Fostering Intrinsic Motivation in Elementary Students

By

Natalie Yurkewich

A research paper submitted in conformity with the requirements

For the degree of Master of Teaching

Department of Curriculum, Teaching and Learning

Ontario Institute for Studies in Education of the University of Toronto

Copyright by Natalie Yurkewich, April 2016
Abstract

A qualitative study was conducted on how elementary teachers foster intrinsic motivation in the early years as proactive pedagogy to aid prevention of drop-out in the later years. Semi-structured interviews were used with 3 elementary school teachers. The interviews were transcribed and coded using thematic data analysis. The teachers’ perceptions of at-risk students and intrinsic motivation were described through indicators and influential factors. Strategies and resources for teachers on supporting at-risk students and fostering intrinsic motivation were also discussed. The challenges of supporting at-risk students and the development of intrinsic motivation were reviewed. Next, teachers identified how they maintained their own intrinsic motivation to teach. Lastly, implications and recommendations for the education community were made, as well as suggestions for future areas of research.

Key Words: intrinsic motivation, at-risk students, drop-out prevention, elementary teachers
Acknowledgements

I wish to acknowledge and thank the many people who supported me throughout the research process. I would first like to thank my research supervisor, Dr. Angela MacDonald, and her teaching assistant, Jason Brennan, who provided endless feedback and helped keep me motivated. They provided me with new understandings and insights while helping me develop as a researcher. I would also like to thank my research participants for taking the time to contribute to my research. Their dedication to and inquiries about fostering intrinsic motivation strengthened my commitment to complete and share this research. Lastly, I would like to thank my peers in cohort 0251 for encouraging me and supporting me. The peer feedback I received provided me with new perspectives on my research while our ongoing discussions constantly reminded me that we were all in this together.
# TABLE OF CONTENTS

Abstract ........................................................................................................................................... i
Acknowledgements ................................................................................................................... ii

Chapter 1: Introduction

1.0 Research Context and Problem .......................................................... 1
1.1 Purpose of the Study ............................................................................. 3
1.2 Research Questions .............................................................................. 4
1.3 Background of the Researcher ............................................................. 5
1.4 Overview .............................................................................................. 5

Chapter 2: Literature Review

2.0 Introduction ......................................................................................... 7
2.1 Student Drop-Out ................................................................................. 7
   2.1.1 Factors that Impact Student Drop-Out ........................................ 8
   2.1.2 Students At-Risk of Dropping Out .............................................. 11
   2.1.3 Preventative and Reactive Programs .......................................... 13
2.2 Intrinsic Motivation ............................................................................ 21
   2.2.1 Indicators and Measurements ................................................... 23
   2.2.2 Factors that Impact Intrinsic Motivation ..................................... 24
   2.2.3 Methods of Fostering Intrinsic Motivation in Youth .................. 26
4.1.3 Lack of social development and poor decision-making .......... 46
4.2 Teachers’ perceptions of main factors contributing to being at-risk ........ 47
4.3 Teachers supporting at-risk students ................................. 49
4.4 Teachers identify intrinsic motivation to learn in students ............... 51
4.5 Teacher’s perceptions of factors affecting student motivation ............. 52
  4.5.1 Student work and academic success ................................ 53
  4.5.2 Student needs .......................................................... 54
  4.5.3 Classroom environment .............................................. 55
  4.5.4 Home environment ................................................... 56
  4.5.5 Interactions between students, teachers, and parents ................. 56
4.6 Teachers intrinsically motivate students ................................. 57
4.7 Teachers’ resources for fostering intrinsic motivation ..................... 59
  4.7.1 Parental involvement .................................................. 59
  4.7.2 Staff and administration .............................................. 60
  4.7.3 Professional development ........................................... 61
4.8 Students motivate teachers to overcome challenges ....................... 62
4.9 Conclusion .................................................................. 64

Chapter 5: Implications

5.0 Introduction .................................................................. 66
5.1 Overview of Key Findings and Significance ............................. 66
5.2 Implications .................................................................. 67
  5.2.1 Broad: The Educational Research Community ..................... 67
5.2.2 Narrow: Your Professional Identity and Practice 69

5.3 Recommendations 70

5.4 Areas for Further Research 72

5.5 Concluding Comments 72

References 74

Appendix A: Letter of Consent 84

Appendix B: Interview Protocol/Questions 86
Chapter 1: Introduction

1.0 Research Context and Problem

While the average high school graduation rate of students in Ontario has increased over time, approximately 16% of students are still not graduating from high school (Ontario Ministry of Education, 2015; Office of the Premier, 2015). The Canadian Council on Learning commissioned a report in 2009 on the economic costs of dropping out of high school in Canada. This report showed that Canadians who drop out of high school earn at least $3,000 a year less than those who graduate from high school without going on to post-secondary education (Canadian Council on Learning, 2009; Hankivsky, 2008). The report also highlighted how dropping out not only has financial costs to the individual that dropped out, but also to the public. The public cost of social assistance for each person that drops out of high school is on average $4,000 a year (Canadian Council on Learning, 2009; Hankivsky, 2008). In addition to financial costs, students who drop out often have continuous poor health and are at greater risk of various health issues such as cardiovascular disease, diabetes, cancers, and some mental illnesses (Dryfoos, 1990; Freudenberg & Ruglis, 2007; Nilsson, Johansson, & Sundquist, 1998; Schnittker, 2004). Lastly, people who have dropped out of high school are over represented in the prison population in Canada and the United States (Lochner & Moretti, 2004; Ungerleider & Burns, 2002). It is evident that dropping out of high school is a serious problem because of the several negative consequences for the individual and the public.

There are several different factors that relate to why students drop-out of school. The factors can be arranged into three categories: personal/individual, family, and school/institutional. Significant personal/individual factors include gender, ethnicity, motivation, behavioural problems, self-esteem, and self-efficacy (Darney, Reinke, Herman, Stormont, &
FOSTERING INTRINSIC MOTIVATION

Ialongo, 2013; Gray & Hackling, 2009; Hankivsky, 2008; Hazel, Vazirabadi, & Gallagher, 2013). Significant family factors include socio-economic status, family structure, severe home and welfare problems, and parental involvement (Fan & Wolters, 2014; Gray & Hackling, 2009; Hankivsky, 2008). Significant school/institutional factors include geographic location, school type, prior academic performance/problems, attendance, school culture/environment, teacher-student relationships, student support resource availability, and student and school engagement (Darney et al., 2013; Gray & Hackling, 2009; Hankivsky, 2008; Hazel et al., 2013; Kim & Streeter, 2008; Rumberger, 1995). All of these factors not only relate to drop-out, but they are all interconnected to each other through a complex series of relationships. It is important for educators to understand these significant factors and how they can affect one another in order to create prevention strategies and programs that effectively decrease the probability of student drop-out.

There have been several programs implemented in schools to decrease the rate of student drop-out. The Ontario government implemented the Student Success Strategy in 2003. This province-wide strategy included expanded programs, new courses, transition support, student engagement programs, and the creation of student success teams that offer extra attention and support for students (Canadian Council on Learning, 2009; Ontario Ministry of Education, 2015). The Student Success Strategy has been successful in increasing Ontario’s graduation rate, thereby decreasing the drop-out rate (Ontario Ministry of Education, 2013). British Columbia, Alberta, Saskatchewan, Manitoba, Nova Scotia, Yukon, and Quebec also offer similar programs aimed to increase the graduation rate and decrease the drop-out rate in high schools (Canadian Council on Learning, 2009). The focus of these programs is to motivate students to want to learn through the use of student interest (providing more choices for what students can learn in high
FOSTERING INTRINSIC MOTIVATION

school) and through increasing students’ value of education (applying what they learn through internships and cooperative education placements). The programs help students develop intrinsic motivation, one of the significant personal factors related to drop-out, by creating a desire to learn in the students (Gray & Hackling, 2009; Vallerand, Fortier, & Guay, 1997). The programs also change the curriculum and school structure which are important school/institutional factors related to drop-out. In addition, the extra support and funding offered through the programs help alleviate negative effects of family factors associated with drop-out.

Although there is a lot of research on drop-out and drop-out prevention programs, there are still a few issues not yet addressed. Much of the research focuses on whole school prevention programs and there are few studies on what teachers can specifically do in their classrooms to prevent drop-out. There is also a large focus on prevention programs in high school, but there is little literature on prevention programs for elementary schools. Studies have shown that the significant factors associated with drop-out can be accurately detected in elementary students so it is important to develop drop-out prevention strategies for elementary schools and teachers (Darney et al., 2013).

1.1 Purpose of the Study

The purpose of this study was to examine what proactive strategies elementary teachers are enacting to increase intrinsic motivation in their students in the early years to contribute to preventing drop-out in the later years. Intrinsic motivation is a desire and willingness to participate in an activity, such as learning, solely for the pleasure and satisfaction inherent in the activity (Carbonneau, Vallerand, & Lafrenière, 2012; Carlton & Winsler, 1998; Deci, 1975; Deci & Ryan, 1985). This study looks specifically at prevention strategies related to fostering intrinsic motivation in students since research on prevention programs has shown that developing intrinsic
motivation is an effective way to decrease drop-out rates (Gray & Hackling, 2009; Vallerand et al., 1997). The study explores various ways teachers can help support the development of intrinsic motivation in their students. The study reports teacher perspectives concerning factors that make a student at-risk of dropping out and will report how participating teachers identify at-risk students. The study more broadly investigates how educators and researchers observe, identify, and measure intrinsic motivation. Lastly, the study examines the literature on various prevention programs and teacher practices that are known to foster intrinsic motivation and decrease the probability of drop-out. These researched programs and practices are compared with what has been implemented in classrooms by the participating teachers.

1.2 Research Questions

The goal of this research was to determine how a sample of teachers are enacting preventative pedagogy for combatting drop-out by fostering intrinsic motivation in students at the elementary level. The main research question was:

How is a sample of elementary teachers fostering intrinsic motivation as proactive pedagogy for preventing students from dropping out of school in later years?

The sub-questions include:

- How do these teachers foster intrinsic motivation for at-risk students? What instructional strategies, resources, and/or pedagogical approaches do they enact and why?
- What are these teachers’ perspectives on factors contributing to students being at-risk of drop-out, and what indicators of this do these teachers look for in students?
- What outcomes do these teachers observe from students? What indicators of intrinsic motivation do these teachers observe?
1.3 Background of the Researcher

I completed an Honours Bachelor of Science in Forensic Psychology. I focused on juvenile delinquency, aggression, callous-unemotional traits, and parenting practices. A lot of research I was involved with showed how important education and having a supportive school community is in order to prevent juvenile delinquency. I am passionate about learning what the major factors are that determine a child’s academic success and motivation to further their own education.

I have a lot of personal experience with the struggle to develop intrinsic motivation to learn, as well as with the choice to drop-out. I did not connect with a lot of my high school education which inhibited me from wanting to learn in my classes. I had to take the initiative to find ways to apply what I learned in class which helped me develop an intrinsic motivation to learn. I also debated whether or not to drop-out of high school because of personal issues occurring at home and with my health. In addition, I have close friends that dropped out of high school for various reasons. I have personally seen some of the consequences of dropping out of high school.

1.4 Overview

This study was conducted through a qualitative research approach that used semi-structured interviews. Chapter 2 contains a review of the literature related to various topics pertinent to the research problem and questions. Chapter 3 explains the research methodology. It elaborates on the procedure, the data collection instruments, the participants, and the limitations and strengths of the study. Chapter 4 describes the data as it addresses the research questions and explains the significance of the research findings. Chapter 5 includes the key findings, implications of the study,
and recommendations for practice and future research. References and a list of appendixes follow at the end.
Chapter 2: Literature Review

2.0 Introduction

My research aims to explore how elementary teachers can help prevent high school drop-out through instructional strategies, resources, and/or pedagogical approaches that foster intrinsic motivation in students. In this chapter I review the literature in the areas of student drop-out and intrinsic motivation. More specifically I review themes related to the prevention of student drop-out through specific strategies and programs that develop intrinsic motivation in students. I start by reviewing the literature in the area of student drop-out and I consider the factors that impact drop-out, how students at risk of dropping out are defined and can be identified, and what actions are being taken to combat drop-out. Next, I review research in the area of intrinsic motivation and I consider how intrinsic motivation is defined and measured, the factors that impact the development of intrinsic motivation, and what methods have been used to foster intrinsic motivation in students at school and at home. Finally, I review research on how the development of intrinsic motivation can prevent and respond to drop-out. I explore the relationship between intrinsic motivation and drop-out and I review existing drop-out prevention strategies that foster intrinsic motivation.

