THE EFFICACY OF ZONES OF REGULATION IN TEACHING GRADE 3 AND 4 STUDENTS SELF-REGULATION SKILLS

by

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Dedication or Acknowledgement

The decision to pursue my Masters of Education in School Counselling was not one that was taken lightly. I knew that being a single mother of two active teenagers, and teaching fulltime was going to require that I make sacrifices, and would require me to rely on my support system. I am eternally grateful to my two wonderful parents who supported me both emotionally and financially along this journey. I also acknowledge my two children who inspired me to take on this challenge. I hope that my pursuing this degree later in life will inspire them to never feel it is too late to take on a challenge, and I hope that they view me as a role model for lifelong learning.

I am grateful for the opportunities provided to me along the journey, and the people that made it such an amazing experience. My mentor during my practicum encouraged me to take risks, and provided the encouragement that I needed to accept every opportunity that would allow me to grow as a counsellor. The instructors at City University were supportive, encouraging, and inspiring. I have learned something from each and every one, and I am so grateful to them for having been an integral part of my journey. I am grateful for the gentle guidance of my thesis supervisor. Writing this thesis was overwhelming on many occasions, and she always offered support and words of encouragement. Lastly, I want to acknowledge my cohort members for the lasting impact they have had on my life. Over the two year program we became a group that offered unconditional support to each other. I truly feel that each person in my cohort cares for the others. I hope to maintain relationships with this wonderful group of new school counsellors.

Lastly, I wish to thank my class of grade 3 and 4 students from the 2015/2016 school year, as without their participation, this paper would not have been possible.
Abstract

The aim of this paper was to examine the phenomenological experience of the teacher while teaching a grade 3 and 4 students the Zones of Regulation program. The Zones of Regulation program’s aims are to teach students self-regulation skills and strategies. The project described in this paper was an action research study conducted by myself, the educator in the participants’ grade 3 and 4 classroom. The Zones of Regulation was implemented to determine if it would improve observed self-regulation skills, which would in turn have an effect on student learning outcomes. Observations and students’ comments were recorded in a journal by the teacher/researcher after Zones of Regulation class lessons were conducted. A thematic analysis of the journal data collected was then undertaken. The themes of self-awareness, focus, empathy, acceptance, influence and empowerment, and student activity were uncovered by this project. As a result of this action research project, the researcher’s subjective evaluation was that Zones of Regulation was valuable in teaching self-regulation skills and strategies. Ideas for further research are discussed in this paper so that educators might be able to create school communities that are comprised of learners who successfully can self-regulate in order for every student to maximize their learning potential.

Key Words: Zones of Regulation; self-regulation; self-awareness; student empathy; phenomenology; action research.
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Chapter 1

Introduction

In today’s classrooms, many students are visibly distracted, disengaged, and unfocused leaving educators to ask themselves, “are the students in my class learning anything?” Disruptive behaviour from students not only negatively impacts these students’ learning, but also has a detrimental influence over the ability of the other students in the class to remain focused and engaged. The alarming number of students in classrooms today that are consistently demonstrating unfocused, disengaged, and disruptive behaviours has reached such a critical level that teachers are struggling to effectively teach their students. This has necessitated the search for solutions that will allow their students to be more focused and engaged in their learning and less disruptive to the learning environment.

This paper will evaluate the efficacy of Leah M. Kuyper’s Zones of Regulation program when implemented as a whole class program to teach self-regulation skills and strategies to grade 3 and grade 4 students.

This first chapter will examine the pertinent background information that contributed to the decision to utilize the Zones of Regulation program in a whole class setting to teach students self-regulation skills and strategies. It will also provide more detailed information pertaining to the determined problem. This will include a discussion regarding what the literature says about the implications for students who are not able to acquire the skills and strategies to self-regulate, and, as a result fail to regulate properly; this is known as dysregulation. In addition, the specific research prediction will be provided, along with a description regarding the importance of the
study. This chapter will provide a definition of key terms that will be utilized throughout this paper. A description of the scope of this particular study will also be included. This chapter will conclude with a brief summary of the main points, as well as an overview of the following chapters.

**The Problem**

Current classrooms contain diverse populations of learners from a variety of economic and cultural backgrounds, and unfortunately this diversity includes large numbers of unfocused, disengaged and disruptive students. The numbers have reached unprecedented proportions which has become a tremendous impediment to the effective delivery of curriculum in the classroom. Ignoring the problem will only create populations of adults who have exited the education system unprepared for their futures, and reduces the number of people who are able to contribute positively to their communities. Shanker (2013) argues that self-regulation is the key ingredient to fostering children’s abilities to respond to life’s many challenges both efficiently and effectively resulting in students who are both focused and engaged which is the optimal state for learning to occur. Undoubtedly, if self-regulation is the solution, it becomes necessary to discover how to ensure that students are able to self-regulate.

**Background to the Problem**

Within the last couple of decades, a shift in the composition of students in classrooms has occurred. Specifically, there has been an increase in the number of students who require special attention and support in order to have their learning needs sufficiently met. These students require such support for a variety of reasons that include medical, learning, and/or social-emotional challenges. Policies surrounding inclusion, where all learners regardless of their needs are welcomed into regular classrooms, have largely contributed to the greater variety of needs in
regular classrooms. This shift has been positive in terms of allowing all children to feel that they belong to their classroom community; however, it has also resulted in busy and active learning environments where an increased number of students struggle to remain focused and engaged in the learning activities offered in the classroom, so that even when teachers develop engaging and age-appropriate lessons, many of the students are just too unregulated to absorb what is being taught (Bodrova & Leong, 2005). Consequently, unfocused and disengaged learners will fail to benefit from many of the learning opportunities provided in the classroom, and this can have a significant negative impact on the futures of these particular students. Therefore, in order for a teacher’s lessons to be beneficial and effective, it is necessary to have students who are both focused and engaged. Without this, the learning opportunities are futile, and with “such unregulated students in their classrooms, teachers end up spending more time on classroom management than on teaching (Bodrova & Leong, 2005, p. 55). If students are taught the skills and strategies they require to learn to self-regulate, then the burden on the teacher to manage and discipline student behaviours will lessen significantly (Shanker, 2013).

For too long, more and more teachers have failed to ensure that all students are ready to learn. This is partly because classroom management has become such a cumbersome task and many teachers may feel the need to start lessons when most, and not all, of the students appear ready. However, it can also be very difficult to recognize which students are truly alert and focused and which ones are not. Students may outwardly appear to be listening and focused, but internally they may be thinking about other things going on in their lives, or are distracted by external stimuli such as bright lights, others’ voices, or noises coming from hallways. So, although students may seem prepared to learn, they may in fact not be, and are therefore, missing key components of a lesson. Over the last decade, the topic of self-regulation in the classroom
has been increasingly recognized by experts as an important factor contributing to successful classrooms (Bodrova & Leong, 2005; Hoffman, 2009; Shanker, 2013, 2016). However, teaching self-regulation to a diverse population of learners is a complex task.

Unfortunately, teachers themselves play a key role in the problem. They often fail to recognize that there is a need for self-regulation education. Instead, teachers may tend to label disengaged learners as disruptive and poorly behaved and react in a punitive manner rather than taking a proactive approach that aims to support students to become engaged and focused. Even more concerning, is that more students are now being labelled and diagnosed as having Attention Deficit Hyperactive Disorder when it is probable that they simply have not learned how to self-regulate (Bodrova & Leong, 2005; Shanker, 2016). Since there is such an increase in the number of unregulated students in today’s classrooms, it should be clear that the traditional approach of trying to suppress, extinguish and punish students’ problematic behaviours is not a viable option, and new approaches are needed; teaching self-regulation skills and strategies is a vital step in achieving classrooms populated with engaged and focused learners (Communities, 2015; Shanker, 2016).

