DEVELOPING AN OUTDOOR MINDFUL ACTIVITY-BASED CURRICULUM FOR
ENGLISH LANGUAGE LEARNER STUDENTS

By

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A capstone submitted in partial fulfillment of the requirements for the degree of Master of Arts in Education: Natural Science and Environmental Education

Hamline University

Saint Paul, Minnesota

May 2019

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ACKNOWLEDGEMENTS

Thank you to my family and friends for all their support throughout this entire capstone process. A special thank you to Susan Tinder and Trish Harvey for all their help and guidance with the capstone paper and project. Without all of you none of this would have been possible. Your support has meant the world to me. I am forever grateful.
Epigraph

“I go to nature to be soothed and healed, and to have my senses put in tune once more.”

-John Burroughs
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CHAPTER ONE
INTRODUCTION

Early on in the United States many immigrants and refugees spoke their native languages and faced the fact that English was the common language spoken in the new world. In the beginning of my teaching career I did not encounter any English Language Learners (ELL), but during the past 10 years my teaching has been filled with students who speak English as an additional language. This presents a unique challenge because many of the ELL students I have encountered have traveled from war torn countries or under difficult circumstances. I believe that ELL students could benefit from not only the healing effects of the outdoors but from mindful activities as well.

ELL students are good candidates in utilizing the outdoors to take advantage of the mindful restorative benefits (Keniger, Gaston, Irvine, & Fuller, 2013). During my preparation for teaching we had the added experience of Environmental Education as part of the University of Wisconsin Stevens Point curriculum. I have carried this environmental approach throughout my teaching career and more recently to the question I have asked for my new age ELL students; *How can outdoor activities support the academic and emotional needs of elementary level English Language Learner students?*

In this chapter I will move through the journey of why I believe students benefit from outdoor mindful activities both academically and in helping to heal mental health issues these students may have endured.
Context

I began my teaching career way back in the late 1980’s with a second grade class in a suburb of Milwaukee. The school was in the city of West Allis and the grounds did not have a whole lot of green space. We went outside for occasional lessons or at times just to sit under a tree and read. Outdoor learning spaces were not even on the radar, but it was a time when families took children to parks and the lakeshore on a regular basis, so the need for outdoor education was very low.

The next years were filled with a variety of substitute teaching jobs in Illinois, Minnesota, and New Mexico. All the states had unique cultural backgrounds, with New Mexico being the first state where I directly encountered many children in school who did not speak English as their first language. We lived in New Mexico for two years beginning in 2001 and the state was struggling to meet the academic needs of its students who did not speak English. There was a great debate as to how they were going to help the ELL children start moving in the direction of proficiency. These directives were mainly on what teachers to hire, and what needed to be added to classroom teaching. Again, outdoor education did not seem to be part of the curriculum.

My next move brought me to Des Moines, Iowa, and into a school that was around 95% ELL students. I was the art teacher for the entire school which meant that I taught every student from Pre Kindergarten all the way through eighth grade. These students were from around the world and were primarily recent immigrants or refugees. That opportunity really put me into the trenches of not only the challenge of what to teach academically, but it also was about dealing with mental health issues that stemmed from
traumatic incidents in their former country and the related journey to Iowa. This was a school where we were not only teachers of academics, but we were also working to support the wellbeing of students working through many emotional and stressful situations they had encountered. Daily, there were even clashes between cultures of children in the school. Situations such as having to address a child hiding under a table or crumpling up a paper because of the stress and frustration they felt in the school setting.

It was during that time frame of four years that I realized I could use the limited green space around the school as peaceful places for my students to interact with nature and do activities outside as a mindful addition for learning. I could see the calming effects it had on my students. Many of the students let go of some of the mental baggage they might be carrying around. Although it was not part of the curriculum, it was frequently easy to fit the outdoors into my standard based lessons. Many of these children did not know how to act in the greenspace, so helping them learn what they were capable of was an important part of being outside.

Our final move brought us back to the state of Minnesota. Thus far I have taught second and third grade, art, Spanish, Reading Corps, and have been substitute teaching. This is not only the land of 10,000 lakes, but also the land of green space. Many of the schools where I have taught have had outdoor classrooms, nature walks, school gardens and opportunities for students to explore. However plentiful, many of the schools vastly underutilize their resources. Many of the excuses I have heard from teachers is that they have no time to plan what to do outside, that it would require a lot of equipment, or they do not want to take the time to go outside. The unfortunate side of this is that many of
their ELL children spend little to no time outside when they are not in school. When I have spoken to students about it, I would hear students tell me things like their parents do not think it is safe outside, or they are afraid of the creatures outside. Many of their parents also leave small children in the care of older children while they are working and forbid the children from going outside. Helping students become familiar with the outdoors can also pave the way to planting gardens, further exploration of the outdoors, and to trickle down their knowledge within the family unit to their parents (Kaplan, 1989).

Another reason that being outside in nature can be beneficial for ELL students is that many of the students have had traumatic or stressful events happen in their young lives before they moved to the United States (Davies & Webb, 2000). Many of my students had told me horrendous stories of survival for themselves and members of their families. One family witnessed their father brutally taken away to be killed. That kind of trauma can also impact learning in the classroom because the children do not know how to express their pain and sometimes anger. These students can also be far behind their peers in both classwork and in test taking (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015). That can cause anxiety in the students, which I have seen firsthand through a variety of acting out situations. Many of the students have no positive release for those anxieties, and do not know how to deal with feelings. This is where we as educators can give them the tools that will last a lifetime.
I believe in the healing powers of nature, and that is what inspired me to think about ideas that would best meet the needs of English Language Learners outside of the traditional classroom utilizing the outdoors both academically and mindfully.

**Rationale**

The love of the land and outdoors was instilled in me by my maternal grandmother. Everything we did with her, in some way, was connected to the earth. She made sure we were good stewards of the earth and had gained knowledge of what surrounded us. That kind of background experience is now a rarity especially for many of our ELL students in school today. My capstone project of helping ELL students experience the outdoors, and by also doing activities as part of the school day that might help them and can also be carried on throughout their lives.

My friend Susan was an ELL teacher in Iowa at the same school I was teaching art. She worked in the classroom next to mine. We shared the same love of the outdoors and wanted to utilize it as much as we could. Her simple act of hanging a bird feeder outside the window in a tree opened a new world to some of the children who had never observed anything like that before. They would not only watch, but they would go outside, in any season, and fill the bird feeder. The students learned many types of birds and were excited just to sit and make observations in each season. Susan not only inspired the children, but she also inspired me to go to graduate school and receive my ELL degree. Since then I have actively been seeking out opportunities to work with ELL students. I could see that these students needed more than just the rigor of traditional academic study.
Through this capstone I am seeking to learn more about what the benefits are of being outside, the benefits of participating in activities executed outside the regular classroom, and what the scientific findings are that back up why being outside for the activities can be instrumental to the health and wellbeing of students (Chawla, 2015).

Summary/Conclusion

With my question of *How can outdoor activities support the needs of elementary level English Language Learner students?* I am embarking on a journey to help others see the benefits of outdoor activities specifically based on meeting the needs of our ELL students, which in turn will also enhance their academic success (Deringer, 2017). With numerous hours of screen time in school and at home, I am seeking for the alternative in helping students get outside of the conventional classroom and do activities outdoors that will help restore health and mental wellness.

This path I am following in my teaching career was not even on my radar 20 years ago. By being inside our ever-changing schools, and by working with our ever-growing diverse population of students, I hope to utilize my love of the outdoors with mindful activities that will help our ELL student body deal with stress and anxieties in beneficial ways.

In chapter two I will be working on a literature review as to why being outdoors and participating in mindful activities can have a positive effect on both the body and the mind. I will be searching for evidence from the experts as to why schools need to incorporate more outside time and activities to work on mental health and wellness in their routines, and how it can benefit especially our ELL students.
In chapter three I will lay out the ideas for my plan to implement outdoor mindful activities. These activities will be those that anyone can be successful in practicing, possible places they could take place, and that prolonged repetition could have accumulative effects. I will also touch on how the outdoors can also be utilized inside a school building as part of the experience.

Chapter four will help me reflect on my question and what I have learned through this process. I discuss how just about any school can benefit from the activities, how I might propose to communicate my message about these outdoor activities with other schools, and how teachers could employ these benefits to their students. There will also be a component on the difficulties that might be faced with this kind of project, and then I will work to articulate my conclusion on what this journey had meant to me.