2.1 Student Drop-Out

Students dropping out of high school has been a prominent concern in Ontario since 2003 (Ontario Ministry of Education, 2013). Approximately 16% of students are currently not graduating from high school in Ontario (Ministry of Education, 2015; Office of the Premier, 2015). Students choosing to leave high school before they graduate often encounter significant financial losses, have continuous poor health, and are at a high risk of becoming involved in criminal activity that leads to incarceration (Canadian Council on Learning, 2009; Dryfoos,
FOSTERING INTRINSIC MOTIVATION

1990; Freudenberg & Ruglis, 2007; Hankivsky, 2008; Lochner & Moretti, 2004; Nilsson et al., 1998; Schnittker, 2004; Ungerleider & Burns, 2002). There has been a lot of research conducted to determine what the significant factors related to a student’s choice to drop-out are (Fan & Wolters, 2014; Franklin, Kim, & Tripodi, 2008; Gray & Hackling, 2009; Hankivsky, 2008; Kim & Streeter, 2008; Lund, 2014; Sheldon, 2007). There are also multiple studies on several prevention and intervention programs that were created and implemented in an attempt to decrease the rates of student drop-out (Bruhn, Woods-Groves, & Huddle, 2014; Canadian Council on Learning, 2009; Finnan & Kombe, 2011; Klem & Connell, 2004; Mac Iver, 2011; Mahoney, 2014; Ontario Ministry of Education, 2015). The review of this research will show how there are various successful strategies for prevention and intervention of high school drop-out. It is also apparent that there is a strong focus in the literature on prevention/intervention in high school and there is little research conducted on prevention/intervention at the elementary level. Furthermore, most of the research discusses whole school approaches rather than what individual teachers can do in their classrooms with their own students.

2.1.1 Factors that Impact Student Drop-Out

There are many reasons why a student may choose to drop out of high school. Research has determined that there are three categories of significant factors related to dropping out: personal/individual, family, and school/institutional (Franklin et al., 2008; Kim & Streeter, 2008; Lund, 2014). Each of these factors impact the probability of a student graduating from high school and can be used to help determine which students are at-risk of dropping out (Darney et al., 2013; Fan & Wolters, 2014; Hazel et al., 2013; Lund, 2014; Mac Iver, 2011). On the other hand, it is difficult to accurately predict whether a student at-risk will drop out or not because there are usually multiple,
interconnected reasons for why a student chooses to leave school early (Franklin et al., 2008). Therefore, preventative and reactive programs need to be flexible in addressing the specific needs of at-risk students and students who have dropped out.

Personal/individual factors that relate to high school drop-out involve characteristics of the student. The gender and ethnicity of the student affects the probability of them dropping out (Gray & Hackling, 2009; Hankivsky, 2008; Hazel et al., 2013). Males and students from minorities have a higher risk of not graduating from high school (Gray & Hackling, 2009; Hazel et al., 2013). Students with behavioural or substance abuse problems are also at a greater risk of leaving school early (Bruhn et al., 2014; Franklin et al., 2008; Jimerson et al., 2002; Kim & Streeter, 2008; Lund, 2014). On the contrary, students with high self-esteem, high self-efficacy and high intrinsic motivation have greater persistence and are more likely to complete high school and continue their education (Hardre & Reeve, 2003; Lyxell, 1996; Vallerand et al., 1997).

Psychological well-being is also important because psychological instability and/or mental health problems increase the risk of a student choosing to drop out (Anderman, 2002; Kim & Streeter, 2008). Some of these factors cannot be altered, such as gender and ethnicity, but many of these can be managed, avoided, or improved through prevention and intervention efforts.

Family factors, like some of the personal/individual factors, can be difficult to improve and some may be unchangeable. Family status and function are both significant variables that impact drop-out rates. Students from lower socioeconomic status families often have a higher rate of truancy, which is strongly related to dropping out (Dembo et al., 2014; Nolan, Cole, Wroughton, Clayton-Code, & Riffe, 2012). Financial struggle or
poverty often coincides with low-wage jobs which have long work hours leading to inadequate parental supervision, all of which puts a student at greater risk of leaving school early (Kim & Streeter, 2008). Another reason students may not complete high school is if they are from a dysfunctional family that experiences marital and/or family problems, domestic violence, teen pregnancy, and/or high levels of family conflict (Franklin et al., 2008; Kim & Streeter, 2008). Single-parent families and families with an immigrant status are also related to higher risk of drop-out (Terry, 2008; Whannell & Allen, 2011). Conversely, there is a higher chance of graduating high school when parents are involved in, engaged in, and supportive of their children’s education with positive attitudes towards education (Fan & Wolters, 2014; Franklin et al., 2008; Kim & Streeter, 2008; Sheldon, 2007). Families, especially parents, have a large impact on a students’ perspectives, values, and choices (Fan & Wolters, 2014; Franklin et al., 2008; Kim & Streeter, 2008; Sheldon, 2007). Therefore, it is important for prevention and intervention strategies to work with the whole family or consider ways to improve home life for students.

School/institutional factors are equally important in addressing the prevention of high school drop-out. The organization of the school, the teachers, and resource availability all have significant influences on how students perceive learning and education (Gray & Hackling, 2009). School environment is an important variable that can protect students or put them at risk for dropping out (Alika, 2012; Kim & Streeter, 2008; Lund, 2014). If students feel unsafe due to bullying or poor adult-student relationships and if there is not enough teacher support due to large class sizes, then they are at higher risk of dropping out (Alika, 2012; Bryk & Thum, 1989; Kim & Streeter, 2008; Lee &
Factors that help students want to stay in school include ample teacher support, high academic quality, and available extracurricular/after-school programs that lead to positive peer and adult relationships (Bryk & Thum, 1989; Fan & Wolters, 2014; Franklin et al., 2008; Gray & Hackling, 2009; Hazel et al., 2013; Kim & Streeter, 2008; Lee & Burkham, 2003; Mahoney, 2014; Mahoney, Lord, & Carryl, 2005). A more personal/individual school factor is prior academic success which often pushes students to complete their education, while prior academic failure often pushes students away from education (Alika, 2012; Fan & Wolters, 2014; Franklin et al., 2008). Lastly, observed truancy/absenteeism is related to academic failure and drop-out (Dembo et al., 2014; Kim & Streeter, 2008; Rumberger, 1995; Rumberger & Thomas, 2000). These factors are all related to student and school engagement, intrinsic motivation and the value a student places on their education (Hazel et al., 2013; Vallerand et al., 1997). Therefore, school/institutional factors are closely related to personal/individual factors.

The complex relationships between all of these variables makes it difficult to determine which students are at risk for dropping out (Franklin et al., 2008). Each student has a different situation and set of factors that impact whether or not they will drop out. It is important that preventative and reactive programs understand the complexity behind a student’s choice to drop out to ensure the student’s needs are properly addressed.

2.1.2 Students At-Risk of Dropping Out

The various reasons students choose to drop out make accurate prediction of at-risk students difficult (Franklin et al., 2008). Students at-risk of dropping out of high school can be defined as “poorly equipped to perform up to academic standards” (Quinnan, 1997, p. 31). Calabrese, Hummel, & Martin (2007) defined at-risk students as,
“those who under-perform in state mandated academic assessments as well as school-related academic achievement” (p. 275). Other research defines students as at-risk “if they are dropouts, truant, school-age parents, or adjudicated delinquents, and one or more years behind their age or grade levels in basic skills or credits leading to graduation” (Van Den Heuvel, 1986). These definitions exemplify how prediction of drop-out and identification of at-risk students is complicated by the vast amount of significant factors related to drop-out.

The definition of at-risk students is one of the research questions to be explored in this study. I am specifically interested in what being at-risk means to a teacher and what indicators teachers use to determine whether a student is at-risk or not. A study by Dona Kagan (1988) examined how elementary teachers perceived students in their classroom to determine whether a student was at-risk or not of dropping out in high school. The study defined an at-risk student as, “one who (a) has sufficient intellectual ability but consistently obtains low grades, (b) has low motivation and appears indifferent to school, and (c) appears to have marginal ability and becomes frustrated or withdrawn because of a lack of success” (p. 320). The teachers in the study were asked to intuitively decide which students in their class could potentially be at risk of dropping out of school in later years. The at-risk students chosen by the teachers were then compared to actual students that dropped out. The comparison of characteristics between the two groups of students showed that teachers could more accurately predict drop-out through scores on standardized achievement tests, descriptions of home environment, and aggressive or withdrawn classroom behaviours. The comparison also revealed that teachers’ perceptions of at-risk students were skewed depending on the composition of the rest of
the class (i.e. exaggeration of dysfunctional behaviours of at-risk students in the context of a “normal” classroom). This study shows that objective assessments and observable behaviours are better predictors of drop-out. It also emphasizes that teachers can accurately identify some risk factors of drop-out, which means it is important to understand how teachers view at-risk students.

2.1.3 Preventative and Reactive Programs

Prevention and intervention of drop-out are necessary to combat high school non-completion. Before prevention programs and proper support can be implemented, students must be identified as at-risk for dropping out and the needs of those students must be understood (Franklin et al., 2008; Kagan, 1988). In the literature, there are two major screening tools for risk factors related to drop-out (Bruhn et al., 2014; Johnson & Semmelroth, 2010; Raines, Dever, Kamphaus, & Roach, 2012;). The National High School Center developed the Early Warning System, a screening tool for students in their first year of high school (Johnson & Semmelroth, 2010). The Early Warning System deems a student to be at-risk if they miss more than 10% of instructional time during the first year, if they miss more than 10% of the first 20 days, if they earn a GPA less than 2.0, and if they fail one or more courses (Johnson & Semmelroth, 2010). The Early Warning System focuses on academic factors, while the School-wide Emotional and Behavioural Screening (SEBS) tools focus on personal/individual factors (Bruhn et al., 2014; Johnson & Semmelroth, 2010). SEBS identifies at-risk students and students that have demonstrated behavioural and emotional difficulties (Bruhn et al., 2014; Raines et al., 2012). SEBS tools often focus more on detecting students that may require special education services than on prediction of student drop-out, however, detection and
intervention of behavioural problems is associated with a decrease in risk of dropping out (Bruhn et al., 2014; Lund, 2014; Raines et al., 2012). These screening tools help provide more accurate, early identification of at-risk students that may require additional assessments and interventions (Bruhn et al., 2014; Raines et al., 2012).

Students that are identified as at-risk should be supported through prevention programs that meet their individual needs. The Institute for Education Sciences (2008) conducted a review of research on about 30 drop-out prevention programs. The review found that effective drop-out prevention requires data systems that can help identify at-risk students, adult advocates for at-risk students, academic support and enrichment strategies that improve academic performance, programs that improve classroom behaviour and social skills, personalization of the learning environment and instructional strategies, and instructional strategies that engage students in learning. It is clear that these requirements address most of the significant personal/individual, family, and school/institutional factors related to drop-out previously explored. Therefore, an effective prevention program should target most of the known significant factors related to drop-out.

There is substantial research on various effective prevention and intervention programs and strategies. The following review of these programs/strategies begins with programs offered by community-based organizations. The review will then look at school-based programs and programs currently in place in Canada. Lastly, programs/strategies that have been implemented in classrooms will be examined. The review of these programs/strategies shows how effective drop-out prevention is possible through a variety of different methods. It also emphasizes how there is a limited amount
of research on effective classroom prevention strategies that can be implemented by teachers for their own students. Lastly, it indicates the lack of research on prevention programs and strategies for elementary students.

Community-based organizations that offer prevention and intervention programs for youth at-risk of dropping out focus on early detection, increasing access to support services, and building healthy relationships between students’ home and school lives (Cuddapah, Masci, Smallwood, & Holland, 2008; Lunenburg, 1999). The community-based organizations that support and facilitate these programs most often include a variety of health services, counselling services, mentor services, social workers, and university partnerships (Cuddapah et al., 2008; Fries, Carney, Blackman-Urteaga, & Savas, 2012; Lunenburg, 1999). The Transition Education Program and Professional Development Schools and Extended Summer Learning Programs are two prevention programs offered by community-based organizations (Cuddapah, et al., 2008; Emerson, 2010). Both of these programs use early detection to target incoming high school students that are at-risk of dropping out (Cuddapah, et al., 2008; Emerson, 2010). The Transition Education Program is effective because of the individual action plans made by social workers for each targeted student that ensure they are provided with all the support, whether academic or social, they need to be successful throughout high school (Emerson, 2010). The Professional Development Schools and Extended Summer Learning Programs allow incoming grade 9 students deemed at-risk to attend mock classes at the high school that focus on various skills to help strengthen student academic and social success the summer before they start high school (Cuddapah et al., 2008). The efficacy of these prevention programs through the collaboration of community resources can also be seen
in several intervention programs offered by community-based organizations, such as Big Brothers Big Sisters and the Virtual Education Academy (Chan et al., 2013; White, Lare, Mueller, Smeaton, & Waters, 2007). Big Brothers Big Sisters focuses on using mentors to create a support system while increasing communication between parents, teachers, and students (Chan et al., 2013). The Virtual Education Academy is offered through a university partnership and provides homebound at-risk students extra academic and social support through online courses and face-to-face mentoring services (White et al., 2007). Wraparound services, another successfully implemented intervention program, uses agencies and the community to create a supportive and stable life for at-risk students outside of school so they can focus more on academic achievement in school (Fries et al., 2012). Prevention and intervention programs offered by community-based organizations are effective because of the strong academic and social-emotional supports created for students through the collaboration of various services (Graeff-Martins et al., 2006; Lunenburg, 1999). These programs may be effective, but they can be costly and require a high level of organization between multiple parties (Fries et al., 2012). Therefore, programs offered by community-based organizations are not the only interventions seen in schools.

