeks' pieces indicated that students were not familiar with the writing process and needed much more modeling and feedback for their writing.

Table 4

Overview of 12 Spring Lessons

Week	Literacy Objective	Running Objective	Literacy Activity	Writing Activity
Week 1	Features of Informational Text	Goals and Distance Running	Jesse Owens	How to Be a Good Distance Runner
Week 2	Writing Instructions	Running Form	Steve Prefontaine	How to Train for a 5k
Week 3	Compare and Contrast	Pace	Two Previous Articles	Two Famous Runners
Week 4	Characteristics of Poetry	Stretching	Where I am From Poem	Where I am From Poem
Week 5	Visualizing through Poetry	Hydration	ōLessieö	Acrostic Poetry ōRunningö
Week 6	Poetry Review	Review	Recipe for Running	Recipe for Running
Week 7	Planning/Buddies	Running Buddies	Good Beginnings	Plan and write beginning of draft
Week 8	Drafting	Focus	Focus and Detail	Draft Middles
Week 9	Drafting	Finishing Strong	Good Endings	Draft Endings
Week 10	Revise and Edit	Adjusting Pace	Model Revise and Editing	Traits Self Assessment
Week 11	Review Poetry	Goals	My Running Partner	Poem about running buddy
Week 12	Expression	Race Preparation	Reflect on Group	Where We are From Group Poem

The first three weeks of writing instruction involved students creating three different informational pieces with little support in order to gain an understanding of their writing abilities. This was followed by three weeks of poetry writing. After analyzing the first three informational pieces, I made an instructional decision to provide more support on the next informational piece. Students were told to select one of the first three pieces to re-write and take through the writing process. Writing instruction for this piece included teacher modeling and thinking aloud as we modeled. We also scaffolded instruction as we had informal conferences with students to discuss their writing needs. Students were encouraged to but not required to share their writing pieces.

Data Collection

Multiple data sources including interviews, observations, critical incident reports, and student writing were collected during the spring 2010 semester. A detailed description of data collection procedures is provided in the following sections beginning with a table (see Table 5) that illustrates which question each data source informed.

Table 5

How Data Was Used to Inform Questions

	Question 1	Question 2	Question 3	Question 4
Field Notes	+		+	
Writing Samples	+		+	+
Interviews	+	+	+	+
Critical Incident Reports	+		+	
Audio-Recorded Conversations	+		+	
Lesson Plans	+			+

Data collected from the club meetings included lesson plans, field notes of student observations, writing samples from all 20 students, audio-recorded and transcribed conversations between the students and I while running, critical incident reports, and interviews with the teacher volunteers. Observation field notes and writing samples were collected weekly. Teacher interviews took place in the beginning of the semester to gain an understanding of why teachers were involved and what they hoped to gain, and in the end of the semester to gain an understanding of their experience at the culmination of the club.

Data collected from the focal students and parents included all of the above mentioned data along with detailed observation field notes, classroom observations, and interviews. Meeting observations took place weekly. Classroom observations occurred three times throughout the semester to gain insight into each student's engagement in the classroom setting. Interviews were

conducted with parents and students in the beginning and at the end of the club to gain a clear view of expectations and experiences.

Club Meeting Data Collection

The following is a summary of data collection for the club as a whole. This included all 20 grade 3-5 participants.

Lesson plans. Lesson plans for running and writing were collected each week. An outline of the twelve lessons was provided in Table 4. Writing plans were centered on informational writing and poetry. They included teaching the writing process and six traits of writing through modeling and informal conferences with students.

Field notes. Observation notes were made at each club meeting. The goal of these observations was to gain insight into the experiences of participants in the club. Student engagement in literacy and running activities were the focus of these observations. I used descriptive notes and reflective notes for the literacy and running components. Audio-recordings of conversations between the students and me during the running component were also transcribed for analysis. The focus of these observations and audio recordings was to capture the experience as a whole of all third through fifth grade participants. Furthermore, detailed notes were taken about the five focal students to gain further insight.

Because of my unique role as an observer and participant, it was important to remain fully aware of my role as researcher while still being immersed in the experience. To verify my observation notes, an additional observer attended four meetings and used the same observation methods. We met to discuss our observations and compared notes. Our observations about students and how they were engaged matched on all four occasions.

Student writing samples. Student writing samples for all students in grades 3-5 were a large portion of data collection for this study. These were collected as part of the weekly lessons. The foci of the writing lessons were informational writing and poetry. A total of four samples of informational writing were collected from each student throughout the semester including the first 3 informational pieces and the final piece they worked through the writing process. Five poetry samples were collected from each student as well. The purpose of collecting the informational and poetry writing was to analyze the students' writing development (or lack thereof) throughout the semester. The poetry writing and informational writing was assessed using the 6 + 1 Traits of Writing rubric. Informational writing assessment included ideas, organization, voice, word choice, and sentence fluency while poetry assessment only included voice, word choice, and sentence fluency. These were the traits focused on in each piece and that is the reason for using only the selected traits in the analysis.

Journal writing samples. In addition to the informational and poetry writing samples, students were asked to keep a journal of their experience. Students were initially given guiding questions in their journals to help them come up with ideas of what to write about such as setting goals, assessing goals, making a plan for the goals, writing about how their bodies felt, writing about the weather, and writing about how they felt about their run that day. However, after realizing students were simply making lists of one word responses to questions, teachers provided modeled instruction on journal writing, and the guiding questions were taken out of the journals. The journals were used to gain insight into each student's engagement in running and writing and their development in both areas throughout the semester. The journals were collected weekly and coded throughout the course of the semester.

Critical incident reports. In addition to reflection in student journals, students were also asked to reflect about the learning community as a whole after each meeting by writing a critical incident report. These reports were similar to the design by O'Sullivan and Tsangaridou (1992). In the reports, students were asked to respond to two prompts, *Write one thing that happened during the meeting today that you found important, and why was that important to you?*

Teacher interviews. Teacher interviews were conducted two times during the semester with the teacher leaders. The first occurred in January, and the last was conducted after the culmination of the club in May. Teacher interviews focused on each teacher's experience as a participant in the learning community and sought insight into the student participants. Interviews were between 30 and 45 minutes each. I used an interview protocol (see Appendix A) for each interview. It included guiding questions to allow for flexibility depending on the participant responses. For example, interviews began with asking teachers to explain their role within the learning community.

Heart-rate. I attempted to collect student heart rate data using heart rate monitors. However, the monitors did not fit the students well and therefore did not give accurate measures of their heart rate before or after running. I had students take their own heart rate by counting their pulse. They recorded this information in their journals. However, this too was not accurate as I noticed numbers that simply were not possible for heart rates. For this reason the heart rate data was not included in the results.

Focal Student Data Collection

The following sections outline data collection for the small focal sample of five students and their parents. The purpose of this smaller group was to give a more detailed account of the club and the participants' experience.

Focused observation field notes. In addition to observations of the club meeting as a whole, I kept more extensive field notes on the five focal students selected. Student engagement in running and writing activities was the focus of these weekly observations. I audio-taped conversations I had with students while running with them during the running component as a means to gain insight into their running engagement.

Classroom observations. In order for me to gain more insight into each of the five focal students, classroom observations and physical education class observations occurred twice during the semester, in the beginning and at the end of data collection. I hoped to gain more insight into writing engagement and physical activity engagement by observing the child in his or her own classroom and physical education class. This data was simply used to better understand each student and was not used for comparison with the learning community.

Student interviews. Student interviews were conducted individually with each of the five participants, and occurred two times during the semester: at the beginning and end. These interviews took place in the school. These interviews focused on the child's experience in the learning community and in the classroom. An interview protocol (see Appendix B) was used with flexible questioning to allow myself to ask questions specific to that child in regards to what was seen in classroom and club meeting observations. Interviews lasted between 30 and 45 minutes each.

Parent interviews. Parent interviews were conducted two times during the semester. The first interview occurred at the beginning of the semester and focused on what the parent hoped to gain from their experience or hoped their child would gain. The interview at the end of the semester was focused on the experiences of the child and parent through participation in the club.

An interview protocol (see Appendix C) lists questions that allowed for flexibility depending on responses.

Timeline for Data Collection

The following tables outline data collection. Data collected at club meetings included field notes, writing samples, critical incident reports, and interviews. Data collected from focal students included field notes, classroom observations, physical education class observations, and interviews.

Table 6

Data Collection Outline (n)

Data Sources	Participants	Collection
Club Meetings		
– Field notes	20, student grades 3-5	Weekly (12)
– Writing samples	20, student grades 3-5	Weekly (80 informational, 80 poetry, 200 journal)
– Interviews	3 teachers	Beginning, End (6)
– Critical Incidents	20 students	Weekly (120)
– Audio recorded conversations	20 students	Weekly (48)
– Lesson plans		Weekly (12)
Focal Students		
– Field notes	5 focal students	Weekly (12)
– Classroom Observations	5 focal students	Beginning, End (10)
– PE Observations	5 focal students	Beginning, End (10)
– Interviews	5 focal parents and students	Beginning, End (20)

Table 7 illustrates a timeline for interviews and observations for each focal group participant.

Table 7

Timeline for Interviews and Observations

Participants	Classroom Observations	Club Observations	Interviews
Students	January 2010 May 2010	Weekly January-May 2010	January 2010 May 2010
Parents			January 2010 May 2010
Teachers			January 2010 May 2010

Data Analysis

Data was analyzed to answer each of the four research questions. Some of the data overlapped and informed more than one question. When coding data, I first read through the data making notes in the margins to represent the codes. I then made a list of these codes and collapsed them into categories. A sample of codes is provided in Appendix E. After using this process for each data set, I looked across data source categories to collapse them into larger themes. These themes were informed by the literature reviewed for this study. The following is a detailed description of data analysis methods for each data set.

Lesson Plans

Lesson plans were coded in relation to instruction. I read through each plan and made notes in the margins about codes that emerged. Codes included modeled instruction, mentor texts, sharing the pen, individual work, peer interaction, teacher conferencing, peer conferencing, writing process, running process, and sharing. After establishing initial codes, these codes were placed into categories such as running instruction, writing instruction, and instructional changes.

Next, I looked across these categories to find relationships and collapsed these categories into themes.

Interviews

All student, parent, and teacher interviews were transcribed and coded. I followed the same process I used for coding lesson plans by reading through the transcripts multiple times and making notes in the margins of emerging codes. These codes were then collapsed into categories such as student experience, parent experience, and teacher experience and themes were created from the categories.

Observations

Classroom observation protocol notes and memos were also taken through this same process of analysis by reading through data multiple times and making coding notes in the margins, arranging codes into categories, and creating themes from the categorized data. The classroom observations gave me more insight into each student participant, and a foundation to work from in analyzing engagement in the learning community. For example, I was able to observe how students were engaged in writing practices in the classroom, and how this matched, or contradicted ways they were engaged in the learning community. Learning community observation notes and memos were also analyzed using codes, categories, and themes.. Field notes were also examined for weekly notes about changes to be made in weekly lesson planning. After all observations were complete, observation notes and memos were coded using the same process of reading through data, making notes in the margins, categorizing these codes, and then developing themes.

Writing Samples

The informational writing samples were collected and analyzed using the *6+1 Traits of Writing* (Culham, 2003) rubric (see Appendix D) using the elements ideas, organization, voice, word choice, and sentence fluency. Poetry writing was analyzed using the traits of voice, word choice, and sentence fluency. After each written text was scored, the data was used to check for differences across time for all individuals, for patterns within student engagement groups and for patterns within groups of strongest and weakest writers.

The student journals were analyzed looking for changes in organization and depth of reflection. For example, throughout the duration of the learning community, the structure and organization of student journal writing changed. Students also began to elaborate more about their run. The journal writing was also examined and coded for indicators of engagement in running and writing. For example, students included how many laps they ran in their journals. I used this data to illustrate an increase in the amount of time engaged in running.

Critical Incident Reports

As with interview transcriptions, critical incidents were also analyzed using the process of coding data, categorizing the codes, and collapsing them into themes. . After coding and identifying themes, critical incident reports were divided into groups of beginning, middle, and ending responses to analyze change overtime in what was most important to students.

Researcher Field Note Journal

I kept a detailed journal throughout my experience. I wrote in my journal after each meeting and wrote analytic memos to record my thought process as I moved through data collection. In this regard, the journal was used not only as a way to capture my experience, but as a way to analyze my data collection and interpretations.

Trustworthiness

After extensive time spent getting to know participants, immersed in the setting, and striving for meaning, a researcher has to stop and question the trustworthiness of their study. Creswell (2007) wrote that the researcher often grapples with questioning if she has given an accurate account and if she "got it right" (p. 201). In this quest for "getting it right," Creswell (2007) outlined a variety of validation strategies including prolonged engagement, triangulation, peer debriefing, negative case analysis, clarifying researcher bias, member checking, rich, thick descriptions, and external audits. For the purpose of this study, I used triangulation, peer debriefing, member checks, clarifying researcher bias, and rich, thick descriptions.

Triangulation

Triangulation involves the use of multiple sources of information in order to validate evidence (Creswell, 2007; Shank, 2006). Triangulation was used in this study through the extensive use of multiple and varied sources of data such as parent interviews, student interviews, teacher interviews, student writing samples, classroom observations, meeting observations, audio-recorded conversations, lesson plans, and critical incident reports. All of the data was used in order to give a complete understanding of the learning community, *Running to Achieve*.

Peer Debriefing

Peer debriefing was used as an external check of the researcher. Lincoln and Guba (1985) asserted that the role of the peer is to keep the research and researcher honest by asking questions about the research. Peer debriefing sessions occurred at three points throughout data collection: after the first three weeks, after the first 8 weeks, and then at the culmination of the learning community after 12 weeks. At the sessions, I went over my observation notes along with any

other data pieces that had been collected at that time. My colleague asked questions about my interpretations which allowed me to pay attention to things I might have been overlooking. Extensive notes were taken during and after each of the three peer debriefing sessions and recorded in the field journal.

Member Checks

In member checking, the researcher takes her findings and interpretations back to the participant (Creswell, 2007; Merriam, 1998; Stake, 1995). This ensures the researcher is not taking anything out of context but is representing each participant accurately. For students, focus group sessions were held in order to check interpretations. The focus group took place mid way through the data collection. I did not receive much feedback from these student sessions. Students simply agreed with what I had said and gave very short responses to any questions. These responses were not very informative and did not help with my findings. For parents and teacher interviews, the last question in their final interview asked them to give feedback on my interpretation of data. All parents and teachers were satisfied with my interpretations and also gave little feedback, if any.

Rich, Thick Descriptions

Rich and thick descriptions give detailed accounts of the participants and setting to allow the reader to decide whether or not findings can be transferred to other settings (Creswell, 2007). I wrote detailed accounts of observations and interactions with participants and used their own words whenever possible.

Limitations

This study was limited because of the population in itself. There is just one, small, specific group being studied and all participants were volunteers. For this reason, results could not be generalized as with all qualitative research.

The writing samples collected also limit findings as there were no pre and post samples. Writing instruction was scaffolded and there was no final unsupported writing piece to compare with the supported pieces. Using the six traits to analyze informational writing and poetry writing was also not a perfect match as the traits fit differently in regard to each different type of writing.

The attendance of student participants also limited this research as all students did not attend meetings every week. There were several absences which led to unfinished writing pieces and fewer journal entries and critical incident reports. These students also missed out on instruction for the days they were absent.

Finally, my position as creator, teacher, and researcher of this learning community is also a limitation in that these roles have definitely shaded my interpretations of data. I tried to disclose all of my bias in my positionality.

Positionality

When classifying researcher bias, the researcher discloses any past experiences that might shape her representation of data (Creswell, 2007). I address this issue by explicitly stating my position within the context of the study, and my history with the learning community, Running to Achieve. My role in *Running to Achieve* is a very important one to disclose as I am not only the researcher, but also the creator of the club. I created all lesson plans, weekly newsletters, and the general framework of the club in itself. This undoubtedly shaped my opinions and beliefs about the lessons and materials used.

I must disclose my beliefs that shape this study. The first is that I believe physical activity, in particular running, is imperative for students and within the context of education, is

equally as important as academics. I also value written expression and believe it is imperative in literacy instruction as well as other content areas.

My reasons for beginning after-school running clubs that incorporate literacy are many and relate back to my upbringing. As a child of a military parent and nurse, physical health and nutrition were stressed in my home. Both of my parents were avid runners, and because of their interest in running, I naturally developed an interest in it. I loved to listen to my father's stories of growing up as a member of a poor family in rural Alabama. Running was important to him because it was an outlet for him. Coming from a poor family, group sport participation was not an option. It was through a relationship with a teacher in his school that he was introduced to running, a sport that as far as he was concerned, cost nothing to do. A struggling student up until that point, my father gained a new motivation to excel in academics as he found fulfillment and enjoyment through running and participation in track. He kept that love for running throughout his life and that love led to my mother, brother, and myself developing a love for the sport as well. Beyond running for physical activity's sake, running was used as a space for reflection and contemplation as my father used it whenever he had anything to discuss with me in my teenage years and beyond. I knew he had something on his mind whenever he would tell me to go lace up. I never realized just how much this love of running, and understanding of its influence on children, would impact my teaching. Through my experience as a child, I grew to believe that running is an important physical activity and can be accessible, powerful, and influential on young children.

My integration of running into my classroom instruction happened out of a first year teacher's desperate attempt at classroom management strategies that would not always have to include negative consequences. After trying all of the gimmicks I had been taught in my pre-

service teaching courses and professional development seminars, I decided to use my love of running to motivate my students. I knew that my students loved physical activity as I participated in basketball, and soccer with them during recess. Therefore, I told students that they would be able to race me every Friday, if they had good behavior throughout the week. When I made this simple statement, I had no idea the impact it would have on my students. They absolutely loved it. They spent time at recess practicing on the track and were on their absolute best behavior. Students were excited every Friday as they entered the classroom, eager for the race with òMs. V.ö The idea was certainly a success for motivating good behavior and gave me an idea to take running a step further with the creation of my first after-school running club.

The value I place on writing was also fostered during my childhood by my mother and grandparents. My grandmother was a teacher and my favorite memories with her involved being read to and writing short stories together. I loved the creative expression and freedom of writing my own stories. My grandfather was a marvelous story teller. I loved listening to stories he would make makeup for us as well as stories about his life. I learned the value of storytelling and self expression through his influence, which shaped my views of writing as a teacher. My mother is an avid reader and always encouraged reading and writing. As a first-year teacher, I taught at a school that also valued writing. I received extensive professional development in writing instruction and was excited to use that in my classroom. My beliefs about writing were validated in the excitement of all of my students when it came time for writing. Sadly, when I moved to Alabama, I worked at two schools that, at the time, did not value writing until the upper grades, when it was assessed. I still made the choice to include writing instruction in my classroom daily; however I was angered that this was not a valued part of my instruction in the eyes of my administrators. It was from my belief that the mind and body are connected in learning and my

love of running and written expression that I developed the learning community for this study, *Running to Achieve*.