With states and schools focusing more and more on the outcome of standardized tests, teachers need to lookout for ELL students in new ways which may be a bit out of the box.
CHAPTER TWO
LITERATURE REVIEW

Overview

Teaching in the outdoors utilizing specific mindful activities can have benefits that reach far beyond simply taking a break from the indoor classroom, especially for ELL students. Being in the outdoors may also offer benefits associated with exposure to trees, gardens, parks, and wildlife, including physical activity, stress relief, and the rejuvenation of attention (Kuo, Browning, & Penner, 2018). Using nature and its restorative effects to enhance outdoor activities that are directly chosen to improve mental health and well-being for ELL students is in its infancy. This review utilizes scholarly literature in relation to the research question *How can outdoor activities support the academic and emotional needs of elementary level English Language Learner students?*

The initial part of the review will focus on the benefits of utilizing the outdoors during school hours, which can have far-reaching benefits for children. The outdoors can replenish and nourish the mind, restore cognitive function, and help foster a positive view of the outdoors. Although this is important for all children, this is especially important for the health and well-being of ELL students (Moore, 1997).

The restorative effects of the outdoors on health and mental well-being seems well paired with the challenge of helping our ever-growing population of ELL students in schools. Many ELL students have endured pre-arrival trauma, sequelae or conditions that
are the result of traumatic events, developmental difficulties related to trauma or stress within the families, fatigue in cognitive functioning, and overall academic performance problems (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015). Understanding trauma for ELL students and then re-thinking how we work to not only improve academics, but also address their health and mental well-being could result in a dramatic change in the way we work with ELL students. This part of the review will work to explain these difficulties and how addressing them directly coincides with the restorative properties of the outdoors paired with specific activities that work to restore mental well-being.

In utilizing the outdoors to address the academic and mental well-being of ELL students, there are activities that can help utilize the benefits of both the outdoors and mindful activities. This part of the review looks at possible activities; which may include meditation, yoga, nature journaling, and reading outdoors. These activities work together with the benefits of the outdoors to initiate cognitive thinking, foster the reduction of stress, relieve anxiety, and work to have restorative benefits for children (Chawla, 2015; Berman, Jonides, & Kaplan, 2008; Deringer, 2017).

**Benefits of the Outdoors**

**Stimulate the senses.** Going outdoors brings children from the nonliving environment into the living natural world. When children go outside the walls of the school building, the natural setting can stimulate their development in ways that cannot be provided elsewhere (Moore, 1997). Children express positive feelings about their school environment when there is a natural presence outdoors. Many of these same children have no other natural outdoor outlet as they either live in an area that has no
natural surroundings or have adults around them who believe it is unsafe for children to play outside (Kaplan, 1989).

Being in the outside natural world stimulates the senses in ways that the indoor environment cannot equally replicate (Borsos, Patocskai, & Boric, 2018). Young children experience much of life through their senses and the outdoors activates the senses in a variety of ways (Unsworth, Palicki, & Lustig, 2016). A child sitting on the grass under a tree can feel the coolness of the greenery and the gentle warm wind blowing. They can see the sway of the branches and leaves, and the occasional fly cruise past. There is an ever-changing world for them to experience. It may be through the magical qualities of picking dandelions and the wonder of the milk dripping from the stems, or just watching the clouds float by. The act of just being in nature can help formulate a positive feeling of the outdoors that children can then carry throughout their lives as well (Kaplan, 1989).

**Cognitive benefits.** Urban environments contain a variety of stimuli that demand considerable attention to overcome all the urban distractions making these areas far less restorative for cognitive function (Berman, Jonides, & Kaplan, 2009). Early studies into the cognitive benefits of direct contact with nature were beginning to point in the direction of reducing stress, elevating mood, increased self-esteem, positive psychological well-being, and reducing mental fatigue. Studies on indirect contact with nature, such as viewing nature images in pictures or out a window, and the presence of indoor vegetation have also produced results which point to a positive cognitive outcome. The biggest problem with many of those early studies was that the control group was a
missing factor making the scientific aspect of the reports searching for more research to validate the findings (Keniger, Gaston, Irvine, & Fuller, 2013).

Taking classes outdoors for lessons not only helps peak their engagement in the subject matter, but it also spurs additional conversations and questions once back in the classroom setting (Keniger, Gaston, Irvine, & Fuller, 2013). Interaction with nature can increase self-esteem and mood, reduce anger, and improve general psychological well-being with positive effects on emotions and behavior. These interactions can also have positive effects on cognitive function such as academic performance and the ability to perform mentally challenging tasks. Interactions with nature may also have physical health benefits such as stress reduction (Keniger, Gaston, Irvine, & Fuller, 2013, p. 919).

Cognition refers to the mental process of knowing things including awareness, perception, judgments, and ability to reason. People who have moved from urban areas lacking in green space to greener urban areas or the suburbs have felt that they have far less cognitive fatigue. Attention restoration theory (ART) is an important framework first proposed by Kaplan and Kaplan (1989) that claims urban environments suffer from the effects of constant stimulation. When people move from a more urban environment that did not include ample greenspace, they have reported definite improvements in overall mental health (Pearson, & Craig, 2014).

Executive functions are cognitive skills which include inhibition, ability to shift from one situation to another, emotional control, initiation of tasks, working memory, ability to plan, ability to organize, and self-monitoring (Bathelt, Holmes, Astle, & Center for Attention, Learning, and Memory, 2018). A study on executive function and the
effects of natural environments was conducted to assess if nature has natural restorative properties. The study employed a backward digit span task, which involved repetition of numbers presented verbally repeated in backwards order, and Raven’s Progressive Matrices, an abstract reasoning non-verbal test, with the outcome showing that even a brief exposure to a nature video had a larger positive benefit over an urban video (Bourrier, Berman, & Enns, 2018).

In a time when children are losing access to nature, it is more important than ever to include being in the outdoors during school hours. There are varied benefits to being outside. The surroundings can stimulate a child in their development because of the diverse sensory experiences (Borsos, Patocskai, & Boric, 2018). It is beneficial to incorporate informal and formal learning in nature to help build up the cognitive formations in cerebral improvements (Moore, 1997).

**Challenges of outdoor education.** Many teachers in the United States are in the beginning stages of embracing outdoor education. In a more recent study at Cold Spring Environmental Studies Magnet School in Indianapolis, Indiana, students participated in both indoor and outdoor lessons which considered whether the lessons would cause students to have either more or less concentration once back in the classroom. That has been one of the concerns of teachers who believe that taking students outside for lessons makes them less cooperative in their learning once back in the classroom (Pearson & Craig, 2014).

In the Indianapolis study, classroom engagement was significantly better after lessons in nature, based on the number of tallies accumulated regarding student redirects
once back in the classroom, when matched to comparable lessons taught within the classroom. In this study, redirects were cut in half after lessons conducted outdoors. Subsequently, this gave teachers more time to teach students, and students in general were considerably more engaged and on task (Pearson, & Craig, 2014).

Academically, the evidence suggests students retain more after having lessons in nature in biology and math, language arts, social studies, and science more generally than after similar lessons indoors (Kuo, Browning, & Penner, 2018).

Daily hands-on contact with nature is essential and necessary for a child’s health. The negative factors that can sometimes restrict access to the outdoors for children should be considered, but most difficulties can also be overcome. There might be traffic dangers in the area, worries about stranger danger, as well as neighborhood violence. These dangers may be a real threat outside of school, but in general schools are safe places for students, and any dangers can be assessed and addressed before any outdoor interactions (Moore, 1997).

Other factors that can impact outdoor contact might be lack of green space and play spaces, parental schedules for children that restrict free time, children not wanting to leave air conditioning, and children who see electronics as a preferred way to spend their free time. School can be one of the only times when children have real contact with the outdoors. This makes contact with the outdoors an even more important aspect of activities while at school (Berman, Jonides, & Kaplan, 2009).