School-based programs are similar to those offered by community-based organizations, however, they are facilitated by school personnel rather than an outside organization (Eng & Jevne, 1989; Lunenburg, 1999). School-based prevention and intervention programs involve the collaboration of various resources obtained through teachers, principals, school counsellors, school psychologists, and other faculty and/or board members (Eng & Jevne, 1989; Fulk, 2003; Lunenburg, 1999; Shepard-Tew &
Creamer, 1998). A school-based program may involve only a limited amount of resources, such as a counselling program (Bauer, Sapp, & Johnson, 2000). School counsellors can conduct group counselling interventions for at-risk students (Bauer et al., 2000). These interventions may use either a cognitive-behavioural model or a supportive model to enhance students’ self-concepts, address and change school behaviours, and increase students’ school achievement (Bauer et al., 2000). This type of intervention only requires resources provided by the school counsellor who works as an adult advocate for the students (Bauer et al., 2000). A more complex school-based prevention/intervention program is the School-Within-a-School program (Lunenburg, 1999). This program is used in high schools and is facilitated by the teachers. The teachers create a team and they plan the curriculum and handle their own budget. This allows all of the teachers to provide services their students need through sharing resources, such as discipline strategies and individualized teaching strategies. The School-Within-a-School program also promotes smaller class sizes and the use of cooperative learning and mentorships to help support students and teachers. Similarly, the Freshman Focus Group program uses teacher-student partnerships to create a support system and network in which to share resources (Fulk, 2003). In this type of prevention program, the teachers work together with successful senior high school students to help support at-risk incoming ninth graders. The successful senior students act as mentors to the ninth graders while the teachers work together to create lessons that can respond to student diversity within the school. The School-Within-a-School program and the Freshman Focus Group program rely on teacher and student resources to support at-risk high school students (Fulk, 2003; Lunenburg, 1999). Research on school-based prevention/intervention programs has
mostly focused on students at the high school level, but there is one successful program for elementary students highlighted in the literature (Eng & Jevne, 1989; Fulk 2003; Lunenburg, 1999; Shepard-Tew & Creamer, 1998). Elementary School Integrated Services Teams are used to support the social, emotional, academic, and physical needs of elementary students so that they can achieve academic success (Eng & Jevne, 1989; Shepard-Tew & Creamer, 1998). The team can involve school counsellors, social workers, school psychologists, school nurses, principals, vice principals, and/or teachers. Elementary students that are struggling academically are referred to the team, usually by the students’ teachers, and a case-management approach is used. The team determines a plan of action for the student and gathers the necessary resources. The student is then monitored until consistent progress and academic success is observed. Elementary School Integrated Services Teams is a prevention program that uses the same techniques as the School-Within-a-School program and the Freshman Focus Group program. It is clear that the focus of school-based prevention and intervention programs is to collaborate with as many school resources as possible to provide the best supportive services to students in need. In addition, school-based programs are easier to manage than community-based programs because all of the resources are managed and organized within the school. The only limitation of school-based programs is that resources offered by community-based programs may not be available within a school. Therefore, both types of prevention/intervention programs can be successful and the choice of program will depend on the amount and type of resources available to a school community.

The research on prevention and intervention programs for school drop-out, as noted previously, has shown that there are a variety of successful programs to implement.
Across Canada, several initiatives have been made to reduce high school drop-out (Canadian Council on Learning, 2009). A report by the Canadian Council on Learning (2009) outlines various examples of drop-out prevention/intervention strategies implemented in Ontario, Saskatchewan, Nova Scotia, Yukon, Manitoba, Quebec, Alberta, and British Columbia. The Ontario government created the Student Success/Learning to 18 Strategy in which the Ministry of Education provides funding, resources, training, and other services that can help reduce the drop-out rate in Ontario high schools. A wider variety of courses available in high schools and transition programs are two examples of prevention/intervention enacted by the Ministry under this strategy. In Saskatchewan, the Saskatoon and District Industry Education Council created the SMART (Students Moving Ahead with Real-world Training) program which creates business-student partnerships so students can learn marketable skills for employment. The Options and Opportunities program in Nova Scotia focuses on hands-on learning and connecting curriculum to career themes. Similarly, the Yukon has developed several experiential education programs to help increase engagement in school. The Career Trek program in Manitoba also emphasizes the importance of developing student career goals to motivate students to stay in school. In Quebec, the Montreal Hooked on Schools initiative provides various services to all school boards to help them support their staff and students. In Alberta, about 130 outreach programs help provide services and resources for struggling students and their families. Lastly, the Abbotsford School District in British Columbia has a partnership with the University College of the Fraser Valley which allows students the option of participating in skilled worker training in order to receive a high school diploma and first-year college studies certificate simultaneously. All of these
prevention/intervention programs across Canada are community-based and share the same goals. These programs hope to increase accessibility of services and resources while promoting the application of academic knowledge to career-related experiences. The report does not explicitly state what age range the programs target, but the focus on career development in the programs may be more suitable for high school students than for elementary students. In addition, the programs use a whole school approach and there is no guidance for individual teachers. This review of drop-out prevention/intervention programs across Canada further emphasizes the overall lack of literature on what can be done at the elementary level and what teachers can do in their classrooms to prevent drop-out in later school years.

There is a limited amount of research on drop-out prevention and intervention within the classroom, however, there are a few valuable strategies discussed in the literature. A longitudinal study by Darney et al. (2013) measured the effects of two types of interventions on grade 1 students with academic and behavioural issues. One intervention was the Classroom-Centered Intervention which involved the use of the Good Behaviour Game, as well as reading and mathematics aids. The other intervention was the Family-School Partnership Intervention which enhanced parent-teacher communication and improved parental behaviour management strategies. The goal of both interventions was to improve academic achievement while reducing early aggressive-disruptive behaviour as a preventative measure to combat later school drop-out. The interventions did not have a statistically significant effect on the grade 12 outcomes of the participants in the study. This could be due to the small sample size of the study or because a more integrated intervention that combined both interventions was
needed. On the other hand, the study did find that academic and behavioural problems in grade 1 led to a greater likelihood of negative school and social outcomes in grade 12. This study shows the importance of early screening of academic and behavioural problems, as well as the need for successful early intervention and prevention programs. Another classroom intervention identified in the literature is bibliotherapy (Prater, Johnstun, Tina, & Johnstun, 2006). Prater et al. (2003) describes bibliotherapy as using books to teach social and developmental skills while encouraging problem solving. This type of intervention is limited by the books available and the openness of the readers, therefore it is recommended to use bibliotherapy in addition to other interventions. Bibliotherapy has shown to improve behaviour and enhance academic success which makes it a successful drop-out prevention and intervention strategy. In addition, it can be implemented with students of any age from elementary to high school. Bibliotherapy is a strong approach to prevention and intervention within the classroom because it can be easily facilitated by the teacher alone and because it can be enhanced with support from teacher librarians, school counsellors, and school psychologists. All three of the interventions previously explained are able to be implemented at the elementary level, but early prevention/intervention still needs to be further explored. It is clear from reviewing the literature on classroom drop-out prevention/intervention strategies that more research needs to be conducted on what teachers can do to help their students succeed in completing their high school education.

2.2 Intrinsic Motivation

Intrinsic motivation can be described as the inherent pleasure gained from engaging in a specific activity (Carbonneau et al., 2012). Research shows that from birth, children have “an
innate need to interact with the environment” which begins the process of learning and knowledge acquisition (Deci, 1975). These environmental interactions are driven by their intrinsic motivation and learning first occurs with no need for external rewards (Deci, 1975). Intrinsic motivation should develop over time as people strive to have competence, relatedness, and autonomy or self-determination in their lives (Carlton & Winsler, 1998). It is important for students to develop intrinsic motivation to learn because it is associated with greater academic achievement, staying in school, increased persistence and positivity towards work, stronger conceptual learning, psychological wellbeing, prosocial behaviour, and happiness (Carlton & Winsler, 1998; Froiland & Oros, 2014). In reality, research shows that children’s reported intrinsic motivation in school steadily decreases from at least the third grade through high school (Cordova & Lepper, 1996). This decline occurs for a variety of social and contextual factors such as decontextualization of teaching instruction, lack of student interest, and lack of student choice (Cordova & Lepper, 1996). Therefore, the following review focuses on understanding how educators can best support the development of intrinsic motivation in students.

The review begins with how researchers identify and measure intrinsic motivation. The literature emphasizes how intrinsic motivation can be perceived and measured in many ways, but there is often a focus on the observable behaviours of engagement (Carbonneau et al., 2012; Carlton & Winsler, 1998; Fan & Wolters, 2014). The review then explores the significant individual/personal, social, and contextual factors that impact on the development of intrinsic motivation (Carbonneau et al., 2012; Ferrer-Caja & Weiss, 2000; Vallerand et al., 1997). Lastly, the review examines various strategies that foster the development of intrinsic motivation.
2.2.1 Indicators and Measurements

The literature on intrinsic motivation shows multiple ways to define, conceptualize, and measure it (Carbonneau et al., 2012; Carlton & Winsler, 1998; Fan & Wolters, 2014). Carbonneau et al. (2012) proposes that intrinsic motivation can be categorized into intrinsic motivation to know, to accomplish, and to experience stimulation. This tripartite model of intrinsic motivation emphasizes how it can be expressed as a desire to learn, to achieve, and to participate. Intrinsic motivation can also be described as having intrinsic value (Fan & Wolters, 2014). This value, like a desire, is expressed through student interest and enjoyment during a task (Fan & Wolters, 2014). Therefore, intrinsic motivation is defined as a feeling of wanting to do something because the task or action is perceived as a positive experience for the individual.

The literature often conceptualizes and measures intrinsic motivation through the level of active engagement students have in various activities (Ferrer-Caja & Weiss, 2000; Iyengar & Lepper, 1999; Klem & Connell, 2004; Martin, 2006). Martin (2006) sees motivation as an energy that drives students to become engaged in learning and pushes them to work effectively to achieve academic success. Klem and Connell (2004) expand on what it means to be engaged in learning. They discuss how there is behavioural engagement (i.e. staying on task, concentrating), emotional engagement (i.e. enthusiasm, optimism, curiosity), and cognitive engagement (i.e. know why they’re working, understanding the importance). Behavioural engagement is most often used in the research as an indicator and measurement of intrinsic motivation because behaviours like time spent on a task/persistence and choice of task/voluntary participation can be observed and quantified (Ferrer-Caja & Weiss, 2000; Iyengar & Lepper, 1999).
Exploratory behaviours are also used to measure intrinsic motivation in infants and toddlers (Carlton & Winsler, 1998). These behaviours are similar to behavioural engagement as they focus on persistence and participation, as well as curiosity through observed continual exploration of different activities (Carlton & Winsler, 1998). In addition to measuring behaviours, researchers will also use self-reports of interest and enjoyment as a measure of intrinsic motivation (Deci, Koestner, & Ryan, 1999). These self-reports allow researchers to correlate the levels of behavioural, emotional, and cognitive engagement to ensure validity and reliability when measuring them as indicators of intrinsic motivation.

### 2.2.2 Factors that Impact Intrinsic Motivation

The literature on factors that impact the development of intrinsic motivation can be categorized as individual/personal, social, or contextual (Carbonneau et al., 2012; Ferrer-Caja & Weiss, 2000; Vallerand et al., 1997). Individual/personal factors relate to the characteristics a person has, like their personality (Carbonneau et al., 2012). People’s personalities can influence what tasks or activities they will be intrinsically motivated to do (Carbonneau et al., 2012). If a person is naturally more curious and exploratory, they will be more intrinsically motivated to know new things (Carbonneau et al., 2012). If a person is achievement-oriented, they will be more intrinsically motivated to accomplish tasks that give them a sense of achievement (Carbonneau et al., 2012). If a person is sensation-oriented, they will be more intrinsically motivated to participate in activities they find stimulating (Carbonneau et al., 2012). Another individual/personal factor is self-perception (Fan & Wolters, 2014). Research shows that intrinsic motivation requires a person to have competence (know how to achieve what they want and believe they are
capable of achievement), relatedness (secure and stable relationships), and autonomy/self-determination (self-regulation, initiative) (Deci, Vallerand, Pelletier, & Ryan, 1991). Therefore, a person must develop their self-efficacy, confidence, and willingness to start a task in order to foster their own intrinsic motivation (Fan & Wolters, 2014).

Social factors that impact the development of intrinsic motivation are based on the formation of relationships and the influence of other people (Crow, 2009; Vallerand et al., 1997). Parents and/or caregivers are significant factors because they are a part of a child’s first relationships (Carlton & Winsler, 1998). Newborns require secure relationships which are formed when a caregiver is responsive, but not for all of the infant’s requests (Carlton & Winsler, 1998). These secure relationships encourage exploratory behaviours in the infant which then sparks the development of intrinsic motivation (Carlton & Winsler, 1998). Crow (2009) also believes that anchor relationships, usually made with parents or other trusted adults, help support a child’s interest and seeking behaviours. As the child enters school, teachers and friends also become significant factors in the development of intrinsic motivation (Fan & Wolters, 2014; Lam, Cheng, & Ma, 2009). Friends that value academics influence each other to increase their own intrinsic values in learning (Fan & Wolters, 2014). Similarly, teachers that are intrinsically motivated towards what they are teaching act as role models for students and use more instructional strategies that make students want to learn more (Lam et al., 2009). Therefore, having strong relationships with parents, friends, and teachers who are all supportive of and value academic learning helps build a student’s self-efficacy which also fosters their intrinsic motivation to learn (Fan & Wolters, 2014).
The last set of factors that impact the development of intrinsic motivation are contextual. Culture is a significant factor that strongly influences how choice affects intrinsic motivation (Iyengar & Lepper, 1999). People from independent cultures are more intrinsically motivated when they have the opportunity to make their own choices (Iyengar & Lepper, 1999). On the contrary, people from interdependent cultures are more intrinsically motivated when relevant in-group members make the choices for them (Iyengar & Lepper, 1999). School climate is another significant factor that can diminish or enhance a student’s intrinsic motivation to learn (Ferrer-Caja & Weiss, 2000; Vallerand et al., 1997). When a school promotes student autonomy and competency it enables students to develop their intrinsic motivation to learn (Vallerand et al., 1997). Teachers and administration have to focus on supporting student learning, self-improvement, and participation in optimally challenging tasks rather than focusing on competition and public evaluation (Ferrer-Caja & Weiss, 2000). In addition, students that receive verbal rewards, positive feedback, and opportunities to have choice often have greater intrinsic motivation to learn than students that are given tangible rewards, deadlines, evaluations, and imposed goals (Deci et al., 1999).