My relationship with the students and teacher participants is important to disclose. At the time of the study, I had worked with the teachers and students for one semester. I had also previously taught with two of the teacher volunteers at another school. I had developed relationships with the students as a leader of the group. Students referred to me as "Coach" although I never called myself their coach directly. The other teachers who volunteered to help were called by their last names, as a student would normally address a teacher. This seemed to place me in a more relaxed role with the students and might have put them more at ease in their interactions with me. I was not seen merely as a teacher, there to impart knowledge to them, but as a coach, or someone who helped train and motivate students to prepare them for an end goal.

I took an active role in the club and could be seen running alongside students at each meeting. I believed that all of the teachers involved should run with the students, and I encouraged other teacher volunteers to do the same. In addition to running with the students I was bombarded with other tasks as they arose such as tying shoes, helping a child work through a cramp, attending to a child who had fallen or hurt herself, and of course, mediating arguments that inevitably arose during the running portion.

During the literacy component I could be found with my group, sitting in a circle on the floor. During writing activities I moved from student to student, offering assistance and often taking on the role of the encourager. I modeled writing tasks with students and shared my own reflections of my running experience as examples. In addition to attending to the literacy tasks at hand, oftentimes my involvement took on other forms such as mediating arguments, encouraging a student who had given up, and monitoring behavior.

While my close involvement with the club, students, and teachers gave me more insight into meanings and interpretations, it was also important to always be aware of my position to ensure I was not shading interpretations with my biases.

CHAPTER IV:

RESULTS

To present my results, I have grouped my findings by research question. I begin with question one by describing the characteristics of the learning community. I then move to question two and describe the experience of the participants and any benefits to participation. Engagement in running and writing is examined in question three. Finally, in question four, I present data related to changes in student running and writing through participation in the learning community.

Question One

What are the characteristics of this learning community?

Through extensive data collection and analysis that included lesson plans, observation notes, audio recorded conversation, critical incident reports, and journal writing, three major themes emerged that capture the characteristics of this learning community, *Running to Achieve*. The learning community provided social activities, fostered teacher-student relationships, and nurtured students as runners and writers.

Running and Writing are Social

This theme emerged from analyzing lesson plans, observation notes, critical incident reports, and journal writing. Each data set was coded using open coding. A broad list of categories coalesced from each set of data. From that set, the central theme, running and writing are social, was selected.

Lesson plans. Lesson plans did not initially emphasize social interaction. After six weeks of observing students during running and writing, I noticed that the students who were not fully engaged in running and writing were the same group of students. These students often were not engaged in the activities of the learning community because they were busy engaging in social interaction with their peers. During the running component students were often too busy talking or playing with their friends to focus any energy on running. The same held true for writing activities. After observing this for six weeks, I made a choice to introduce running and writing buddies. Students were taught that the running buddy was someone they would run with and together they would help one another reach their goals. They were taught they could most definitely talk about whatever they wanted with their running buddy, but they needed to make sure they did this while running. For writing buddies, students were taught this person was to help them come up with ideas and plan their writing pieces. They were encouraged to talk with their buddies but discussions had to be focused about the writing piece.

After making the instructional change, lesson plans explicitly included encouraging social interaction among peers. Up to that point, social interaction had not been explicitly mentioned in the plans. The plans changed to include teachers modeling having a running buddy and writing buddy as part of each lesson. Modeling included what it would look like, things they might discuss, and how they might motivate each other. This gave students a greater understanding of how to direct their social interactions for running and writing.

Observation notes. In addition to lesson plans, observation notes were also coded for social interaction. While some students chose not to have a running or writing buddy, most did. The students that chose not to have a buddy were students that were already participating in both the running and writing. However for the students who preferred socializing over running and

writing, encouraging social interaction helped them stay engaged and focused in both running and writing. The following table illustrates the change in social interaction as it displays observation notes taken before and after the implementation of running and writing buddies.

Table 8

Change in Observation Notes After Running and Writing Buddies Implemented

Before Running and Writing Buddies	After Running and Writing Buddies
<p>Jan. 28: There is a group of students that doesn't really want to break a sweat. These students run a few steps, then stop and walk. They often will make an excuse for why they cannot run such as sore throat, twisted ankle, or going to throw up.</p>	<p>Mar. 4: Finally had a break through with my student who usually sits and talks the whole time! She was actually engaged the whole time with her buddy, sharing ideas, and making plans for writing, and ACTUALLY writing! I was so happy to see this. Better still, she was so proud of herself, along with the usual other chatterboxes, for being able to really focus and spend her time engaged in the writing and the running.</p>
<p>Feb. 18: The majority of the 3-5 runners seemed focused. There is a small group of girls that hardly runs. The running component seems to be more of social time for them than running time. The boys that don't run much aren't really focused on talking to each other as much as it is just antagonizing each other.</p>	<p>Mar. 11: Beth and Meg are running together. They stop and walk for ¼ lap and then start running again. It is the first time I have seen Beth run this much so I hope Meg can motivate her to keep going. The buddy system is helping out tremendously. I really think they will continue to improve.</p>
<p>Feb. 25: Tried to encourage my walking/social girls to run a little more today. They pretty much only started running when they saw me run near them.</p>	<p>Mar. 11: All students were engaged in writing today. The buddy system has worked wonders! I dropped in and listened to my social girls' conversations and they were completely about writing!</p>
<p>Feb. 25: I tried my best to be patient with her. She is VERY social and loves to chat with her friends, walks the entire time during the running component so she can chat with friends, and expects that she should be able to do the same during the literacy component.</p>	<p>Mar: 25 I noticed Pam using different tactics to keep her and her running buddy going. At one point she was playing a game pretending there was a shark chasing them so they had to keep running. At another time she was singing songs to keep them going.</p>
	<p>Mar. 25: Beth seems much more engaged in writing today since her buddy has returned.</p>
	<p>Apr. 1: Tim and Penny (my top two runners) actually ran together today. This was interesting because they usually run on their own and try to beat each other. Now they are working together, pacing each other to reach their goal. That was really great to see.</p>

The first column of notes represents the need for change in order to engage students. Once this was identified, an instructional decision was made and the buddy system was implemented. The final column illustrates the noticeable change that occurred in regards to running and writing.

Critical incident reports. In addition to observation notes, students also mentioned social interactions as being most important to them in several of their critical incidents. Before introducing the idea of running buddies and writing buddies, two out of 75 critical incident responses mentioned social interactions. After introducing running and writing buddies, 33 out of 106 critical incident responses mentioned social interactions. The following table includes some student responses, before and after implementing buddies, to the prompt: *Write about one thing that happened during the meeting today that you found important. Why was it important?*

Table 9

Change in Typical Critical Incident Responses After Running and Writing Buddies Implemented

Before Running and Writing Buddies	After Running and Writing Buddies
Andy: Running with my friend was important.	Andrea: I got a running buddy and she helps me stay focused on running.
Pam: I got to run and pace.	Pam: It was funner than any run yet because I got a running and writing buddy.
Becky: I walked with my friends.	Jenny: Me and Gabby wrote 8 sentences and also almost 3 paragraphs and it was looking good.
Tom: I ran good. To get fastest.	Lynn: I was excited because I got to be with my running buddy and writing buddy.
Ray: I ran fast.	Becky: I ran with my buddy and, well even though I was tired, she kept on motivating me.
Lynn: We ran 20 minutes and I had mud on my shoes.	Andrea: Me and Kim finished our first draft of writing!
Jenny: I thought about my mom and dad.	Kim: Got to write a poem about my running buddy.
Becky: I ran 5 laps.	Lynn: Running with Jenny was important because she encourages me and is my best friend.
Andrea: We learned about Steve Prefontaine and it was interesting.	Mya: I like to have a buddy to help me improve myself.
Kim: We learned about Jesse Owens and Steve Prefontaine.	
Mya: I ran 8 laps.	

As the table describes, most of the responses to critical incidents before buddies were about how many laps students ran, or what they had learned. Before implementing running and writing buddies, social interaction was only mentioned two times which accounted for 2% of all responses. When it was mentioned, it did not have a purpose. For example, “I walked with my friends” simply stated what the child did, but did not include why this was important. After implementation, social interaction was mentioned 33 times and accounted for 32% of all

responses. After implementing buddies, responses included more purposeful social interactions such as, “I like to have a buddy to help me improve myself.”

Journal writing. The theme of social interaction also emerged in students’ writing through their journals 27 times. For example, on April 1st Jay wrote, “My running buddies help me a lot. A couple of weeks ago I just ran one lap. The rest I just walked. It felt good to run again.” On April 8th, Tom wrote, “Today I had a good run with my classmate. I was running with my friends and they helped me out and we ran two miles.” On the same date Andy wrote, “I ran more than I have ever ran with Pam and Devin. It felt good and Pam and Devin helped me.” Similarly Kim reflected, “Today I really improved. I ran eight laps with my running buddies. They really motivated me.”

While encouraging social interaction was not a perfect solution for everyone, it contributed to increased engagement for students and became an integral part of the learning community. However it was not the only motivator for student engagement. In addition to social interactions with peers, social interactions with teachers also played a vital role.

Teacher-student Relationships

As the social interactions between peers emerged as a characteristic of the learning community, the social interaction between the teachers and the students was also evident. Just as the social interaction with peers motivated students to be engaged in running and writing, the relationship between the teacher and the student contributed to engagement. The structure of the learning community, where the teacher worked alongside the student, in both running and writing, allowed room for strong relationships between teacher and student. Observation data and journal writing were analyzed and coded for this theme.

Observation notes. While implementing running and writing buddies was beneficial for most students, teacher-student relationships seemed to be beneficial for all students. Observation notes showed how much the students enjoyed spending time with the teachers as they would rush into each meeting with open arms to hug us. Many of them would bring little gifts like stickers, bracelets, and one student brought me a whistle to help with time during the running component. Another student wrote a letter to Ms. G saying, "When I see you, you make me feel confident. I believe that you can help me win the big race."

The following table of observation notes outlines interactions with George and me (teacher/researcher), and the relationship built through the club. This data best represents an example of the depths of relationships fostered in the learning community. These relationships went beyond typical instructional conversations of the classroom setting to more personal conversations that built relationships of trust.

Table 10

Teacher-Student Relationship Observation Notes: George and Mrs. V

Date	Notes
Jan. 21	After a parent meeting, George's grandmother stayed behind because she said she needed to talk with me about her concerns with her grandson. The conversation spanned about 45 minutes as she explained George had Asperger Syndrome, ADHD, and Bipolar Disorder. She described his aggression problems and even mentioned he had suicidal tendencies. I was shocked by what she said. George is always very pleasant to me and the students in the club. It was a rough start to get him to try but now he is an active participant in the running and literacy. I wish there was more I could do for his grandmother but I guess all I can do is spend time with him in running club and encourage him to do his best and carry that over to other areas of his life.
Jan. 28	After speaking with Gavin's grandmother last week I watched his behavior even more closely today but I still don't see any of what she mentioned. He always asks if he can help me in any way. He volunteers to clean up, help pass things out, and carry things. He is very polite with me and works diligently in the literacy component. I have been trying to figure out why there is such a difference in his behavior with running club and the classroom or home.
Feb. 4	Today I observed George in his regular classroom during writing instruction. He was told to write to a prompt and "fill up a page." He rushed through the prompt and put it to the side within 10 minutes. He then pulled several pages of writing out of his desk and began to write. I asked him if I could see what he was working on and he let me read an engaging, elaborate, detailed chapter story he was writing and was excited about. His classroom teacher told me that he was a problem child and never wrote or did work. This was not what I was seeing at all.
Feb. 11	I asked George about the classroom observation incident as we ran today. He said he writes all the time but doesn't show his teachers because one time a teacher threw his writing away. I told him that I thought he was a great writer and I would love for him to share his writing with me. He seemed shocked but also excited. I had no trouble getting George to run today with the big smile on his face.
Feb. 25	During the writing component today George was very excited. He was eager to share his poetry with me and told me he writes it at home all the time. He asked if I wanted him to bring some of it in and I told him I would love for him to share it with our group.
Mar. 11	I have started to see a different side of George as he has been misbehaving the last couple of meetings. Today he was being incredibly rude and distracting during the literacy component. I told him that if he was not interested in being here he did not have to come. I told him that we enjoyed having him as a part of the group so I hope he stays, but that his current behavior was rude and hurtful to students. After we dismissed he lurked behind as if he wanted to say something to me. I finally asked him if he needed to talk to which he replied, "You are wrong Ms. V." I asked what I was wrong about and he said, "I do want to be here." My heart broke a little. Gavin went on to tell me that things at home were not good.

George felt encouraged and supported in the learning community. Although he had occasions of misbehaving, he was always quick to turn his behavior around when a teacher spoke with him because he seemed to care about the teachers and what they thought of him. The teachers showed care, concern, and interest in him, and he gave effort in return.

Audio-recorded conversations. Relationships were built with students not only by showing care and concern, but by really getting to know them. Due to the unique nature of the club, in which the teachers are also participants, teachers were able to engage in conversations with many students while they ran together. Teachers and students ran alongside each other talking casually as well as encouraging each other. I engaged in these types of conversation with five to ten students at each meeting during the running component. Other teachers also had these types of conversations, but they were not recorded. The following table gives excerpts from transcripts of a typical encouraging conversation.

Table 11

Encouraging Running Talk Transcript

Transcript with Kim

Ms. V: Good job! Let's not stop let's just slow down if you need to. Come on, Pam I know you can do it!

Penny: I bet you when your baby gets older she will be running with you.

Ms. V: Maybe she will. See if you just slow down, it's better than stopping and walking. You are speeding up again! Let's slow down so we can run longer. How are you doing?

Penny: Good.

Ms. V: What are you thinking about today while you run?

Penny: Um I am thinking about the race.

Ms. V: How many laps so far?

Penny: This is my fifth.

Ms. V: Great! How is school going?

Penny: Good! Straight A's!

Ms. V: That is great!

Penny: Have you met my baby brother, Jack?

Ms. V: I don't think I have.

Penny: He is a baby. He is one.

Ms. V: And you have a sister?

Penny: Three sisters!

Ms. V: Wow! Big family! See you did it! You did a lap when you didn't think you could. You can do way more than your mind is telling you that you can. Keep going girl!

Motivational talks also occurred during informal writing conferences with students. Rather than tell students what was wrong with their writing, teachers encouraged students to improve their writing and tried to help them find the areas to improve. The following table is an example of a typical conversation with students during writing. On average, I engaged in conversations such as this with five to ten students at each meeting.

Table 12

Encouraging Writing Talk Transcript

Transcript with George

Ms. V: Alright, George, what have you got? That is great George! What is your next one going to be?

George: Texas.

Ms. V: Ok so what are some things about Texas. Longhorns?

George: I don't know. I had this written down on the other side (turns over to a planning page), desert and sand, and cactus, but I don't know what to put after that.

Ms. V: Ok so if you put that, then you might want to say something about Texas to tie it together.

Ummm maybe something like where I was born?

George: Longhorns at hand?

Ms. V: Ok. But see the pattern? How you did the first part with a list of three things and then a statement about those three things? So "I am from deserts, cactuses, and sand" maybe "born in Texas, but raised in Alabama"?

George: Hmm. Are we going to put these out?

Ms. V: We are just going to share with each other for now.

George: Ok.

Ms. V: I am really impressed with you guys. This is great poetry.

George: Want me to bring you one of my poems tomorrow?

Ms. V: Yes. I would love to see it!

George: I used to write some. Technically I used to write some before my grandpa died. But I am not into that anymore.

Ms. V: Well I would love to read your poetry. What is your next idea?

In my conversation with George about his poetry, I gave him guidance on creating his poem, while also encouraging and giving him praise for what he had done. This allowed George to open up and want to share poetry he had written at home. Showing care and concern for this student helped tear down a wall he had built, and allowed him to show a side of creativity he had been hiding from his classroom teacher.

In addition to giving motivational talks during runs and writing, teachers also became trusted listeners for students who had things on their minds. The following table is an example of such a conversation:

Table 13

Running Talk About Trust Transcript

Transcript with Pam

Pam: I am thinking about my dad. He just moved back in.

Ms. V: Why did your dad move out?

Pam: Fight. They had a few fights this year. Some of them were so bad police had to come. My mom went to jail for a day. Um what else? Lots of other things. So I get that off my mind while I run. And I think of when I was an only child.

Ms. V: Did you like it better then?

Pam: Yeah.

Ms. V: Yeah sometimes life is rough like that isn't it?

Pam: Not like my life.

Ms. V: You don't think so?

Pam: Nothing like my life. Everyday a few people get yelled at in my house. Mostly about money like you owe me one dollar. And it causes bad things. My little baby brother has to hear it. Cussing.

Ms. V: Do you think it will be better now that your dad is back?

Pam: I don't know. It's fights when he was there, without him there. Punching, cussing, hitting, guns! But no one ever got shot. But a few days ago, my uncle tried to find a gun and shoot himself in the head. My family is in a rough time right now and it isn't even our house!

Ms. V: Whose house is it?

Pam: My nanny's. We have to live there with her and my uncle Ronnie. It's like one whole family lives in one house. Eleven people, three bedrooms. Two beds in our room and one old recliner. Me and my sister sleep in the recliner.

The relationships built between teacher and student let the teacher see a different side of students to understand them a little better. While some things students revealed about their lives were disturbing, it built trust and transformed the learning community into a space where the

students felt comfortable. Not every child revealed personal stories, but there were eight students I had similar conversations with in the learning community. The relationships built motivated students and led to an increase in student engagement. They saw the teachers work alongside them running and writing, putting in the same kind of effort they had to. They saw them when they were tired and struggling to keep going.

Journal writing. The importance of teacher-student relationships was also found in students' journal writing. Jenny was encouraged by teachers, as she stated in her journal, "I have improved so much and when Ms. V said it, it felt good." Mya stated, "Mrs. G helped me run today. She believes in me. She let us stretch and every time I wanted to walk she said "come on you can do it. I know you can." Anna ended her last journal entry by reflecting on the importance of her relationship with the teachers as she wrote, "I had a great time in running club. I had so much fun writing, running, reading, and meeting runners. But most important I had a great time with the teachers."