Another obvious factor that might inhibit teaching outdoors would be the weather conditions. Many children come to school unprepared for adverse weather, and schools
are not usually equipped to outfit an entire class for unexpected conditions. Many preschools today take children outside every day of the school year. They do this by asking parents at the start of the year to ready the correct outerwear for every condition during the school year, and that can include subzero weather. One way to remedy the situation would be to have loaner coats, gloves, boots, and hats at the ready. These could be donated to school, or classes may even be able to receive a grant in order to be able to buy them. The other concern to consider if you want to have this equipment on hand for students would be the storage of them. Many schools are very short on storage and would need to set aside a designated area to store the equipment. Teachers would also need to have alternate plans as backup in case a lesson that was supposed to have been taught outdoors cannot be taught due to unforeseen circumstances (Jayasuriya, Williams, Edwards, & Tandon, 2016)

Positive effects of nature. Chawla (2015) has shown that there is a growing groundswell of evidence that greenery and natural areas are not a luxury, but a necessity for children’s overall health and well-being. Benefits of nature have a direct efficacy for children. Some of the most important are:

- Physical coordination
- Advanced decision making
- Improved concentration
- Ability to control impulsive behavior
- Expanded imaginative play
- Abundance of multisensory experiences
- An expanded understanding of nature
- Inspires creativity
- Gives a feeling of freedom
- Lessening of depressive and mental distress
- Feeling of being one with nature

These are the considerations planners need to think about when contemplating parks and schools. This is a whole new understanding of nature play for children, and if we keep children in mind they will benefit in a multitude of ways (Chawla, 2015).

When looking at children’s affective attitude toward nature, we are thinking about the mood, attitude, and feelings about nature. Reducing children’s access to nature ultimately will affect their feelings about nature later in life. Children who have had more experiences with nature type activities are more likely to carry on proenvironmental behaviors as adults. Subsequently, the role models that children have, especially teachers, play a large part in the formation of these proenvironmental behaviors. This points to the ever increasingly important role of schools, as many children today do not participate in nature-based activities with family or adults away from school. Teachers who help students actively engage in a positive way with nature leave a lasting impression (Cheng & Monroe, 2012). The positive effects of nature can be directly utilized to help many of our ELL students who need more support on account of trauma in their backgrounds (Lawrence, Kaplan, & Collard, 2018)
Effects of Trauma and Stress on Mental Health for ELL Students

Davies and Webb (2000) made some valid points about trauma and the treatment of refugee children. They were assessing what they saw as positives and negatives within the system set up to help assess the health and mental wellness of refugee children. They pointed out that mainstream American culture, or other resettlement countries like the United Kingdom, were vastly different than Somalia, or other countries of origin, and that many of these children had lives in their villages that were a world away from the schools they were now expected to assimilate into. They saw that the complexity of the trauma suffered by refugee children was very diverse and theirs was an early study into how we go about trying to best aid children who have been primarily affected by the traumas of war.

As a general rule, families who have been traumatized by a variety of violence from their homeland are sent to health care facilities that can focus on the psychological help for the family. These families have many times been traumatized within the villages they are from or the refugee camps they had been sent to. Many families are cooperative during the process of identification but once they have the paperwork to aide in attaining their refugee status, they do not utilize the professional help that is extended to them (Rousseau, Measham, & Nadeau, 2012).

Refusal of help can also happen for a variety of reasons. Families may be stressed with work and schedules and are unable to attend sessions. They may also have transportation problems (Rousseau, Measham, & Nadeau, 2013). One common reason within many cultures is that they look at mental illness as a weakness and do not want to
have that stigma associated with their family (Davies & Webb, 2000). Families may also be avoiding the psychological help as it revisits the trauma that they would rather not think about as it can throw them back into the despair that they are working to forget (Rousseau, Measham, & Nadeau, 2012).

Schools that receive refugee children may also be lacking in the services and psychological help they need. Schools need quality cultural psychiatric consultation teams on hand (Davies & Webb, 2000). This is of utmost importance because many of the children will not be getting any treatment or help anywhere else (Rousseau, Measham, & Nadeau, 2012).

Families may also be seeking spiritual help which is a preferred means in many cultures. Many of these families feel helpless, and schools that receive refugee children and are not prepared to help the children, may only deepen the feeling (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015). The main goal of programs working on psychotherapy is to only reduce the symptoms, not to improve the overall functioning for the refugees. This is also a problem because many times they will recommend, along with psychological sessions, some sort of medication that also has a negative cultural stigma attached to taking the medication (Rousseau, Measham, & Nadeau, 2012).

The consensus is that most children who are being treated by clinics and health care facilities use a combination of treatments which includes some art therapy. Art therapy is in general more accepted by families as it has no negative stigma attached to it and usually works in a way that does not revisit the trauma that the child has experienced (Rousseau, Measham, & Nadeau, 2012).
Kaplan, Stolk, Valibhoy, Tucker, and Baker (2015) reported that refugee children who are resettled in a country other than their home country are very likely to have suffered trauma. A large quantity of these refugee children, as a result, are misdiagnosed with a learning disorder, but many times this diagnosis is premature.

Psychological sequelae can last a very long time for refugee children, putting them at increased risk for a variety of other problems due to inappropriate behavior as a direct result of neurobiological problems. Their academic performance is usually based on the new language in their host country, and the level of acquisition may be lagging for many of the recent refugee children. Working on closing this achievement gap needs to support the refugee children by addressing the actual problems, not the perceived problems (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

Refugee ELL children are some of the most over-represented in the special education interventions at many schools. Most of these children have resettled in countries that are not speaking their native language. When these children have come from backgrounds of trauma, the incidents of that trauma can be wide ranging. Many of the children have directly witnessed combat, bombings, village destruction, separation from family members or the murder of them, assaults, torture, and being forced into the military at a very young age. They may also have have spent prolonged periods in refugee camps which also put them in constant danger (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

All traumatic events put refugee children at increased risk of cognitive deficiencies. These children suffer emotional and behavioral difficulties, have impaired
memory problems, suffer lack of attention, have trouble with abstract and concrete reasoning, have difficulty organizing, completing tasks, and in overall planning. Family problems also play into their ability to focus on any tasks at school (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

Many other areas of focus and daily functioning can also be affected. Refugee children may have heightened sensitivity and exaggerated behaviors, they may have a disconnect between thoughts, and they may also be unable to remember either current or past events. This directly affects their ability to understand instructions in their new language and leaves them unable to problem solve at a level expected for their age or grade. Long term retention is also a major factor in their ability to apply academic language properly in order to perform well on standardized tests (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

A traumatic background for refugee children can also manifest itself with difficulties in creative play, the ability to self-regulate behaviors, the ability to correctly comprehend situations, can cause problems with self-motivation, and ultimately affect their self-esteem and self-confidence. The internal and external ways refugee children choose to deal with trauma are usually misconstrued while in the learning environment. Traumatic experiences directly affect a child’s ability to process information, think, reason, and remember as part of their cognitive function. They may also struggle with control and regulation of emotions, resulting in reduced academic success (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).
Refugee children can also be impacted by past trauma that affects the entire family. Family stress can also affect anxiety and cause depression within the family unit. As a result, children may miss school, becoming caretakers of other family members. Lost school time may also affect academic achievement. The family may also be suffering poverty, racism, and from lack of ability to assimilate into the new culture (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

All the trauma refugee children endure will have accumulative effects on the proficiency of their new language. Schools should provide interpreters and translators for refugee children in school, but most schools do not provide this for them due to budget constraints. Tests for cognition should also be given in the child’s proficient language, but that is also not the norm. The factor of test bias can also be key to the performance for these children as things like a normal picture on a test can be unfamiliar for students who are new to the country (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

Students who have trauma in their backgrounds need to be given comprehensive support if they are to succeed in their new land. Appropriate interventions and staff that recognizes how to service refugee children is integral (Kaplan, Stolk, Valibhoy, Tucker, & Baker, 2015).

Lawrence, Kaplan, and Collard (2018) reported on the challenges in a new land for refugee children and how this new land should not change the fact that every child should be given appropriate standards of health and well-being. This right may often be overlooked. Children entering a new country should be given an assessment to help determine their health and mental well-being. A child’s well-being involves their
cognitive and emotional evaluation, as well as taking into consideration their life experiences which often includes trauma.

Trauma-related mental health issues need to be addressed if the whole child is being supported in their new land. However, most refugee children are not consulted about their needs or on how they cope with their difficulties. When service providers understand refugee children’s perspectives, they can help children by working to tailor any interventions needed for that child’s particular set of needs. Helping schools learn the intricacies of helping refugee children cope with their new lives in a new land takes mental health and well-being into a whole new realm of possibilities (Lawrence, Kaplan, & Collard, 2018). Although the complexity of traumatic events may differ, ELL students that need help is a pressing issue. Schools can be an important link in the chain of support for mental health issues through mindful activities which will ultimately enhance academic learning (Davies & Webb, 2000).