Students themselves are in the best position to gauge their own level of focus and engagement; however, they require the skills to be able to make these necessary assessments, and the strategies to be able to adjust their level of focus and engagement. Unfortunately, many students in today’s classrooms are not equipped with the necessary skills and tools to maintain the required focus and engagement to fully benefit from the learning opportunities that their teachers provide for them. Therefore, it is vital that teachers explicitly teach students how to recognize when they are not fully focused and/or engaged in their learning, and then provide students with the tools necessary to allow these learners to be able to increase their focus and
engagement on a more consistent basis. If this does not occur, the teachers’ lessons are essentially futile. Therefore, it benefits both the learners and the teachers to have classrooms populated with students who are focused, engaged, and therefore prepared to learn.

**Statement of the Problem**

As mentioned above, the number of unregulated learners in today’s classrooms have reached alarming proportions and it is clear “that these numbers represent a massive societal problem, requiring a concerted societal response” (Shanker, 2012, p.171). In the classroom, it has been observed that students who are unable to regulate themselves are not sufficiently prepared to participate in self-initiated and independent learning opportunities (Bodrova & Leong, 2005). Furthermore, these unregulated students often choose to disengage from other classroom activities because engagement is too challenging for them (Ida Rose Florez, 2011).

Unfortunately, having a high unregulated population has negative consequences that reach far beyond the classroom, and this is a problem that must be addressed. Having large populations of students emerging from elementary and high schools without the ability to self-regulate can result in negative repercussions for these students’ future success and relationships which in turn also becomes a societal problem (Eisenberg, Champion, & Ma, 2004; Shanker, 2012, 2013, 2016).

**Purpose of the Study**

Programs and interventions that are able to successfully “target children’s abilities to manage their behavior and emotion at school have positive effects on children’s problem behaviors and social competence (Eisenberg, Valiente, & Eggum, 2010, p. 693). The purpose of this study was to determine if the Zones of Regulation program would effectively teach a whole
class of students how to become more self-regulated learners. I was interested to discover if this program would be efficacious for all the learners in my classroom.

**Research Predictions**

As the researcher, I predicted that the Zones of Regulation program would be an effective program to both teach my students how to recognize when they have lost focus, and provide effective tools and strategies to support them to regain focus. Upon completing the Zones of Regulation program, I predicted that my students would be able to articulate when they were not focused and engaged, and that they would be able to select a particular strategy that would assist them to become and regain focus and engagement. I further predicted that my students would be able to transfer the knowledge and skills that they acquired through the Zones of Regulation lessons into other aspects of their lives. I predicted that they would be able to utilize the skills, tools and strategies they gained throughout their participation in the Zones of Regulation program in a variety of school situations, but also be able to use these skills, tools and strategies at home and during extracurricular activities.

**Importance of the Study**

This study is important because if the findings suggest that Zones of Regulation is in fact an efficacious program for equipping students with the skills and strategies they require to become self-regulated in their classrooms then educators can be encouraged, that by implementing the program in their classrooms, they can expect to observe more students who are focused and engaged learners, and thus fully benefitting from the curriculum they are teaching. In addition, with respect to my school culture, this study is important because if it is discovered to be efficacious for teaching self-regulation skills and strategies, then it can be recommended as a program that can be utilized by more teachers within my school community. Perhaps it could
even become a school wide initiative. Moreover, if deemed appropriate, it can be recommended as a self-regulation resource for other Canadian school districts.

**Definition of Terms**

Throughout this paper, many terms will be utilized in order to discuss the efficacy of the Zones of Regulation activities that my students were engaged in. Terms specific to the program will also be utilized. A definition of these terms is provided in this section.

**Self-Regulation**

“the ability to do what needs to be done to be in the optimal state for the given situation” (Kuypers, 2011, p.3) Self-regulation includes “regulating one’s sensory needs, emotions, and impulses to meet the demands of the environment, reach one’s goals, and behave in a socially appropriate way” (2011, p. 3).

**Zones of Regulation** - a curriculum designed to foster self-regulation and emotional control. It was designed by Leah Kuypers (2011).

**Blue Zone**

body feels sluggish, tired, or sick; brain may be experiencing emotions such as sadness or boredom

**Green Zone**

body feels awake and brain feels focused and alert; the optimal zone for learning

**Yellow Zone**

body feels wiggly and not in control; brain may feel frustrated, worried, anxious, surprised or excited

**Red Zone**

body is expressing and brain is feeling extreme emotions such as terror, anger and elation; loss of control has occurred

**Sensory Tool**

a tool that helps to bring a person out of the blue, yellow or red zone (when it is not appropriate to be in those zones) and back to the green zone
Calming Strategy - a thinking (e.g. positive self-talk) or breathing technique (e.g. deep breathing) that assists in taking a person from the blue, yellow, or red zone (when it is not appropriate to be in those zones) into the green zone

**Scope of the Study**

For the purpose of this study, the scope was very narrow. It only involved the participation of a particular age group, students in grade 3 or grade 4. More specifically, it was only the 22 students in my own class that participated. The purpose of this study was to evaluate the program’s efficacy at this age level and in a whole class setting, and despite that only one class participated in the study, a general feeling about the program’s efficacy could be reached. However, it is important to recognize that more studies would need to be conducted in order to prove accuracy of the findings reported.

**Summary**

In summary, it is necessary to teach children the skills and strategies that they require in order to be focused and engaged learners during the hours they spend in their classrooms. A key way to achieve this is to teach children how to self-regulate. Since these skills and strategies are not innate, they need to be explicitly taught. This study utilized the Zones of Regulation program in order to teach a class of grade 3 and 4 children self-regulation skills and strategies.

**Outline of Next Chapters**

In the next chapter, I will review the relevant literature regarding self-regulation as it pertains to children. The second chapter will define self-regulation as it pertains to the classroom setting, and will review literature that argues the importance of children’s abilities to self-regulate, and will describe some of the current programs being utilized to teach skills and strategies to foster self-regulation in students. Chapter 3 will describe the methodology utilized
to conduct this particular study and with provide both general and specific information pertaining to this methodology. In Chapter 4, I will provide the qualitative thematic analyses uncovered from the journal I kept throughout the implementation of the Zones program in my classroom. This will be supported by quotes from students’ work samples that was completed during the Zones of Regulation lessons. Chapter 4 will also provide my final judgment as to whether the Zones of Regulation program is efficacious for teaching self-regulation skills and strategies to grade 3 and 4 students in the context of whole class instruction. The final chapter, Chapter 5, will briefly summarize the project, but more importantly, this chapter will discuss the implications of my findings. In light of these implications, future recommendations will be outlined.
Chapter 2

Review of Literature

This chapter will review literature that has been written about the topic of self-regulation. First, in order to improve clarity, it is necessary to discuss the definition of self-regulation, particularly as it pertains to children. Then, I will discuss, based on what I have reviewed, the importance of teaching self-regulation with respect to the benefits it can bring to students, teachers, and the classroom environment. Lastly, I will describe some of the programs that are currently utilized in today’s classrooms to help support and foster self-regulation.