2.2.3 Methods of Fostering Intrinsic Motivation in Youth

There are several strategies for teachers to use in their classrooms and parents to use at home to ensure they are fostering the development of intrinsic motivation in their students/children (Benton, 2013; Carlton & Winsler, 1998; Froiland, 2011). Early childhood educators and parents of infants/toddlers should make sure there is a wide variety of inanimate objects for the children to explore because exploratory behaviour is the beginning stage of intrinsic motivation development (Carlton & Winsler, 1998). Free
exploration and choice of activities should continue throughout all grade levels and students should continually be supported in pursuing learning about things that interest them (Benton, 2013; Carlton & Winsler, 1998; Crow, 2013). In addition, teachers should include hands-on activities and leisure-oriented learning, such as experiments and games (Benton, 2013; Crow, 2013).

Communication and collaboration with peers and teachers is also important in helping students learn through teaching which motivates them to feel more responsible for their own learning (Zhao, Ailiya, & Shen, 2012). Student goal-setting should be promoted along with peer collaboration to enhance student responsibility for learning while increasing their intrinsic motivation to accomplish their goals (Crow, 2013; Manderlink & Harackiewicz, 1984). The goals students set for themselves should be achievable and realistic, just as teachers should ensure that what they are teaching is contextualized (Cordova & Lepper, 1996). Allowing students to apply their knowledge to meaningful and interesting contexts helps them understand the importance of what they are learning and enhances their intrinsic motivation to learn (Cordova & Lepper, 1996). Personalizing learning also increases intrinsic motivation to learn because students can see the self-relevance of the learning as they are open to make choices based on their interests (Cordova & Lepper, 1996).

Two approaches to learning that both focus on increasing students’ intrinsic motivation to learn are project-based learning and problem-based learning (Crow, 2009; Lam et al., 2009). Project-based learning occurs when students work collaboratively in small groups to find solutions to various problems by asking and refining questions, debating ideas, making predictions, collecting and analyzing data, drawing conclusions,
and communicating their findings to the rest of the class (Lam et al., 2009). Students are
given a choice on the issues they learn about and the teacher supports students by
modeling and coaching collaborative learning skills, integrating real-life contextual issues
to increase the significance of what they are learning, and ensuring that the challenges
presented are appropriate for the students’ abilities (Lam et al., 2009). Problem-based
learning is similar to project-based learning, except it can be done independently or
collaboratively (Crow, 2009). Students use the inquiry process to question, investigate,
explore, search, and study what they want to learn (Crow, 2009). Both teaching
approaches successfully foster intrinsic motivation to learn in students because they make
learning meaningful, they support individualized learning, and learning is student-
centered with the responsibility of learning being more on the student than on the teacher
(Crow, 2009; Lam et al., 2009).

Most of the literature focuses on classroom and teacher specific strategies for
fostering intrinsic motivation in students, however, Froiland (2011) discusses how
parents can also be involved in supporting the development of intrinsic motivation.
Froiland (2011) used an intrinsic motivation intervention program with parents that
taught them how to support their child’s autonomy with regards to learning and
homework. The parents learned how to help their child set learning goals for homework,
how to use verbal persuasion, how to model and role-play positive learning behaviours,
and how to give corrective feedback. This intervention led to the children self-reporting
more positive emotions during homework. Parents also perceived their children’s
behaviour as being more intrinsically motivated and autonomous. Therefore, it is
important for both teachers and parents to learn how to foster intrinsic motivation in
children and to work together to ensure the children are well supported at school and at home.

2.3 Developing Intrinsic Motivation to Prevent Student Drop-out

The literature on student drop-out and the literature on intrinsic motivation often remains separate, however, it is important to consider the relationship between these 2 variables (Hardre & Reeve, 2003; Lyxell, 1996; Martin, 2006; Vallerand et al., 1997). One of the factors that influences a student’s decision to drop out is their level of intrinsic motivation to learn (Hardre & Reeve, 2003; Lyxell, 1996; Vallerand et al., 1997). Intrinsic motivation is also strongly associated with academic success (Hardre & Reeve, 2003; Lyxell, 1996; Martin, 2006; Vallerand et al., 1997). Previous academic success is another significant factor that influences whether or not a student will drop out (Froiland & Oros, 2014). The first part of this review further explores the relationship between student drop-out and intrinsic motivation, as well as all of the factors that may connect the 2 variables. The second part of the review discusses specific drop-out prevention strategies that develop intrinsic motivation. Most of these strategies resemble those previously outlined under strategies that foster intrinsic motivation (Crow 2013; Crumpton & Gregory, 2011).

2.3.1 Relationship between Student Drop-Out and Intrinsic Motivation

The previously stated literature on intrinsic motivation shows that there is a clear link to its development and academic success (Hardre & Reeve, 2003; Lyxell, 1996; Martin, 2006; Vallerand et al., 1997). The Motivational Model of High School Drop-out emphasizes how students’ self-perceptions of competence and autonomy influence how determined and motivated a student is to stay in school (Vallerand et al., 1997). A low
level of intrinsic motivation can lead a student to drop-out because they do not believe they have the ability to stay in school or achieve anything (Vallerand et al., 1997). Froiland and Oros (2014) also found that intrinsic motivation is associated with positive academic and social-emotional outcomes. Students in their study with higher levels of intrinsic motivation were more persistent, had overall better memory, were more positive towards doing homework, exhibited more prosocial behaviour, and reported more feelings of happiness. In addition, the study found that measures of intrinsic motivation and previous academic success in reading in Grade 5 were determined to be the 2 strongest predictors of the level of reading achievement of the same students in Grade 8. Therefore, fostering intrinsic motivation helps develop the skills and confidence necessary for students to achieve academic success while decreasing the probability of student drop-out.

### 2.3.2 Drop-Out Prevention Strategies that Foster Intrinsic Motivation

The literature on drop-out prevention that fosters intrinsic motivation is similar to the strategies discussed previously that help teachers and parents develop intrinsic motivation in children (Crow 2013; Crumpton & Gregory, 2011). Hardré (2007) found that motivation to learn can be encouraged by teachers when they support student autonomy in the school environment, thus leading to a stronger effort to stay in school. The study also showed that teachers lacked knowledge on how to aid in the development of intrinsic motivation in their students. Therefore, teachers may require more professional development on effective strategies for fostering intrinsic motivation in their students.
An effective strategy teachers should try is contextualizing learning and increasing academic relevancy by allowing students to apply their knowledge in realistic situations (Cordova & Lepper, 1996; Crumpton & Gregory, 2011). Low-achieving students and those at-risk of dropping out benefit from personalizing learning and practical application because it emphasizes the importance of what they are learning, it helps them understand why they need to learn what they learn, and it allows them to achieve success in solving a problem that is relevant to their own lives (Cordova & Lepper, 1996; Crumpton & Gregory, 2011). In addition, self-determination interventions have been successful in enhancing students’ intrinsic motivation to learn while decreasing the probability of drop-out (Eisenman, 2007). These interventions involve explicit teaching of skills related to self-determination, such as goal setting and problem solving (Eisenman, 2007). Students that have clear learning goals and are supported in achieving them have a greater chance to be academically successful, to have high expectations of themselves, and to focus on the learning process while having reduced fear of failure (Hruska, 2011). Therefore, interventions and strategies that focus on student autonomy, contextualizing learning, and self-determination skills will promote the development of intrinsic motivation and ultimately help prevent student drop-out.

2.4 Conclusion

In this literature review I looked at research on student drop-out and intrinsic motivation. This review elucidates the extent that attention has been paid to significant factors that impact drop-out rates, how to identify at-risk students, prevention of drop-out in high school, and school-based drop-out prevention strategies. The review also illuminates how research has focused on various ways to measure intrinsic motivation, significant factors that impact intrinsic
motivation, and the multiple strategies teachers and parents can use to foster intrinsic motivation in children. It also raises questions about what elementary teachers can specifically do to help at-risk students and prevent drop-out and how teachers can more accurately assess whether they are developing intrinsic motivation in their students or not. The review points to the need for further research in the areas of preschool and elementary teacher drop-out prevention strategies, drop-out prevention strategies with a focus on the development of intrinsic motivation, and teacher assessment of drop-out prevention strategies. The next chapter, Chapter 3, outlines the research methodology and procedures. It includes information about the participants, data collection, and ethical procedures used.
Chapter 3: Research Methodology

3.0 Introduction

In this chapter I describe the research methodology. I start with a review of the general approach, procedures, and data collection instruments. I then focus on the participants, specifically participant sampling and recruitment. Next I explain the data analysis procedures and elaborate on the ethical considerations within the study. Methodological limitations and strengths are then discussed. Finally, I provide a summary of the methodology and state my rationale for the methodology in relation to my research purpose and questions.

3.1 Research Approach & Procedures

A qualitative research approach was used to conduct this study. The purpose of qualitative research is to gain a detailed understanding of a specific experience or problem (Creswell, 2013; Crow, 2009). It is not used to find causal relationships or generalize results, but it allows for exploration and discovery of a topic that interests the researcher (Campbell, 2014). This approach was well-suited for the purpose of my research because I was able to explore the experiences of elementary teachers who use strategies to increase intrinsic motivation in their students. My research approach also involved characteristics of narrative research and phenomenology. Narrative research focuses on collecting stories of individual experiences through different forms of data (Creswell, 2013). Phenomenology emphasizes the exploration of a phenomenon, expressed through a concept or idea, experienced by a group of individuals (Creswell, 2013). My research looked at individual experiences of elementary teachers through interviews. The goal of the research was to explore the phenomenon of how teachers help develop students’ intrinsic motivation. I interviewed a small group of elementary teachers and I also conducted a literature review to gather a variety of forms of data on my research topic. In
addition, my data analysis was partly thematic and partly systematic. Therefore, the qualitative nature of my study expresses several characteristics of both narrative and phenomenology research.

The qualitative research approach used for this study involved a review of relevant literature and semi-structured interviews with elementary teachers. I began by conducting an initial review of the literature on student drop-out and intrinsic motivation with a focus on the relationship between them. I then found my participants through recommendations made by teachers I know and completed my semi-structured interviews. I transcribed the interviews and analyzed the data. As the study progressed I continually refined and revised my literature review to ensure the information was current.

3.2 Instruments of Data Collection

The data collection for this study occurred primarily through the use of semi-structured interviews (see Appendix B for protocol). A semi-structured interview protocol lets the researcher ask the same questions to all participants while maintaining flexibility through varied follow-up and probe questions, like a focused conversation (Dearnley, 2005; Pathak & Intratat, 2012). The questions asked in a semi-structured interview are open-ended to encourage the participants to answer with depth (Dearnley, 2005; Whiting, 2008). Semi-structured interviews were effective for my research because they allowed me to gather detailed information on teachers’ beliefs, practices, and experiences in regards to promoting intrinsic motivation in the classroom. The semi-structured format provided me the opportunity to ask my research questions while it gave me the flexibility to explore other related areas of interest brought up by the participants throughout the interviews.
3.3 Participants

In this section I review the sampling criteria and participant recruitment strategies for my study. I also include biographies for my participants.

3.3.1 Sampling Criteria

The participants for my study fulfilled the following criteria:

- They must be current elementary school teachers with at least 10 years of experience;
- They must have taught at least 2 different grades;
- They must have a commitment to promoting intrinsic motivation to learn as shown through the use of teaching strategies that increase intrinsic motivation, research experience related to intrinsic motivation, and/or professional development related to intrinsic motivation.

The sampling criteria for my study were chosen specifically to ensure that my participants were able to inform my study and respond to my research questions. My participants needed to be current elementary teachers because my research focuses on teacher strategies used at the elementary level. They needed to have at least 10 years of experience and have taught at least 2 different grades to ensure they have had a variety of experiences and have developed teaching strategies for different age groups. Having 10 years of experience also meant that some of their previous students would have reached high school thereby providing them with the opportunity to potentially see long-term effects and outcomes of their strategies. Furthermore, my participants needed to be dedicated to developing intrinsic motivation in their students because that is the topic of my research. In order to answer my research questions and fulfill my research purpose, I
needed participants that have experience working with students to develop their intrinsic motivation.