Students wanted to do well not only because of the motivation of their peers, but also because they wanted to please their teachers who they trusted. Observation notes, transcribed conversations, critical incident reports, and journal writing all revealed that time spent fostering relationships with students, and allowing them to see a more human side of teachers, was an important characteristic of the learning community. These strong relationships with teachers also helped students build self-efficacy as runners and writers.

Self-efficacy as Runners and Writers

Students were motivated to become engaged in running and writing through relationships with their peers and teachers. However these relationships did more than just motivate. They also

contributed to students' self-efficacy as runners and writers. For this theme, journal writing and student interviews revealed this change in the belief about students' abilities.

Journal writing. Goal setting was an important part of the learning community that helped promote self-efficacy in students in running. Students set weekly running goals with the ultimate goal being the 5k race. For writing, students had the goal of making an informational book about running for the school library (each student contributing an informational piece to the book), as well as composing a group poem about the club that they would recite together at awards day in front of their school community.

Students kept up with their running goals in their journals. They were self-selected and self-assessed goals. Along with recording in their journal how many laps they ran, many students chose to write about their goals and their assessment of them. In fact 70% of student journal entries were about their goals and how they had improved. The following table provides excerpts from those journal entries describing their goals to demonstrate the increase in self-efficacy in running:

Table 14

Goal Setting Student Journal Excerpts

Student Journal Excerpts
Penny: I met my goal from last week. I will run 8 laps or more for next week. I will run in my neighborhood at home this week.
Lynn: My goal from last week was to run 4 laps without walking. My goal this week was to run 1 mile and I made my goal. It makes me feel good.
Tom: I ran my butt off today in running club. I think my heart almost beated out of my chest and I think my shoes caught fire. I meet my goal. I ran 3 miles.
Mya: I did not meet my goal for last week because I didn't try so hard. Next week I will meet my goal.
Jay: I finally meet my goal and ran 10 laps!!!!
Kim: My run today was good. I did 6 laps. I almost meet my goal. I was 1 lap away.
Matt: I met my goal and ran 7 laps. Running club was great. I felt good. Next time I will run more laps and make my running goal. I will try to run 12 laps next time and I will start eating healthy foods.
Pam: I hope this week I can encourage myself to eat healthier foods and drink a lot of water. I can't wait for next week and I hope that I can meet my goal.

Students did not receive a formal assessment of their running from their teachers. The teachers also did not set a goal for them. Instead, students selected their own goals, based on what they thought they could do. Student journal entries reflect optimism about reaching their goals and a new goal to do more at the next meeting. There were no journal entries about defeat or giving up.

Student interviews. Students also built self-efficacy as writers. Goal setting did not seem to play a large role in this increase in self-efficacy; rather the structure of the writing instruction and the feeling of community led to this boost in self-efficacy. During the final interview, all five

focal students thought they had become better writers and were asked why. Reasons all five students gave included, writing from experience, freedom of constraints, freedom of expression, and a feeling of community.

Students felt more confident in their writing because they were writing from experience. They had personal connections with what they were writing about because they were writing about topics related to running. Students also felt more freedom to explore in their writing because they did not feel the pressures of time constraints or dictated topics. Writing pieces were taken step by step through the writing process and were not completed in one day. Poetry also opened them up to a new form of expression and they found enjoyment in the freedom of poetry. The feeling of community gave students a space where they felt supported to share and grow as writers. Excerpts of the interview responses are presented in the Table 15.

Table 15

Excerpts from Focal Students Interviews Demonstrating Reasons for Writing Growth

Reasons for Growth	Interview Transcript
Writing from Experience	<p><i>Ms. V:</i> Why do you say writing at running club is easier than in your classroom?</p> <p><i>Eric:</i> Because the essays we do in class it's like think about birthday parties, cars and things you actually have to sit down and think. And at running club you can be like ok well I this during the run, this, and this. See. Easier.</p> <p><i>Ms. V:</i> Easier because you have a connection to it?</p> <p><i>Eric:</i> Yes</p>
Freedom from Constraints	<p><i>Ms. V:</i> So what is different about writing in running club and your classroom?</p> <p><i>Pam:</i> For some reason I feel more comfortable in running club. Because I won't be timed like in the classroom. At running club I can just go slow and get it right. I can kind of take my time.</p> <p><i>Ms. V:</i> So it makes you feel comfortable that you can take your time?</p> <p><i>Pam:</i> Yeah and I can know that I can keep working on it. That is what I can know. That I can keep working on it if I don't finish.</p>
Freedom of Expression	<p><i>Ms. V:</i> Do you share your writing with your family and friends?</p> <p><i>Penny:</i> No.</p> <p><i>Ms. V:</i> You don't like to share it with people?</p> <p><i>Penny:</i> No.</p> <p><i>Ms. V:</i> Well in running club, I have noticed that you do. So let's talk about that. What is the difference between the writing we do in running club and writing you do in the classroom.</p> <p><i>Penny:</i> We write different things like poetry.</p>
Feeling of Community	<p><i>Ms. V:</i> Do you enjoy writing in running club more than the classroom?</p> <p><i>Tom:</i> Running club.</p> <p><i>Ms. V:</i> Whenever I ask people to share in running club, you volunteer. Why?</p> <p><i>Tom:</i> I feel more comfortable because I like it and I am not embarrassed because I always think I am going to mess up. And in running club I don't.</p> <p><i>Ms. V:</i> Ok so maybe the smaller group, and you just know everyone really well?</p> <p><i>Tom:</i> Yeah like Kim, Pam, and Jay.</p>

Perhaps the strongest support for the increase in self-efficacy can be seen in the students' own words. In an interview one student stated, "I have learned if I push myself, I can do whatever I want." Another stated, "I did more running than I thought I could." In a journal entry another wrote, "I have never run like this before. I did not know I could run this way!"

Through coding observation notes, interviews, journal writing, and critical incident reports, social interaction, teacher-student relationships, and building self-efficacy as readers and writers emerged as the three characteristics of the learning community. The combination of these three characteristics became the foundation of the learning community and contributed to student, teacher, and parent experiences.

Question Two

How do student, parent, and teacher participants describe their learning community experience?

Child, parent, and teacher participants all valued their experience and expressed that they benefitted from participation. Each participant's role in the community was unique, and for that reason different themes emerged from each group of participants.

Student Experience

Students who participated in the learning community all expressed a positive experience. When asked how she would describe her learning community experience one student said, "Running club is a fun place to go. They teach you how to pace yourself so you can be a better runner with little steps at a time. It's a really good place. And it teaches you how to write fluently and how to read fluently. It teaches you how to write neat and write poems and things like that." This was a representative reaction of all students. In fact, not one student expressed dissatisfaction with their experience. From interview data, several themes about students'

experience with the learning community emerged: goal setting, teacher impact, peers, knowledge of writing, and running and writing connection.

Goal setting. In describing their experience with the club, all students mentioned goal setting. Student reported that they liked being able to set their own goals based on what they knew about their abilities. They also liked recording their goals in their journal to see their improvements each week. It gave them a space to assess their goals. They were able to see when they did not meet their goals and that motivated them to work harder next time, or adjust their goals if they were setting them too high (see Table 14). As Penny stated, "Goal setting helped me push myself. If I push myself, I can do whatever I want."

Teacher participation. In addition to goal setting, all five students stated teacher participation impacted their experience. Students were impressed to see teachers struggling alongside them. They were also amused by seeing their teachers run. It made them see their teachers in a different light and in a way this motivated them to run as well. Jay stated that he thought seeing the teachers run was "very funny and kind of cool." Pam was also motivated by teacher participation stating, "Adults are older and they don't have as much energy as kids. If they can run, we can run. I can run."

Peer motivation. However, students were not only motivated by their teachers but also by one another. While this was evident through observation and student writing as mentioned earlier in Table 6 and Table 7, students also explicitly mentioned their buddy work when describing their experience in interviews. The buddies gave them motivation during the run, and acted as a sounding board to share ideas and strengthen their work during writing. As Pam recalls, "I felt really excited to have someone to work with and share my ideas with. It was amazing!" Tom

echoed this with, "I enjoyed that you could share ideas with another person." Working together with peers stood out to participants as an important part of their experience.

Knowledge of running and writing. While students valued goal setting, teacher-student relationships, and peer interactions, they also noticed an increase in their writing knowledge which was reflected in the interviews. In the first interviews, before the club began, students described good writers using vague descriptions that mostly involved the mechanics of writing. Nothing was mentioned about content. This established that students had very limited knowledge of writing. In the final interviews, students were again asked to describe good writers and it was evident that they had expanded their notion of what writing was. The following table illustrates responses before and after the learning community.

Table 16

Good Writers Interview Transcript: “What is a good writer?”

Student	Day 1 Sample	Final Sample
Tom	Um good punctuation. Uh, indenting after each paragraph. Stuff like that.	I have learned that good writers give detail.
Eric	I start out indenting, and um, and then if I have a long word I go past the red line but if I don't I stop at the red line. Then I say "The End."	I know how to put expression and how to write poetry. I learned to add more detail.
Pam	A good writer sharpens their pencil so it wouldn't break. A good point will write better. And a good writer should get their pencil grip. And put it on so their hand doesn't get tired.	I have gotten better at writing. I have better ideas. I had someone to work with and share ideas with. I get to express my feelings.
Penny	A good writer has good handwriting.	I like to write about what I see.
Jay	Good writers put punctuation at the end and when they start a paragraph they indent and use capitals.	I can write more detail. I can write correctly. Like it's not just scribbles.

Through the use of writers' workshop, modeled writing, mentor texts, and teaching traits of writing rather than simply focusing on conventions, students expanded their ideas of what writing is. Exposure to new kinds of writing through poetry writing also enhanced their knowledge of written expression. Most students expressed that poetry was their favorite writing that we did, but had not thought of it in relation to writing practices before the club.

Students also experienced growth in their knowledge of running. During the first interviews, when asked what a good runner was, all five focal students responded, "someone who runs fast." In the final interview, responses changed including, "someone who stays focused," "someone who keeps a good pace," "they practice," and "pace." This is evidence that

students expanded their notion of what running was and had developed a common language in the learning community about what running is.

In addition to simply expanding their knowledge about running and writing, all students expressed that they felt they had become better writers and runners. Tom stated, "I have learned to slow down and give more detail." While Pam simply states, "I have become way better at writing. WAY better." In relation to running, Jay stated, "I have learned to pace myself," while Penny stated, "I have run more than I thought I could." Clearly the growth in knowledge about running and writing was important to the student experience in this learning community.

Connections. Finally, throughout my conversations with students, they began to make connections between running and writing. The connections began with all five students stating that running before writing helped make them focus. Steve stated that it helped calm him down so he could focus on what to write. Three of the five students took the connection further and expressed that running gave them experiences to write from. Running also provided a place for them to think of ideas. As Pam stated, "Maybe I saw some things while I was running and I would think "Oh my gosh, I just saw something amazing while I was running that I could write about." All five students expressed that they wish the format of the club was carried over into their classrooms. They thought that more physical activity interspersed throughout the day would help them stay focused and energized as they learned. Eric stated, "I actually think more about what I am doing when I get physical activity done." Pam further elaborated, "I wish the classroom was more like running club. That would be *way* better. It could even help with math. Like I could count squirrels while I ran or something like that."

Overwhelmingly students enjoyed their participation in the learning community. They expressed that they were motivated through goal setting and relationship building with peers as

well as teachers. This motivation, in conjunction with instruction, led to a transformation in writing knowledge. Through participations students learned that they can do more than they thought they could in not only running, but writing as well.

Teacher Experience

Three other teachers and I volunteered time to participate with this learning community. Two of the teachers were classroom teachers at the elementary school. The other was a teacher who was taking a break from the classroom to pursue a PhD. In describing their experience with the learning community, four themes emerged; teacher motivation, student knowledge, student motivation, and access.

Teacher motivation. One major theme that surfaced in interviews was the reason teachers volunteered to participate. It was not necessarily because they wanted to learn how to engage students in writing or physical activity, but rather they already believed in the importance of writing and physical activity and therefore thought it would be a useful program. Teachers were in support of the program because they already believed in what the program was promoting. As one teacher said, "In my own classroom I tried to keep my students moving as much as possible through stations, dance, and regular stretch breaks throughout the day. I know that movement allows the brain to link past learning with new knowledge and was curious to see how running would help students improve literacy skills." Having this knowledge led these volunteer teachers to their participation in the program and piqued their curiosity. Teachers were able to build on their own beliefs about teaching and add to their existing knowledge. As Ms. G stated, "a lot of things, as far as literacy goes, I was doing in the classroom, but it was nice to work with kids on different levels and be exposed to other grade levels."

Student knowledge. While teachers were motivated to participate in the club to gain knowledge or support previous knowledge, they noticed right away that in regards to writing, student knowledge was lacking. This was evident across all grade levels. Ms. G stated, “The students did not really have knowledge of the writing process.” Ms. T echoed this with, “They had no idea about writing. It was awful. They had reading skills, but writing skills were awful. There was no knowledge of the writing process or organization.” This was also corroborated in student writing as I will address later.

Teachers noticed changes in student knowledge over time. Teachers stated that because of the running before the lessons, students seemed to be much more engaged which helped them gain knowledge of the writing process. As Ms. G stated, “It was hard to see improvement in the beginning since we only met once a week, but at the end you could really see it. It was interesting to see what the kids could do.” Ms. T further stated, “We were able to get those creative juices flowing which sometimes doesn’t happen in the classroom.”

As teachers noticed growth in running and writing, they looked to find a reason for the change. This led them to an important observation in regard to student motivation. Teachers identified four factors that helped motivate student engagement in running and writing; teacher student relationships, peers, goal setting, and personal connections.

Student motivation. As previously stated, the format of the club made it much easier for teachers to foster relationships with students to really get to know them. During runs, teachers could be seen running alongside students, engaged in conversations about the student (see Tables 6 and 9). Teachers also had informal conversations with students during their writing which gave insights to the child. Another time for relationship building was at the beginning of each meeting while students gathered, and afterward in the carpool line. When asked about the most

memorable moment of their participation, all teachers referred to a particular encounter with a child that reflected the relationship they had built. For example, Ms. G spoke of a time when a child rushed over to read a letter he had written about her at home. In the letter, the child expressed that the reason he ran was for her. “I thought it was interesting that I didn’t know him before but even just having a different adult as a motivator was good for him. So it was just a sweet little letter in his little writing that sort of sticks out most.” Ms. T stated that students were motivated by her because they saw her struggle alongside them with running, and saw her think out loud as she worked and struggled through writing as she modeled. All of this allowed students to see teachers from a different perspective and fostered a deeper relationship which teachers saw as a motivator to engage students in activities which in turn spurred their interest.

However students were not only motivated by their teachers. According to teachers, peers served as a great motivator as well. As the structure of the club changed to include running and writing buddies, students became more and more motivated to run and write. Students held each other accountable and served as encouraging cheerleaders for each other. Instead of working against each other in competition, students worked together to ensure they all met their goals. As Ms. A stated, “When we started running and writing buddies, everything changed. Students were much more engaged.” (See Table 6).

According to teachers, goal setting also served as a motivator. Each week, students set their own goals in regards to running and literacy. They were not told what they had to do, but instead were allowed to decide for themselves what was realistic. While they were encouraged to challenge themselves, the goals were ultimately up to their discretion. As Ms. A stated, “It was really neat to see them meet their goals and some of them actually started pushing themselves harder as we progressed through the program.”

Teachers felt that personal connections served as a motivator for students to be engaged in running and writing. The experiences gained in running through their training helped motivate them for writing in that they had a personal connection to the literacy activities. In the same way, the literacy activities motivated the students to engage in running by giving them a personal connection through reading and writing about running. As Ms. A stated, "When we read about Jesse Owens, a runner from Alabama, I just remember the students getting so into it and making great connections. After that I really noticed that they started making more connections with other texts and their experiences. I guess it was sort of a turning point with my group of young students."

Student access. Beyond teacher and student knowledge, relationships, goal setting and personal connections, a common theme teachers noticed was the impact that the club has on students in that it gave them access to physical activity and additional literacy instruction they might otherwise not have had. The school is in a rural area and many of the students are not able to participate in sports because of the cost. These same students cannot afford tutoring for literacy support, and some were not receiving writing instruction in the classroom. Teachers found that this club gave these students a chance to be a part of something that was at no cost to them. As Ms. G stated, "It gave students who normally wouldn't have the money to join an extracurricular activity the opportunity to be involved with something outside of school hours. They felt like it was a privilege and gained knowledge and skills in both literacy and running."

As far as the teachers' experience in the learning community, they participated in the club because it aligned with what they already believed about physical activity and literacy. They wanted to gain a little more insight into how the two could support one another. They felt students were lacking in their knowledge about writing and that their role was to enhance student

knowledge in both running and writing. They also saw that their roles were as motivators for students by fostering relationships. Peers also served as motivators, helping each other reach their goals that they set for themselves. Giving students the experiences in running helped bridge the literacy activities and gave them personal connections which also served as motivation. Finally, teachers agreed that they were giving access to extracurricular activities that students otherwise might not have had. Teachers gained knowledge to add to their existing beliefs and practices, built relationships with students, encouraged relationship building with peers, and encouraged goal setting. Teachers also increased student knowledge, while providing them access to activities and experiences to draw from. All teachers involved reflected fondly on their experience and stated that they would all participate again if given the opportunity.

Parent Experience

Five parents of the five focal students participated in interviews. These interviews were coded in relation to their experience and benefits to participation. Parent participation included signing their child up for the program and race, providing transportation, and supporting the running and writing at home. Themes that emerged include teacher impact, school/home connection, parent knowledge, and student growth.

Teacher impact. Parents all mentioned the teachers involved in the program in their interviews. They felt that the teachers served as motivators for their child. The children were able to see an adult besides a parent emphasizing healthy lifestyles and literacy skills. These teachers were not only teaching about these topics, they were setting examples by working alongside the children running and writing. As Mrs. P stated, "Tom has become more aware of someone other than mom and dad telling him the importance of healthy lifestyles."

School/home connection. All parents reflected on ways the club activities are carrying over to home life. Students encouraged their families to eat better and exercise more. As Mrs. R said, "she keeps me in check with what I am doing." Writing was also carried over at home as parents stated they saw their children writing more. One child even began keeping a journal at home after starting one in the club.

Parent knowledge. Even though parents saw an increase in the volume of writing their children did, they were not able to really articulate if their writing had improved or how. Even with the support of the weekly newsletters as an attempt to give parents ways to help their students and assess writing needs, parents still seemed to lack the knowledge needed to articulate their child's abilities. As Mrs. O stated, "He writes more but I don't know what he writes."

Student growth. All parents stated their child had grown in regards to healthy lifestyles and writing. They stated that their children made healthier eating choices and engaged in running at home. Students also encouraged their parents to run with them as well as to make healthy eating choices. In regards to writing, parents stated that their children were writing more and seemed to be more creative. They noticed the creativity most through the poetry writing.