**Benefits of Mindful Activities**

There are a wide variety of benefits that can come from the practice of activities which keep mindfulness at the forefront. The specific benefits of mindfulness have made an impact for many types of people, mostly adults, and with all the knowledge compiling up, there are very good reasons to begin to apply those same ideas with children in need. One of the most disadvantaged groups in schools today are the ELL populations (Hyland, 2009).

Thinking about mindfulness means that attention is directed toward things in the moment, acceptance of things and thoughts around you without using judgments, and
simply letting those thoughts exist. Mindfulness is well known to help people with depression, addictions, and bolstering physical and mental well-being. Everyone has their own life experiences. Commonly ELL students have had violent and trauma-inducing events in their short past. Through mindfulness students move toward letting go of what might have been their typical reactions and learn to practice more appropriate ways to deal with their feelings. Students strive to let go of past experiences in order to move forward with their life in the present. They also learn to trust in their own thoughts, feelings, and experiences (Hyland, 2009).

There are no set objectives beyond learning to pay close attention by shutting out other distractions. With acceptance, students gain the ability to see things as they are, in the present, then aspire to accept changes and developments in their lives. Letting go of thoughts that may be extremely upsetting, and viewing those thoughts through a different lens, helps train the brain for deep learning and letting go of fear (Hyland 2009).

The developing brain can be very malleable. Mindful meditations are now being considered an educational tool. Much of the neuroplasticity of the brain is still being formed in young students and is what helps them learn to improve focus. Greater self-control gives them the power to self-regulate. The results of equipping young ELL students with the power of mindfulness can help them reduce stress, improve focus, regulate emotions, build resiliency, and help them become better at social interaction among their peers (Choudhury & Moses, 2016).

Place-Based Education (PBE), learning that takes advantage of local places utilizing the experiences, and in this case is the outdoors, is also on the upswing of
consideration for many who influence what happens in school systems (Deringer, 2017). Being mindful in the outdoors helps students experience real life. The need for outdoor place-based mindfulness is especially apparent for ELL students. The current era of extreme high stakes standardized testing and curriculum has hurt many disadvantaged students (Westervelt, 2007). Helping ELL students become more mindful can level the playing field in many ways. It specifically helps these students take their power back which has been displaced due to circumstances beyond their control. Students learn to embrace the outdoors through the surroundings such as rocks, trees, grassy fields, and alike (Olson & Clough, 2009). They can learn to make more of a connection to nature, and that connection can then move ELL students toward awareness of environmental issues. When ELL students experience the outdoors with mindfulness, they engage all their senses. This utilization of all the senses can increase academic achievement, help form a deeper bond with community, and help them connect with other students. It can also inspire increased creativity, increase their engagement in school, and lead to more inquiry-based learning which in turn can lead to more problem solving. Students feel empowered when these kinds of positive changes happen in their lives. When ELL students mindfully improve their school performance, they move to a place that can help them become critical thinkers, all of which is a benefit of PBL (Deringer, 2017).

According to Remmers, Topolinski, and Koole (2016), mindfulness can also help ELL students become non-judgmental about all the complicated feelings they may possess. The practice of being mindful bolsters effective mood and emotional self-regulation. It also helps to guide students toward attending to emotions in a more
flexible way that doesn’t work against positive feelings. With these positive feelings ELL students may become happier in general and enjoy more life satisfaction. It can also help to interrupt the automatic response that may have been fostering a negative reaction (Remmers, Topolinski, & Koole, 2016).

The neuroscience looks at mindfulness in terms of how it affects self-regulation. Self-regulation is increased through emotional regulation, working to be more self-aware, and the expansion of attention in the terms of self-control. This type of self-awareness takes practice in order to expand and fully have control over these situations, but beginners can also have success (Tang, Hölzel, & Posner, 2015).

Neuroscience has studied both the anterior cingulate cortex and the dorsolateral prefrontal cortex in terms of structural changes after mindful activities like meditation. The anterior cingulate cortex is responsible for emotion and cognition. The dorsolateral prefrontal cortex is the area in charge of working memory and selective attention. Both areas of the brain have shown structural changes leading to greater control over those areas of the brain. This can bring a heightened sense to control over attention and a superior regulation of emotional states. This kind of mindful work with ELL students can assist them in taking control over conflicts that come up both at school and the outside world (Tang, Hölzel, & Posner, 2015).

**Meditation.** Nature and mindful meditation go hand in hand because both look for an interconnectedness with psychological well-being. Mindfulness is thought of as having motivated intention to keep attention and stay focused, be only in the present,
without making judgments of any kind, letting distractive thoughts that come up just float away in your mind, and being non-reactive (Anicha, Ode, Moeller, & Robinson, 2012).

Unsworth, Palicki, and Lustig (2016) conducted several studies related to nature and mindfulness. In one of their studies, a group of college undergraduates agreed to participate through comparing nature interconnectedness including mindfulness and in just being in nature without practicing mindfulness. The study was predicted to show that the participants who had included meditation into the daily activities while in nature showed an increased interconnectedness to nature. The participants incorporated 15 minutes of meditation in the morning and then they were encouraged to be mindful throughout the day. Pre and post surveys were given to both groups. The surveys that were used were Inclusion of Nature in the Self (INS) scale and the Frieberg Mindfulness Inventory. INS scale consists of seven Venn diagrams with circles representing self and nature then the survey included an open-ended question about their feelings. The circles in the Venn diagrams overlap in varying degrees representing the relationship a participant might perceive they have with nature both pre and post study. Frieberg Mindfulness Inventory consists of fourteen questions which have ratings between one and four. A rating of one would be rarely, and a rating of four would represent almost always in regards to questions asked about their relationship with nature. The nature trip study lasted for three days. Results indicated that meditation in nature had a positive effect on participants perceived connectiveness to nature, and they were more likely to respond to the written question about their attitude toward nature with memories about nature when compared to non-meditators responses (Unsworth, Palicki, & Lustig, 2016).
The two groups initial survey scores were almost equal when assessing their attitude toward connectiveness to nature prior to the start of the trip. At the end of the trip, the meditating group had a much higher increase in positive connectiveness feelings than the non-meditative group. The open-ended question that went with the Venn diagrams resulted in meditators showing more advanced cognitive connectiveness to nature in their written response as well (Unsworth, Palicki, & Lustig, 2016).

Again, as in other studies, more in-depth research is being recommended for several reasons. The overall length of the program was relatively short and may need a longer program in order to see if the meditation has longer lasting effects. The study also did not separate participants into cultural groups which may also play into the results of the report. Nonetheless, this study is a positive first step in the research into nature and mindful meditation (Unsworth, Palicki, & Lustig, 2016).

Children, in general, have no control over what has happened in their lives before they enter school, and many times even after they enter school age. When trauma disrupts neural pathways in children early on in life, it can directly impact their emotional well-being. Meditation can work to counteract some of the adverse effects of a variety of traumas inflicted upon children, especially ELL students. Some of the benefits of meditation are in its ability to help students gain control over behaviors that may be out of control for them. Meditation has been shown to help students regulate emotions, improve their ability to concentrate, and focus their attention. These benefits can vastly improve mental well-being and in turn enhance academic success. Meditation has also
been shown to improve personal happiness which helps students connect to not only their life but also to the lives of others around them. (Lubimoff, 2017)

Tang and Leve (2016) believed that mindful meditation can lead to better emotional regulation due to the neuroscience perspective. They believe that in using neurological science we can use things like mindful meditation not only in the present, but also as a preventative intervention. Mindful meditation activates specific regions in the brain that are associated with self-regulation which includes attention, emotion, and actions.

Mindful meditation helps harmonize both the body and the mind. By relaxing the body through meditation, we can focus our attention on the present without any judgments. Meditation has also been known to reduce stress, anxiety, and other negative behavioral conditions. These benefits to mental health also enhance cognitive performance. When practitioners of meditation have had their brain scanned with a magnetic resonance imaging scan (MRI), the results have shown changes in the brain. This imaging research shows that mindful meditation has resulted in changes at rest and with task application. When conducting research with college undergraduates, practice in mindful meditation showed significantly better attention control in participants (Tang, & Leve, 2016).