### 3.3.2 Participant Recruitment

My study used purposeful sampling with characteristics of criterion, convenience, and maximum variation sampling. Purposeful sampling means the participants are chosen because they can enhance the understanding of the research topic/problem (Creswell, 2013; Devers & Frankel, 2000; Marshall, 1996). Criterion sampling aids purposeful sampling because the researcher can set sampling criteria that ensures participant knowledge and experience of the research topic/problem (Byrne, 2001; Creswell, 2013). The sampling criteria for my study was previously listed. The criteria emphasize the need for experience with and knowledge of the development of intrinsic motivation in students which directly relates to my research topic. My study also employed convenience sampling which uses the researcher’s existing contacts and networks to find participants (Creswell, 2013; Marshall, 1996). I am a part of a large community of teacher candidates and mentor teachers who helped me recruit participants that fit my sampling criteria. Convenience sampling can result in poor data quality or a lack of credibility in the research, however, the sampling criteria I have set helped offset these potential negative effects (Marshall, 1996). In addition, I applied aspects of maximum variation sampling which focuses on the diversity of specific characteristics within the sample (Creswell, 2013; Marshall, 1996). The criteria I set that required my participants to have taught at least 2 different grades helped increase the variation of experiences of my participants. All of these sampling procedures helped me recruit participants that have a broad range of experiences that relate to the purpose of my research and my research questions.
The recruitment procedure for this study consisted of the use of my already existing networks of educators. Initially I contacted my teacher colleagues and mentor teachers through email. I provided them with an overview of my research study, my sampling criteria, and my contact information and asked that they distribute this information to teachers they know and/or potential participants. I never asked these teachers to provide me with names or contact information of potential participants. This ensured that the teachers who contacted me were volunteering to participate and did not feel pressure or obligation to participate. Once my teacher colleagues and mentor teachers sent out the information for my research, they discussed my research further with other educators in their schools. I then received emails over the next few weeks from the teachers who became the participants for my research and are described in the next section.

3.3.3 Participant Biographies

My first participant, Jane, had taught for about 16 years and was currently teaching Grade 2 in a public elementary school. She had previously taught SK and Grades 1-3 and 5-7. Her school had students from diverse backgrounds and socioeconomic levels. Jane often involved herself within the school community by signing up for committees and coaching various sports. Her school also had a strong focus on improving the teaching of mathematics.

My second participant, Blair, had taught for about 15 years in a private Montessori school. She was currently teaching children ages 3 to 6, which is considered equivalent to Preschool, JK, and SK. She had also worked in elementary classes at the Montessori before, which are considered equivalent to Grades 4-6. Blair’s school often
prioritized independence, helping others, courtesy, mannerism, and a positive social environment.

My third and final participant, Tess, had taught for about 8 years and was currently teaching Grade 8. She had also taught Grades 5-7 before. The students in her school were mostly from South American and Pilipino, as well as European backgrounds. Tess was involved with coaching sports and running a student leadership club in her school. Her school also provided multiple literacy and numeracy support programs for the students.

3.4 Data Analysis

Thematic data analysis in qualitative research allows the researcher to develop meaningful themes and rich insights in regards to complex phenomena or experiences (Smith & Firth, 2011). In my research study, I followed the general data analysis process as described by Creswell (2013) and Dierckx de Casterlé, Gastmans, Bryon, & Denier (2012). This process helped me determine not only the themes that occur within each participant’s interview, but also the themes that occur across all of the participants’ interviews (Dierckx de Casterlé et al., 2012). It also ensured that I continually moved back and forth between the interconnected stages of data analysis to obtain interpretations of the data in terms of participant context and literature context (Creswell, 2013).

The data analysis began with the transcription of my interviews. I thoroughly read through each transcript several times and made notes on key concepts, ideas, and/phrases that stood out to me. I then began to code my data by highlighting significant phrases and assigning a code that stated what I heard the participant say in that phrase. I put all of the significant phrases and initial codes into a table. I then grouped similar codes together, first within each transcript
and then across transcripts. I colour coded the phrases and initial codes to let me know which participant said what. Once I had my codes grouped, I tried to determine what was common between all the codes I grouped together. The reason for why I grouped a set of codes together then became my category for those codes, which I put in a third column of the table. After I came up with categories for all of the sets of codes, I grouped similar categories together. I then put my research questions in front of me and read through all of the data in similar categories. I asked myself what I was hearing in the data that could respond to my research questions. This led to the creation of themes that represented a response to my research questions using the data I had. The themes were then revised several times to ensure there was no repetition of themes and that there were themes that could speak to any null data I had. As I wrote about my themes, I infused participants’ voices while connecting my data to relevant literature. Therefore, my themes were contextualized both by my participants’ experiences and related research.

3.5 Ethical Review Procedures

All participants were given a letter of informed consent (Appendix A) which they were required to read and sign before engaging in the interview process. The consent letter provided an overview of the study and addressed ethical implications. It also specified the expectation of participation as one 45-60 minute semi-structured interview. A copy of the consent letter was given to the participant and a copy was kept for the records of this study.

At the beginning of each interview, I reviewed the topic of my research study. The participants were told that they have the right to withdraw from participation in the study at any time and that they can refrain from commenting on any question during the interview. They were also told that they will have the opportunity to review the transcripts before data analysis to clarify or retract any of their statements. Lastly, I informed the participants that their identities
will remain confidential through the use of pseudonyms and any identifying markers related to their schools or students will be excluded. The participants were assured that only my research supervisor and I were able to access the data collected in the interview. All efforts were made to ensure the participant’s comfort and willingness to participate in the interview and have their data included in the study.

After the interview, participants were given their complete transcript to review and I restated their right to withdraw from participation in the study. I also made it clear that the audio recordings and transcripts for my study will be stored on my password protected laptop and can only be accessed by myself and my research supervisor. In addition, I will destroy all data after 5 years. All participants were assigned a pseudonym and any individual-specific information was excluded or changed through an alias to protect the anonymity of the participants.

There were no known risks associated with participation in this study. The participants were continuously made aware of their right to withdraw from the study at any time and their right to refrain from answering any interview questions. Every effort was made to make sure they felt comfortable throughout the process and their identities were kept confidential. In addition, there was no deception used in any way and I was transparent about relationships between myself and my participants with regards to any conflicts of interest.

All of these measures were taken to ensure that there was a high level of ethical standards in place throughout the research process. These standards help researchers remain sensitive to the needs of the participants and they imply that participants must be respected at all times (Creswell, 2013; Orb, Eisenhauer, & Wynaden, 2001). The researcher must also disclose all information on content, consent, and confidentiality to the participants to build rapport and gain their voluntary support (Creswell, 2013). Furthermore, the ethical procedures were in place to
reduce harm and prevent abuse of the participants (Bresler, 1995; Orb et al., 2001). My study protected the participants by maintaining anonymity and respecting their right to withdraw from any part of the research at any time (Bresler, 1995; Orb et al., 2001).

3.6 Methodological Limitations and Strengths

There are limitations to this study. The ethical parameters of the MTRP only allow me to conduct interviews with teachers. Consequently, it is not possible for me to interview students or parents, conduct surveys, or make classroom observations. This limitation affects the amount of perspectives and depth of understanding available to me and will, in turn, affect how I interpret my data and the significance of my findings. Creswell (2013, p. 163) states that interviewing and observing are the two most frequently used types of data collection, however, using multiple forms of data collection can help convey the depth and complexity of the research topic. Another limitation is the number of participants involved in my study. The small scale of this study only allowed me to interview three teachers. My findings are still relevant and meaningful in terms of understanding more deeply what the development of intrinsic motivation in students is like in the classroom, but I cannot generalize my findings to the experiences of other teachers. I also recognize that my literature review was selective. There is a vast amount of research on the topics of student drop-out and intrinsic motivation and I tried to represent the majority of perspectives found in the literature. If I conduct further research on this topic I will broaden my literature review. In addition, I am limited by my reflexive position within this study. My background and what I hope to gain from this research affects the way I interpret the information in this study and may limit my perceptions. I have acknowledged my background in Chapter 1 and through acceptance of my background I hope to reduce the effects on my perceptions.
Although there are limitations to my study, there are also several strengths. The semi-structured interview process allows me to get a more in-depth picture than a survey could of the experiences of my participants. The purpose of my research is to learn specific teaching strategies that help develop a student’s intrinsic motivation to learn. The interviews allowed me to explore specific examples of teaching strategies actually used by teachers in their classrooms. In addition, the teachers during the interviews were given the opportunity to speak to what matters most to them in terms of increasing intrinsic motivation in students. The interviews validated the teachers’ voices and experiences while letting them explore the meaning of their lived experiences. The teachers in my study could have also used the interview process as a way to reflect on their practices while providing me with a deeper understanding of what they are doing, how they are doing it, and why they are doing it. In this way, I collected real-life examples of teaching practices and strategies used to develop intrinsic motivation and compared them with those found in the literature. The comparisons helped me conceptualize how the theory in the literature connects to what is being practiced in actual classrooms. Therefore, it is clear that for the purpose of my research my methodology is suitable, especially given previously stated constraints.

3.7 Conclusion

In this chapter I addressed the methodology including the research approach and procedure, data collection, participant sampling and information, and the data analysis process. I chose narrative research and phenomenology approaches because through my research I was to obtain teachers’ narratives of their classroom experiences of developing intrinsic motivation in their students. Semi-structured interviews were chosen because they allow the researcher to explore the research questions, as well as other relevant areas of interest brought up by the
participants. Purposeful sampling was used along with sampling criteria, convenience sampling, and maximum variation sampling to ensure that the participants could inform my research on student development of intrinsic motivation. Thematic data analysis was used to develop meaningful themes and rich insights from my data. In addition, I reviewed the ethical procedures for the study which included consent, confidentiality, respect, and the rights of the participants. The limitations and strengths were also discussed and it was made apparent that the methodology is well-suited in terms of the scope of the research being conducted. Next, in chapter 4, I report the research findings.
Chapter 4: Research Findings

4.0 Introduction

In this chapter I report and discuss my research findings through themes and sub-themes that respond to my research questions. The chapter is organized with the themes as headers and the sub-themes as sub-headers. I have identified 8 themes in my data that focus on teachers’ perceptions and support of at-risk students, as well as the development of student motivation. The first 3 themes are on identifying, understanding, and supporting at-risk students. The following 4 themes are on identifying, understanding, and fostering student motivation. The final theme is on the challenges of supporting at-risk students and fostering student motivation, and how teachers overcome these challenges. I conclude the chapter with a summary of my research findings.

4.1 Teachers identify at-risk students through their abilities, emotions, behaviours, and interactions.

This theme encompasses the data on the participating teachers’ beliefs and perceptions of indicators of at-risk students. The teachers spoke about the experiences they have had with students they believed to be at risk and what made those students appear to them as at risk. 3 sub-themes were identified within this theme. The first is about students’ academic abilities and clinical diagnoses. The second is about students’ emotions and behaviours as shown through their engagement and self-regulation in class. The third is about students’ social interactions and decision-making skills. These sub-themes further explore specific indicators of at-risk students perceived by the teachers in relation to current research on defining and identifying at-risk students.
4.1.1 Teachers recognize academic difficulty, learning disabilities, ADHD, and ADD as indicators of at-risk students.

This sub-theme is apparent in the data of 2 of my participants, Jane and Blair. These teachers perceived at-risk students as academically low due to lack of skills and/or a disability. Jane said, “I would describe a student who is at-risk being academically low so they’re struggling with reading and maybe may not have strong foundational skills in math.” Blair said, “The student at-risk would be the students who have learning disabilities or ADHD or ADD.” These teachers’ perceptions and descriptions of at-risk students reflect the current research on identifying and defining at-risk students. Many researchers define a student as at risk when they cannot meet academic standards for their age/grade level (Calabrese et al., 2007; Quinnan, 1997, p. 31; Van Den Heuvel, 1986). Research specifically on teachers’ perceptions of at-risk students by Dona Kagan (1988) also shows that many teachers look at students’ intellectual ability and academic success as indicators of being at risk. In addition to supporting current research on identifying and defining at-risk students, I found that Jane and Blair’s perceptions of at-risk students were related to their school’s priorities. Jane’s school prioritized developing students’ math skills and Blair’s school prioritized the development of the whole child. These priorities may have influenced how these teachers viewed student success, which would then influence how they perceived at-risk students.

4.1.2 Teachers recognize lack of student engagement and self-regulation as indicators of at-risk students.

This sub-theme focuses on how teachers observe student engagement and self-regulation through student interest, disposition, and behavioural patterns to help them
determine if a student is at risk or not. Jane and Blair both described at-risk students as being uninterested and challenging to keep interested in their work. Jane further stated, “Someone who doesn’t look enthused so their disposition is one that’s not happy, bored, not interested.” All three of my teacher participants also observed students’ behaviour to determine if they are at risk or not. Jane perceived at-risk students as those reluctant to do their work. Blair believed students to be at risk when they have difficulty staying motivated and concentrated on their work. Blair and Tess both perceived at-risk students to be those with patterns of “at-risk behaviour”, such as being a “menace to their peers”. These teachers’ observations of student disposition and behaviour build on past research. The study by Dona Kagan (1988) discusses how at-risk students have “low motivation” and may appear uninterested, frustrated, and/or withdrawn. The study also notes that many teachers perceive classroom behaviours that are aggressive or withdrawn to be indicators of being at risk. The teachers’ perspectives provided by my research builds on Kagan’s study (1988) by further exploring the importance of observing a student’s disposition, work habits, and behaviour patterns for emotional and behavioural indicators of being at risk.

4.1.3 Teachers recognize lack of social development and poor decision-making skills as indicators of at-risk students.

Lack of social development and poor decision-making skills were identified by Blair and Tess as indicators of being at risk in my data. Blair identified at-risk students by “their behaviour, their patterns, their interaction with other students” and by “parents approaching us and giving us background information regarding their child and if they have been tested professionally.” Tess said, “A student who is at-risk displays poor
decision-making skills, has difficulty interacting with other students and independently solving conflicts” and “will actually seek at-risk behaviour for a need to belong”. Tess also talked about past at-risk students she had taught and said that “they made very poor decisions that impacted their well-being”. These findings are significant as current research does not include social development and social interactions in the definitions of at-risk students or as indicators of being at risk.