Defining Self-Regulation

Throughout the process of researching what experts have said about self-regulation, it became clear that it is a complex concept, and that a simple and straightforward definition is not easily available. A significant challenge to defining self-regulation is that many researchers use different terms such as self-control and self-management synonymously to describe what I believed self-regulation entailed. For example, Denham and Brown (2010) provide a definition that effectively captures the essence of self-regulation; however, their description is used to define self-management. They explain that self-management “includes the ability to handle one’s emotions in productive ways, being aware of feelings, monitoring them, and modifying them when necessary so that they aid rather than impede the ways in which the child is able to cope with varying situations” (Denham & Brown, 2010, p. 656). They further explain that self-management “includes handling stress, persevering through obstacles, and expressing emotions appropriately” (Denham & Brown, 2010, p. 656). I would argue that self-regulation also includes all of those elements, and therefore this definition could also be used to define and explain self-regulation. In their research, Eisenberg, Valiente and Eggum (2010) also noted that
varying definitions of self-regulation can be found, but that, as cited in their article, they argue that self-regulation “refers to the processes used to manage and change, if, when, and how one experiences emotions and emotion-related motivational and physiological states and how emotions are expressed behaviourally” (Eisenberg, Valiente, & Eggum, 2010, p.681). Bodrova and Leong describe self-regulation as a mechanism that is deep and internal, and they have chosen to define it as the “capacity to control one’s impulses, both to stop doing something (even if one wants to continue doing it) and to start doing something (even if one doesn’t want to do it)” (Bodrova & Leong, 2005, p. 55). This definition works effectively in the school setting, since in the classroom teachers are continually asking students to stop certain behaviours (e.g. calling-out, getting out of their desk) and to start certain behaviours (e.g. lining up at the door, starting an assigned task). Bodrova and Leong (2005) further explain that self-regulated children are able to both delay gratification and suppress their impulses, which is very similar to what is commonly referred to by educators as self-control. Other researchers define aspects of self-regulation in their work. As cited in the research conducted by Braet, Theuwis, Van Durme, Vandewalle, Vandevivere, Wante, Moens, Verbeken and Gossens, Emotion Regulation is defined as being the “process by which individuals modify their emotions or the situations eliciting these emotions” (Braet et al., 2014, p. 493). Although this definition encapsulates much of what self-regulation entails, it is not comprehensive enough to thoroughly define everything that self-regulation encompasses. In her work, Florez (2011) acknowledges the complexity of self-regulation, and utilizes the metaphor of a thermostat to help in the defining and explaining of self-regulation. She explains that just like a thermostat that has to sense and measure a particular temperature, and then adjust to the desired temperature, children, through self-regulation, can evaluate their emotions and behaviours and then make necessary adjustments to fit the situation
they are in (I.R. Florez, 2011). This metaphorical way of explaining self-regulation is useful as it is an easy and effective manner of explaining self-regulation to children so that they can acquire meaning and develop understanding.

It appears that many researchers utilize different definitions and different terminology to describe what is currently being referred to in education as self-regulation. However, although the terms self-control, self-management and self-regulation seem relatively interchangeable, and often appear to be utilized interchangeably, some researchers would disagree that this is appropriate. For example, in his research, Shanker (2013, 2016) vehemently distinguishes between the terms self-control and self-regulation. He explains that “self-control is about inhibiting impulses, self-regulation is about identifying the causes and reducing the impulses and, when necessary, having the energy to resist (Shanker, 2016, p.6). Shanker (2016) further argues that “self-regulation is not only fundamentally different from self-control: It is what makes acts of self-control possible – or as often happens, unnecessary” (p.6). However, other researchers seem to think that it is perfectly acceptable to apply the two phrases of self-control and self-regulation interchangeably. In her opening chapter, Kuypers states that “self-regulation can go by many names, such as “self-control”, “self-management”, “anger control”, and “impulse control” (2011, p.3). Keeping in mind the multitude of definitions, and complexities surrounding the concept of self-regulation, for the purpose of this paper and for my research, I chose to utilize the definition of self-regulation that Kuypers offers since it complements the teachings in her program, and is aligned with what many researches of this subject, including Shanker, believe self-regulation encompasses. Therefore, the definition of self-regulation, for the purpose of this paper, is “the ability to do what needs to be done to be in the optimal state for the given situation” (Kuypers, 2011, p. 3). Kuypers further explains that self-regulation includes
“regulating one’s sensory needs, emotions, and impulses to meet the demands of the environment, reach one’s goals, and behave in a socially appropriate way” (2011, p. 3).

**Importance of Self-Regulation**

Regardless of how it is defined, researchers in the field agree that self-regulation is important and necessary. In chapter 1, the negative consequences for learners who are not able to develop the skills and strategies to self-regulate were discussed. This section will examine the benefits that occur when students are able to self-regulate effectively. Teaching self-regulation to students in today’s classrooms is a vital part of a teacher’s program despite it not being officially mandated in the curriculum. Many developmental researchers believe that self-regulation is an instrumental component of students’ ability to learn (“The Self-Regulating Student,” 2012). Therefore, without it, student learning is compromised. Moreover, equipping students with the skills they need to self-regulate empowers them which in turn positively impacts their achievement (Cleary & Zimmerman, 2004). Within any given classroom, the students will be experiencing different emotions and different levels of focus, and the ability to self-regulate allows the power to be given to each student, which in turn relieves the teacher of the burden of trying to ensure that all students are focused and ready for the learning tasks.

More than allowing students to be able to learn effectively, self-regulation offers many additional benefits to students. Most teachers are aware that their students need to be focused in order to effectively absorb what is being taught. Self-regulation skills will certainly help to support students’ focus, and, not surprisingly, there is a strong correlation between students who are able to self-regulate and academic success (Maurice, Joseph, Patricia, & Roger, 2003). In their article, Denham and Brown (2010) assert that students’ “ability to regulate emotion, attention, and behavior has been found to be related to their school/classroom adjustment and
academic achievement” (p. 659). This alone may be enough for educators to realize the importance of teaching self-regulation skills to their students. However, educators and parents may not be aware of some of the other benefits of self-regulation. Acquiring the ability to self-regulate is a significant contributing factor in ensuring a successful school experience for our students (Denham & Brown, 2010). This would suggest that being able to self-regulate will not only help students to experience greater academic success, but can also contribute to the entire school experience being more enjoyable for our students. Moreover, many researchers assert that self-regulation also supports self-motivation in students, and that those students who acquire the ability to self-regulate are likely to experience a positive impact on their ability to form and maintain healthy relationships (Cleary & Zimmerman, 2004; “The Self-Regulating Student,” 2012). Furthermore, learning self-regulation skills in elementary school can have a positive impact on the mental health of students later in life (Ashdown & Bernard, 2012). Students who gain the skills they need to be self-regulated are generally happier people, and are then better mentally equipped to contribute positively to their communities and society when they reach adulthood (Hoffman, 2009). In addition, “regulating one’s thinking, emotions, and behavior is critical for success in school, work, and life” (Florez, 2011, p.46). Consequently, it is important that self-regulation skills be taught as soon as children enter the education system so that they can begin to acquire and practice the skills, working toward self-regulation proficiency so that they can then enjoy the most benefit, since ultimately self-regulation is key to optimal human functioning (Braet et al., 2014).

Therefore, due to the important benefits that the ability to self-regulate offers children, it can be argued that “instruction in self-regulation in early years deserves the same – if not more –
attention as instruction in academic subjects” (Bodrova & Leong, 2005, p.57). This opinion, and what it means for classroom teachers, will be examined in greater depth in Chapter 5.

**School Based Intervention Strategies**

Many programs that address at least some aspects of self-regulation are currently available for classroom use, and likely many more are in the developmental process, or will be developed in the future. I will briefly discuss some of the programs that are being utilized within my school district in order to support self-regulation in students.

The MindUp program, developed by the Hawn Foundation (2011) is one program that is currently being utilized by several teachers in my school community, and I regularly utilize aspects of the program in my own teaching practice. This program, organized into four units, was designed to “foster social and emotional awareness, enhance psychological well-being, and promote academic success” (Hawn Foundation, 2011, p. 6). Many of the lessons teach aspects of self-regulation. For example, one of the lessons teaches students about their brain and its different parts, and explains how what is occurring in their brain can either support or hinder their ability to focus (Hawn Foundation, 2011). Another lesson utilizes an activity called “core practice” in which students listen to a chime as they focus on their breathing. It is explained that by “concentrating on the sensations of a resonant sound and then of their breathing, students calm their minds and get ready to focus on the next part of their day. For the individual student, the Core Practice supports self-regulation and mindful action” (Hawn Foundation, 2011, p. 42). Because this particular activity supports self-regulation, and complemented the activities of my action research, I utilized Core Practice daily with my students.