The benefits of meditation can be directly applied to how and when students complete school work and participate in class. If an ELL student has had a hard time focusing on their schoolwork because they have recently traveled from either another country or a refugee camp, helping them explore things like meditation can be the most
useful tool not only for them in the present, but also in the future. Academic success in school is very focused on a child’s ability to pay attention, be in control of both their body and their emotions, have the ability to concentrate, and present a positive attitude towards schoolwork (Hyland, 2009). By using meditation, students can gain these tools and, in the process, work to change their brain through gaining lifelong skills. Mindfulness meditation helps students stay in the here and now while they work to participate in school. It can also help them with the ability to self-report. Meditation can help students have less anxiety which in turn helps reduce inattention problems (Crescentini, Capurso, Furlan, & Fabbro, 2016).

Meditation trains the brain to be attentive and be in control. It enhances neural pathways to better control emotions which will also help with coping skills. Meditation is also cost effective because there is little you need in order to participate (Lubimoff, 2007).

**Yoga.** By utilizing yoga for children one can help them calm their mind, increase their health, and add to their well-being (White, 2009). Although yoga is in the same mindful family as meditation, it can also have additional benefits for students. Some of these benefits are improved attention, improved adaptation skills, reduced depression, reduced behavioral symptoms, and help reduce anxiety. Students who are in the minority, many of whom may be ELL students, receive less health care services in general, and are less likely to receive the help they need. Many of these students suffer from emotional and behavioral challenges which results in poor academic success, strained personal interactions, and have a higher dropout rate in high school. Many students show outward
symptoms, but many also suffer from internal symptoms including anxiety, depression, post-traumatic stress disorder, and oppositional defiant disorder which can result in problematic classroom behaviors. Outward symptoms can manifest themselves through fighting, classroom aggression, impulsivity, and a host of disruptive behaviors (Stener, Sidhu, Pop, Frenette, & Perin, 2012).

Yoga has shown to improve the lives of students, especially students who come from a challenging background. Schools struggle to accommodate students who come from complicated backgrounds. There are significant classroom challenges surrounding behaviors like stress, anxiety, inability to cope, and inability to focus. Yoga can be a more efficient treatment for students than traditional pharmaceutical therapies. Mindful yoga can help with overcoming stress, calming the mind, regulating the autonomic nervous system, and can foster relaxation for students who do not have the ability to do so on their own. The ability to focus the mind into calm breathing cultivates coping skills and can increase a greater self-awareness of emotions, self-control, and concentration. These skills work to help keep students on the tasks at hand (Dariotis et al., 2017).

Other benefits of yoga are associated with improvements in fine and gross motor skills. Schools are an excellent location for yoga and other mindful practices because children spend much of their day in school. Some schools may be reluctant to participate in what they consider nonessential activities, deeming mindful activities as unnecessary. They may also have concerns about staff, scheduling conflicts, and helping parents understand the development of what will take place, especially if their first language isn’t
English. Studies conducted on the use of yoga in schools are also in their infancy and will require more research for long term results (Dariotis et al., 2017).

The general outcomes for yoga in schools are promising and could potentially help students beyond what is the norm at this time. When presented the special circumstances with students, many times it is new understandings and practices that will serve them in the most beneficial way possible. Administrators and teachers are always learning, and yoga can be an important tool in the struggle to reach many, like ELL students, with complicated background experiences (Dariotis et al., 2017).

**Outdoor reading and writing.** Along with the positive benefits of just being in nature, both reading and writing have additional benefits that many students, especially ELL students, do not get to experience on a regular basis. Human language takes us into our world through many outlets. We experience social interactions through language, activities, experience cultures, and become familiar with social groups. Language aids in our comprehension and our overall experiences (Gee, 2001).

Novack (2014) disclosed that being mindful in nature while reading or journaling helps students become more aware of their surroundings. These types of exercises are meant to help students, especially ELL students, with reading, writing, speaking, and listening as they are the four areas assessed with the WIDA (World-Class Instructional Design and Assessment). Often reading and writing are where ELL students need the most support.

When reading outdoors, students will use mindfulness to focus and observe. Then they will be able to apply this to discussions, sharing, and general interactions about the
literature being discussed. To help students take full advantage of their surroundings, teachers can read from literature that coincides with the surroundings to help connect the students to nature. This will help support and aid in making meaning from both the literature and the surroundings. Reading outdoors can also help ideas from literature become more vivid and as a result move into memory building utilizing existing memories (Novack, 2014).

When working on journaling in nature, students will be in the present, look at the world around them without judgements, and focus on what they are doing. Nature journaling will usually include both writing and drawing, which also helps students become more deeply aware of what they are focusing on. This kind of observation and recording will help students make connections to the world around them (Cormell, & Ivey, 2012).

**Summary**

ELL students continue to increase in the overall population at schools. Many of these children carry the baggage of their early childhood while in refugee camps or through tumultuous journeys simply to arrive in the United States. Once here, many families are subjected to discrimination, poverty, and locations that do not afford the occupants any access to green space (Keniger, Gaston, Irvine, & Fuller, 2013).

The benefits of taking students outdoors are many. The restorative qualities of nature can help reduce stress, restore cognitive functioning, help with focus and attention, and restore mental health and well-being. The outdoors stimulates the senses in ways we
cannot replicate indoors. Although there are some challenges to going outside, the benefits far outweigh the challenges (Moore, 1997).

Many of our ELL students arrive at school with significant trauma and difficulties in their backgrounds. By utilizing the outdoors with mindful activities students have a better chance at succeeding in school both academically and socially (Rousseau, Measham, & Nadeau, 2012).

Chapter three will explore the methods for the project. This will include a description and explanation of the project, who the project is geared towards, where the project might take place, and how to go about implementation of the project. Chapter four will be a reflective chapter that will give a narrative of the project as a whole.
CHAPTER THREE

METHODS

Overview

Environmental Education begins in the outdoors. Many schools I have taught at have beautiful outdoor spaces, but they are vastly underutilized. The restorative benefits of nature are widely documented (Chawla, 2015), and I think are an excellent fit for ELL students. My question of How can outdoor activities support the academic and emotional needs of elementary level English Language Learner students? is supported by my project. This outdoor curriculum project will focus on the cognitive benefits of the outdoors combined with mindful activities to enhance academic success and emotional healing for ELL students.

My curriculum project of using outdoor mindful activities will utilize the Understanding by Design (UbD) framework of working backwards created by Wiggins and McTighe (2011) using three stages. Stage 1 will cover desired results thinking about knowledge transfer, students making meaning through understanding including essential questions, and through acquisition which focuses on knowledge and skills. Stage 2 will contain the evidence showing how the students are understanding through demonstrating understanding. Stage 3 will include the learning plan looking at whether students have met goals in the first two stages through engagement and effectiveness (Wiggins & McTighe, 2011).

Through the opening two chapters, I have shown why I became so passionate about nature and why we should utilize the restorative properties of the outdoors along
with mindful activities to support ELL students. In chapter one I spelled out how I became so passionate about the environment and how it has always played such a big part in my dedication to teaching. In chapter two, I used literature to show how the outdoors can be combined with mindful activities to help support ELL learners. The literature review in chapter two showed how working with ELL students in an outdoor setting with mindful activities can benefit them in a multitude of ways (Hyland, 2009). The topics of literature began with the benefits of the outdoors in conjunction to stimulating the senses, benefiting cognition, explaining some of outdoor challenges, and culminating with the positive effects of nature. The next part of the literature review presented the effects of trauma and stress on mental health for ELL students presenting a direct barrier to academic success (Rousseau, Measham, & Nadeau, 2012). In the concluding section, I showcased the benefits of mindful activities like meditation, yoga, reading, and writing in nature.

**Curricular Framework**

According to the Minnesota Department of Education (MDE) Minnesota Report card (2018) regarding ELL students, the achievement gap continued to get wider each school year from third through twelfth grade for student achievement levels. In the most recent 2018 report for reading, math, and science the disparities are evident. The following graphs show the statistics for ELL vs. white students who exceed grade level standards, meet level standards, partially meet standards, and those who do not meet standards. For me these statistics are alarming.
These final two graphs are very telling. They point out that the gap between ELL students versus their white classmates continues to widen as you advance in grade level.
(MDE report card, 2018). Utilizing mindful outdoor activities beginning at a young age could make a significant difference by helping students rewire their brains to move them in the direction of helping them both emotionally and academically (Choudhury & Moses, 2016).