All parents described their child's participation in the club as valuable. They saw value in the teachers motivating their children. They also saw value in the growth their children made in regards to physical activity and writing. They saw this growth carry over at home, although they were not able to articulate the specifics of the writing growth. They did not seem to see themselves as participants in the club as all of their answers centered on their child's participation and experience.

Question Three

In what ways are students engaged in running and writing throughout the year?

When considering engagement styles in both running and writing, students seemed to fit into one of three groups, initially. Interestingly, these engagement styles seemed to match up in running and writing. In addition to identification of engagement styles, increase in engagement in running and writing was also identified. Observations, interviews, journal writing, and critical incident responses informed this question.

Running Engagement Styles

The fable, *The Tortoise and the Hare*, is a useful metaphor for the engagement styles exhibited by the students in both running and writing. We used the text in a writing lesson. The story discusses a hare, who was fast but thoughtless in a race against a tortoise, who was slow but consistent. The engagement groups identified were the *tortoises*, the *hares*, and the *spectators*.

Tortoises. This group of students was highly self-motivated in regards to running. They did not pay attention to what others were doing, but instead were focused on doing *their* best which means they were intrinsically motivated. This engagement style demonstrated behaviors that would associate them with a task-oriented motivational orientation. Racing and being the fastest was not important. They seemed to truly understand and believe that "slow and steady wins the race." They might not have been the fastest runners, but they could run the farthest without stopping.

Hares. The next engagement style that emerged was a group called the *hares*. These students were concerned with running fast. They seemed to have no concept of enduring with distance running even though it was stressed at every meeting. Pacing themselves to finish was

not a priority. They had to be fast, even though that speed typically lasted for $\frac{1}{4}$ of a lap. These students' behaviors reflected an ego-oriented motivational orientation. They wanted to be *seen* racing by other students. They overlooked the fact that half way through the time limit they were reduced to walking because they had no more energy. In their minds they were working hard, even though it was not the entire time. When the whistle blew, signaling the end of running, suddenly the *hares* could sprint again.

Spectators. The third engagement style was a group I call the *spectators*. This group rarely ran. They walked leisurely along the track and spent most of their time talking to one another or playing around. They were onlookers, gossiping and playing as they watched the *tortoises* and the *hares* work. They demonstrated behaviors of a performance-avoid motivational orientation. The following table is an excerpt from observation notes of students from each group.

Table 17

Engagement Style Observational Notes

Engagement Style	Observational Notes
Tortoises	<p>Tom is keeping a good pace and staying focused on running the whole time.</p> <p>Penny ran consistently today. She is self-motivated and works extremely hard. She is definitely not afraid to sweat.</p>
Hares	<p>Ray sprints off when he passes me and then stops after half a lap. He seems to want me to think he is running a lot but he is not following my instructions for keeping a slow pace to run the whole length of time.</p> <p>Jay only sprints when he thinks I am watching him. Other than that, he is walking.</p>
Spectators	<p>After about 2 and a half minutes of running, George has finished half a lap. He is too busy stopping and playing with kids to focus on his running.</p> <p>Jenny, Becky, and Andrea are all talking as they walk slowly. When asked why they aren't running they said one of them was sick so they could not run. They love being at running club, but it is more for social time.</p>

The following table provides detail of which students belong to each engagement style before implementing buddies. These students remained in the same group for both running and writing engagement styles.

Table 18

Student Engagement Styles for Running and Writing Before Buddies

Engagement Style	Name	Grade
Tortoises	Penny	3
	Jay	3
	Kim	4
	Eric	4
Hares	George	5
	Tom	3
	Andy	3
	Devin	4
	Ray	4
	Matt	4
Spectators	Pam	3
	Lynn	3
	Amy	3
	Jenny	4
	Becky	5
	Darcy	5
	Anna	5
	Andrea	4
Kate	4	
Mya	5	

It is important to note that after the change was made to encourage running buddies, engagement increased and the lines between these engagement styles were blurred. The

spectators group changed from being completely disengaged with running, to running most of the time. They used their talking as a way to distract themselves from the physical stress of running and used their social interactions to motivate one another to keep going. This is the point in the club that the *spectators* became *teammates* as they used their social energy to motivate one another to do their best. They were no longer watching others do work; rather they were finally participants, working as well, and using their social energy to encourage their teammates. The *hares* also benefited from the buddy system as some of them chose *tortoises* to be their buddies. This taught the *hares* to slow down and pace themselves and also helped motivate them.

Students increased their time engaged in running each week as evidenced in their running journals. Figure 1 is an example of the five focal students' increase in running each week.

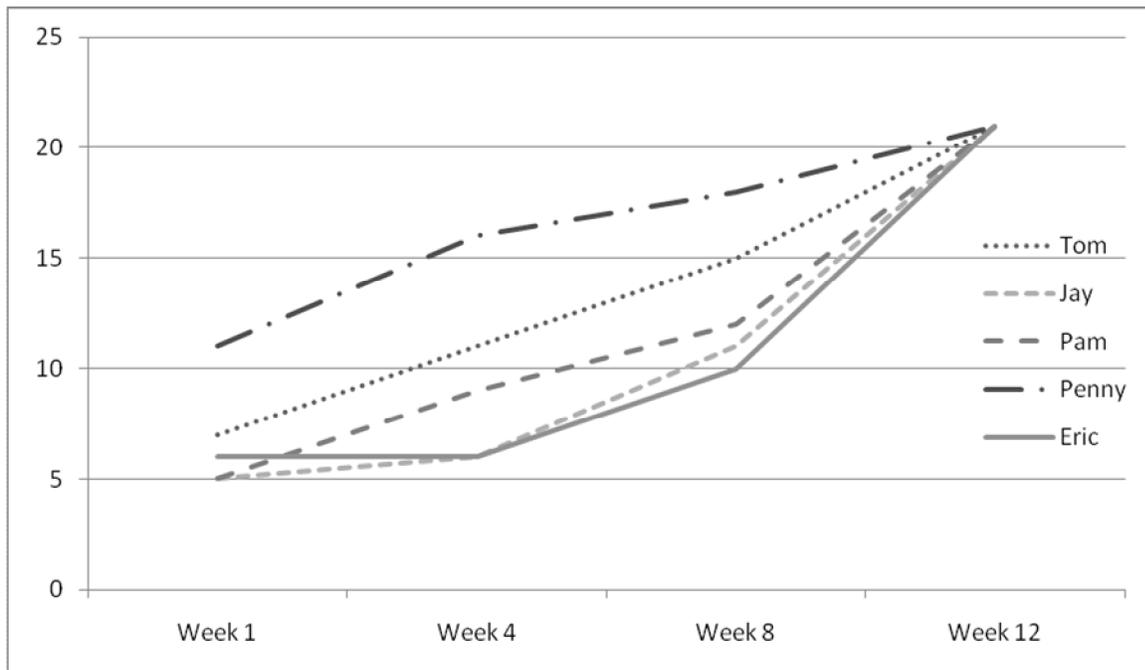


Figure 1. Focal Student Increase in Running Laps by Week

As the graph illustrates, students increased their laps slowly but steadily in the first half of the club, with a dramatic shift toward the final weeks as the race became nearer. Penny, the

best runner of the club, consistently ran the most laps. This sample of the five focal students was representative of the type of increase all other students also gained in the learning community.

Writing Engagement Styles

The same names for engagement styles in running were used for engagement styles in writing because students exhibited the same characteristics, initially. For example, *hares* wanted write quickly and be the first to complete the writing assignment. Interestingly, all students remained in the same groups based on engagement style for both running and writing.

Tortoises. *Tortoises* took their time with their writing. They did not rush through but instead spent time thinking about what they would write and then made a plan. These students did not need encouragement to get started or prompting to slow down and add more detail. Instead, they needed assistance with adding style to their writing, organizing their writing, and giving it voice. They cared about their writing and wanted to ensure they developed a well-written piece. They did not notice what their peers around them were doing, but instead kept focused on their work. For example, in observation notes, Kim was always identified as fully engaged in her writing. She took care with all of her writing pieces and put thought into each of her words, needing little teacher input. Penny was also noted as engaged in writing, but contrary to Kim, Penny would often ask for assistance. Through informal writing conferences with Penny, my notes indicate that Penny cared about her writing and wanted to do it well, however her writing skills were weak. Instead of giving up or avoiding the task altogether, Penny sought assistance to strengthen her writing. For this reason, I decided to still keep her in the *tortoises* in regards to writing engagement.

Hares. The *hares* on the other hand were most interested in being fast. They were less concerned about the content of their writing and more concerned about being the first to tell the

teacher they were done. They did not spend time thinking about what to write and rarely planned their pieces. The first thing that popped into their heads was what they wrote down. These were students I had to encourage to add more detail and to elaborate their pieces. These students also had disjointed writing pieces that did not flow or follow basic writing conventions. Getting these students to slow down and enjoy the writing experience as a process was essential to enhancing their engagement, and this was accomplished through modeling and peer conferencing. For example, my observations notes frequently included Tom rushing up to me to tell me he was finished within five minutes of writing. I had informal conferences with him and to reiterate the importance of taking his time with his writing instead of racing to be the first to finish. The following is a sample of the first writing piece from Tom. He was the first student finished and he truly thought it was complete.

You must stay healthy to run a long way You must take your pace You must keep focused.

Figure 2. Tom's First Writing Sample: How to Be a Good Runner

Tom had rushed through his first piece and did not attend to conventions or content. When he approached me with this piece, he thought it was sufficient informational writing about how to be a good runner.

Spectators. The *spectators* were once again the social bunch. In the beginning this group devoted little time to writing and most time to talking. According to observation notes, they slowly ate their snack as they watched the other students writing in their journals. They talked about the sleepover they had the weekend before, or they told jokes to one another and laughed while the rest worked. This group changed dramatically with the implementation of buddy

writing. They learned to focus their social energy into productive discussion about crafting their pieces of writing. Instead of talk about sleepovers and telling jokes, conversations were about adding detail and making their writing interesting.

Change in engagement. In addition to recognizing engagement styles, change in engagement was also identified. The following figure includes two student samples of journal entries from the beginning of the club and toward the end of the club. This representative sample shows how each child became more engaged in her writing through modeled lessons, buddy work, and teaching traits of writing through the writing process.

Table 19

Change in Journal Writing

Student	First Journal Entry	Change in Journal Entry
Kim	<ol style="list-style-type: none"> 1. wasn't here 2. 6 laps 3. run 10 mins. 4. Good 5. Sunny 6. water, breakfast bar 	<p>Dear Running Journal,</p> <p>My run today was okay. It was a lot hotter. I got tired a lot faster. I ran 8 laps today. My heart rate was 130. I had a running buddy that helped me focus on running. When I run I think about the race and what we are going to do.</p> <p>Your friend, Kim</p>
Amy	<ol style="list-style-type: none"> 1. Next week I'm going to run 2 laps without walking 2. I'm going to stretch. 3. I felt awesome. 4. Sunny. 5. Sun chips, ham and cheese 	<p>Dear Running Journal,</p> <p>Last week I ran 4 laps. This week I ran 5 laps. My goal from last week was to run 1 mile. I didn't make it. My goal for this week was to run 5 laps. I did fantastic and made it! The weather was pretty cool. I was thinking about my run and my goal. I felt great while I was running. I love running.</p> <p>Your friend, Amy</p>

The first student sample entries are simply lists and short responses to questions students were given as a way to help them get ideas for writing. Interestingly, all students' initial journal entries were done this way. This demonstrated that they were not fully engaged or invested in this writing or way of reflection. I took it for granted that students would know how to write in a journal. After seeing that they did not, I modeled writing in a journal and we had several discussions about the purpose of the journal and how it was useful as a reflective tool for running. After the modeling, students had a better understanding of how they should use their journals. Observation notes indicate students spent much more time and attention on entries after these lessons. In the first weeks of the club, students spent about five minutes on journal writing and toward the end they spent 10-15 minutes. This increase in engagement is reflected in Kim's samples in Table 19.

Amy, a student who was a part of the Hares, demonstrated her growth in engagement in writing. Amy's thought process is reflected in the second journal entry sample (taken several weeks after the first sample). She demonstrated reflective thinking as she analyzed her previous goal that she did not meet. She realized it might be too lofty and adjusted to one that still pushed her ability, but was attainable.

Change in engagement was also identified through analyzing critical incident responses. After each meeting, students were asked to write about what they found most important about the meeting and why. Running was most important to the students as a whole with 36% of all student responses being about running. Writing followed with 29% of responses being about writing. Social interaction was a close third with 23% of responses being about social interaction. Finally, goal setting appeared in 12% of all student responses. The following table illustrates what students, grouped by their engagement style, found most important in the beginning,

middle, and end of the program. Responses were divided into four weeks for the beginning, four weeks for the middle, and four weeks for the end. The final column shows the percentage of critical incident responses for that category for each particular group. For example, 31% of the *Tortoises*' critical incident responses were about running.

Table 20

Critical Incident Responses by Engagement Style "What was the most important part?"

Student(n)	Beginning	Middle	End	Total	%
<i>Running is most important</i>					
Tortoises (4)	4	3	8	15	31%
Hares (6)	10	5	17	32	54%
Spectators (10)	12	6	18	36	30%
<i>Writing is most important</i>					
Tortoises (4)	7	5	8	20	42%
Hares (6)	5	3	4	12	20%
Spectators (10)	16	7	11	34	28%
<i>Social interaction is most important</i>					
Tortoises (4)	0	2	5	7	15%
Hares (6)	0	1	4	5	8%
Spectators (10)	3	11	26	40	33%
<i>Goal setting is most important</i>					
Tortoises (4)	0	1	5	6	13%
Hares (6)	2	0	9	11	18%
Spectators (10)	0	1	10	11	9%

While goal setting was not most important overall, it became more important as the race neared shown by the 28 responses about goal setting in the final four weeks as compared to two responses in the beginning four weeks. Running and social interaction also became more important toward the end of the learning community, and writing less important as shown by 28 responses in the first four weeks as compared to 23 in the final four weeks. While looking across categories gave an overview of the group as a whole, I also looked across engagement styles.

Writing was most important to the *tortoises* in relation to the other areas with 42% of their critical incident responses being about writing. Running was a close second with 31% of their responses being about running. Social interaction and goal setting were almost equal with 15% and 13% respectively.

Running was most important to the *hares* in relation to other areas with 54% of their responses being about running. Writing was the second most important receiving 20% of their responses. However goal setting was close behind at 18%. Social interaction was least important at 8%. This would seem to match the description of their engagement style as they are concerned about their own success and being superior to others.

As might be expected, social interaction was most important to the *spectators* in relation to other areas with 33% of their responses being about social interaction. Running and writing were close behind with 30% and 28% respectively. Goal setting was also least important to this group with only 9% of its responses devoted to goal setting.

As represented in the table, overall engagement in running was most important to the *hares*, social interaction was most important to the *spectators*, and writing was most important to the *tortoises*. Goal setting became more critical to students as the race neared but was still not the

most important. Running also became more important and writing less important as the race neared.

Running and writing impact on engagement. While engagement in running and writing was enhanced through the learning community, running and writing in themselves worked as motivators for engagement. In interviews, students stated that the running helped them engage in writing by helping them focus. All of the five focal students interviewed expressed an interest in incorporating more time for physical activity in their regular classroom to help them focus. As Eric stated, “I liked getting to run before work. I actually think more about what I am doing when I get physical activity done.” Tom echoed these remarks when he said, “If we ran before we did work in my classroom I would be very focused.” Jay also stated that he would, “be more focused,” if his classroom activities incorporated physical activity. Pam was very excited about combining running into classroom activities as she stated that, “it would be way better! When I am running I might think of things like if I wanted to write something like ‘oh gosh I just saw a cat climb a tree,’ or like with math I could count how many squirrels I see and write that down you know. I wish the classroom was more like running club.”

Question Four

How does students’ writing change through their experiences with literacy activities and running throughout the year?

Students were engaged in informational writing, journal writing, and poetry writing throughout their participation in the learning community. Students completed three informational writing pieces in the first three weeks of the club. They then completed three poems. After the poetry break, students chose one of their finished informational writing pieces to revise and take through the writing process through modeled lessons. This was the piece they contributed to the

book for their school library. Three more poetry lessons followed with a final group poem about their experience in the learning community. Students wrote in their journals daily. In the beginning of the club, students were provided with a list of questions to help give the ideas for journal writing. After seeing that students did not know what journal writing was I modeled lessons of journal writing.

The informational writing was assessed using the 6+1 Traits of Writing rubric for ideas, organization, voice, word choice, and sentence fluency. The rubric was a five point scale. One sample of writing from the first three informational pieces was used to compare with the final informational piece that was taken through the writing process. Journal writing was assessed holistically for overall growth. Poetry pieces were assessed using a 6+1 Traits for voice, word choice, and sentence fluency. This rubric was also a five point scale.

Informational Writing

There were several small but important changes in students' informational pieces. The changes were not only in structure and organization, but also in elaboration and word choice. As previously mentioned students stated they liked writing in the learning community because they had experiences to write from, social interaction, and a non-threatening platform for sharing. This was reflected in almost all areas of growth.

To analyze the informational writing pieces, I used the 6+1 Traits of writing rubric focusing on ideas, organization, voice, word choice, and sentence fluency. The following table reports the overall averages of all the selected traits for each child on their beginning writing piece and their final writing piece. Students are grouped by engagement style. The beginning piece was written with little support, using only what they already knew about informational

writing. The final piece was taken through each step of the writing process while the teacher modeled and taught about the traits of writing.

Table 21

Beginning and Ending Writing Scores by Engagement Styles

Students	Beginning Writing Average	Final Writing Average
<i>Tortoises</i>		
	3.1	3.4
Penny	2.6	3.8
Jay	1.8	2.6
Eric	4.2	3.4
Kim	3.8	3.8
<i>Hares</i>		
	1.7	2.63
George	3	3.2
Andy	1	2.6
Devin	1	2.2
Ray	1.8	2.6
Matt	1.8	2.2
Tom	1.8	3
<i>Spectators</i>		
	2.7	4.0
Pam	3	3.8
Lynn	2.2	4.2
Amy	3.8	4.2
Jenny	1	4.2
Becky	1	3.8
Darcy	No Score	No Score
Anna	3.4	4.2
Mya	3	3.8
Andrea	3.4	3.8
Kate	3.4	3.8

As demonstrated in the above table almost all students saw an increase in their total score while one student remained the same. As a group, the *hares* were weakest in writing and the *tortoises* were strongest in the beginning. In the end, the *spectators* made the most growth, followed by the *hares*. The change in the format of the club from individual to social in order to

meet the spectators learning style may have lead to an increase in engagement which could have impacted their writing. The following table includes writing samples from a student in each engagement group to demonstrate their changes in informational writing.