Another program that contains components that foster self-regulation in students is the Friends for Life program developed by Dr. Paula Barrett (2005). It is a program that was
developed in Australia with the aim of assisting students to develop skills to effectively manage anxiety (Barrett, 2005). Although anxiety awareness, prevention, and management is the program’s focus, it also supports self-regulation because many lessons focus on teaching students to recognize emotions and then use strategies, such as deep belly breathing, to calm emotions that are preventing students from functioning effectively (Barrett, 2005). This program is often utilized in my school district to teach students about anxiety, but since emotion management is such a vital part of being able to self-regulate, it serves to foster self-regulation in students as well.

On a lesser scale, the Kids in the Know program also contains aspects that can support self-regulation. This is a personal safety program that was specifically designed by the Canadian Centre for Child Protection to reduce victimization of children (Kids in the Know: Personal Safety Program, 2008). However, as part of the program, students are taught how to recognize emotions and how emotions impact the way people behave. These particular lessons can serve to support the acquisition of self-regulation strategies since recognizing emotions is key to successful self-regulation.

Undoubtedly, there are many other programs being implemented by educators to nurture the social emotional learning of their students, and it is likely that many of these support self-regulation. However, in my district, and particularly in my current school, the three program described above are the ones most widely utilized, and the ones with which I have the most familiarity.

Lastly, the Zones of Regulation program developed by Leah M. Kuypers (2011) most certainly supports self-regulation in students. It was specifically designed with the aim to teach students how to self-regulate and manage their emotions in order to be productive learners.
Although Kuypers originally designed the program to foster self-regulation in students with neurobiological disorders, “it became apparent that the curriculum can reach a broader population (Kuypers, 2011, p. 2). Therefore, I believed that it would potentially be a program that would benefit my students and I chose to implement it for my study. I also appreciated the design of the program because of the well-structured, user friendly lesson plans. The specific research question that was being explored throughout this study was: Is the Zones of Regulation Program an efficacious program for teaching self-regulation skills and strategies to grade 3 and grade 4 children?. During the process of my literature review, it was clear that very little research existed about the efficacy of this program, and therefore I was curious to implement it in my own classroom, and then report on my discoveries.

Summary

Throughout the research process, it became evident that self-regulation can be defined in many different ways. However, most researchers agreed that self-regulation pertains to the ability to identify and monitor one’s own emotions, and adjust behaviours appropriately to effectively engage with others in social settings. For the purpose of my action research and this paper, I utilized Leah Kuyper’s definition that self-regulation is “the ability to do what needs to be done to be in the optimal state for the given situation” (Kuypers, 2011, p. 3). This definition was most appropriate since my research involved implementing Kuyper’s Zones of Regulation program to teach the students in my grade 3 and 4 class the skills they would need, and provide the tools they could use in order to foster their self-regulation. Although, as mentioned above, there are other programs that can be utilized to foster self-regulation in students, I decided to implement The Zones of Regulation: A Curriculum Designed to Foster Self-Regulation and Emotional Control because it was a comprehensive, user friendly program that directly targeted
self-regulation within its curriculum. Throughout my research, as discussed previously, I discovered that there are tremendous benefits to children being able to self-regulate, and that the ability to self-regulate could be instrumental in my students’ level of success in the future. However, very little research was available about the efficacy of the Zones of Regulation program, and therefore it was decided to implement it in my classroom to determine if it was in fact an efficacious program to teach self-regulation to students at the grade 3 and 4 level.
Chapter 3

Methodology

This chapter will describe in detail the methodology utilized to conduct this study. The nature of this study, evaluating the efficacy of the Zones of Regulation program, made using qualitative action research most logical since qualitative studies “are based on the assumption that reality is subjective and dependent on context (McMillan & Wergin, 2010, p. 89). More specifically, this study utilized approaches that are of ethnographic design in nature since it involved “the direct engagement with participants…to obtain an in-depth description and interpretation of behaviour within a culture or social group” (McMillan & Wergin, 2010, p. 7). The aim of this study is to determine the efficacy of the Zones of Regulation program with respect to teaching students self-regulation skills and strategies; this particular study focused on students in grade 3 and grade 4. It was predicted that after completing the Zones of Regulation program, the students who participated would have a repertoire of skills and strategies that they would be able to utilize in able to maximize their self-regulation with respect to their behaviour and their being alert and focused during times of in class instruction and tasks. The rest of this chapter will provide specific information about this qualitative, ethnographically designed action research study.

Method

Since I was the only researcher, and was implementing the Zones of Regulation in my own classroom, utilizing qualitative action research approaches was the most feasible and authentic to the nature of the study. My direct involvement with the implementation of the lessons allowed me to observe closely the perceived effect that the Zones of Regulation lessons had on my students.
Specifically, I journaled throughout the course of the study in order to enhance my understanding of what I was observing. I also utilized the journal entries and work samples of my students in order to gain insight into their experiences with the Zones of Regulation program, and to get their perspectives regarding the efficacy of the lessons being taught and the activities that they were engaged in.

**Research Design**

For this study, I used an auto-ethnographic, action research design. As mentioned previously, this study was conducted by myself as the sole researcher in my own classroom. My class was a combined grade 3 and grade 4 class with 22 students. The school is a triple track school that offers an English program, a French Immersion program, and a Late French Immersion program. I teach in the English program. The school has approximately 500 students, and is situated in a middle class neighbourhood. The school’s parent community is very involved with the activities and programs we offer, and they generously support our programs financially.

**Participants**

All of my students participated in the action research component of this research study which was the implementation of Zones of Regulation lessons as part of their Health and Career Education curriculum; however, I did not receive informed consent from the parents of two of my students so none of their journal entries or work samples were utilized in my study, and I did not include them in the more specific descriptions of the study’s population below.

Of the 20 students whose parents consented to allowing their children’s opinions, comments, journal entries, and work samples to be included in my study, 9 students were in grade 3 and 11 students were in grade 4. All of the grade 3 students were either 8 or 9 years old.
by the end of the 2015/2016 school year, depending on what month their birthday occurred in. The grade 4 children were either 9 or 10 years old at the end of the school year, again depending on their birth month. Within the grade 3 population, 4 students were female, and 5 students were male. Of the 11 students in the grade 4 population, 5 students were female, and 6 students were male. In total, there were 9 female students and 11 male students whose parents consented to their participation in the study.

In terms of ethnicity, 12 of the participating 20 students were Caucasian. All 12 of these students were born in Canada, but had parents from a variety of cultural backgrounds that included many countries in Europe and South Africa. The remaining 8 students came from Asian or Middle Eastern, or mixed race backgrounds. Those few students who were English language learners had the directions re-explained individual to ensure that they understood the tasks. The students with learning disabilities were able to fully participate in the program.

Instrumentation

For this study, I utilized observation as the primary source of collecting data. I closely observed my students as they participated in each Zones of Regulation lesson and activity, but also observed their behaviours when lessons regarding self-regulation were not being directly taught in order to discern the impact of the program’s lessons. I recorded my observations in a reflective journal and made notes regarding additional observations that occurred after lessons were taught. It needs to be noted that, although observations are pertinent to this type of study, they are also highly subjective, and my recordings of my observations are undoubtedly influenced by my own biases and interpretations.