4.2 Teachers perceive students’ home environment, social development, and school attendance to be the main factors contributing to students being at risk.

This theme came from the data about the participating teachers’ perceptions of what may lead a student to become at risk. In the current literature, the factors related to students becoming at risk of dropping out are categorized into personal/individual, family, and school/institutional (Franklin et al., 2008; Kim & Streeter, 2008; Lund, 2014). I found that the participating teachers focused more on family and school/institutional factors. Tess was the only participant to mention a personal/individual factor. She stated that “what they choose to do with their time” can affect whether students become at risk. This relates to research on how behavioural and/or substance abuse problems lead to a greater risk of dropping out of school (Bruhn et al., 2014; Franklin et al., 2008; Jimerson et al., 2002; Kim & Streeter, 2008; Lund, 2014). None of the teachers mentioned gender, ethnicity, or psychological well-being as factors that may influence a student to become at risk (Anderman, 2002; Gray & Hackling, 2009; Hankivsky, 2008; Hazel et al., 2013; Kim & Streeter, 2008). These other personal/individual factors highlighted in research may not have been recognized by the teachers because they may not have been relevant factors in their own experiences with at-risk students. This supports what Dona Kagan (1988) found
about how teachers’ perceptions of at-risk students are often skewed by their own experiences with their own classes.

Although my participants did not discuss many personal/individual factors, they touched upon the several family and school/institutional factors related to students at risk of dropping out. Jane said, “Family would be one main factor. Again their socioeconomic background… and then just their income level”. Tess also mentioned socioeconomic status as a factor related to students becoming at risk and added, “If there are issues at home within the family I think that the student seeks at-risk behaviour”. Both of these factors, socioeconomic status and family conflict, are emphasized in the literature as being related to students becoming at risk (Dembo et al., 2014; Franklin et al., 2008; Kim & Streeter, 2008; Nolan et al., 2012). Blair and Tess also believed peer relationships and peer influence to be important factors contributing to students being at risk. The research does support that poor peer relationships, such as bullying, are related to a higher risk of dropping out (Alika, 2012; Kim & Streeter, 2008; Lund, 2014). In addition to these factors, Tess went on to recognize that truancy and teacher support influence whether a student is at risk or not. It has been observed by many researchers that truancy is common with at-risk students, while ample teacher support helps students avoid becoming at risk of dropping out (Dembo et al., 2014; Kim & Streeter, 2008). The data made it clear that these teachers understood many of the factors related to students becoming at risk. I also noticed that Tess was able to recognize more factors than Blair or Jane. I think this may be related to the fact that Tess has more experience teaching older students (Junior/Intermediate) while Blair and Jane have more experience teaching younger students (Primary/Junior), however, there are many other considerations that could have led to this outcome.
4.3 Teachers support at-risk students through developing student responsibility, building student-teacher relationships, and collaborating with parents and community to support student needs.

The data that led to the creation of this theme was centered on the practical strategies the participating teachers used in their classrooms to support at-risk students. In my literature review I found that there was a lot of research on specific prevention and intervention programs (Canadian Council on Learning, 2009; Cuddapah et al., 2008; Eng & Jevne, 1989; Lunenburg, 1999), but very little research on classroom strategies to support at-risk students. This means that the strategies used and described by the teachers in my research aid in furthering the development of research on specific approaches to supporting at-risk students in the classroom. It is important to note that the strategies discussed by Blair and Tess are context-dependent, meaning the strategies may not lead to successful support for all at-risk students.

The strategies used by Blair relate to many of the components of successful prevention discovered by the Institute for Education Science’s review (2008) of multiple drop-out prevention programs. The review stated that effective drop-out prevention requires identification of at-risk students, adult advocacy, academic support and enrichment, behavioural control and social skill development, personalization of learning and instruction, and student engagement in learning. Blair experienced at-risk students that were diagnosed with a learning disability, ADHD, and/or ADD. She supported these students by increasing teacher supervision during student work periods, using simple reminders to keep the student focused and concentrated on their work, providing additional positive feedback and reinforcement, and encouraging at-risk students to take on more leadership roles within the class. Blair also stated that her school has several at-risk students and that teachers “find a different approach for them to stay motivated, to
stay focused, and to reach their success level in a different manner”. This statement shows how teachers in her school value differentiated instruction and individualized learning when trying to support at-risk students. These strategies relate to the requirements of effective drop-out prevention as they involve academic support, the development of social skills through leadership, and personalizing student learning through the use of different approaches (Institute for Education Science, 2008).

The strategies used by Tess differed from Blair’s because they focused more on community and school supports rather than instruction and learning. Tess experienced at-risk students that were often absent from class for long periods of time. She believed that the best way to support these students was to “stay completely in the game in order to show consistency and in order to show that you’re there for their learning”. This shows her dedication to providing strong academic support for at-risk students. Tess also thought it was important to try to communicate more with parents or caregivers through conferences and meetings so she could understand the challenges that may be going on at home and collaborate with the parents to support the at-risk students. She said, “I think that it would be very helpful if the caregivers or parents are provided with some support with whatever challenges they are facing in order to create stability for that child.” She wanted to ensure that at-risk students were not only given stability at school, but also at home. In addition, she often got support for at-risk students through school and community services, such as school counsellors and social workers. The research on successful prevention and intervention programs believes that the use of community organizations and school programs are both beneficial ways to provide at-risk students with the services and resources they need to become successful students (Cuddapah et al., 2008; Eng & Jevne, 1989; Fries et al., 2012; Fulk, 2003; Lunenburg, 1999; Shepard-Tew & Creamer, 1998).
Therefore, both Tess and Blair’s approaches to supporting at-risk students are based on recommendations of effective practices from the literature. Their approaches also build on the literature by demonstrating practical strategies teachers can use in their own classrooms to support at-risk students.

4.4 Teachers identify intrinsic motivation to learn in students through their desire to learn, their behaviours, their academic success, and their emotions.

This theme elaborates on the participating teachers’ beliefs about and perceptions of intrinsic motivation in students. The teachers defined what intrinsic motivation meant to them and discussed what indicators of intrinsic motivation they looked for in their students. I found that the responses of my participants could be categorized into 4 types of indicators of intrinsic motivation. The first type of indicator is student desire to learn. All of my participants believed that a “want to learn”, “want to know more”, and a “want to do work” as shown through student curiosity and interest reflected intrinsic motivation to learn in a student. Carbonneau et al. (2012) supports the identification of intrinsic motivation through a desire to learn as this research proposes that intrinsic motivation is split between a desire to know, to accomplish, and to participate. Other researchers also agree that intrinsic motivation can be recognized by interest and a desire to learn (Deci et al., 1999; Fan & Wolters, 2014; Ferrer-Caja & Weiss, 2000; Ivengar & Lepper, 1999).

The second and third types of indicators are behaviour and academic success. Jane and Blair identified intrinsic motivation in their students by seeing if they were “quick to the task”, “eager”, “focused”, “concentrated”, “not easily disturbed”, and if they persevered to complete a task. The literature supports that students are intrinsically motivated when they have a drive to do work effectively and when a student chooses to continue working on a task for a long period of
time or until it is completed (Deci et al., 1999; Ivengar & Lepper, 1999; Martin, 2006). All of the teachers also looked at academic behaviours that related to academic success as an indicator of intrinsic motivation. Students that could “find learning meaningful”, achieved higher test scores, consistently completed their homework and school work, got accepted into “higher quality schools”, and continued to stay in school were perceived as being intrinsically motivated to learn. These academic success indicators are not discussed in the literature on defining intrinsic motivation, but research does support the correlation between intrinsic motivation and academic success (Carlton & Winsler, 1998). Therefore, the academic success indicators observed by these teachers may need to be researched further as potential measures of intrinsic motivation.

The last type of indicator that these teachers discussed was student emotion. Jane and Tess both looked at student body language to identify their emotions while working on different tasks. They both believed a student to be intrinsically motivated to learn if they showed excitement and happiness while working. Jane had recently taught a Science unit on liquids and solids in her class. She said, “They were very excited about the activity. And when interactions happened between the liquid and the solid they would voice their excitement.” Research strongly supports that intrinsic motivation is related to enjoyment from engaging in an activity (Fan & Wolters, 2014), and student self-reports of enjoyment are often used in research as an indicator of intrinsic motivation (Deci et al., 1999; Ferrer-Caja & Weiss, 2000; Ivengar & Lepper, 1999).

4.5 Teachers observe how student motivation can be affected by academic, personal, environmental, and social factors.

This theme describes the various factors identified by the participating teachers that were perceived to affect student motivation, both intrinsic and extrinsic. The 5 sub-themes within this theme are categories of the factors mentioned by the teachers. The first sub-theme highlights
how student work and academic success influence intrinsic motivation and the want to accomplish more. The second sub-theme is about individual student factors that can influence the amount and type of motivation a student will experience. The third sub-theme focuses on how the classroom environment affects student motivation. The fourth sub-theme looks at how the home environment impacts student motivation. The fifth sub-theme explores how interactions between students, teachers, and parents influence student motivation. Many of the factors discussed by these teachers are supported in the research, however, there is one factor that was not discussed. Research by Iyengar and Lepper (1999) found that students’ cultural background may influence the development of intrinsic motivation in students. The study found that students from independent cultures were intrinsically motivated by the provision of choices of work, but students from interdependent cultures were intrinsically motivated when their work was chosen for them by a person they believed to be part of their group. Therefore, it is important to keep cultural factors in mind when determining how to foster students’ intrinsic motivation.

4.5.1 Student work and academic success influence student motivation.

Jane and Blair both discussed how the type of student work available and prior academic success affect student motivation to learn. Jane said, “I found that something that was very challenging and difficult for me was very hard to motivate me to complete something” and “something that I found confusing, I didn’t understand, didn’t motivate me to try and figure out the problem”. Jane’s own experiences led her to believe that a student would lose motivation to work when they found a task too challenging, difficult, or confusing. Ferrer-Caja and Weiss (2000) also found that the development of student motivation requires the availability of optimally challenging tasks. Blair builds on this idea by identifying how the tasks available in their Montessori program are self-
correcting and self-motivating so the student always reaches success. She further describes the work students do in Montessori as “geared towards practical life” which helps students understand why they should do their work. Jane and Blair also found that when students achieve success it pushes them to keep going because they can see how their perseverance has positive learning outcomes. Ensuring student tasks are appropriate for the abilities of the students and focusing on learning as self-improvement helps students develop their intrinsic motivation to learn as they continue to find academic success (Ferrer-Caja & Weiss, 2000).

4.5.2 Students’ individual needs influence student motivation.

Blair and Tess noticed that students’ needs and attitudes influence whether or not they are motivated to learn, and whether that motivation is intrinsic or extrinsic. Blair found that students would lose motivation because they could be easily distracted by “friends trying to lure them away from their work”, “a friend that’s in front of them that is doing work more interesting than what they chose”, “a loud noise”, or “maybe they are hungry or thirsty so they get disrupted by their inner thoughts”. Blair also found that students who lacked patience for the learning process and were not confident in their own abilities did not have motivation to continue to learn and do their work. Blair and Tess both recognized that when students are not comfortable in their learning environments, they are also not motivated to learn. Carbonneau et al. (2012) explains that these factors are related to a student’s personality and affective state. This means that sometimes student motivation depends on the mood of the student and whether they feel like learning and doing their work or not. Research by Fan and Wolters (2014) also adds to these factors by showing how student perception of competence and self-efficacy greatly
impact student motivation. In addition, Tess found that sometimes there are students who struggle with intrinsic motivation to learn because they are used to being rewarded for their work and effort. Carlton and Winsler (1998) have found that tangible, expected rewards have significant negative effects on intrinsic motivation in students. Therefore, it is important that Tess was able to realize that some students may struggle with intrinsic motivation because they have grown up in a culture of materialistic rewards and extrinsic motivation.

4.5.3 The classroom environment influences student motivation.

All of my participants found that there were several factors related to the classroom environment which influenced student motivation. Jane said, “The classroom setup, so if it’s not bright and cheery and neat it may provide a mood in the classroom that children don’t want to learn in”. The mood of the classroom needs to support children’s motivation to learn. Blair found that the Montessori environment promotes student autonomy and success as everything is “geared towards the child”. She explained how all of the materials, including tables and chairs, are child-sized so it is easier for a student to move in the space than it is for an adult. Tess further stated, “I think that a love of learning is important and I try to instill that culture in my classroom”. Research has shown that school environments that support student autonomy and competency have a strong impact on the development of student motivation (Carlton & Winsler, 1998; Vallerand et al., 1997). Therefore, my participants have added to this research by showing how classroom layout and culture are also important in creating a mood for learning. Blair also pointed out the issue of accessibility in the learning environment which is not discussed in the literature. It is important that students can easily access any
learning material in the classroom and the classroom should be tailored for the size of the students.