Table 22

Change in Informational Writing Samples

Student	First Writing Sample	Final Writing Sample
<p><i>Penny/ Tortoise</i></p>	<p>I am going telling about Jesse Owens and Steve Prefontaine were two famous runners. They were different and alike in many different ways.</p> <p>Steve Prefontaine was very little but he got very big. Steve Prefontaine won 0 medals. Jesse Owens win 4 gold medals. Jesse Owens was living in Alabama. Steve Prefontaine lived in Oregon.</p> <p>Jesse Owens ran short. Prefontaine ran long.</p>	<p>Two Famous Runners</p> <p>Introduction</p> <p>Jesse Owens and Steve Prefontaine were really good runners. They were different and alike in many ways. Here are some ways they are alike and different.</p> <p>Jesse Owens</p> <p>Jesse Owens was a short distance runner. He was such a good runner. He had a good impact on running. He ran the 100 meter race. He also had a steady pace.</p> <p>Steve Prefontaine</p> <p>Steve Prefontaine was also a good runner. He was a long distance runner. Steve died in a car crash. He had a great impact on running. He was a good runner.</p> <p>Steve and Jesse</p> <p>Steve and Jesse were good runners. They are alike in many ways but also different. In spite of their differences, they are very good runners. They are our heroes.</p>

Tom/ <i>Hare</i>	<p style="text-align: center;">About Jesse Owens and Steve Prefontaine</p> <p>I am telling you about to good runners. They where alike but they where also different.</p> <p>They both ran in the Olympics. They both where very good runners. They both died. The both went to college.</p> <p>Jesse Owens won four gold medals. Steve Prefontaine won zero gold medals. Jesse Owens went to college in Ohio. Steve Prefontaine went to Oregon in college.</p>	<p style="text-align: center;">Jesse Owens and Steve Prefontaine</p> <p style="text-align: center;">Introduction</p> <p>Want to hear about two good runners? I am telling you about Jesse Owens and Steve Prefontaine. They are both my idols.</p> <p style="text-align: center;">Jesse Owens</p> <p>Jesse Owens went to the Olympics and won four gold medals. He went to college in Ohio. Jesse Owens died because he had cancer. He was a very good runner.</p> <p style="text-align: center;">Steve Prefontaine</p> <p>Steve Prefontaine went to Oregon College. He died in a car accident. He went to the Olympics and won zero gold medals. He was a good runner.</p> <p style="text-align: center;">Conclusion</p> <p>That is the story of Prefontaine and Owens. They were two good runners that I look up to. I hope to run like them someday.</p>
Jenny/ <i>Spectator</i>	<p style="text-align: center;">Running</p> <p>Running is an exercise. It works your heart. It is a great way to meat knew people.</p>	<p style="text-align: center;">Training for a 5k</p> <p>Sweating when running all through the race. If you want to win a 5k race focus on running, pace yourself, and stretch before the race.</p> <p style="text-align: center;">Stretching</p> <p>When you are training for the race you should stretch your muscles. A great way to stretch is by jumping</p>

		<p>rope, toe touches, arm circles, and jumping jacks. Don't stretch too much or else you will hurt yourself!</p> <p style="text-align: center;">Pacing</p> <p>If you are training for a 5k race pacing yourself helps by making yourself go longer. It helps by not stopping as much as you usually do. And that's why you should pace for a 5k race.</p> <p style="text-align: center;">Focus</p> <p>If you are training for a 5k race you need to focus on the race. Focusing keeps your mind motivated on the race for the 5k. You should always focus on running because it could help you on a 5k race.</p> <p>All these things will help you train for a 5k race. Stretching helps you train because it increases your muscles. Pacing, stretching, and focusing helps you train for a 5k.</p>
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The most obvious change looking across samples is the structure. The parts of informational text were stressed in lessons which accounts for the use of headings in the final piece. Penny's first piece was not very well organized and the ending was abrupt. Her final piece is much more organized, clear, and is tied up at the end. The same is evident in Tom's pieces. His initial piece is unorganized and unclear. It also ends without a satisfying conclusion. His organization improves in his final piece and he includes a conclusion. Even though the conclusion lacks a summary, it is a satisfying close to the piece. Jenny's piece shows the most growth of the three students. Her first piece was not well developed or thought out. Her final piece demonstrates organization, and includes ideas that relate to the focus of the piece. She

demonstrates growth in adding detail. While her beginning is still a little unclear, she sums up her thoughts much more clearly in her ending.

Growth was also made in elaboration and word choice. In the final writing pieces, students gave greater detail and explanation in their writing. This elaboration was supported through their word choice as well. Students utilized technical vocabulary from the running component in their informational pieces about running.

Data suggests that engagement styles do not necessarily predict writing proficiency. For example, just because a child is in the *tortoise* group with the task-oriented motivational style, does not mean they are a stronger writer than a student in the *hare* or *spectator* groups. The following two tables (Tables 23 and 24) split the students into two groups. The areas of improvement for the weakest writers (according to the beginning writing sample) followed by areas of improvement for the strongest writers (according to the beginning writing sample). Representative writing samples from each group are included Table 22.

Table 23

Areas of Improvement for Weakest Writers

Students	Ideas	Organization	Voice	Word Choice	Sentence Fluency
Becky	+	+		+	
Devin		+		+	
Jenny	+	+		+	
Andy	+	+		+	
Tom		+	+		
Ray	+	+		+	
Matt				+	+
Jay	+				+

Table 24

Areas of Improvement for Strongest Writers

Student	Ideas	Organization	Voice	Word Choice	Sentence Fluency
Kim	+				
Pam	+	+			
Amy				+	
Andrea	+		+	+	+
Kate					+
Mya			+	+	
Anna	+		+		
George	+		+		+

The weaker writers showed most improvement in ideas, organization, and word choice. The stronger writers improved in ideas, voice, word choice, and sentence fluency. Organization was not an area of improvement for most strong writers. However, strong writers had growth with voice, word choice, and sentence fluency. The following tables include beginning and final writing pieces for a representative student from the weaker writers followed by a representative sample of the strongest writers.

Table 25

Weaker Writer, Andy's Writing Pieces

First Writing Sample	Final Writing Sample
<p style="text-align: center;">Jesse Owens and Steve Prefontaine</p> <p>Jesse winn four medal and Steve he got to run he didnø win no gold medal. The both was a run. Ok one of them didnø no how to drive in a reck and the other died. I donø know the are both from this planet from venus and from mercury.</p>	<p style="text-align: center;">Two Famous Runners</p> <p>Today I am talking about two famous runners you have never heard of. Jesse Owens and Steve Prefontaine are some good runners.</p> <p style="text-align: center;">Jesse Owens</p> <p>Jesse Owens was a good runner. He ran in the Olympics. He ran short track. He won a lot of medals. He stayed hydrated and he stretched good and paced himself. He ran against good runners from all over the world.</p> <p style="text-align: center;">Steve Prefontaine</p> <p>Steve Prefontaine was a long distance runner. That means that he ran longer distances than Jesse Owens. He would race in long distances. He would stay hydrated and stretched real good.</p> <p>When you start running do all things Jesse Owens and Steve Prefonatine did and you will finish.</p>

Andy's ideas and organization have improved greatly in the final piece. He used headings to organize his writing and gave more detail in his writing. There is evidence that Andy also applied what he was learning about running into his writing as he mentions hydration, stretching, and pace. Andy's word choice is much more precise in relation to running as he uses words such

as track, hydrated, stretched, pace, and distance runner. This technical vocabulary was not explicitly taught or scaffolded in writing instruction.

Table 26

Stronger Writer, Andrea's Writing Pieces

First Writing Sample	Final Writing Sample
<p>Jesse Owens and Steve Prefontaine are famous. Do you want to know why? They are famous for their running. They are alike and different.</p> <p>Jesse Owens and Steve Prefontaine are alike in many ways. One way is they both were in the Olympics.</p> <p>They are also different. One way is one graduated. Another way is Steve Prefontaine died in a car accident and Jesse Owens died of cancer. The other thing is Jesse won four gold medals and Steve did not win any medals.</p> <p>So now you know that Steve Prefontaine and Jesse are alike and different. You also know that they are famous runners.</p>	<p>How to Train for a 5K Race</p> <p>I'm hot. I feel like I'm going to faint. I don't know if I'll make it to the finish line. This is my first 5k race and I trained very hard for this race. This is how you can win the 5k race. You can stay hydrated and stretch daily!</p> <p>Staying Hydrated</p> <p>Staying hydrated is very important. It is important because if you don't drink water you can get cramps, you could pass out, and you could hurt yourself. There is a lot more things that can happen to you. When you think of liquids don't think of soda. Think of water, not soda. When you drink water it will not give you cramps. That's why you need to stay hydrated.</p> <p>Stretching Daily</p> <p>Stretching daily can be fun if you give it a try. You should stretch at least three times a day so you will not pop a muscle while you run. If you stretch too much or too hard you can hurt yourself. Remember to stretch.</p> <p>Now you know what to do when you train for a 5k race. All you have to do is stretch daily, and stay hydrated. Soon you will be training for a 10k!</p>

Andrea's first writing piece is well organized and focused on an idea, but lacks detail, voice, and sentence fluency. Her final piece has a stronger voice. The reader can hear a little of Andrea's personality through this writing piece. Her word choice is much more precise to

running as well with words like hydrated, cramps, stretch, and muscle. She also includes more varying sentence lengths.

Journal Writing

Along with change in informational writing, changes also occurred in journal writing. Students began with numbered lists to answer questions for their journals. Through modeling by the teachers, they learned the form of journal writing which changed the organization of their writing. This modeling occurred after three weeks of reading journal entries that were one word responses to prompts. Throughout the term, they became much more reflective and elaborated their ideas in their journals.

Table 27

Student Samples of Writing Journal Growth

Students	First Journal Entry	Final Journal Entry
Becky	<ol style="list-style-type: none"> 1. I ran fore laps. 2. I will run five laps with not stoping 	<p>Dear Running Journal,</p> <p>Today it is the last day of running club. I have never run like this befor. I idd not know I could run this way!</p> <p>I sweat like craze. I also met Matthew Wasin. Came to see us. He is a perfeshunul runner from ALABAMA.</p> <p>Love, Becky</p>
Anna	<ol style="list-style-type: none"> 1. Yes 2. 13 min 8 laps 3. drink water eat fruits 4. hot 	<p>Dear Running Journal,</p> <p>Today is the last day of running club. It felt like last Thursday was our first meeting. I will miss running. I am also thinking about doing it next year. It was fun running. I had a great time. I had so much fun writing, running, reading, meeting runners, and most important the teachers.</p> <p>Your friend, Anna</p>
Tom	<ol style="list-style-type: none"> 1. Yes I did. 2. Running at PE. I will run in my neighborhood. It was sunny and hot. 	<p>Dear Running Journal,</p> <p>I ran my butt off today in running club. I think my heart almost beated out of my chest and I think my shoes caught fire. I meet my goal. I ran 3 miles. It was burning hot today. Yesterday a UA track runner came. He was cool.</p> <p>Sincerely, Tom</p>

As illustrated in the Table 27, the first journal entries were just simple, numbered responses with little thought or elaboration. It is clear in the final journal entries that not only the organization improved, but the content did as well. Students gave much more detail and treated

the entry as a reflection about what they found important rather than answering question prompts.

Poetry

The introduction of poetry writing made many boys hesitant at first. They thought that poetry was for girls and did not seem interested at all. That is until they became engaged through participating in lessons in which teachers modeled poetry writing. In fact, almost all students, girls and boys, stated that poetry writing was the favorite writing activity during *Running to Achieve*. They thought it was an interesting way of expressing themselves. They also seemed to enjoy the length of poetry. They could create more poems in the same amount of time they could create one draft of their informational writing. This was very appealing to the *hares* of the group. During poetry lessons, I infrequently stopped to ask a student to begin writing. They all wanted to create a poem and were eager to share. When they shared their writing, we snapped our fingers for them instead of clapping. The students thought this was funny and loved the change.

Students began with a poem about themselves called an *ōI am Fromö* poem. This piqued their interest because they were all eager to tell a little about themselves. The next two poems were about running and running buddies. The final poem was a second *ōI am Fromö* poem in relation to the learning community. These individual poems were turned into a collective group poem with each student contributing at least one line to the poem that was recited at awards day. This was an excellent culminating activity that helped students reflect on their experience in the learning community and express what it meant to them. The poem created is displayed Figure 3.

We Are Fromí

We are from determination

Never giving up.

We are from teachers and friends encouraging us

Helping us to keep going.

We are from reading about runners

Jesse Owens, Steve Prefontaine, and Wilma Rudolph.

We are from eating healthy

To stay strong and give us energy!

We are from the hot sun

Making us drip with sweat.

We are from pacing ourselves

Not going too fast.

We are from pencils and paper

Becoming better readers and writers.

We are from working hard to reach our goals

Never giving up!

We are from staying hydrated

Drinking water instead of sugary drinks.

We are from Practice! Practice! Practice!

Hard work and dedication

Running for the finish line!

We are from Maxwell Elementary

And we are **RUNNING TO ACHIEVE!**

Figure 3. Final We Are From Poem

Poetry samples were analyzed with the 6+1 Traits of Writing rubric, using voice, word choice, and sentence fluency. The rubric was a 5-point scale with 5 being the highest. The following table includes the average score for each student by engagement style for their first poem and final poem. The *NS* indicates that child did not have a poem to score.

Table 28

Average Scores for First and Final Poems

Student	Poem 1	Poem 2
<i>Tortoises</i>		
Penny	3	3.3
Jay	2.6	3
Kim	3	3.7
<i>Hares</i>		
Devin	1.7	2.3
Andy	1.7	3
Ray	1	3.3
George	4	4
Tom	2.3	3.7
Matt	<i>NS</i>	4
<i>Spectators</i>		
Becky	<i>NS</i>	3.3
Kate	<i>NS</i>	3
Pam	<i>NS</i>	3.3
Lynn	4	4
Anna	2.7	4
Jenny	3	4
Amy	4.3	4.3
Mya	3	3
Andrea	4	4

**NS indicates that no scores were available for this student. They were most likely absent on the day of the activity.*

As shown in the table above, nine out of fourteen students improved their average poetry score. The other five students saw no change in their average. As an engagement style group, the *Hares* made the most growth overall with four out of the five students making growth.

More information is provided below about each trait individually in regards to poetry. The following table includes scores for each child, grouped by engagement style, from their first poem and their final poem for the traits of voice, word choice, and sentence fluency.

Table 29

Poetry Analysis of First and Final Poem

Student	Poem 1			Poem 2		
	<i>Voice</i>	<i>Word Choice</i>	<i>Sentence Fluency</i>	<i>Voice</i>	<i>Word Choice</i>	<i>Sentence Fluency</i>
<i>Tortoises</i>						
Penny	3	3	3	3	4	3
Jay	3	3	2	3	4	2
Kim	3	3	3	4	4	3
<i>Hares</i>						
Devin	2	1	2	3	2	2
Andy	3	1	1	3	3	3
Ray	1	1	1	4	3	3
George	4	4	4	4	4	4
Tom	3	2	2	4	4	3
Matt	<i>NS</i>	<i>NS</i>	<i>NS</i>	4	4	4
<i>Spectators</i>						
Becky	<i>NS</i>	<i>NS</i>	<i>NS</i>	3	4	3
Kate	<i>NS</i>	<i>NS</i>	<i>NS</i>	3	3	3
Pam	<i>NS</i>	<i>NS</i>	<i>NS</i>	3	4	3
Lynn	4	4	4	4	4	4
Anna	3	3	2	4	4	4
Jenny	3	3	3	4	4	4
Amy	4	4	5	4	4	5
Mya	3	3	3	3	3	3
Andrea	4	4	4	4	4	4

**NS indicates that no scores were available for this student. They were most likely absent on the day of the activity.*

In relation to poetry writing, like informational writing, *hares* seemed to be the weakest on the first piece. Nine out of fourteen students demonstrated growth in poetry writing. All nine experienced growth in relation to word choice. Of these nine, four students also demonstrated growth in voice and sentence fluency. One student of the nine also demonstrated growth in voice, but not sentence fluency. The following are three representative students' poetry samples with their first poem and final poem.

Table 30

Student First and Final Poetry Writing Samples

Student	First Poem	Final Poem
Ray	<p>I am from gold medals Gold shoes, something I want in the future.</p> <p>I am from green slime I like to hold my snake every day</p>	<p>I am from lap club Training for a 5k.</p> <p>I am from water. Never stop at the 5k.</p> <p>I am from training Running hard to win the race.</p> <p>I am from mustang. Running like a mustang.</p>
Anna	<p>I am from rice, broccoli, and shrimp When people tell me I am smart I think of teachers Two people I hate is Brianna and Kianna two sisters Playing basketball, dots, soccer This is who I am from</p>	<p>I am from hydration Drinking and eating.</p> <p>I am from running a 5k Practice! Practice! Practice!</p> <p>I am from running Not sleeping or eating</p> <p>I am from practicing every Thursday Happiness is here to stay!</p>
Andy	<p>I am from money I love they pay me ten bill I love car key I like to be funny One time I made a guy spill grape juice on his self.</p>	<p>I am from Run for the cup.</p> <p>I am from Running it cip me in shape I am from write Because this is going in a book.</p> <p>I am from speed But you got to run slow because you might fall.</p>

All of these students demonstrated growth in their poetry writing. Perhaps the most dramatic was with Ray. Ray struggled with writing tremendously but seemed to really take to

poetry writing. On his final piece, Ray was able to use better word choice, develop more of a rhythm to his poem, and start to show his own voice in his writing. Anna seemed to use her first poem as simply a place to write random thoughts. There was not much cohesion in her thoughts. Her final poem is much more focused with clear word choice. More of her voice also shines through this piece in her use of punctuation to show her excitement. Andy's first poem was disjointed and confusing. His final piece is clearer with more precise word choice. His sentence fluency improved from his initial piece in that he used more of a patterned rhythm.

Informational Writing and Poetry

After analyzing growth in poetry writing for each student and in relation to engagement style, I compared informational writing to poetry writing in regards to sentence fluency, voice, and word choice. The following table represents those results.