This curriculum project is designed to utilize the environment outdoors to help restore cognitive function for ELL students. Better cognitive function would greatly improve the chances of closing achievement gaps. Understanding that the environment has positive effects on cognition leads to positive changes in emotional and academic performances (Keniger, Gaston, Irvine, & Fuller, 2013). Constructing lessons outdoors that benefits student's health and well-being is advantageous because it is supported by the simple fact that we are using nature to support learning (Chawla, 2015).

My curriculum project focuses on getting students to an outdoor setting, then utilizing not only the outdoors, but also using mindful activities to help assist ELL students in their journey to academic success. To do this I created unit planning guides for meditation, yoga, reading and writing in an outdoor setting with journaling, sharing, and discussion as the basis for student assessments. Teachers who would want to incorporate outdoor mindful activities could use one or more, but not necessarily all the activities.

Before the start of the outdoor mindful activities, teachers and parents will have been given surveys to gage how they believe students seem to be performing in school at the beginning of the year. They will periodically be given additional surveys again throughout the year to see how students are progressing. All outdoor mindful activities
will use surveys, and students will be given their own to self-assess how they feel about school. The first unit planning guide is outdoor meditation, the second is outdoor yoga, the third is outdoor reading, and all three activities will use journals for writing reflections. Students will be taken outside in small groups from the same grade level and they will participate in the outdoor activity, then conclude each day writing in journals. Sentence starters will be given to help students, and some students like Kindergarteners may want to draw pictures in their journals with writing later on in the school year. Each activity will also include discussions and sharing as well as teacher notes to students in the journals.

Wiggins and McTighe (2011) talked about three main guidelines in curriculum writing that will be my focus. Stage 1 lays out what should be expected as results for my unit (see Appendix A). The results of the outdoor mindful activities will vary, but they will have certain accumulative aspects in common resulting in building cognitive functions and being supportive of the emotional well-being of students. Stage 2 lays out what types of evidence will be acceptable to show that the students are making gains (see Appendix B). Gains for students may have similarities within their journaling, sharing, and discussions, but will look very different from student to student as they will be at a variety of levels. Students should show a progression of skills from the beginning to the ending of the activities throughout the year. Stage 3 lays out what the learning plan will be (see Appendix B). Within the learning plan guides I will accumulate the surveys from teachers, parents, and students. Stage 3 lays out the activities so they address all goals in Stage 1 and 2 (Wiggins & McTighe, 2011).
Setting and Participants

This curriculum is meant for students of the elementary school age, but I believe it could be applied to any school age student who would benefit from outdoor mindful activities. All settings will need to accommodate the number of students being serviced in each group. The outdoor settings will vary and could consist of something as simple as a grassy patch where students can gather, to an organized outdoor learning space that has log stumps for students to sit on. Any outdoor space that is approved of by the administrators will work for most activities.

The outdoor sites for most schools are areas for outdoor education which have been set aside by the school and are a safe and sheltered space. If that specified space is not already designated, a safe site may have to be assessed by the administrator and teachers involved. Things that might be a consideration can be traffic dangers, possible neighborhood violence, and access to outsiders (Moore, 1997). If safe outdoor places or weather is an issue, one study suggests that there are benefits to having an outdoor view or even botanicals in the classroom which would enhance learning in much the same way as being in the actual outdoors (Keniger, Gaston, Irvine, & Fuller, 2013).

Woodhouse and Knapp (2000) explained that this concept of outdoor learning has been around for more than 100 years. Being in the outdoors gives humans more sense that they are part of the outside world and it helps to bring meaningful experiences to students no matter the outside space. They also go on to say that going outside can help our students feel more like participants connecting them with their surroundings.
Data Collection

This project will consist of mindful activities students can do in the outdoors with little in the way of tools, and minimal preparation. Homeroom teachers will be given a survey to fill out on each child. These surveys will be very brief, have a scale for teachers to rate certain behaviors they see with their ELL students, and may or may not include teacher notes about the students. Surveys will be given either at beginning, mid, and year end or coordinate with grading quarters to compile data as to whether the primary teachers can see any behavior and/or academic changes within the regular classroom for the students involved. The teacher in charge of the ELL outdoor activities will also work to assess the students on a more regular basis with observations and the information they gather from student self-assessments and in journal writing.

The teacher survey for the students will include questions on behaviors often seen in ELL students who have suffered trauma. Kaplan, Stolk, Valibhoy, Tucker, and Baker (2015) suggested that the behaviors to look for might be difficulty when testing, problems with memory retention, lack of attention in class, difficulty with abstract reasoning, inability to organize ideas and thoughts, difficulty completing tasks, and difficulties in planning. They also believe that anxiety and depression are sometimes present. These kinds of cognitive problems can lead to exaggerated behaviors. Working with ELL children in a mindful way may be a key to helping them gain more control over their academic success.

Students will be given a survey that coordinates with the teacher surveys on some factors, but also looks for how students feel about school in general. Students would also
be required to journal throughout. Daily journaling is a very important way to see a progression in skills for students. Very young students may begin journaling with pictures and very little written text but may progress into more writing as the program moves through the year. As the year progresses Kindergarteners could be given pre-printed sentence starters to glue into their journals to then expand on through writing. First grade could start with pre-printed sentence starters as well, and then be weaned off of them as their skills in writing progress. Older students may be more inclined to do less drawing, but will hopefully become better at journaling feelings, moods, and how they think they may be benefitting from the program (Novack, 2014). Older students would copy a sentence starter from a portable whiteboard, then elaborate on the topic.

Journaling would also be a two-way intervention because ELL teachers can read the journals on a daily or weekly basis and then add a written reply to students approximately once a week. This is a very good way to interact with each student and model many types of sentence structures for students learning English.

Self-assessment surveys for students will be geared towards feelings and attitudes. For very young children, the teacher will be guiding students through the questions and the assessments will have a happy face, a so-so face, and a sad face they can circle for answers. Older students will be given help reading the questions. I have given this type of assessment survey to children as young as Kindergarten, many of whom were ELL students, and they catch on very quickly.

Journaling will be a big part of this curriculum. Journaling after meditation or yoga will take the form of the students recording how they are feeling about the mindful
activity, what they feel they are doing well, or other ideas they may want to share. Sentence starters will be common to help students start a thought. Journaling after reading will take the form of what they enjoyed most about the reading, how they tie it to nature, and a variety of other ideas. They can also do observational journaling on what they observe as they sit in nature. This kind of journaling can record how the area changes in the seasons, and what they think will happen next. Journaling also lends itself well to working with a partner, so they can discuss what they will journal about, compare ideas, and even write notes to each other. Students can write as much as they feel they need to and include drawings (Novack, 2014). Cormell and Ivey (2012) pointed out that journaling helps students make connections to what they are doing, feeling, or interacting with. Journaling will also help with focus, observational skills, and comparisons. They may also write down questions about something they are wondering or want to know more about. It is a great way to help students express themselves as they move through the school year.

Journals are also very easy to make with a piece of construction paper, pieces of copy paper, and a simple piece of string or yarn to tie them together. I have made these for science journals, reading journals, and drawing journals. To make a journal you line up the cover over the page paper, cut a slit at the top and bottom through all the layers, fold the journals in half, open the journal, put the string across the inside fold, pull it down the slit on each side, and tie it together on the outside (Appendix C). This keeps student thoughts together and becomes concrete evidence of the progression of skills.
They are also easy to store in a bin with each group or class label. The bins are easily portable as well. You also have the option of buying journals.

**Timeline**

The first three chapters of this capstone project will need to be completed by December 9, 2018. This final curriculum project and writing chapter four will begin on January 30, 2019 and will be completed by May 11, 2019. In the first weeks of February I updated my profile, got to know my fellow classmates, began working out my completion timeline and worked to clean up the first three chapters of my paper. Mid February our peer editors and my content expert read over those first three chapters to further refine them. The last week of February I posted my timeline for completion, and peer edited for others in my group. The first week of March began with revising my first three chapters, meeting with my professor via google hangouts, and working on the first part of my project.

The second week in March I worked on part two of my project and continued to clean up my paper. I finished my first draft of my project the third week in March, read over what my peer partners have shared, and started to work on chapter four. Chapter four writing went on through the third week of March and was completed a week later. I began working on the third part of my project and putting together the table of contents and references. Both the paper and project were ready for our professor to review by the first week on April. I was then working on my project presentation. Chapter 4 was submitted in early April and the presentation was the middle of April. Then the finishing tasks were completed and ready by the beginning of May.
Conclusion

In chapter one, I described my upbringing with my teaching career and what led up to my passion for environmental education, and more recently my passion for helping ELL students reach their full potential. Chapter two helped me discover many of the aspects of my proposed project through a literature review. The literature gave concrete evidence why the outdoors is so important for many students. It also showed that many of the restorative aspects in nature give us helpful tools to use with personal trauma that many ELL students are having challenges with. The final portion of chapter two included mindful activities in an outdoor setting for maximum benefits for our ELL students. In this era of technology and so much screen time for students, it is even more important that we take advantage of all the outdoors has to offer.