The Zones of Regulation
The Zones of Regulation curriculum is designed in a manner that is user friendly, and not onerous to implement. The program consists of 18 lessons, and each lesson includes a detailed plan for teaching, and provides the necessary blackline masters. Each lesson plan further offers adaptations to accommodate younger or older students, suggestions for additional activities, and ideas about how to assess student understanding of the particular concepts taught in each lesson.

The first two parts of the Zones of Regulation program resource, which is a soft covered book, provide structure for educators in delivering the program. These two sections provide background information about the program, as well as suggestions for educators about how to best prepare and organize prior to teaching the lessons. These first two sections also offer some general suggestions for assessment of student understanding.

The next 3 sections of the resource outline the lessons to be taught. The first group of lessons, lessons 1 – 9, introduce students to the different Zones, and is intended to help them to develop a deeper understanding of the different emotions they and others experience. These lessons are designed to be taught in sequential order as each builds on what was previously presented.

The next set of lessons, lessons 10-12, allow children to explore a variety of self-regulation tools and strategies. These lessons included exploration of both sensory and calming tools, as well as thinking strategies in order to foster self-regulation. These lessons offer educators some flexibility as they can be taught in any order that best suits the educators’ students and/or schedule.

The last 6 lessons, lessons 13 – 18, provide opportunities for students to reflect on the tools and strategies that work best for each particular zone, and encourages students to discover the tools and strategies that are most personally effective.
The program allows for flexibility regarding the duration of time used to teach the program. In my action research study, I implemented the program in weekly 40 minute to 60 minute lessons. The specific lesson titles are outlined in Appendix B.

**Data Analyses**

I collected observational data in a journal throughout the delivery of the program. Once the school year was over, I re-read my journal entries to uncover themes. These themes were noted in an ongoing paper trail. Additionally, I collected samples of students’ work from many of the lessons in order to illustrate the themes that emerged. Some quotes from these samples will be provided in order to support and corroborate my findings. Thematic analyses was utilized as it is an effective method to support the intent of the action research which is to gain deeper understandings within the research context about what is and what is not effective, and then to utilize the findings to facilitate change (McMillan & Wergin, 2010). The resulting themes are presented in Chapter 4, and will be used as a framework to discuss the efficacy of the Zones of Regulation program.

**Methodological Assumptions**

For this particular study, I had to make assumptions about both the study’s subjects and the data collection methods. In terms of the subjects, the students in my class, I needed to assume that the comments that they were making and the written responses that they were providing were truthful and authentic. Children at 8 and 9 years old often want to please their teacher, and it is possible that they provided comments and responses that they believed that I wanted. I also have to assume that some students may have received support from their peers in order to complete tasks, and therefore may not be completely representative of their own ideas, beliefs or opinions. In terms of the data collection methods, I had to assume that I was
interpreting student responses accurately. It further needs to be assumed that I, as the researcher and data analyst, am able to be objective with my findings. In addition, when utilizing an action research design, it is imperative that the researcher be “sensitive to the ways in which the data from the study will be used; information that is used to make value judgments – about what is and is not effective- has both political and ethical overtones” (McMillan & Wergin, 2010, p. 167). Therefore, it needs to be assumed that, through my action research, I strived to be sensitive to these considerations.

**Methodological Limitations**

With this type of study, there are important limitations to both the research design and the scope of the study that need to be considered. As mentioned previously, this type of study is limited to the researcher’s interpretations of what is being observed. It is also limited to what I actually observed. Because there are many students, I could not observe all of the conversations that they were engaged in regarding the activities that they are participating in. Moreover, many conversations occurred outside of the classroom that I may not have been made aware of, and those that were reported came from second hand sources (i.e. parents of the students in my class). This study was also limited to the students who were actually present for the lessons. Due to absences, some students did not participate in all of the Zones of Regulation lessons, and therefore, their ideas and opinions are based on only partial participation in the program. The scope of this study is also limited. This study was conducted in one classroom, in one school within a specific socio-economic and cultural setting. Also, the sample size was very small because of the nature of the study. However, the research design could be applied to other classrooms in different schools as well as different grade levels. The same study could also be conducted in a variety of socio-economic and cultural settings.
Legal and Ethical Considerations

For this particular study there were many legal and ethical considerations to be mindful of. First, because my action research involved human participants that were minors, consent from the parents of my students was required before I was able to begin my action research (see Appendix A for the letter of consent). Furthermore, although the parents of my students were not involved in my study directly, it was imperative that I provide my students’ parents with clear information about my study in order to make them feel comfortable about the activities that their children would be involved in. Providing information to the parents beforehand may increase the likelihood that they would give consent for me to utilize their children’s journal entries and work samples in my findings. Because I did not receive consent from 2 of my students’ parents, it was necessary for me to be cognizant that I never incorporated their comments in my own journal entries, or made copies of any of their journal entries and work samples. Due to the nature of the study, many parents were indirectly involved because their children brought home the Zones of Regulation activities that they completed, and my students were encouraged by me to discuss their learning about self-regulation from their participation in the Zones of Regulation program with their parents. However, because I did not receive consent to use parent comments about the program, I needed to be aware that any comments that were provided to me had to be utilized in my findings cautiously so that anonymity was adhered to.

Summary

In conclusion, this chapter had provided a detailed description of the methodological components of my qualitative, ethnographically designed action research. Although only my own class of students participated in the study, there was still a fairly diverse population. This population would likely be a fairly typical representation of other grade 3 and grade 4 classrooms.
within my district. Therefore, my findings, as described in the next chapter, could definitely be considered useful for other teachers of similar grades in similar environments.
Chapter 4

Presentation of Results and Discussion of Findings

This chapter will describe my findings regarding the efficacy of the Zones of Regulation program to teach grade 3 and 4 students’ self-regulation skills and strategies. In this chapter, I will provide a generalized overview of my results pertaining to the efficacy of the program as it relates to the literature. However, the majority of this chapter will focus on describing the themes that emerged from conducting this research study. I will present a thematic analysis, and utilize quotes from the reflection journal that was kept throughout my research study. Additionally, I will include quotes from student journal entries and work samples in order to strengthen the arguments presented.

Thematic Analyses

After reviewing the journal entries that I recorded after each Zones of Regulation lesson, it was apparent that common themes emerged as a result of the students’ participation in the Zones of Regulation program. The themes of self-awareness, focus, empathy, acceptance, influence and empowerment, as well as student activity were the most prevalent and consistent themes that emerged throughout my action research study. A discussion of each of these themes will be presented in the following sections of this chapter. For each theme this discussion will include what was observed, and how these themes relate to self-regulation. Quotes from student work samples will also be included in order to illustrate and support the themes.

Self-Awareness

As my students participated in Zones of Regulation, my journal entries contained more and more about my observations of students being more self-aware of their emotions and behaviours. Firstly, students became more aware of the different feelings that they have
experienced, and how having certain feelings can affect behaviour. For example, a student who had recently lost a pet, was understandably in the Blue Zone (feeling sad, acting withdrawn). She was able to articulate that her reason for not being engaged in her school work was directly related to her sadness. She was aware, that for her, it would be very near impossible to get into the Green Zone (focused and engaged in class activities) that day. Another student who was excited about an upcoming vacation was aware that his excitement was causing him to be in the Yellow Zone (distracted and silly); however, he was self-aware enough to realize that the excited behaviours would not be conducive to have a productive day in the classroom so he was able to employ self-regulation strategies (deep-breathing, squeezing a fidget ball) to help him regain his ability to focus and contribute positively to the classroom environment.