Table 31

Comparing Final Informational Writing and Final Poetry Writing Across 3 Traits

Student	Informational Writing			Poetry Writing		
	<i>Voice</i>	<i>Word Choice</i>	<i>Sentence Fluency</i>	<i>Voice</i>	<i>Word Choice</i>	<i>Sentence Fluency</i>
<i>Tortoises</i>						
Penny	3	5	3	3	4	3
Jay	1	3	3	3	4	2
Kim	3	3	3	4	4	3
<i>Hares</i>						
Devin	1	3	1	3	2	2
Andy	1	3	3	3	3	3
Ray	1	3	1	4	3	3
George	4	3	3	4	4	4
Tom	3	3	1	4	4	3
Matt	1	3	3	4	4	4
<i>Spectators</i>						
Becky	3	3	3	3	4	3
Kate	3	3	3	3	3	3
Pam	3	3	3	3	4	3
Lynn	3	5	3	4	4	4
Anna	5	3	3	4	4	4
Jenny	3	5	3	4	4	4
Amy	3	5	3	4	4	5
Mya	5	5	1	3	3	3
Andrea	3	3	3	4	4	4

As indicated in the Table 31, 11 students scored higher in the voice trait with poetry than with informational writing. Nine students scored higher with word choice in poetry than with informational writing and 11 students scored higher in sentence fluency. Scores indicate poetry had the largest impact on the *hares* as every student in this group scored higher in their poetry samples than in their informational samples.

Through poetry writing, students learned a new way of self expression. Their knowledge of poetry was limited at first, but through their participation they were opened up to different kinds of poetry and ways of expression. Their knowledge of informational writing was weak, but

increased with modeling and the use of the writing process. Through the writing component as a whole, students were able to see that writing does not just include essays and stories. It includes a variety of elements such as imagination, ideas, and experience, written with a unique voice.

CHAPTER V:

DISCUSSION

The findings from this study add to the body of research on learning communities, motivation and engagement, writing growth, and access to physical activity. While findings support existing research, this case has also shed new light on implications for future areas of research.

Learning Community

Lave and Wenger (1993, 1991) have described learning communities as groups that motivate and shape learning as participants build relationships through a shared interest that creates routines and procedures unique to the community. Within a learning community, Lave (1996) posited that real world settings provide members with learning opportunities through interactions with one another. In the case of the classroom participants include students and teachers so that the teacher is a participant in the learning, not just a provider of knowledge. Wenger (1998) acknowledged three components that identify successful learning communities: mutual engagement, joint enterprise, and shared repertoire. Mutual engagement refers to the relationships which are created within the community as the members pursue joint enterprise, or a common goal that joins them. Finally, the members of the learning community create a shared repertoire of routines and practices. *Running to Achieve* was a learning community where participants (students, teachers, and parents), built relationships because of a common interest in running and/or writing. This interest contributed to their joint enterprise, or their goals, which were to improve running and writing. These goals each impacted and produced engagement in

one another. The joint enterprise contributed to and shaped the shared repertoire that was made up of activities in running and writing which also enhanced and contributed to one another. From these activities, a shared discourse about running and writing was formed as was evidenced in each child's description of running and writing. Gee (1999) described discourse as language, actions, values, and tools that identify a particular social group. The following figure represents the components of the learning community, *Running to Achieve*.

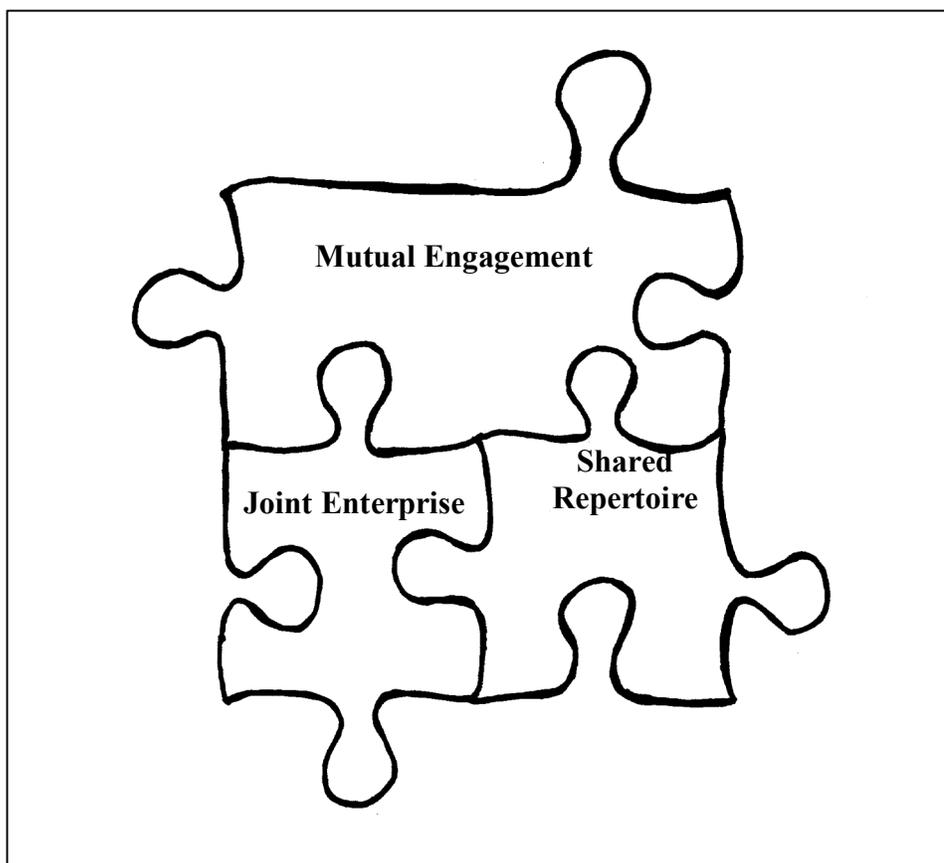


Figure 4. Diagram of Running to Achieve Learning Community

I chose puzzle pieces to visually represent how Wenger's (1998) components of mutual engagement, joint enterprise, and shared repertoire work fit together and work with one another to make up the learning community. The pieces are left open to illustrate how this learning

community is a small piece of a larger learning community, in this case, the school. Each piece is pulled apart separately below, to go into more detail about each component.

Mutual Engagement

Figure 5 below represents the mutual engagement of the learning community. Members were joined by a shared interest in running and/or writing. Relationships were built between teachers and parents, teachers and teachers, teachers and students, students and students, and students and parents.

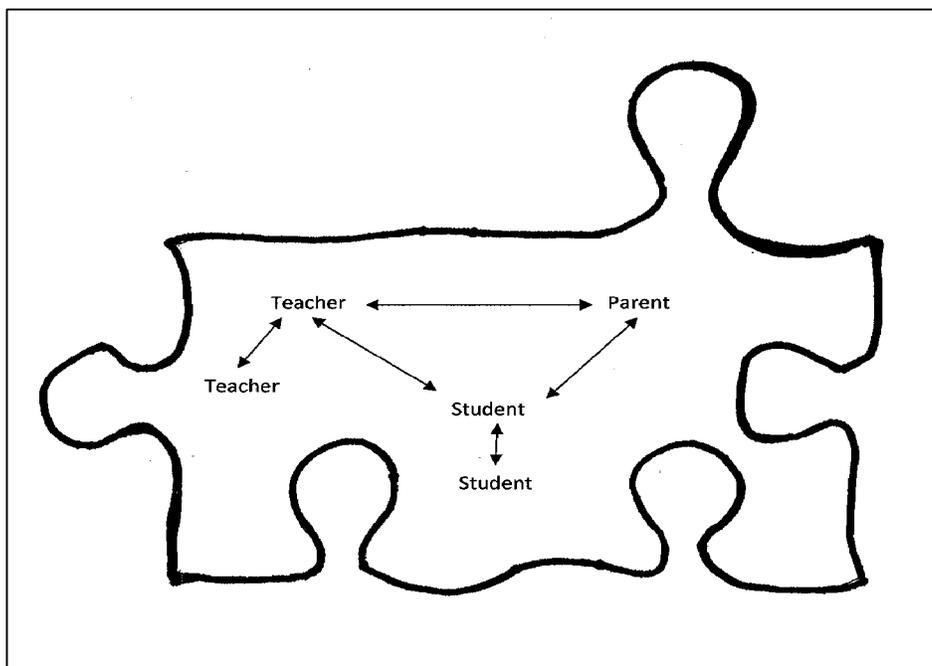


Figure 5. Mutual Engagement

Relationships students built with each other, and with teachers seemed to have the most impact on each child's experience. Modeling and social interaction was a large piece of the learning community as teachers modeled running and writing, and students used peer and teacher feedback and encouragement to accomplish tasks. This built a strong relationship not only between peers but also between teachers and students. This relationship between the teacher and

student is essential as children's engagement is influenced by their perception of the teacher's level of interest and care (Skinner & Belmont, 1993). This relationship is also important in regards to self-efficacy as students' beliefs in his or her own abilities is linked to teacher feedback (Schunk, 2003). The relationship that a focal student, Pam built with others is a good illustration of the importance of mutual engagement.

Energetic and enthusiastic, Pam joined the learning community eager to participate. She considered herself a strong writer, but was not sure about her abilities as a runner. Due to asthma, she had shied away from physical activity in the past, but was now ready to take on the new challenge. Although Pam loved writing, and through her participation came to love running, her social nature got in the way of her being fully engaged in either. Pam loved to socialize and spent most of her time doing just that. When she was engaged, she was a task-oriented student who was working to do her best. She did not judge her abilities against what others did; rather she was concerned about doing her best. However, her love for socializing usually got in the way of her ever really getting around to completing a task. The buddy system for running and writing was just what she craved. As she put it, "I had someone to work with, share my ideas with, and it was amazing!" Pam began running and writing more as she was able to focus her social energy into a task at hand rather than it being a distraction.

Another key to Pam's change was her relationship with teachers. Pam liked to run with me, and usually pushed herself more if we ran together. In fact, most of my memories of my experience include talks with Pam. During our runs, Pam opened up about her home life and the stresses it was putting on her and her family. However, Pam was not only interested in telling me her story. She also was interested in hearing mine. She was always sure to ask me how I was doing and usually followed up any question I asked her, with the same question directed at me.

For example, she wanted to know if my journal writing had improved since running club and if I learned anything from reading their writing. She also wanted to know if I had fun working with kids and at one point asked, "What are you gonna be when you grow up?" I always looked forward to seeing Pam and looked forward to what she might have to say or ask.

Pam developed a trusting relationship with the teachers and peers in the learning community and this impacted her participation by leading to an increase in engagement in both running and writing. She entered the learning community excited and enthusiastic, and left it just the same, with a little more focus intertwined, a new love of running, and a new group of friends.

Joint Enterprise

While some students like Pam were influenced by relationships, others were influenced by the joint enterprise, or the shared goals. The following figure (see Figure 6) represents the joint enterprise piece of the learning community.

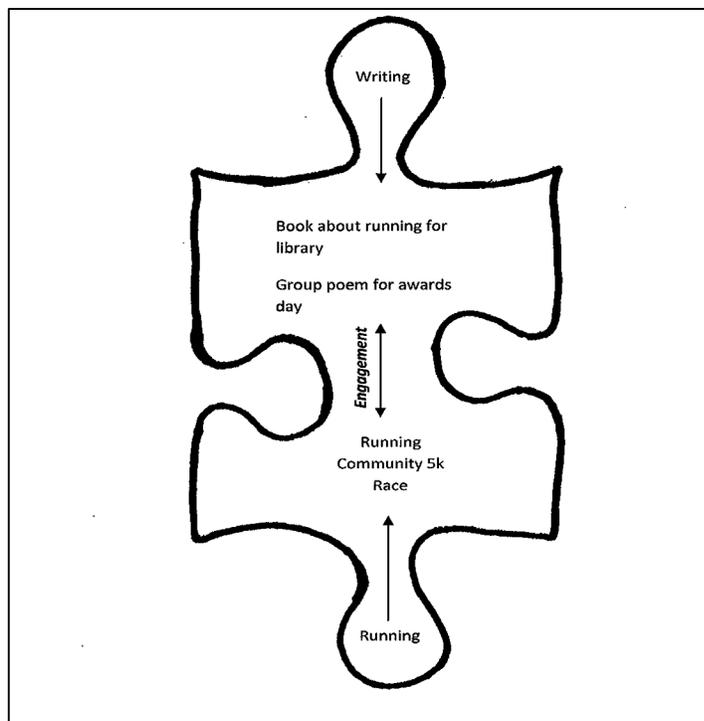


Figure 6. Joint Enterprise

This piece of the puzzle (see Figure 6) represents the joint enterprise of the learning community, or goals that the members shared. The learning community was created out of a shared interest in running and/or writing; therefore the goals are tied to those activities. The running goal was to compete in a local community 5k race at the culmination of the club. The writing goal was to create a group informational book about running for the school library, and a group poem about the learning community to be recited at awards day. Both the running and writing goals were mutually supportive of one another and promoted engagement in each other. While the learning community had the larger running and writing goals, students set short-term goals to help reach the long-term goals. These goals were self-selected and reflected a student-centered approach that does not emphasize comparison of skill levels among students, but gives each student ownership of his or her learning (Guthrie, 2000). The importance of joint enterprise can be seen through the experience of Tom.

Tom had to be fastest and had to be first. He wanted to be first in line headed to the track, first on the track, first off of the track, first in the gym for writing, first to finish snack, first to finish journal writing, and first to finish other writing activities. It wasn't necessarily the quality of the work produced that he was concerned with. Instead, it was the perception of the work. Tom equated finishing first with being the best. His motivational style matched an ego-oriented motivational style. Ego-centered students are motivated by a desire to outperform peers or gain recognition (Nicholls, 1984, 1989). It was interesting to observe Tom as he grew through his participation in the learning community. His goals slowly moved from being the best, to having a shared goal within the community of helping one another.

Through the implementation of the buddy system in both running and writing, Tom formed a partnership with the very person he used to try and outperform-- Penny. Penny was a

task-oriented student and was motivated by improving her own ability. She was the strongest runner in the group and this pairing changed Tom tremendously. He was no longer as obsessed with only winning, and he began to focus more energy on endurance with running. Tom began encouraging his peers rather than simply trying to finish faster than they did. Tom changed his focus to not just running and writing fast, but enduring the distance and helping his peers. In the learning community, Tom found a platform on which he could shine through sharing his writing. Instead of finishing first, he began to add detail and elaboration in his writing to ensure he had a quality piece to share with the group.

While Tom still cared about winning, as he mentioned wanting to win the final race, his motivation style was changed through his participation in the learning community by including a place for peer interaction and support. In an early journal entry, Tom wrote, "Today my goal was to beat Penny." This is a stark comparison to a later journal entry where he wrote, "I ran more than I ever have with Penny. She helped me and it felt good for her to help me."

Shared Repertoire

Out of the mutual engagement of an interest in running and/or writing, and the joint enterprise of running and writing goals, a shared repertoire was created. The following figure (see Figure 7) represents the final piece of the community, the shared repertoire

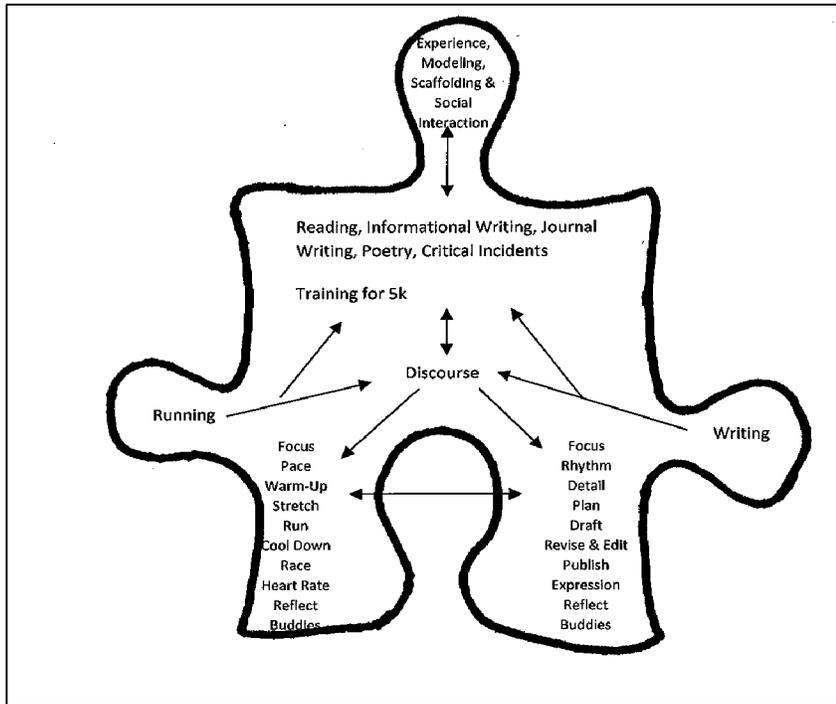


Figure 7. Shared Repertoire

Shared routines and practices emerged from the goals of running and writing, primarily based on instructional decisions I made. However other routines and practices emerged on their own as a result of the nature of the learning community. The running component of the learning community consisted of training for the 5k race through warming up, stretching, running, and cooling down. The writing component consisted of reading texts, and writing informational text, journals, poetry, and critical incident reports. Both running and writing were presented as a process and thus a discourse emerged that was mutually informing and supportive. The importance of focus was emphasized in both running and writing. Keeping a good pace in running was correlated with slowing down to add detail in writing, and also with rhythm in poetry. The process of running involved warm-up and stretching which correlated with planning in the writing process. Running was associated with drafting a writing piece. Cooling down and

checking heart rate to monitor progress was associated with revising and editing writing. Finally, publishing the piece was associated with running the race, the final component in each.

Reflection was used in both running and writing. Students reflected while they ran, and after they ran. Writing was also a part of the reflection process and students made changes in their running based on their reflections. Students wanted to use words to create a picture in the reader's mind and for this the term visualization was used. Visualizing was also used in regards to running as students discussed visualizing themselves running in the race while training. Finally, buddies were used in both running and writing. In both areas they were used as encouragers and supporters.

The shared discourse that emerged exemplified embodied cognition. Students made connections between their physical experiences and their literacy learning. For example students recognized a parallel between the process of running and the process of writing. They also noted that they used skills such as visualizing in both running and writing. Beyond that, students also made personal connections with beliefs about their abilities in literacy through their successes in running. Students learned that their bodies could do much more than they thought by pushing themselves to run more. This transferred into their literacy learning as they carried over this same belief. Through physical activity, and support of peers, students suddenly began to believe they could do more in both running and writing. Cheville (2005) explored this phenomenon and found "the orchestration of bodily activity was the means to a collective mindset. Learning was necessarily a political process, demanding that coaches and players negotiate their understanding through social and bodily engagement" (p. 98) This finding resonated very clearly with the final days of the learning community as students often made statements like, "I can run so much more than I thought I could and that helps me know I can try harder in writing." The connections

fostered through embodied cognition was just beginning to emerge through this data and certainly warrants more exploration, however it was very interesting to observe this idea surface. Eric's experiences are a good example of the impact of a shared repertoire through embodied cognition on students.