Chapter three explains the basic ideas of the curriculum project regarding my question, How can outdoor activities support the academic and emotional needs of elementary level English Language Learner students? Taking our students outdoors has a multitude of benefits for them. This project will work to use assessment surveys for teachers, parents, and students to help monitor behaviors and feelings in an ongoing way throughout the school year. Students will also be writing in journals which will show evidence of the progression of learning. The combination of surveys from teachers, parents, and students, along with journal writing from students will demonstrate a better picture of each student on an individual basis.

Chapter four restated the research question and give an overview. The main body of the chapter contained a description and explanation for my conclusions about my
capstone project. The chapter also injected some personal thoughts and feelings about the entire capstone process. Then it went on to answer the research question and explain what my proposed plan was for the project in the future. Each section included a summary and transition to the next section. Chapter four ended with a conclusion that includes final thoughts about the entire capstone process.
CHAPTER FOUR

Reflections and Conclusions

Overview

This capstone has been a journey into my question of How can outdoor activities support the academic and emotional needs of elementary level English Language Learner students? This question began when I was working with many students who were ELL and were experiencing difficulties in a school setting. I have always been the kind of teacher who incorporated an environmental component into my teaching, so naturally I did so with my ELL students. I could see that just going outside put them more at ease and that planted the seed of what benefits nature had on students, especially ELL students who may have experienced trauma. This was the driving force in the research to answer my question and develop a curriculum that would utilize the outdoors in aiding both academic and emotional support for these students. My project revolves around being in an outdoor setting, then conducting activities that are also mindful in an effort to help students become less stressed, be better focused, gain sustained attention, and be in better control of how they react to their own feelings (Hyland, 2009).

Chapter four explains what I believe are my major learnings and whether or not they were expected. It also revisits important parts of the literature review, what may be some limitations of this project, what the implications are, and possible future research and projects. Finally, I pointed out how I could communicate my results, how the results could benefit the profession, and finally a summary for the chapter.
Major Learnings

When I began this journey into a masters degree I was very uncertain about it but was excited about exploring more about the realm of environmental education and natural science. As this journey moved closer to the finish line I became more and more uncertain of what my capabilities would be in completing this masters. Writing has never been a strong suit of mine, and it seems to take me much longer to accomplish what is seemingly effortless for others. That being said, I forged onward. My thought was in giving it my best, and then just when I felt that something was good, I was always finding something I felt needed to be changed. This inner conflict would be quelled at the very end of the degree. Self-doubt can be tricky sometimes, but I guess if you want to achieve a goal, everything is part of the adventure.

The preeminent learning for me was in the validation of what I already suspected. Children can be supported by the outdoors in a wide variety of ways. Innately we know this on some level even if we are not consciously thinking about it. As a researcher, I was glad to see there have been a fair amount of studies that have been completed which show the benefits of being outdoors.

The unusual part of my search was that I wanted to connect using the beneficial attributes of being outdoors to mindfully helping vulnerable ELL students. I have encountered so many ELL students who have so much to overcome, but at times it feels like schools are not moving in the direction of looking at all the needs of students. Too often schools only focus on what should be academically accomplished. My project idea was more of a “connect the dots” through my literature review in order to combine a
variety of benefits in both the outdoors and with mindfulness activities in order to help overcome the cognitive deficiencies because many ELL students have experienced trauma. I quickly discovered that although there have not been studies of my exact proposed plan for ELL students, there have been enough studies, when taken in combination, to show in a roundabout way that my project plan was viable.

Although, the capstone process was challenging at all levels, I learned substantially more than expected. Through this data I am hoping to inspire programs in schools to make the leap into helping students more comprehensively. The biggest challenge was searching literature in the review because it felt like there was little time to complete all the reading. This was a very arduous time, but in completing it I gathered a substantial amount of information to confirm what I was proposing. Although this was true, some of my research did concede that more research is needed.

One of the most unexpected parts of the capstone was in our online relationships. Many times it felt like I was speaking directly to my peer editors which made the online classes more personable. I hope I get a chance to meet my classmates in person someday.

**Review of Guiding Literature**

There were many important aspects of my literature review. It would collectively be my opportunity to communicate why outdoor mindful activities of meditation, yoga, reading, and journal writing would be so beneficial for ELL students. Moore (1997) expressed the fact that being outdoors can help students in ways that being inside four walls cannot. When we are in the outdoors we stimulate all of our senses
while activating positive feelings for the outdoors (Kaplan, 1989; Unsworth, Palicki, & Lustig, 2016).

My main focus was to show that the outdoors can work to restore cognitive functions. Keniger, Gaston, Irvine, and Fuller (2013) documented that positive cognitive effects can also improve academic abilities. Lawrence, Kaplan, and Collard (2018) validated that those positive cognitive benefits have a direct effect on ELL students who need more support in the school setting.

Davies and Webb (2000) presented that many ELL students have endured trauma whether it be their journeys from countries of origin or after they arrived in their new country. Those traumas can also be very diverse. As a result of the complexity of the traumas, Kaplan, Stolk, Valibhoy, Tucker and Baker (2015) reported that many ELL students were being diagnosed with learning disabilities at an alarming rate and in many cases were premature. They go on to say that problems for ELL students with traumatic backgrounds have a variety of cognitive function problems which need a more comprehensive support system. This is where my belief that outdoor mindful activities came into play.

I propose in my project that the outdoor mindful activities take the form of meditation, yoga, and reading, along with journal writing taking place as part of each activity. Hyland (2009) pointed out that mindful meditation helps students be in the present to focus their attention. Lubimoff (2007) showed a direct connection to meditation focus training the brain to be attentive and in control. He went on to say that when students gain the ability to focus and cope they can then move toward academic
success. That is the main reason I wanted to not only utilize the restorative effects of the outdoors, but then combine them with other mindful activities that would help students achieve both emotional and academic successes.

Dariotis et al. (2017) discussed that yoga is associated with the same mindful benefits as meditation. According to Novack (2014), outdoor reading and writing which utilizes the positive aspects of nature outdoors also helps students become more mindful of their surroundings with the help of literature. Helping students become more mindful with their surroundings connects them to their environment outdoors. All of my outdoor activities also employ journal writing. Cormell and Ivey (2012) found that journaling helps students write without judgments which also helps them become more aware of what they are focusing.

ELL students need to gain the necessary brain function they may be lacking. My curriculum project works to improve the lives of ELL students through directly utilizing the outdoors in conjunction with mindful activities of meditation, yoga, reading and journal writing. I believe this will help repair brain function putting ELL students on the road to success.

Implications

My greatest conclusion for the implications of my outdoor mindful curriculum project would be to help students become the best they can be by giving them the tools which not only help them with emotions and academics, but also with life. This world of high stakes testing is stressful for everyone involved. My curriculum project using outdoor mindful activities puts ELL students in an environment of low stress that is
non-judgemental. In a low stress environment students can experience elevated mood, increase self-esteem, feel a more positive psychological sense of well-being, and reduce overall mental fatigue (Keniger, Gaston, Irvine, & Fuller, 2013). Sometimes students just need a safe place to focus and not to worry about the regular stresses of the day.

My curriculum project of meditation, yoga, reading, and journal writing helps students decompress, learn to focus, and be in the present. Benefits come from not just the repetition of activities outdoors, but in the positive interactions they will be provided. I also feel like it will be engaging for students to get out of the everyday classroom rigor and experience something contrary or unexpected. I believe professionals at schools who are in charge of making decisions for students should be looking toward this kind of idea to help them on a more complete level.