Additionally, participation in the Zones of Regulation program allowed my students to gain greater self-awareness of situations that caused them to be in particular Zones. Specifically, in Lesson 4 of the program the students completed an activity that asked them to demonstrate their understanding of what types of situations would be deemed appropriate for causing them to be in a particular Zone. For example, one student reported that it would be appropriate for her to be in the Blue Zone when “my skating class was cancelled” (student work sample, Lesson 4). Another student showed self-awareness by stating that she would be in the Blue Zone “when we got a call that my cat was hit by a car” (student work sample, Lesson 4). A student recognized that the excitement of “going to Great Wolf Lodge” resulted in her being in the Yellow Zone.

In my class, there were a few students who legitimately seemed unaware of their unfocused and disruptive behaviours. Prior to implementing the Zones of Regulation, they would routinely need teacher intervention and redirection in order to stop these behaviours. Through participation in Zones of Regulation, these students gradually became more aware of
the behaviours they were exhibiting, and how these behaviours negatively impacted the group. Gaining this self-awareness allowed these students to better choose a self-regulation strategy that would best allow them to change their disruptive behaviours into ones that allowed them to be more positive members of the class.

Gaining self-awareness through the Zones of Regulation program was also beneficial for the students who rarely struggled with self-regulation prior to beginning Zones of Regulation. Their self-awareness was more about how they reacted to a student’s disruptive behaviour. They began to assess whether their reactions were helpful or unhelpful in getting that student to stop unwanted behaviours. For example, if a student was constantly making noise, a common reaction may be to get mad at the student or report it to the teacher. However, as this group of students participated in Zones of Regulation, they recognized that they contributed in some way to the disruptive behaviours, so rather than getting angry or telling the teacher, these students could choose an alternate work space and utilize a deep breathing technique to ensure that they could remain focused on their own work and not get distracted by others. In many ways, I think it was this group of students who gained the most self-awareness.

**Focus**

As a result of participating in Zones of Regulation, I would not report that my students necessarily became more consistently focused learners in the classroom. However, because of the skills and strategies that my students learned through Zones of Regulation, they were able to more effectively regain focus when focus had waned. Many students were still struggling with focus, but they gained the strategies and skills to ensure that the moments where they were unfocused were significantly shorter, and therefore allowed them to better participate in class discussions, and complete their assigned tasks. Directly after the students completed Lesson 10,
the lesson where they had opportunities to experiment with a variety of sensory tools, my reflections questioned whether students could effectively choose the right sensory tool. I wrote, “I am not convinced that students could accurately identify the Zone that a particular tool would be best for” (researcher reflection journal, Lesson 10). However, in terms of regaining focus, I observed that indeed they were able to choose a strategy to help re-gain or maintain focus. For example, in my reflection journal I retrospectively recorded observations that indicated students were better able to efficiently re-focus. In the days after students had completed lesson 10, I recorded that “many students asked to use the wiggle and wedge cushion, and many more than typical used the headphones, and when I asked them about it they commented that it helps them to get into the Green Zone” (researcher reflection journal, post Lesson 10). I discovered that having better self-regulation, and appropriate sensory tools available, supports students with better managing times where focus was lacking, rather than eliminating times of when they are unfocused altogether.

**Empathy**

While perusing my journal entries, it was evident that as a result of participating in Zones of Regulation, my students had gained greater empathy. This was a relatively unexpected, but very welcomed discovery. As they participated in Zones of Regulation, students began to have greater understanding of their classmates’ feelings, and they understood that the way a classmate is feeling directly affects the way that they act in the classroom. Gaining this understanding allowed my students to respond to their classmates in a more empathic manner. For example, when students realized that one of their classmates was upset because she had lost her dog, they were able to give her the space that she wanted, and also be considerate of her inability to participate fully in classroom activities. They were also eager to offer comforting words and
help in any way that they could. During Lesson 2 students demonstrated that they understood that gaining insight into how a classmate was feeling would allow them to react more empathically. At the end of this lesson students were asked to write about how accurately “reading” someone’s facial expression could change how they interact with that person. Many thoughtful responses were offered by my students, and exemplified their empathy. For example, one student wrote that knowing what someone’s facial expression means “is important because if the person is mad (red) it’s good to give the some space, or if there (sic) happy (green) you can come over to them without them not liking it” (student journal response, Lesson 2). Another student responded that it was important to know what someone’s facial expression means because “if there (sic) in the blue zone you could cheer them up, or if someone’s in the red zone you could leave them alone” (student journal response, Lesson 2).

Prior to implementing Zones of Regulation, there certainly were students in my class that regularly exhibited empathy towards others; however, I noticed increased empathy among the group as a whole as they participated in Zones of Regulation. Having empathy can be seen as complementary to having self-regulation as it will allow students to better regulate their reactions and responses to their peers in order to support them.

They also gained empathy through the Zones of Regulation program in terms of developing a greater understanding that when they are in a Zone that is not expected, it directly impacts the other members of the class. In Lesson 5, the students had the opportunity to demonstrate this new understanding. For example, on the worksheet, one student recorded that, “When I am in the Red Zone and it is unexpected other kids might feel worried or scared around me. Other kids might be thinking “Aahh!!” or “What’s going on!” Other kids might say “Stop!” or “Grrr” (student worksheet sample, Lesson 5).
Although this learning occurred early in the implementation program, the empathy that was gained continued to be demonstrated throughout the program, and was observed during other times of the day, and not just during Zones of Regulation lessons.

**Acceptance**

Throughout the research study, I began to notice the theme of acceptance emerging. This theme was two-fold. I noticed that my students began having greater acceptance of their classmates’ needs to utilize self-regulation strategies in order to be more engaged in what was occurring in the classroom at any given time. They came to accept that not every student will be experiencing the same level of engagement at the same time, and this was both normal and expected. I observed that students were no longer easily distracted by their peers getting up to get a sensory tool to support their self-regulation, and I believe this is because they had increased acceptance regarding why their classmates may need to utilize self-regulation skills and strategies.

More importantly, as they participated in Zones of Regulation, my students’ gained greater acceptance of their own changing emotions and behaviours. They began to accept that it was okay for them to, at times, not be focused and engaged, and gaining this acceptance then allowed them to use self-regulation skills and strategies more often and more willingly. It became acceptable for them to be unregulated, since they now had the strategies to independently re-gain focus and engagement.

Many of my students also gained greater acceptance of their changing emotions, and they were able to utilize self-regulation skills and strategies to manage emotions. For example, during a class discussion, I recorded in my reflection journal that a student who had experienced fear and nervousness when starting at a new after school care facility was able to “use her inner coach
(as strategy taught in Lesson 12” to tell herself that it will be okay” (researcher reflection journal, Lesson 12). Therefore, as a result of participating in Zones of Regulation, students were better able to accept that all their emotions were okay, and that they could utilize strategies that they had learned in order to help them manage difficult emotions.

**Influence and Empowerment**

As my students participated in the Zones of Regulation program, the theme of influence and empowerment began to emerge as soon as the students began experimenting with the various tools and strategies that they had been exposed to during the lessons when these tools and strategies were demonstrated to the students. To clarify, the students began to realize that they were gaining influence over their behaviour and they were being empowered to use this influence in order to choose tools and strategies that would allow them to change their behaviour when their behaviour began to impede their learning. The self-regulation skills and strategies they were learning began to empower them to take charge of their own behaviours rather than relying on peers to complain about their behaviour and then require a teacher to intervene to suggest alternate behaviours or provide consequences for the unwanted behaviours. For example, as they participated in Zones of Regulation, if a student was finding it difficult to stay on task, and noticed that the off-task behaviour was that they were beginning to look around the room or chat with their classmates they could take charge of their own behaviour by choosing a self-regulation tool that would support them with regaining focused, on-task behaviour. One particular student who experienced off-task behaviour with regularity, would quietly leave them room (he would ask me or give the hand signal we had agreed upon) and walk to the other end of the hall, get a drink of water and then return ready to complete his task. This student began to recognize that he was triggered by “not understanding instructions” and that being empowered to
utilize the self-regulation strategy of taking a break would help him be better equipped to try to grasp the instructions given on particular tasks (student work sample, Lesson 9).