Eric did not like writing. He stated that he basically did it because he had to and did not enjoy any part of it. Writing was just something his teachers made him do and he did not see a reason for it other than earning a grade. However, through his participation in the learning community, Eric became excited about writing. He credited this excitement with the experiences he gained through the running component and peer interaction.

The writing became more meaningful to Eric because he was writing from experience. The running gave Eric a direct connection to what he was writing about and made it more meaningful. As he put it, he was not simply writing to a prompt that a teacher chose for him. He was writing based on his own experience about something he felt he knew about.

Eric also benefitted from the social nature of the club. Very shy and reserved, he rarely interacted with others in the beginning of the learning community. In fact, he was a bit of a loner. The buddy system helped pull Eric out of isolation and enabled him to engage with his peers. As he stated, "I enjoyed that you could share ideas with another person." This also contributed to his increase in enjoyment for writing. By the end of the learning community Eric stated that he wrote more at home because of the writing in the learning community. "I have a little binder that I take with me and write stories in. Just stories that I make up."

Through participation in the shared routines and practices of the learning community, Eric had grown to appreciate both running and writing, but sadly he did not attend the final race. Eric did not have the money to participate in the race (and was unaware that there was no fee for

those who could not pay). Even though this learning community made an attempt at providing access to physical activity for students; it was still not a perfect solution as Eric's assumption that he could not afford to participate in the race prevented his completing his goal. This verifies research that stated students do not have access to physical activity (Sallis, Prochaska, & Taylor, 1999; Trost, Pate, Saunders, Ward, Dowda, & Felton, 1997; Wilson, Kirtland, Ainsworth, & Addy, 2004).

Through studying each individual piece of the learning community in conjunction with results of the research questions, I identified the impact of the learning community on participants.

Learning Community Impact

All of the pieces of the learning community: mutual engagement, joint enterprise, and shared repertoire, worked together to promote self-efficacy in participants in relation to both running and writing. The running and writing connection was essential in promoting motivation and self-efficacy. Students began to believe in their abilities in both running and writing through experience and social interaction. These elements led to an increase in engagement which contributed to student growth. Students were more engaged with the activities that met their individual needs and were able to grow in their abilities. This, however, is not a linear process. Motivation, self-efficacy, and engagement, are elements that were identified in this study that led to growth. However they are not constant or linear. Instead they are always changing in relation to the context. These elements are encompassed within embodiment. The following figure illustrates the relationship between these elements in relation to this learning community experience and serves only as a way to illustrate what occurred in this one, unique case.

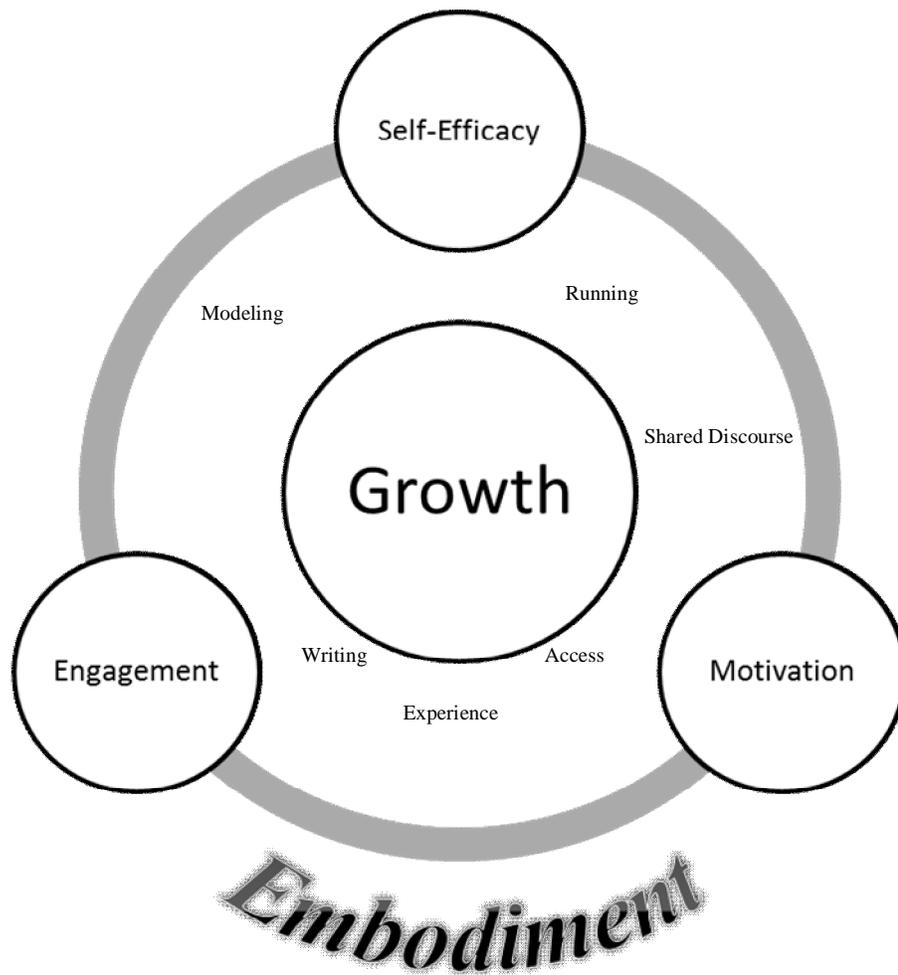


Figure 8. Learning Community Impact

Penny's and Jay's experiences represent how the learning community increased self-efficacy, thus enhancing engagement and growth.

Learning community impact on self-efficacy. The best runner of the group, Penny excelled in running from the beginning. However this was not true of her writing. Penny was not concerned with what others were doing. She only wanted to do her best. She was very shy and kept to herself for the most part, even though she stood out because of her superior running

ability. She did not like the lime light and shied away from attention entirely. Because of this, I had to work hard to develop a relationship with Penny. I took extra care to talk with her and give her positive feedback in relation to both running and writing. I wanted to get to know Penny on a deeper level, but this was hard to do because of her shy demeanor.

My effort paid off in small increments as I noticed Penny opening up and beginning to be more confident in her abilities as a runner and writer. Feedback I provided to Penny promoted her self-efficacy (Schunk, 2003). Penny expressed that she enjoyed writing more because she liked to write from experience. "I like to write what I see." She liked poetry the most and this was evident through my observations as I saw her suddenly volunteer to read her poetry aloud to the group.

Relationships with peers through the buddy system also seemed to impact Penny's beliefs in her abilities. She was looked up to as an expert runner by all of her peers. Her pairing with Tom, and the change from her being someone he wanted to outperform, to someone he looked up to and counted on for encouragement and motivation, seemed to boost her belief in her abilities as well. Through her participation in the learning community, Penny grew from a shy student who blended in to the background, to the unofficial group leader.

Learning community impact on growth. Jay saw himself as an athlete. He often made comments like, "I am going to be a running back for the Crimson Tide. I want to be just like Mark Ingram." In relation to both running and writing, Jay exhibited task-oriented motivation. He was more interested in doing his best rather than outperforming others (Nicholls, 1984, 1989).

Jay wanted to do well even though he struggled with both running and writing. Jay was a bit overweight and this impacted his running. He struggled to keep running, as he tired quickly.

In writing, he struggled with the entire writing process. He described his writing process as simply writing down whatever popped in his head.

The buddy system helped Jay. He worked harder when he had someone by his side in running. He was able to engage in conversation to take his mind off of any physical distress. In writing, it was beneficial for him to have a buddy to bounce ideas off of and to help him shape his writing. A shy student, Jay seemed to open up as the members of the learning community progressed in their learning and relationships. He began sharing his writing pieces with the encouragement of teachers and peers. Jay already saw himself as an athlete in the beginning of the learning community because he identified himself as a football player. However, his self-efficacy in relation to writing grew through greater and more focused participation, or his engagement, and led to growth. Through his participation in the learning community he also saw himself not only as an athlete, but also as a writer.

It seems evident that the learning community framework, in combination with the running and writing connection, was effective in fostering task-oriented motivational styles which led to an increase in self-efficacy thus enhancing engagement and student growth.

Motivation and Engagement

Motivation and engagement were of great importance as I recognized their impact for running (Ferrer-Caja & Weiss, 2000; McCaughtry & Rovegno, 2000; Ntoumanis, 2001) and writing (Anderson, Heibert, Scott, & Wilkinson, 1985; Brophy, 1983; Brophy & Alleman, 1991, Doyle, 1983; Goodlad, 1983; Guthrie, 1996, 2000). Throughout the 12 weeks the motivational climate of the learning community shifted due to instructional decisions. This in turn shaped individual motivational orientations which impacted individual engagement.

Before Running and Writing Buddies

In the first six weeks, I observed and noted students' natural motivational orientations. After analyzing notes, I placed students into distinct engagement style groups based on observed behaviors that were indicative of a particular motivational orientation. The *tortoises* exhibited a task-oriented motivational orientation (Nicholls, 1984, 1989) as they did not require any incentive to participate. They quietly went about their business, attending to their personal goals, and working to do their best. They did not pay attention to what other students were doing. The *hares* exhibited an ego-oriented motivational orientation (Nicholls, 1984, 1989) as they talked about wanting to be faster than their peers. They could always be seen sprinting around the track until they ran out of steam. In writing, they were always the first finished, but rarely had a quality piece of writing. They were concerned with what others thought about their performance and were motivated by receiving attention. The *spectators* exhibited a task-avoidance motivational (Duda & Nicholls, 1992) orientation as they looked to find ways to avoid work altogether. *Spectators* would find reasons they could not run such as an upset stomach or they would complain that it was too hot or too cold to run. They used social interaction as a distraction in their writing. Instead of engaging in writing activities they could be found talking to one another about their personal lives. Many of the *spectators* did not have strong beliefs in their abilities as runners and writers.

Motivational climate. Ames and Epstien's (1992, 1988) elements for identifying motivational climates are useful for discussing the changes in the motivational climate that enabled the students to broaden their approaches to running and writing. An ego-oriented motivational climate consists of teacher developed tasks. The teacher is the authority and makes all decisions about what students will learn. Rewards are public and students are praised for

being superior. Students are ability grouped and evaluated based on performance. Within this climate there are strict time guidelines for completion of tasks. A task-oriented motivational climate consists of tasks selected by students and gives students authority over their goals. Rewards are private and grouping is flexible. Evaluation is based on individual student's ability, and time limits for completing tasks are flexible.

When placed into these elements, before running buddies were added to the learning community, *Running to Achieve* had characteristics of both a task-oriented and an ego-oriented motivational climate. Task, authority, and time all exemplified an ego-oriented climate. In the beginning, I had already planned the running and writing activities the students would engage in. I also had already made all instructional decisions and placed a time limit for completion for writing activities within one group meeting. For example, I began with an instructional writing piece that included a mentor text, and modeled writing. Students worked individually without support and were to complete this writing piece by the end of the meeting. I made all of these decisions without really understanding my students and how they might learn best. These decisions were made independently, without consideration of the students.

Making the decisions independent of deep knowledge and consideration of students fostered an ego-oriented motivational climate (Ames, 1992). This could account for the lack of engagement in all students, but particularly for the *spectators*. The students in the learning community had not been considered or made a part of any of the decisions up until that point. However, I noted the lack of engagement in my observation notes, and the motivational styles of each child. For example, I noticed the same few students were the consistent runners in the group, the same students were the sprinters, and the same students were avoiding tasks altogether. I also noted that while most students were not improving as runners, they were also

not improving as writers. It was at this point that I made efforts at changing instructional decisions to match students' needs. I noticed in my notes that the students who were not engaged were either too busy socializing, or too busy trying to be noticed by peers. At that point, I decided to implement running and writing buddies. This change dramatically shifted this group into an effective learning community.

After Running and Writing Buddies

After I implemented running and writing buddies, to harness students' social energy and use it for a purpose, tasks were relaxed to allow students to choose their piece of writing and to choose how they wanted to participate in running and writing: either individually or with a buddy. Through social interaction, students were encouraged to evaluate and give feedback about progress in running and writing. This gave them more authority over their learning rather than leaving it up to the teacher as the sole evaluator. Finally, time, in regards to writing instruction, was also relaxed and students were not required to complete one piece per meeting. Instead, they were encouraged to take their time with their writing to do their best work even if it took several weeks to complete. Combined with the already existing elements of private reward for accomplishments, cooperative, flexible groups, and self-evaluation, the result of this change was a more task-oriented motivational climate (Todorovich & Curtner-Smith, 2002).

New motivational climate. Fostering a task-oriented climate led to changes in all students within their engagement style groups. The *tortoises* became coaches for their peers as they partnered with the *hares*. For example, Penny, the best runner, served as a coach for Tom as she encouraged him to slow his pace to run farther. The *hares* in turn adopted a more task-oriented motivational style as they stopped being concerned with being the best, and seemed to slow down and become more deliberate about their running and writing. For example, Andy partnered

with a *spectator* and learned to encourage one another as teammates rather than competitors. The *spectators* seemed to be impacted the most. They no longer avoided tasks. Instead, they worked with their buddies to reach their self-selected goals and stayed on task the entire time. They still socialized, but the socializing was focused on the running and writing tasks at hand. For example, one pair could be seen singing songs as they ran to keep each other going, while another pair would make believe a shark was chasing them to keep each other going. Phrases like, "come on keep going," "you can do it," "let's not stop, let's just slow down" could now be heard from peers, not just teachers. Overall, the shift in the motivational climate seemed to foster intrinsic motivation within students. This corroborates Guthrie's (2000) conclusions that collaboration with peers fosters intrinsic motivation and shapes goal orientation. This was evident in most students as they moved toward more task-oriented motivational orientations, which in turn led to an increase in engagement in both running, and writing. Teachers noted this change in interviews, and they credited the running and writing buddies for the observed increase in student engagement.

The social interaction and motivational climate transformed the learning community into a more cohesive group and contributed to an increase in collective self-efficacy, the belief in the abilities of a group an individual belongs to (Bandura, 2005). Therefore, not only was social interaction instrumental in promoting individual self-efficacy, it also contributed to collective self-efficacy, strengthening the relationships of group members. These findings suggest that social interaction and a task-oriented motivational climate could be beneficial for other instructional situations to create community, change motivational styles, increase self-efficacy, and lead to increased engagement. Jenny's experiences illustrate the change in motivation and engagement.

I often wondered why Jenny had joined this learning community. She seemed to have no interest in either running or writing. I never saw Jenny run one step in those first six weeks. Her writing was not much better. She exhibited performance-avoid motivational orientation as comments like, "my foot hurts," or "my tummy hurts," or, "I am tired," were repeated to explain her lack of participation. At one point, at the end of a club meeting, out of frustration, I actually told her she did not have to participate if she did not want to. I explained that this group was completely optional and if she was not interested in running or writing, she might want to tell her parents. This did not sink in as she was back the next week and was still not participating in anything other than spreading the latest gossip. Since politely hinting to her that she could leave the group did not work, I decided maybe I should actually adjust what I was doing to meet her style. I observed my notes on all of my students and found the one thing Jenny was quite good at, and that the rest of the students were good at as well, was socializing.

Jenny changed completely after the implementation of running and writing buddies. She no longer made excuses about not participating. Instead, she participated fully in both running and writing. She still socialized, but the social interactions were focused on encouraging her buddy in running and writing. I found that Jenny had no confidence in herself as a runner or writer, but when partnered with a peer, her self-efficacy increased. This increase in self-efficacy that she felt through the support and affirmation of her buddy could be the reason for her increase in engagement. Jenny no longer avoided running or writing, but seemed eager to do both. Perhaps she best summed up her change as her last journal entry stated, "I have improved so much. Ms. V even said so. Because my running buddies help me a lot. A couple of weeks ago I just ran one lap. Now I run 10!"

These findings suggest that fostering a task-oriented motivational climate could be effective in shifting individual motivational orientations. This shift away from students who are motivated by external reward, or who avoid tasks altogether, may lead to an increase in self-efficacy as students become intrinsically motivated.

Running and Writing

The nature of the learning community, and the motivational climate impacted self-efficacy and engagement, which in turn led to growth in running and writing. Growth in running and writing was observed and documented throughout data collection. In fact, through participation, each child made growth in both running and writing.

Growth in Running

Students made the most growth in running after implementing running buddies. Students who were ego-oriented worked together with students who were task-oriented and began to become more task-oriented themselves. Students who avoided running altogether partnered with each other to encourage and support one another to complete their running goals. This change in goal orientation that led to an increase in running engagement supports research of Xian, McBride, and Bruene (2004) that found task-oriented motivation styles led to an improved and sustained interest in running. This could be seen as students who never ran a step before buddy implementation, began to spend more time running than walking. The increase in interest was also noted in journal entries of students who previously used the space to complain about how hot they were when they ran, and then used it to express their pride in how much they had run on a given day.

While the social nature and motivational orientations led to growth in running, the nature of instruction also contributed to growth. Teachers modeled running and trained alongside

students. They had high expectations for themselves and their students. Teachers engaged in conversations with students that gave them positive support and encouragement to meet these expectations. In fact, observations notes indicated that students usually ran their best when they ran with a teacher. Martinek and Karper (1982) found that teachers' behaviors and expectations have a direct impact on students and their achievement. Behaviors and expectations of the teachers in this learning community definitely impacted running growth. For example, many students took note that I was pregnant throughout the learning community timeline. Many of them were shocked that I could run in my condition with my growing belly. Many of them would tell me that they could not believe I was able to run and some made note of this in their critical incidents by writing, "Ms. V ran the whole time and she is fat," or "Ms. V has a baby in her belly and she still ran. I couldn't let a pregnant lady run more than me!" Students saw that I was trying just as much as they were, and this influenced their performance.

Finally, the main goal of completing the 5k was a factor in promoting running growth. As reported in Figure 1, the amount of laps students completed at each meeting dramatically increased as the race neared. This was also evident in their critical incident reports as they reported running as being most important more frequently as the race neared. Having this purpose directly impacted how much running students completed. As they progressed throughout the program and began to understand the length of a 5k, they began to understand that they would have to continue to run further at each meeting. For example, after I explained to students that a 5k would be 21 laps around their track, they began to understand the distance and work harder. Coupled with the peer and teacher encouragement, the growing understanding of what they were going to have to complete in the end led to growth in running. While most students began the learning community only able to run one lap without stopping, 15 of the 20 students

finished the final 5k. Some finished by combining running and walking, but all finished and made great gains from where they started. Two of the participants placed in their age groups, and Penny won first place for her age group. Perhaps most importantly, not only did students make growth in their running ability, but they developed a love of running in general as well.