4.5.4 A student’s home environment influences student motivation.

Research by Fan and Wolters (2014) shows the importance of parental involvement in helping students develop academic competency and intrinsic motivation to learn. Jane found that the students she had that struggled with intrinsic motivation had “family issues… so either divorce or family arguments or even the relationship between parent and child, if there’s arguing or discord between them, they’re not going to come to school really in the mood to want to learn”. Jane also found that students had less motivation to learn if the parents had a lack of education or did not participate in educational interactions with their child. She said, “If parents need to work long hours at work because they need to provide for their family they won’t be there at home to help with their children, with their homework and such, so their children are going to suffer.” She believed that children need support from their parents at home in order to be more academically successful and motivated. Research knows that parental involvement is key to student success and motivation to learn (Fan & Wolters, 2014), however, Jane further explores the variety of factors affecting parental involvement.

4.5.5 Interactions between students, teachers, and parents influence student motivation.

Jane and Blair identified peer support, teacher-student communication, and parental supervision as factors that affect student motivation to learn. Jane said, “Students that see the classroom bully, if that’s not addressed in the class it can really affect the motivation of students and learning in the classroom”. This lack of peer support
negatively affects student motivation. Blair found that in the Montessori they promote a lot of peer support by having different age groups working together on the same tasks which helps motivate students by building their confidence and competency. The literature emphasizes that having friends that value academic success and having mentor relationships both positively influence the development of students’ intrinsic motivation to learn (Crow, 2009; Fan & Wolters, 2014). The Montessori method promotes these positive peer relationships and Jane builds on this research by realizing that negative peer relationships are harmful to student motivation.

Teacher support, parental involvement, and teachers and parents acting as role models are all seen to support the development of intrinsic motivation (Crow, 2009; Fan & Wolters, 2014). Jane found that one of the best ways teachers can support the development of intrinsic motivation is to integrate student interests into learning activities. This required Jane to spend a lot of time getting to know each of her students and it really emphasizes the importance of teacher-student communication in the classroom. In addition, Blair found that when parents came into the classroom, students often wanted to do more work because they wanted their parents to be proud of them. Therefore, it is clear that social interactions and relationships between students, teachers, and parents impact student motivation.

4.6 Teachers foster intrinsic motivation in students by collaborating with their students and the school community to make learning meaningful and to individualize learning for each student.

This theme represents the various strategies the participating teachers discussed that help them foster their students’ intrinsic motivation to learn. All of my participants found that as a
teacher you have to build relationships with the school community and with each student in order to know how to support each student. Tess found that once she knew more about the cultural community of the school, she was better able to enact culturally responsive and relevant pedagogy. Jane, Blair, and Tess also got to know their students’ interests which helped them personalize student learning so students could connect themselves to what they were learning. The research supports contextualizing teaching material to personalize instruction and learning for students as a way to develop intrinsic motivation (Cordova & Lepper, 1996). In addition to the idea of personalizing instruction through culture and interests, Jane and Blair also mentioned that teachers need to differentiate their instruction and try different teaching approaches in order to suit the learning styles and needs of the students. Therefore, individualized learning that fosters intrinsic motivation should not only include choices surrounding content, but it should also include choices of how the content will be delivered.

As part of individualizing learning, Tess and Blair found that providing peer mentors and opportunities for collaborative learning was also beneficial to the development of intrinsic motivation in students. Research by Zhao et al. (2012) promotes the use of the learning-by-teaching method, in which students teach their peers. This research and the experiences of Tess and Blair demonstrate how when students teach each other and collaborate to build knowledge, they learn better and are more motivated to learn. Moreover, the autonomy and choice built into cooperative learning opportunities also helps increase students’ intrinsic motivation (Zhao et al., 2012). In conclusion, these strategies are all beneficial in supporting the development of intrinsic motivation. The only strategy that was not mentioned by my participants but is found multiple times in the literature is the use of individual goal setting with students (Crow, 2013; Manderlink & Harackiewicz, 1984).
4.7 Teachers identify parents, the school community, educational media, and professional development as resources for fostering students’ intrinsic motivation.

This theme describes the various resources the participating teachers discussed as supporting them in fostering intrinsic motivation. This theme consists of 3 sub-themes. The first sub-theme focuses on parents as resources that enable students to be intrinsically motivated not only at school, but also at home. The second sub-theme explores how staff and administration in a school can collaborate to promote the development of intrinsic motivation in students. The third sub-theme identifies professional development resources such as literature, videos, and workshops teachers use to help them develop student motivation. These resources are identified as being valuable for all of the participating teachers, however, there was a difference in experience with these resources between the teachers. Jane often talked about not having these resources available to her, but they were resources she would like to have. Blair and Tess often had many of these resources available to them, but they used the resources in different ways. Their experiences are great examples of how important it is to understand not only student needs, but also teacher needs so that students can be given the best support possible to succeed.

4.7.1 Parental involvement ensures students’ intrinsic motivation is supported at school and at home.

Parents were seen as a resource by all of my participants. They found that having a positive relationship and open communication with parents enabled students to be better supported in their development of intrinsic motivation at school and at home. The literature supports this finding as it states how parents that are involved in their child’s academic learning help foster stronger competence beliefs and increase their child’s intrinsic value of learning (Fan & Wolters, 2014). Jane and Blair had parents get involved
in their classrooms through programs like Scientist in the School, and through school events like observation days. Jane found that students benefited from having parents act as teachers in the classroom because it felt less “formal” and “more relaxed”. Froiland (2011) also supports having parents model, role play, and provide corrective feedback for their child as it makes the learning experience more positive for the child. Blair believed that letting parents observe their children in the classroom led to a better understanding of how the Montessori method works to promote autonomy and develop intrinsic motivation. Parents were also involved through parent-teacher communication. All of my participants found meetings with parents to be beneficial in planning concrete strategies to help intrinsically motivate students to succeed. Blair and Tess also mentioned phone calls, agenda messages, and classroom blogs as ways they were able to keep parents up-to-date with what was going on in the classroom. These strategies to get parents more involved are not discussed in the literature, however, research does support parental involvement as a beneficial way to foster intrinsic motivation in children at home (Crow, 2009; Fan & Wolters, 2014).

4.7.2 The staff and administration can collaborate to support student motivation and success.

The school climate needs to support student autonomy and competency by focusing on effort over achievement in order to support student motivation and success (Carlton & Winsler, 1998; Vallerand et al., 1997). Blair and Tess found that their schools, staff, and administration all worked together to create this type of school climate. Blair said, “All the teachers are always encouraging and always promoting motivation towards the children to have success all the time.” She found that in her school everyone
developed anchor relationships with the students which pushed the students to explore their own interests through self-directed learning (Crow, 2009). Blair also discussed how the teachers “share all their experiences with one another and they help each other find different methods for success of the children.” Tess had a similar experience in her school as she was a part of the “school improvement team”, which is a “committee handpicked by the principal in order to look at data and factors that contribute to student performance in the school”. This team would look at where there were weaknesses and strengths within the school and then provide a list of strategies to the rest of the teachers to help them support any weaknesses in their students.

Jane had a different experience from Blair and Tess in her school. She found that intrinsic motivation or student motivation in general was “not something that we really discuss openly in the staff room or amongst each other.” Her experiences did not reflect an open school climate and she often felt unsupported by her colleagues. She said that her school needed “discussions at principals’ meetings because I think principals would need to know about it too and then they can bring it to the teachers”. Therefore, the conflicting experiences of my participants, as well as research by Carlton and Winsler (1998), shows the importance of having the whole school, including administration, work together to support the development of intrinsic motivation by creating a learning environment that supports student autonomy and competency.

4.7.3 Professional development including literature, videos, courses, and workshops can support teachers in fostering students’ intrinsic motivation.

Research by Hardré (2007) demonstrates the importance of making professional development on effective strategies for motivating students available as the majority of
participating teachers admitted to having little to no knowledge on how to foster student motivation. My participants had experienced a range of professional development related to fostering intrinsic motivation and/or motivation in general. Blair had experienced the most professional development. She said, “We do have videos and books regarding Montessori method,” which is focused on fostering intrinsic motivation in students. She also is provided by her school with workshops on intrinsic motivation and the Montessori method and there are refresher courses on both available to her. Tess had experienced some professional development, such as a TED talk on intrinsic motivation that was shown during a staff meeting and other small discussions during staff meetings and meetings with the “school improvement team”. Jane was similar to the teachers in Hardré’s (2007) study. She talked about the lack of professional development available to her on intrinsic motivation. She also said that she would like to “sign up more on some teaching literature, professional teaching literature”, but “I haven’t really seen a lot of literature on it”. One resource she did discuss was the book *Elementary and Middle School Mathematics: Teaching Developmentally* by John A. Van de Walle and Sandra Folk. She said, “The resources I use would be books that help me to make a lesson easier to teach because then I think once the children understand it then they’re more motivated to learn”. This shows that professional development on intrinsic motivation and effective strategies to support its development were not consistently accessible to all of the participating teachers, even though research emphasizes its importance (Hardré, 2007).

4.8 Students motivate teachers to overcome challenges related to their own abilities, emotions, school communities, and students, that occur while supporting at-risk students and fostering the development of intrinsic motivation.
This theme explains the challenges the participating teachers have faced with at-risk students and fostering the development of intrinsic motivation, as well as what motivates these teachers to overcome these challenges. Jane discussed how she sometimes struggles to teach mathematics which makes it challenging for her to try to motivate her students. She said, “I find sometimes math really difficult to help kids understand”. Tess also discussed how she often feels pressured by her school community to have her students perform well on standardized tests. She said, “We are pressured to perform and we try to instill that love of learning, we try to forget about all of that”. If they do not do well, it often affects her confidence in her own abilities as a teacher. It is important for teachers to have self-efficacy and intrinsic motivation to teach what they’re teaching because it can affect the instructional support they provide and influence a student’s intrinsic motivation to learn what is being taught (Lam et al., 2009). Another challenge mentioned by Jane was the difficulty in trying to stay current or “fresh”. This challenge is in relation to Jane trying to get to know her students, but having only a limited idea of many of the things they talk about being interested in. In addition, both Jane and Tess find that sometimes there are certain students that bring their own challenges for teachers. Jane said that her school community sometimes leads to students being “aggressive and needy and difficult, challenging for a teacher”. Tess has struggled with truancy and how when a student is away for long periods of time, a lot of progress you made with them disappears and you have to start all over again. They both found these situations with students frustrating. These situations also did not allow an anchor relationship to be formed between the teachers and the students which affects the teacher’s ability to know the child, their interests, and how to best support their development of intrinsic motivation and their learning (Crow, 2009).
Although there are many challenges these teachers have to face, they also are often motivated and inspired by those around them. All three teachers talked about how they often have multiple roles in their schools which allows them to see their students in different contexts. This helps create a stronger relationship between them and their students which makes it easier for the teachers to know how to motivate their students in the classroom. Jane and Blair also discussed how being able to see students enjoy learning and reach success in their classrooms motivates them. Jane said, “If I know that they’re enjoying learning the lesson then that motivates me to want to keep that going”. Blair also mentioned that being able to see students she taught in their earlier years remain successful as they go through the rest of their elementary years and go on to high school continues to motivate her. She said, “From seeing a child in my class at the age of 3 and then seeing that child graduate at the age of 14, you know you made a big impact in their life”. Therefore, developing intrinsic motivation to learn in students leads to the students helping develop motivation in their teachers.

4.9 Conclusion

My research findings have supported the existing literature and highlighted certain gaps in the literature. When teachers identify at-risk students they should be aware of how their perceptions may be influenced by their school’s priorities and definitions of success. My participants identified 2 factors of being at-risk, difficulties interacting with peers and poor-decision making that affects personal well-being, that have not yet been discussed in the literature. An indicator of intrinsic motivation not mentioned in the literature that was discussed by my participants was academic behaviours, such as being able to make learning meaningful and consistent completion of work. My findings also included some null data. None of the participants mentioned gender, ethnicity, or psychological well-being as factors influencing at-
risk students. The participants also did not identify culture as a factor that may impact the
development of intrinsic motivation. Next, in Chapter 5, I discuss the significance of my research
findings for me as a beginning teacher and for the educational research community more
broadly. I also identify areas for future research and make recommendations based on my
research findings.
Chapter 5: Implications

5.0 Introduction

In this chapter I discuss the final conclusions of this study. I begin by reviewing the key findings of my research and their significance in relation to current literature. I then explain the implications of this study for the broader educational research community and for my own professional identity and practice. Next, I make recommendations for Ministries of education, teachers, administrators, schools, and the educational research community based on my findings. I then identify areas for future research. Finally, I summarize my research and its significance in the concluding comments.

5.1 Overview of Key Findings and Significance

My research findings first discussed how teachers identify at-risk students, factors that influence at-risk students, and strategies to support at-risk students and prevent drop-out. There are many ways to identify an at-risk student, but teachers’ perceptions of at-risk students may be influenced by their school’s priorities and definitions of success. Identifying at-risk students through their peer interactions and decision-making skills should be considered and further researched. Significant factors that influence at-risk students are the quality of their home life, their social development, and their school attendance. Teachers may overlook gender, ethnicity, and/or psychological well-being as factors that influence at-risk students. Teachers can support at-risk students by developing student responsibility and collaborating with the rest of the school community to support student needs.