**Student Activity**

The theme of student activity was one that was not expected, and one that may not be initially viewed as a positive by classroom teachers. As my students acquired the skills and strategies from the Zones of Regulation program that they needed in order to become self-regulated learners within the classroom, I began to notice that more students were more often out of their desks. However, I observed that this was not disruptive or unfocused behaviour, but rather a response to their need to self-regulate. Prior to teaching the Zones of Regulation program, students who were out of their desk were often off-task and distracting their classmates; however, once the students began practicing the skills and strategies they had learned, there were more students out of their desks more often throughout the day, but the reason was purposeful and integral to their self-regulation. For example, as a student who found himself in the Blue Zone (e.g. lethargic or sleepy) would, upon assessing their Zone, get out of their desk to utilize a tool to help him get back into the Green Zone (e.g. focused and able to complete assignment). For example, such a student may choose to get a wiggle cushion, or go to the wall and complete 10 wall push-ups.

**General Results**

As evidenced by the resulting themes described above, the Zones of Regulation appeared to teach grade 3 and 4 students practical skills and strategies to increase their ability to self-regulate. Throughout the duration of the program my students learned many new skills and strategies to assist them in becoming more self-regulated learners. They were able to effectively use these skills and strategies throughout the program’s lessons, but more importantly were often
able to utilize the skills and strategies during other times of the day to increase their focus on the tasks they were participating in. As with many new skills and strategies that were taught to this group of grade 3 and 4 students, some students were more able to seamlessly and effectively transfer their newly acquired skills and strategies into other times of the day, and not just during the Zones of Regulation lesson times.

**Summary**

In summary, the Zones of Regulation resulted in many positive changes to my classroom environment as it related to having a greater population of students who are able to self-regulate in order to optimize classroom learning opportunities.

Through the Zones of Regulation program students gained valuable self-regulation skills and strategies that can be utilized throughout the rest of their educational journey. As a result of participating in this research study, I observed that my students gained self-awareness regarding their emotions and behaviours, were able to recognize when focus was lacking and then re-gain or increase their focus through self-regulation techniques, increased their empathy towards the feelings and behaviours of their peers, increased their acceptance of different learning styles and behaviours, and they learned to recognize the influence they had over their own behaviours, which empowered them to utilize self-regulation strategies and skills to ensure their behaviours were conducive to their learning.

The next chapter discusses these results with respect to how they may impact future teaching practices and future curriculums. Additionally, the next chapter will offer recommendations regarding areas of possible future research that could provide even greater insight into self-regulation and its relationship with learning success.
Chapter 5

Summary, Implications, Recommendations, and Conclusion

This chapter will offer a brief summary of the themes found in Chapter 4 from the implementation of the Zones of Regulation program in grade 3 and grade 4 classrooms. In addition, this chapter will discuss the implications that my study has for the students who participated and how their participation impacts their families. In this chapter, I will also address the more general implications this study has for my school community, and for other schools. I will further discuss the implications pertaining to future curriculum development and pedagogical practice in the area of self-regulation. Lastly, I will offer recommendations for the future and regarding areas requiring further research.

Summary of Themes Found

Throughout this research study, I found that certain themes emerged from the implementation of the Zones of Regulation program. These themes were indicative that important self-regulation skills and strategies were being imparted which suggests that the implementation of this program was effective. This program provides students with valuable opportunities to learn and practice many of the skills and strategies that are important to fostering their abilities to be self-regulated learners in today’s diverse, and busy classrooms.

Summary of Predictions

Prior to conducting my action research, I made four predictions about what I believed I would discover throughout the course of my research study. The accuracy of each will be discussed in this section.

First, I predicted that the Zones of Regulation program would be an effective program to both teach my students how to recognize when they have lost focus, and provide effective tools
and strategies to support them to regain focus. I found that the Zones of Regulation program does provide students with a variety of effective tools and strategies that, when utilized, will support them in regaining focus on the task that is required of them. This aspect of the prediction was in fact accurate; however, it is more difficult to evaluate whether or not the program effectively taught my students to recognize when they had lost focus.

My students’ abilities to recognize when they had lost focus was very individualistic, and dependent on the tasks that they were supposed to be focused on. Some students were better at recognizing a need to regain focus than others, and it was observed to be more difficult to recognize a loss of focus the more active a task was. For example most students were better at recognizing that they had lost focus during tasks that were quiet and independent like journal writing or completing math work, but were less able to recognize that they had lost focus when they were involved in small group activities like brainstorming ideas about a content related topic. In general, through their participation in the Zones of Regulation program, I think many of my students did increase their ability to recognize when they had lost focus, but this recognition was not always consistent in all classroom situations, and many students still required that I draw their attention to their need to regain focus, rather than them noticing themselves. Therefore, I do not think that this part of the prediction can be considered completely accurate.

Another prediction I had was that upon completing the lessons of the Zones of Regulation program, my students would be able to articulate when they were not focused and engaged, and that they would be able to select a particular strategy that would assist them to regain focus and engagement. After completing the program, my students were better at communicating that they were not as focused or engaged as they should be in order to complete the assigned task, but, as
mentioned above, they still often required teacher intervention. However, once they recognized the need to re-focus and re-engage, most students were able to select an appropriate strategy to support their focus and engagement. For example, if a student’s off-task behaviour was being silly and loud, they could usually recognize that one of the breathing techniques taught would be an effective strategy to employ. Conversely, if a student’s unfocussed behaviour was that they were demonstrating lethargy, and yawning, they could usually recognize that a more active strategy such as wall push-ups would be appropriate. Therefore, this prediction was mostly accurate in that most students became better at articulating their need to re-focus and re-engage, and once the need was expressed, they were able to choose an effective Zones of Regulation strategy to support them to regain their focus and engagement.

I also predicted that my students would be able to transfer the knowledge and skills that they acquired through the Zones of Regulation lessons into other aspects of their lives. This prediction is not easily evaluated since I am with my students only during their time at school. However, throughout the duration of my study, many parents expressed that their children were utilizing the Zones of Regulation strategies that they had learned in their family life at home. Moreover, many families articulated that their children taught other family members some of the strategies that they found to be most effective in fostering self-regulation. Specifically, some students mentioned that the breathing techniques were used in the classroom were also adopted at home by family members. It is not possible to surmise that all my students were able to transfer the knowledge they gained into other aspects of their life.

Lastly, I predicted that my students would be able to utilize the skills, tools and strategies they gained throughout their participation in the Zones of Regulation program in a variety of school situations, but also be able to use these skills, tools and strategies at home and during
extracurricular activities. Again, this prediction is difficult to evaluate, but as mentioned earlier many families did report that their children were utilizing the skills, tools and strategies that they learned through the Zones of Regulation program at home. Also, other teachers who were directly involved with my students noticed some of the Zones of Regulation strategies being utilized by my students. For example, the performing arts teacher reported hearing one student express that too many students were not in the Green Zone, making it difficult for her to effectively participate in the required task of rehearsing small group skits. Since I do not have contact with the adults involved in my students’ extracurricular activities, it is not possible to make a judgment about whether or not any of the Zones of Regulation skills, tools, and strategies were being utilized by my students in these settings.

Lastly, it is important to note that this thesis and the predictions described above were presented to provide a framework for this phenomenological research. As this was not an experimental thesis, the results are not evidence of a significant statistical effect. Rather, the results provide the rich qualitative subjective view of the researcher and the individual participants. Therefore I cannot say that the Zones of Regulations is effective in increasing self-regulation skills as cause and effect cannot be determined. However this research study presents subjective benefits of the program as witnessed by the researcher and experienced by the students.