Growth in Writing

With the implementation of writing buddies, findings suggest social interaction impacted writing growth by increasing interest which impacted motivational styles as mentioned previously. As Meece and Miller (1999) demonstrated in their study on children's achievement goals in relation to reading and writing, providing students extended periods of time on a single written piece, and encouraging collaboration with peers results in a move toward task-oriented motivation behaviors. This was evident in these findings as students were given multiple sessions on each writing piece and social collaboration was encouraged. The social collaboration changed motivational styles to one of task-oriented. This change in motivational style led to writing growth as evidenced by analysis of writing samples. However, it was not merely social interaction that led to this growth.

The combination of instruction and social interaction led to changes in writing in informational writing, journal writing, and poetry writing. In regards to informational writing, scaffolded support led to improvements in organization, ideas, and word choice for weaker writers, and improvements in voice, word choice, and sentence fluency for stronger writers. For example, in my conversations with Tom, we discussed ways to add more detail to his writing and organize the content. Eventually, Tom was able to find places to add detail to his writing without teacher support. His final writing piece demonstrated growth in organization and ideas. This indicates targeted instruction to meet individual needs will promote writing growth.

All students made growth in journal writing after modeled instruction. Journal writing became more organized and more reflective after students observed teachers writing their own journal entries. Modeled and scaffolded instruction also led to gains in poetry writing in voice, word choice, and sentence fluency. Again, attending to students' needs allowed for student growth in these areas.

While modeling was provided for all areas of writing, student writing samples reflected changes that were not explicitly modeled. One of these areas is the use of headings in informational writing. While the teachers modeled writing samples included headings, and there was discussion about features of informational writing that included headings, students were not told they had to use them, and were not given predetermined headings to use. For example, when introducing informational writing teachers asked students what the text features of informational writing were. They answered with things such as headings, pictures, captions, and graphs. Beyond using headings in the modeled writing, this was the extent of discussion on headings. Without the explicit requirement of headings in their writing, all students' final informational pieces included headings. This could be because of the peer interaction. If a student's buddy was using heading they might have decided to do the same. However, it could simply be that students were paying close attention to the teachers' modeled writing and trying to mimic its form. In addition to headings, the final informational pieces included technical vocabulary. This was not explicitly taught. Students were exposed to technical vocabulary about running through their experiences in the running component, and were exposed to terms in the teachers' modeled writing, but there was no explicit instruction given dictating what technical vocabulary students should use in their writing, if any at all. Writing is more meaningful to students when it is rooted

in experience (Hidi & Boscolo, 2006). The experience students gained from running was reflected in technical vocabulary used in their writing.

These findings suggest that writing is a social process rooted in experience. Students learn to improve their writing through interactions with peers and teachers as modeled, scaffolded support is provided. Writing from experience provides students with appropriate vocabulary to use in their writing, while also giving them a connection to their writing, thus enhancing their interest and motivation. All of this supports research that states that learning conditions are best when instruction is scaffolded, teachers model, and students interact with peers (Bandura, 1993; Bruning & Schweiger, 1997; Calfee & Patrick, 1995; Guthrie & Alao, 1997; Guthrie & McCann, 1997; Graves, 1991; Turner, 1995). When writing instruction is modeled and scaffolded, and rooted in experience and social interaction, students have a greater chance of experiencing writing growth.

Running and Writing Connection

Running and writing complemented each other with one enhancing engagement in the other supporting the notion of embodied cognition. Running provided students with an experience to draw from for writing, thus increasing engagement in writing. This supports Coding and Gambrell (1997) as they stated students need to believe there is a purpose for what they are writing and that they must see value in it. Students in the learning community had a direct connection to their own personal experiences with running and this connection gave purpose to their writing. Running gave students experience to value their writing tasks, but it also gave them a technical vocabulary to enhance their writing pieces. Terminology used in the running components surfaced in all writing pieces and while it was not explicitly taught, is evidence of how experience impacts and strengthens writing. For example, almost all student

pieces included words like pace, focus, hydration, and stretching. Running behaviors also transferred to writing behaviors as students slowed down to take their time with their writing to do their best work, rather than worrying about being first. This transfer of running into writing illustrates embodied cognition. For example, with the training, students were encouraged to run for the entire time allotted. As they began to attend to that task, they also began to write for the entire time allotted, and many would stay behind after dismissal to finish what they were working on. All of this suggests that there are benefits of connecting literacy activities to physical activity.

In addition to the value of writing, the physical activity of running could have also contributed to engagement in writing as Landers et. al. (2001) demonstrated exercise can enhance thinking skills and willingness to participate in challenging tasks. Within the learning community, running took place before the writing activities and could have impacted the students' engagement in writing tasks. In fact, through interviews, students expressed that they felt more focused after running and that this helped them with their writing further demonstrating the connection of the mind and body within the theory of embodied cognition (Cheville, 2005). For example, Pam stated "Running makes me feel more focused and like when I was writing I would think "oh my gosh I just saw something amazing while I was running!" Students also expressed that they thought more physical activity throughout the school day would help them focus on other areas inside the classroom as well. For example, Jay thought that more physical activity would be "cool." Ray's experience illustrates the running and writing connection.

Impact of Running and Writing Connection

At each meeting, I could bet that Ray would be one of the first on the track, the first half way around the track, and then the first to give out and stop. He wanted to be fast. This desire

surfaced in his critical incident responses, his journal entries, his informational writing, and his journal writing. Ray was not a strong runner or writer, but he wanted to give the illusion that he was great at both by being fast, but he did not have the endurance to continue running fast for very long. Through the encouragement of a running buddy and teacher support, Ray learned to focus his running, slow down, and run longer, not faster. This was a difficult concept to get Ray to understand and he did not fully grasp it until the end of the learning community. Ray's running seemed to be impacted greatly by what he was learning in the literacy component. Ray loved learning about Jesse Owens and Steve Prefontaine. He seemed to look up to these runners and wanted to be as successful as they had been. It wasn't until he connected with them through the literacy component that he finally slowed down his pace and changed his focus to being able to finish the 5k distance without stopping, rather than running one lap fast and then running out of steam.

However it was not just his running that improved. Ray began the learning community with minimal writing skills. In fact, it was difficult to get him to write one complete sentence. Through my work with Ray I discovered this was not because he did not want to write, but that he did not know how to write. Ray did not know what a paragraph was, let alone the features of an informational writing piece. However, toward the end of the learning community, Ray's final informational piece demonstrated tremendous growth, in relation to what he started from. The running influence was evident. While Ray's first informational pieces included a sentence or two, not separated by periods and using words I could barely read, his final piece included more detailed sentences, with headings, and he utilized technical vocabulary in relation to running. The knowledge he was learning through the running component certainly surfaced through his writing. Ray enjoyed writing about something he felt he knew about. This gave a student who

previously had no confidence in his writing abilities a little boost and led to small but noticeable writing growth. This unique learning community that combined running and writing gave Ray a place to learn and explore and resulted in growth that might not have been possible through classroom writing instruction.

Research has determined physical activity can be beneficial to learning as it impacts mood and enhances neural connections (Jensen, 2008; Landers, Butler, & Fagen, 2001). As demonstrated in this study, an interest in physical activity could also enhance engagement in literacy activities tied to running (Coding & Gambrell, 1997; Wigfield, 1994).

Implications

Through studying and analyzing this learning community, it is clear that literacy and physical activity benefit from partnership and may benefit others to promote learning. It also seems evident that the learning community framework, in combination with this partnership is effective in promoting self-efficacy which enhances engagement and leads to student achievement. These findings have implications for practice, future research, and policy.

Practice

Perhaps the most important implication of this study is the significance of learning communities. While this learning community took place after-school, findings of this research indicate the learning community framework should be fostered in the classroom in order to provide access to learning for all students. A classroom environment that fosters social interaction through mutual engagement, joint enterprise, and shared repertoire provides students with a safe, non-threatening place to explore and experiment with learning (Alvermann, 2000; Englert, Mariage, & Dunsmore, 2006). In order for a teacher to create a learning community within her classroom, she would have to first get to know her students. This would take time to

get to know their interests and build around them, but would begin the process of fostering relationships. Perhaps another option would be to create a common interest. Not all students were necessarily interested in running when they joined this learning community but developed an interest through their participation. After identifying an interest, goals would need to be created that would then shape and inform activities.

The community feeling also shapes students' motivational styles as they encourage and support one another in learning. Students who might have a natural inclination toward ego-oriented motivation, or performance-avoid oriented motivation, might transition to a more task-mastery motivation style when teachers create a task-oriented motivational climate. This implies that teachers should encourage social interaction as it transforms motivational styles which lead to an increase in self-efficacy. In order to be able to identify students' motivational styles, teachers must make efforts at fostering deeper relationships with students, and take anecdotal notes about behaviors that identify students with a particular style.

However, nurturing relationships between students is not enough. Building relationships between teachers and students is essential for an increase in self-efficacy. Teachers need to be aware of the impact they have on student achievement simply by the relationship they foster, or fail to foster, with students. They should take time to show that they are interested in their students and that they truly care about each one. Building relationships to increase self-efficacy in students is beneficial for teachers as an increase in self-efficacy leads to an increase in engagement (Guthrie, 2000; Skinner & Belmont, 1993). This in turn leads to an increase in achievement as teachers make instructional decisions based on what they know about their students and how to best meet their needs. The first six weeks of this learning community served as a way for me to get to know my participants and led to discovering a way to motivate and

engage them. Classroom teachers need to be reflective within their classrooms as well and make changes according to student need.

This research has several implications for writing instruction. Findings indicate writing instruction is engaging when it is social and involves modeled and scaffolded instruction that is rooted in experience. Writing instruction provided to students in this way led to an increase in growth in writing across all writing pieces including informational writing, journal writing, and poetry writing. Teachers should model writing and allow students to hear their thought processes as they write (Meichenbaum, 1977). Teachers should then scaffold instruction through informal and formal writing conferences to meet individual student needs. Students should not only interact with their teacher. Peers played a major role in writing growth through this learning community. More knowledgeable peers can also provide models and scaffolded instruction that is beneficial (Dalton & Tharp, 2002; Mercer, 2002). Finally, personal connections to writing may have contributed to writing growth. Students employed a technical vocabulary rooted in their experience. Writing from experience served as motivation as students were interested in their writing as it was connected to running.

Finally, implications of this study suggest that including physical activity as part of classroom instruction would be beneficial. Like writing, physical activity is often pushed aside to provide more instructional time to get students prepared to pass state mandated tests. Physical activity is often devalued as evidenced by teachers taking away a student's PE time as punishment for poor behavior or for not finishing an assignment. This behavior shows that despite what teachers know about the importance of physical activity, their actions do not value it. Physical activity is just as essential, yet we take it away or limit the amount of time students have. This should alarm teachers, administrators, and policy makers. Schools today are

constantly looking for ways to enhance curriculum and to integrate it into other areas such as PE. This study suggests integrating physical activity into writing has potential within learning communities for promoting growth.

Future Research

This study scratches the surface of the notion of embodied cognition and needs to be further studied. Future research should dig deeper and focus on a more clear understanding of how physical activity shaped learning. Future research should also focus on identities created through participation in the learning community and how these identities impact participants beyond their participation in the group.

Policy

This future research will have implications for policy. Many policies are being enacted across the state of Alabama that limit the amount of time for physical activity to provide more instructional time in areas such as reading and math. These decisions are being made to meet demands of high-stakes testing rather than meetings the needs of what is best for students and for student learning. The importance of physical activity must become a focus for schools, and instead of pushing it out for the sake of more instructional time, perhaps including more opportunity for physical activity would lead to more growth in all areas of curriculum. Policies about providing opportunity for physical activity throughout the day should be considered and pursued. Instead of taking away recess and limiting PE, policies should require it. Teachers should be taught to use physical activity in their instruction and should not be allowed to use removal of physical activity as means of punishment. Policies must be put in place that value the role of the body in regards to learning. Perhaps if we valued physical activity as much as we

value literacy learning, and merge the two rather than treat them separately, we would see growth in all areas of learning.

Conclusion

Running to Achieve is just one small piece in this group of children's much larger puzzle of education. However, it did shed light on ways students learned about and participated in physical activity and writing, how to promote growth in running and writing, how to meet students' diverse engagement styles, and how teachers and students can learn from each other within a learning community. The importance of teacher-student relationships and peer interactions and its impact on self-efficacy was made evident through examining relationships within the community. This study is a small piece to what I hope becomes a much larger puzzle of research in valuing the role of physical activity and writing in education.

As I tie up this research and reflect on where it has come, I am again taken back to my last day in my classroom in North Carolina. My interactions with students and parents had so much more influence on my beliefs and values as a teacher than I had ever realized and have shaped my research tremendously. It is my hope that schools can become more inclusive institutions of learning where students like little Maria feel excited about learning, and students like Katherine feel connected to teachers that truly care about each child's growth.

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APPENDIX A

TEACHER INTERVIEW PROTOCOLS

January Teacher Interview Protocol

1. Why did you choose to participate in Running to Achieve?
2. What do you hope to gain from your experience?
3. Can you describe a typical meeting?
4. How have students reacted to being a part of Running to Achieve?
5. How are you involved with the running component?
6. How are you involved in the literacy component?
7. Can you describe student engagement for the running component?
8. Can you describe student engagement for the literacy component?

May Teacher Interview Protocol

1. How do you feel your students have benefited from participating in Running to Achieve?
2. How have your students' reading and writing improved since participating in Running to Achieve?
3. What do you like best about Running to Achieve and why?
4. What sort of things did your students tell you about meetings with Running to Achieve?
5. How has Running to Achieve impacted your classroom instruction?
6. How have your students' reading habits changed since Running to Achieve?
7. How have your students' writing habits changed since Running to Achieve?
8. What have you learned about your students' abilities since Running to Achieve?
9. How do you feel your participation in Running to Achieve has impacted students?

APPENDIX B

STUDENT INTERVIEW PROTOCOLS

January Student Interview

1. What does being a good reader mean to you?
2. What does being a good writer mean to you?
3. What kinds of things do you read in the classroom?
4. What kinds of things do you write in the classroom?
5. What is different about reading in the classroom and in running club?
6. What is different about writing in the classroom and writing in running club?
7. What does being a good runner mean to you?
8. How do you feel about goal setting in running club? Does it help?
9. What other things do you hope to read and write about in running club?
10. What do you tell your parents about running club?
11. Do you think you exercise more since joining running club?
12. What are you most excited for in running club?

May Student Interview

1. How do you feel you have benefited from participating in Running to Achieve?
2. How has your reading and writing improved since participating in Running to Achieve?
3. What was your favorite part of Running to Achieve and why?
4. What was your favorite meeting and why?
5. What is your least favorite part?
6. Do you exercise more since your participation in Running to Achieve?

7. Do you write more since Running to Achieve?
8. What types of things do you write? What about?
9. What have you learned about yourself and your abilities since Running to Achieve?
10. How do you feel about your teachers participating in Running to Achieve?
11. Describe the race for me?
12. How did you feel when you finished?
13. How did you feel reading your poetry for the community?
14. How did you feel about making a book for the school?
15. Will you participate in Running to Achieve if it is offered next year?
16. Would you recommend Running to Achieve to your friend?

APPENDIX C

PARENT INTERVIEW PROTOCOLS

January Parent Interview

1. Can you describe your child's writing behavior? Where do they write? What do they write? When do they write?
2. What kinds of things has your child written this week?
3. Can you describe your child's physical activity?
4. What kinds of physical activity has your child participated in this week?
5. What does your child do when they come home from school?
6. What do you hope your child gains from participation in Running to Achieve?
7. What do you hope to gain from participation?
8. How does your child describe the running club?
9. Have you noticed any changes in your child so far in regards to writing? Physical activity? Eating healthy?

May Parent Interview

1. Can you describe your child's writing behavior? Where do they write? What do they write? When do they write?
2. What kinds of things has your child written this week?
3. Can you describe your child's physical activity?
4. What kinds of physical activity has your child participated in this week?
5. What does your child do when they come home from school?
6. What has your child told you about their participation?
7. Can you describe the day of the race?

8. How did your child feel after finishing?
9. How did they feel after reciting their poetry to the community and making a book for the school library?
10. Do you feel your child has benefited from participation? If so, how?
11. Would you like your child to continue their involvement with the club?

APPENDIX D

6+1 TRAITS OF WRITING RUBRIC

	5	3	1
Ideas	This paper is clear and focused. It holds the reader's attention. Relevant details and quotes enrich the central theme.	The writer is beginning to define the topic, even though development is still basic or general.	As yet, the paper has no clear sense of purpose or central theme. To extract meaning from the text, the reader must make inferences based on sketchy or missing details.
Organization	The organization enhances and showcases the central idea or theme. The order, structure, or presentation of information is compelling and moves the reader through the text.	The organizational structure is strong enough to move the reader through the text without too much confusion.	The writing lacks a clear sense of direction. Ideas, details, or events seem strung together in a loose or random fashion; there is no identifiable internal structure.
Voice	The writer speaks directly to the reader in a way that is individual, compelling, and engaging. The writer crafts the writing with an awareness and respect for the audience and the purpose for writing.	The writer seems sincere but not fully engaged or involved. The result is pleasant or even personable, but not compelling.	The writer seems indifferent, uninvolved, or distanced from the topic and/or the audience.
Word Choice	Words convey the intended message in a precise, interesting, and natural way. The words are powerful and engaging.	The language is functional, even if it lacks much energy. It is easy to figure out the writer's meaning on a general level.	The writer struggles with a limited vocabulary, searching for words to convey meaning.
Sentence Fluency	The writing has an easy flow, rhythm, and cadence. Sentences are well built, with strong and varied structure that invites expressive oral reading.	The text hums along with a steady beat, but tends to be more pleasant or businesslike than musical, more mechanical than fluid.	The reader has to practice quite a bit in order to give this paper a fair interpretive reading.

APPENDIX E
SAMPLE OF CODES

Sources	Codes	Themes
Critical Incident Reports Interviews Observation Notes Journals Audio-recorded Conversations	Running Writing Running helped Writing helped Teacher helped Buddy helped Buddy helped writing Buddy helped running Goals Met goal Did not meet goal Changed goal Trusting teacher Encouraging teacher Writing is favorite Running is favorite Better runner Better writer Good writer Good runner Sharing writing Sharing ideas	Running and Writing are Social Fosters Teacher-Student Relationships Promotes Self-Efficacy