Limitations

I realize that we live in a state in which harsh environments can occur with various seasons. That limitation may make some teachers not want to get on board with a project such as mine. What I propose to help overcome a variety of harsh outdoor situations would be to have alternate places for this kind of learning. One school in which I was employed had gigantic walls of glass overlooking beautiful natural areas which is great to help utilize the continued benefits of the outdoors. If that is not a possibility, schools could designate a room that would be outfitted with plants, greenery, and perhaps a natural outdoor mural on the wall. Smartboards are also a great way to bring in the outdoor world. In an urban area there may be a possibility to build a rooftop garden or outdoor green space with some kind of sheltered area.
Another limitation with this kind of outdoor project is that some teachers simply do not want to take students to the outdoor settings. I believe we sometimes do what is best for our students even though it may be more work for us. There are so many schools I have been at that have absolutely beautiful outdoor spaces and classrooms that go unused much of the time. Some schools even have vast nature areas right next to their schools that they do not utilize. We should not be wasting important teaching tools. It may not just be a matter of helping administration realize the importance of the outdoors, but many teachers need to embrace it as well. With planning and possibly volunteer help, students can be ready to go outside in just about any situation. A collaboration of all those involved will help get the program underway.

An additional limitation could be the consideration of the school schedules. I realize that the schedules are usually extremely structured and tight for time. Most schools have student choice time built into the schedule. This would be a great time for outdoor mindful activities because it can be molded to fit the students. The problematic aspect is when other specialists like reading or speech also want the same students at the same time. Compromise is key. Another possible time might be the morning circle time, or even part of sustained silent reading because, in many cases, these activities are not geared for emergent readers like ELL students. If the overall goal is to help students, then other staff should be willing to work on possible time slots to accomplish what is needed for our students.

The last limitation I think about is that this type of project may be too radical of an idea for some teachers and administrators. What my challenge to them would be to
read papers like mine, peruse projects like the one I am proposing, and open their minds to the possibilities of helping not only ELL students, but any student who would benefit from this kind of outdoor instruction.

**Future Research**

My recommendation for this kind of outdoor mindful curriculum would be to try it in a high-needs school with a small group of participants at first, and then if they feel it is successful, expand the program. If a school is dedicated to the education of all students, they should be willing to try alternative approaches especially when the current curriculum may be failing to help students adequately.

It is my belief that now is the time to implement outdoor mindful activities for students. There is literature to support the benefits, and I believe we are on the cusp of this kind of integration in schools. Future research might look at the academic success of programs that utilize outdoor mindful activities on the basis of how many days they practice the program and if the number of days makes a difference. To monitor number of days and their impact schools could have a group that participates all five days during the week and one that would participate for three days. It would also be interesting to see if surveys given to teachers and parents share the same impressions of the impact the program is having on students.

**Communication of Results**

The communication with family, teachers, and administrators will be an important and ongoing part of this type of project. Using the writing journals to keep a running record of the progress the students are making will be an important piece of
evidence to share. The aspect of the teacher writing messages to the students periodically will help students see what they are doing is important and also help them gain writing skills along the way. This kind of communication will be important to share the victories that students are exhibiting in their work. Conferences will be a good way to display the concrete evidence of progression and share behaviors in group time outdoors. Teachers will be sharing information in surveys three to four times a year and some of that information may also be shared with parents at conference time to determine if the two have similarities.

Another way to communicate ongoing results with parents and teachers is through emails, or written notes. I also think that sharing information with administrators on how the outdoor mindful activities are progressing is important. Sometimes administrators are extremely strapped for time, so setting a time to meet or send an email update is probably a good idea. That way administrators will know when to expect information. If your school administrator thinks it is relevant, they may even want the data shared with the school board at one of their meetings as well. Sharing with schoolwide staff could be accomplished on a professional development day. If other teachers are interested in using part of the program they may even want to be coached on how they can bring this kind of outdoor mindful activity to their whole class. Outdoor mindful activities could be taught to the staff on a professional development day, and as part of the experience, teachers would be participating outdoors.

One of the best parts of this kind of outdoor activity will be to share what is going on with teachers, parents, administrators, and anyone else who wants to know more
about it. In addition I think that students will share what is going on with other students which may also help generate even more interest in the outdoor mindful activities. The program details may also be made available for other schools interested in this kind of program.

**Benefits to the Profession**

The benefits of this kind of project could be a low cost effective way to help ELL students not only achieve academically but also with emotional healing. The outdoors has restorative benefits on cognition and mental health. When we strategically help students through mindful activities who have experienced traumas become better focused and in control of their actions, the overall effect will be greater academic success and better behavior in the classroom setting. If students can concentrate and focus they can become part of their learning community. Teachers and administrators need to evaluate programs that are failing groups like ELL students, and look at projects like mine that will benefit them not only in school, but also benefit them in life.

**Summary**

This journey of my capstone project has been the opportunity of a lifetime. Chapter one helped me set the stage for why I became a teacher and who others were that guided me in this calling. Chapter two was an exploration into literature which helped present concrete evidence in studies to show that outdoor mindful activities are a possibility. Studies showed the cognitive benefits through application of mindful activities in the outdoors can have a restorative impact on the lives of ELL students.
Chapter three displayed the information on why this kind of outdoor mindful activity can be so important for ELL students. When we see that achievement gaps continue to get wider between ELL students and white counterparts as they progress through school, we need to change things up in a concerted effort to close that gap.

Chapter four helps tie up the loose ends of what this whole journey has been. Taking a look at my purpose for this capstone project for me was in using the great outdoors along with mindful activities to reach ELL students in need. I evaluated what my learnings were along the way and why my literature review was so important in backing up the proposal of what I wanted to accomplish. The implications of this kind of outdoor activity was examined with limitations that could present possible obstacles with my project. Chapter four then presented how helping students become more mindful in the outdoors can be shared with teachers, parents, administrators, and possibly other schools. This has been a fantastic journey, I hope I can continue it by implementing my project and making a difference in the lives of ELL students.

Conclusion

The entire capstone process seemed like a big puzzle to me. I had all of the pieces at the beginning, but I had no idea how to line them up or where they would go. Moving through the process, although challenging and frustrating all at the same time, helped me get to the place I wanted to be with my project. The entire process helped me grow as an educator. I feel like I have put together my puzzle with a whole lot of help, and that this outdoor mindful project may someday make a difference in the field of education.
REFERENCES


Teacher, 74(3), 47-51.


Woodhouse, J. L. (2000). In Knapp C., Eric Clearinghouse on Rural Education and Small Schools (Eds.), *Place-based curriculum and instruction: Outdoor and environmental education approaches* Charleston, WV: Clearinghouse on Rural Education and Small Schools, Appalachia Educational Laboratory.
## Stage 1 – Desired Results

<table>
<thead>
<tr>
<th>Goals</th>
<th>Transfer</th>
</tr>
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<tbody>
<tr>
<td>What will the goals be for outdoor meditation?</td>
<td>What will the students be able to do with gained cognitive function?</td>
</tr>
<tr>
<td>What will the goals be for outdoor yoga?</td>
<td>What will be the transfer of skills in the long term?</td>
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<tr>
<td>What will the goals be for outdoor reading and writing?</td>
<td></td>
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### Meaning

<table>
<thead>
<tr>
<th>What will the students understand about;</th>
<th>What will students keep considering about;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outdoor meditation</td>
<td>1. Outdoor meditation</td>
</tr>
<tr>
<td>2. Outdoor yoga</td>
<td>2. Outdoor yoga</td>
</tr>
<tr>
<td>3. Outdoor reading and writing</td>
<td>3. Outdoor reading and writing</td>
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</tbody>
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### Acquisition of Knowledge and Skill
What will be the facts and basic concepts students will be able to know and recall?

What skills will students apply in daily use?

APPENDIX B

Outdoor Mindful Activity Guide for UbD Plans Stage 2 and 3

<table>
<thead>
<tr>
<th>Stage 2 - Evidence</th>
<th>Stage 3 – Learning Plan</th>
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<tbody>
<tr>
<td><strong>Code</strong></td>
<td><strong>Evaluation Criteria</strong></td>
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<tr>
<td>Are all desired results from outdoor activities being appropriately assessed?</td>
<td>What will be the criteria used to assess the outdoor activities in order to evaluate the desired results?</td>
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<tr>
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<td>What qualities will be the most important for these assessments?</td>
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APPENDIX C
How to make the homemade journal

1. Assemble cover and pages.
2. Line up both cover and pages.
3. Fold in half.
4. Open & cut 1” slit on fold at bottom.
5. Cut 1” slit on fold at top.
6. Cut a piece of yarn a little longer than twice the size of the fold.
7. Lay yarn on inside fold and close journal.
8. Pull yarn through slits on cover sides.
9. Tie in a knot tightly and snip the long ends off.
10. Label the front of the journal.