**Implications**

As a result of participating in this action research project, my students gained valuable and practical skills and strategies to support them in becoming more self-regulated learners in their classroom settings. I believe that the strategies were practiced with enough regularity that many students will continue to utilize the skills and strategies they gained through participation
in Zones of Regulation as they progress through the intermediate grades. For the families of my students who participated in the study, I believe many have also gained strategies to nurture greater self-regulation.

Conducting this research study, allowed me to observe the benefits of the Zones of Regulation program, and the positive impact it can have on the classroom environment. I do not believe that I worked with a unique group of students, and therefore feel that the skills and strategies taught through Zones of Regulation might benefit other students.

Consequently, directly teaching all students self-regulation skills and strategies, can have tremendous positive effects on classroom environments. Classrooms that are comprised of students who are more self-regulated will in turn allow more learning to occur. Therefore, teaching self-regulation skills and strategies should be a main priority for teachers, and should be a vital part of future curriculums. For this to occur, I suggest that further studies employing experimental research be undertaken to investigate the longer-term effects of the Zones of Regulation program.

**Recommendations**

Curriculum to teach children self-regulation skills and strategies is needed in order to increase student success at school, but also to increase future success in adulthood in students’ chosen careers and relationships (Bodrova & Leong, 2005; Boekaerts & Corno, 2005; Shanker, 2013, 2016). Implementing the Zones of Regulation program might be one way to accomplish that. Fostering and nurturing students’ abilities to self-regulate will create classrooms full of students who are more ready to learn which will allow teachers to more effectively teach and reach their students. However, in order to be truly effective, and have a lasting impact, I believe it is necessary to teach and revisit the skills and strategies every year. Consistency and regularity
are vital, and thus the skills and strategies need to be practiced routinely and not in isolation. This would assist to create a culture in the school that promotes and nurtures self-regulation. Therefore, although it was discovered through this study that the Zones of Regulation could be an efficacious program to teach self-regulation skills and strategies, it cannot be utilized in only one classroom by one teacher if long term results are to be achieved. As with any new skill, regular practice is necessary in order to master the skill. Skills pertaining to self-regulation are no different.

After conducting this research, and observing the benefits of teaching self-regulation skills and strategies, it is recommended that teachers be provided with professional development opportunities that highlight the importance of self-regulation. It is crucial that teachers believe in the value of taking time out of teaching academics to teach self-regulation skills. It is also necessary that teachers themselves consistently model self-regulation so that students “buy-in” to its importance. Additionally, teachers need to allow ample opportunities for students to practice self-regulation strategies and hone their self-regulation skills. Practice in authentic situations is vital since “the interaction that students have with their teachers and peers plays a crucial role in the development of their self-regulatory skills” (Boekaerts & Cascallar, 2006, p. 205).

Therefore, it is important that teachers teach self-regulation skills and strategies to their students, but then embed authentic opportunities to practice them throughout the school day. In order to encourage this, I plan to share my learning with my colleagues, and support them to implement Zones of Regulation in their own classrooms. In order to have teachers fully invested in valuing teaching self-regulation skills and strategies through a program such as Zones of Regulation, there needs to be further research evaluating the impact that a school wide culture that promotes self-regulation through consistent school wide curriculum programming has on the
learners that are immersed in such an environment. I believe that there could be a relationship between a school wide commitment to fostering self-regulation and the number of students who are effectively able to self-regulate. However, it will take many years before a true culture of self-regulation is visible within schools.

In addition, with respect to further research, it is also necessary to evaluate the impact that the physical set-up of the classroom has on children’s abilities to be more self-regulated in the classroom. Many teachers in my district are beginning to look at aspects of their classroom environment such as lighting, reducing the amount of clutter and the use of more monochromatic, and nature inspired colours as a way to support self-regulation. It would be interesting to discover if the physical classroom environment created by the teacher alone has a positive impact on students’ abilities to self-regulate. In further research, it would be even more interesting to discover if combining a program such as Zones of Regulation with a classroom environment that is set up to promote self-regulation, would have an even greater positive impact on the number of students who are consistently able to self-regulate, and if, in turn, this would result in greater student success.

Lastly, because self-regulation seems to be receiving greater attention and value among educators as a key to student success, I am hopeful that many more educators will choose to conduct research to make discoveries about how best to create classrooms that are comprised of students who are able to self-regulate in order to ensure that they are engaged and focused on their learning.

**Final Conclusion**

Through a phenomenological lens, this study looked at self-regulation and specifically the Zones of Regulation program. The aim of this study was to determine if Zones of Regulation
would be an efficacious program to teach grade 3 and 4 students self-regulation skills and strategies. Through thematic analyses, I discovered that the Zones of Regulation was successful in supporting my students to develop valuable skills and strategies to support them with self-regulation.

However, whether or not the students who participated in my research study will continue to practice the skills and strategies they acquired is uncertain. If their future classroom educators do not reinforce and encourage the skills and strategies, and allow them to be practiced regularly, consistently, and authentically, then it is likely that many of these students will cease to use many of the skills and strategies in the future. However, if even a handful of these students experience greater learning success in the future in part because of the skills and strategies that they gained through participation in the Zones of Regulation program, then I consider both the program and my action research successful.
References


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Appendix A

Dear Parents:

This year while I am teaching, I am also pursuing my Masters Degree in School Counselling at City University of Seattle (Vancouver Campus).

I will be completing a study that is connected to what I am passionate about in the classroom, which is supporting students to become the most successful and productive learners they can be. In order for students to be fully engaged in their learning, I believe that they need to be prepared emotionally, mentally, and physically. For my study, I will be implementing the Zones of Regulation program in the classroom to teach students self-regulation skills. The program consists of 18 lessons that help children to recognize behaviours and/or feelings that may be impeding their learning, and then provides students with strategies to effectively manage these behaviours and/or feelings so they can experience greater success in the classroom. I will be reflecting, in a journal, on the effectiveness, practicality, and effects of each lesson of the program. These reflections may include some anecdotal responses given by the students and/or student work samples from the Zones of Regulation activities that accompany some of the lessons. These reflections will form part of my study. Confidentiality is of the highest importance, and any references to your child and/or his/her responses and/or work samples in my reflections will be anonymous and kept completely confidential. Students will not be referred to by name or any other identifying characteristics.

All students in the class will participate in the Zones of Regulation lessons and activities; however, if you agree to have your child participate in my study by allowing me to include his/her comments and/or work samples in my reflective journal, please sign and return the attached letter of consent by December 15, 2015.

If you choose not to allow me to use your child’s comments in my study, your child will not be treated any differently, and there will be no negative consequences.

If you have any questions or concerns now, or during the study, please do not hesitate to contact me, or my thesis supervisor, Dr. Jill Taggart, at the university by phone at 778-588-5015, or email at jtaggart@cityu.edu.

Sincerely,

Kelly Munro
Appendix B

Zones of Regulation Lesson Titles:

Lesson 1  Creating Wall Posters of the Zones
Lesson 2  Zones Bingo
Lesson 3  The Zones in Video
Lesson 4  The Zones in Me
Lesson 5  Understanding Different Perspectives
Lesson 6  Me in My Zones
Lesson 7  How Do I Feel?
Lesson 8  My Zones Across the Day
Lesson 9  Caution! Triggers Ahead
Lesson 10  Exploring Sensory Support Tools
Lesson 11  Exploring Tools for Calming
Lesson 12  Exploring Tools – Thinking Strategies
Lesson 13  The Toolbox
Lesson 14  When to Use Yellow Zone Tools
Lesson 15  Stop and Use a Tool
Lesson 16  Tracking My Tools
Lesson 17  STOP, OPT, and GO
Lesson 18  Celebrating My Use of Tools