My findings then looked at indicators of intrinsic motivation, significant factors that impact its development, and strategies and resources to foster it at school and at home. Teachers can identify intrinsic motivation through a desire to learn, learning-oriented behaviours,
academic success, and positive emotions during work. Academic behaviours, such as being able to make learning meaningful and consistent completion of work, were not mentioned as indicators in the literature. Student motivation can be impacted by previous academic success, appropriate challenges for student ability, amount of distractions, a positive learning environment at school and at home, and the quality of student-teacher-parent relationships. Teachers should also understand that different cultures may influence what motivates a student. Collaboration with the school community to make learning student-centered, meaningful, and individualized is required to foster intrinsic motivation. More professional development on intrinsic motivation and how to help develop it should be made available for all teachers.

Lastly, my research findings spoke to the challenges of supporting at-risk students and fostering intrinsic motivation in students. It also discussed how teachers are able to motivate themselves to keep working with their students. Truancy and staying relevant with youth culture were the 2 biggest challenges. Teachers were able to overcome these challenges and motivate themselves because of their students. Being able to see students succeed and enjoy learning is what keeps these teachers going.

5.2 Implications

In this section, I state what the implications of my research are. First, I explore how my research influences the broader educational community. I then look at how my own professional identity and practice have been shaped by this research.

5.2.1 Broad: The Educational Research Community

This research influences the educational community because my findings focus on improving academic success for all. My findings show that teachers perceive and define at-risk students differently based on their own biases and experiences. It is important then
for teachers to know how their perceptions of students are formed so they can better understand why they may believe a student is at risk. Teachers also need to be informed on how gender, ethnicity, and psychological well-being influence whether a student may become at-risk or not. Educational researchers, Ministries of education, and school boards need to realize the difficulties there are in identifying at-risk students and ensure that the identification procedures used in schools are reliable, valid, and research-based. They also need to make information on at-risk students more easily accessible for teachers by providing literature in professional magazines or recommending books or videos so they can gain a better understanding of what it means to be at risk and why students may be at risk.

Teachers have a general idea of what intrinsic motivation is, however, this research shows that some teachers have difficulty knowing how to promote its development in their students. This implies that educational researchers should be trying to determine more concrete, practical strategies for educators that promote the development of intrinsic motivation, just as I have done through this research. My findings also show that professional development through books, videos, and workshops on intrinsic motivation and how to support its development is crucial to helping teachers understand how to foster intrinsic motivation in their students. In addition, a school community that promotes autonomy and student competency while focusing on effort over achievement is necessary for students’ intrinsic motivation to develop. This implies that administrators, school boards, and Ministries of education are all important influences in promoting the development of intrinsic motivation in students as a goal of the education system.
Teachers need to know how to meet the various needs of students, especially those they identify as at risk. This research implies that individualizing learning and building positive student-teacher relationships are effective ways of meeting various student needs while promoting the development of intrinsic motivation. My findings also imply that collaboration between teachers, students, administration, and parents is necessary for providing the best support and access to resources. Therefore, it is an important goal for teachers, administrators, and parents to work together to ensure that everyone is able to support students at school and at home. In addition, workshops and resources should be available for both teachers and parents to learn more about supporting the development of intrinsic motivation, autonomy, and self-efficacy.

5.2.2 Narrow: My own Professional Identity and Practice

My professional identity and practice have been shaped by this research in many ways. I became more aware of my own biases and beliefs that influence my perceptions of students as I learned about the various ways teachers identified at-risk students. For example, I often believed that students would become bored and uninterested when they are not being challenged enough. Now I realize that being bored and uninterested could also indicate that the work is too challenging or that the student does not understand the relevance of the work. The whole research process has also pushed me to view myself not only as a teacher but also as a researcher. This encourages me to continue investigating my own inquiries in the classroom and to share my knowledge with the educational community whenever possible. It also encourages me as a beginning teacher to stay current with educational research to help inform my practices. In addition, professional
development and collaboration with other educators are key resources that will help me develop as a teacher.

Lastly, my findings made me realize how teachers need to take care of their own well-being so that they can stay motivated for their students. Students need to be able to see how their teachers care about learning and teachers need to be able to model how intrinsic motivation to learn promotes enjoyment in life-long learning. As a teacher, I want to ensure that I share my own interests through my teaching and incorporate my students’ interests to help us become more intrinsically motivated to learn. I also want to create a classroom culture that supports student learning and does not just focus on achievement or competition. I want to organize my classroom so that it is welcoming for my students. I want to have their work on the walls showing their progress over time and highlighting where we learned from our mistakes. I also want to help develop my students’ social skills by using team-building exercises and cooperative learning games.

5.3 Recommendations

I make the following recommendations for the educational community based on my findings and the implications of this research:

- Ministries of education and school boards need to implement screening in elementary schools using research-informed tools (i.e. surveys, psychological assessments) that account for truancy, academic achievement over time, behavioural and emotional difficulties, psychological well-being, cultural background, gender, and home life so there is a stronger focus on early intervention and prevention of at-risk students

- Teachers should be provided with more professional development and training on how to identify at-risk students and on appropriate strategies for supporting at-risk students in the
classroom such as increasing teacher supervision, providing additional positive feedback and reinforcement, offering more leadership opportunities, increasing communication with parents, and involving counselling or social work services when necessary.

- Schools need to provide more information on what support services are accessible (i.e. social workers, counsellors, financial aid) for struggling families (i.e. poverty, mental or physical health issues, family discord) both through the school and in the school community.

- Schools, administrators, and teachers need to ensure there is open communication with parents and parental involvement should be prioritized through parent information sessions, parent-teacher conferences, phone calls, emails, newsletters, and meetings with parent councils.

- Research from the educational community should be made more accessible to administrators and teachers by having more educational magazines available, having recommendation lists of current research in Professionally Speaking, and/or having video updates sent to teachers explaining current research findings and providing links to the research.

- Teachers need more professional development (workshops, literature, videos, etc.) on how intrinsic motivation can be shown through a desire to learn, eagerness, the ability to make learning meaningful, and enjoying a task, as well as how to support its development in students through making learning student-centered, providing students with choice, incorporating student interests, and contextualizing learning in meaningful and realistic ways.
- Teachers should have opportunities to focus on their own well-being and motivation through planned wellness events such as mindfulness activities, meditation sessions, yoga sessions, etc. that are open for all staff and administration to attend

### 5.4 Areas for Further Research

My research findings have supported previous literature, but have also raised more questions to be answered. The following list is of areas I believe should be addressed through further research:

- What indicators of being at risk are specific and/or pertinent to the elementary years of schooling?
- What screening tools can be used to identify at-risk students earlier?
- What teaching strategies best support the development of intrinsic motivation throughout the elementary years of schooling?

### 5.5 Concluding Comments

My research findings explored how teachers identify at-risk students, factors that influence at-risk students, and strategies to support at-risk students and prevent drop-out. Teachers’ perceptions of at-risk students are altered by their biases and experiences. Indicators of intrinsic motivation, significant factors that impact its development, and strategies and resources to foster it at school and at home were then discussed. Student-centered learning promotes autonomy and competency in students which leads to the development of intrinsic motivation. Lastly, my research findings examined the challenges of supporting at-risk students and fostering intrinsic motivation in students. It also emphasized the importance of maintaining your own well-being and intrinsic motivation as a teacher.
There were many implications and recommendations that arose from this research. First mentioned was how at-risk students are not easy for teachers to identify and teachers’ perceptions of students greatly influence who they see as being at risk. Developing early screening tools that account for truancy, academic achievement over time, behavioural and emotional difficulties, psychological well-being, cultural background, gender, and home life may be a reliable approach for identifying at-risk students and enacting appropriate responses. I then discussed how professional development and educational research on at-risk students and intrinsic motivation should be made more accessible for teachers so that they can inform their practices and learn new strategies to use in their classrooms. I also found that I now identify myself as a teacher and researcher which makes me want to continue conducting my own inquiries and to continue sharing what I learn with the educational community. Next, school community collaboration was emphasized as the best way to meet all students’ needs at school and at home. The school needs to be able to provide the resources and services required by teachers, parents, and students to ensure that all students can be successful. Lastly, I realized that personal well-being should be supported by the school community so that teachers and students can remain motivated to learn.

The purpose of this study was to determine practical strategies elementary teachers can use to foster intrinsic motivation in their students to help prevent drop-out in later school years. Since 16% of students are still not graduating from high school (Ministry of Education, 2015; Office of the Premier, 2015), this research is promoting early prevention and intervention of at-risk students in elementary school with the hope of continually decreasing the amount of high-school drop-outs.
References


Ministry of Education. (2015, April 1). 2014 graduation rates across the province [Backgrounder].


Appendix A: Consent Letter

Date: Friday, July 31, 2015.

Dear ______________________________,

My name is Natalie Yurkewich and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on how elementary school teachers are working to increase intrinsic motivation to learn in their students, especially students who are at-risk of dropping out. I am interested in interviewing current elementary school teachers who have at least 10 years of experience, have taught at least 2 different grades, and are committed to promoting intrinsic motivation to learn. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 45-60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a research conference or publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. This data will be stored on my password-protected computer and the only people who will have access to the research data will be my course instructor Dr. Angela MacDonald. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks or benefits to participation, and I will share with you a copy of the transcript to ensure accuracy.
Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Natalie Yurkewich

OISE/University of Toronto Teacher Candidate

Telephone: (416) 988-3367

Email: natalie.yurkewich@mail.utoronto.ca

Course Instructor’s Name: Dr. Angela MacDonald

Contact Info: angela.macdonald@utoronto.ca

Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.

I have read the letter provided to me by Natalie Yurkewich and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ____________________________________________

Name: (printed) ____________________________________________

Date: _____________________________
Appendix B: Interview Protocol

Thank you for agreeing to let me interview you for this study. The aim of this study is to explore how elementary teachers, such as you, are fostering intrinsic motivation to learn in their students, especially those deemed as at-risk. The interview will take approximately 45-60 minutes. I will ask you a series of questions about your teaching experiences related to the development of intrinsic motivation in your students, as well as your experiences with at-risk students. I want to remind you that during the interview you have the right to choose to not answer any question without explanation. You can also withdraw from participating in this study at any time. You will have the chance to review the transcript of the interview once it is completed and any personal identifiers will not be included in the research to maintain confidentiality. Do you have any additional questions before we begin?

Section 1: Background Information

1. How many years have you worked as a teacher?
2. What grades and subjects are you currently teaching and have previously taught?
3. Can you tell me about the school that you currently work in? (size, demographics, program priorities)
4. In addition to being a classroom teacher, do you fulfill any other roles in the school? (counsellor, advisor, coach, leader)
5. As you know, I am interested in learning how teachers work to increase intrinsic motivation for students, especially those at-risk. Can you tell me how you developed an interest in and commitment to this area? *probe re: personal, professional, and educational experiences
   a. Have you ever personally struggled with intrinsic motivation? What was your experience?
   b. Do you attend any professional development meetings related to student motivation? What information or strategies are discussed? What happens after the
meetings (do teachers attend the next meeting to report what they have tried, what was successful or unsuccessful)?

Section 2: Beliefs and Values - Intrinsic Motivation and At-Risk Students

6. How do you define intrinsic motivation? What does it mean to you? What indicators of this would you recognize?

7. How would you describe a student that is intrinsically motivated?

8. In your experience, what are some of the primary factors causing students to struggle with intrinsic motivation?

9. In your experience, to what extent do you believe that teachers and the classroom environment can impact students’ development of intrinsic motivation?

10. What do you believe are some of the most beneficial approaches to increasing students’ intrinsic motivation?

11. How do you think students’ intrinsic motivation to learn relates to their success in school?

12. How would you describe a student who is at-risk? Have you ever experienced having an at-risk student? How did you know they were at risk?

13. What do you think are factors inside the classroom that affect whether a student is at risk or not?

14. What do you think are factors outside the classroom that affect whether a student is at risk or not?

Section 3: Practices

15. Generally speaking, when a student has no motivation to do work activities how do you motivate them to get started? Do you find that this works? How do you know that it works? *probe re: setting goals, incorporating student interests

16. Can you give me an example of a student that you have had that struggled in the area of intrinsic motivation, and tell me how you responded?

   i. Who was this student? (grade, subject, learning style, at-risk?)

   ii. What indicators did you see that this student struggled in the area of intrinsic motivation?
iii. What instructional strategies or approaches did you take to try to increase this student’s intrinsic motivation?

iv. How did this student respond?

17. Can you describe an experience where you successfully motivated an at-risk student to complete a work activity? Explain what happened and the results of your actions. How did you know that you motivated them?

18. In what way, if at all, do you include the students’ parents/guardians in your classroom? How do you think this affects the students?

19. Do you inform the students’ parents about what intrinsic motivation is and their role in its development? Explain why or why not.

**Section 4: Supports, Challenges, and Next Steps**

20. What factors support your commitment and approach to increasing intrinsic motivation in students?
   a. Do other teachers in your school use teaching strategies that aim to increase students’ intrinsic motivation? If yes, do you share or use the same strategies?
   b. Does your school community support the development of intrinsic motivation? If yes, how do they support it? How does the support affect the students? How do you know if it is successful?

21. Do you know of any literature or videos on how teachers can increase students’ intrinsic motivation? What literature or videos have you found most helpful in informing your own teaching practices?

22. What resources do you use in your classroom or school to help students become intrinsically motivated?

23. What challenges do you encounter working to increase intrinsic motivation in students who have been deemed at-risk? How did you respond to these challenges? How might the education system further support you to meet these challenges?

24. What advice, if any, do you have for beginning teachers who are committed to increasing intrinsic motivation to support students generally, and students at-risk more specifically?
Thank you for your time and participation. If you have any questions or concerns you can contact me through the email listed on the letter of consent.