Understanding how the Implementation of the Specialist High Skills Majors Programs in Ontario Schools Contributes to Student Outcomes

By

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A thesis submitted in conformity with the requirements for the degree of (Doctorate of Philosophy)
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Doctor of Philosophy 2013
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Abstract

New programming, such as the Specialist High Skills Major has been implemented in Ontario as part of the Student Success Learning to 18 Strategy to increase secondary graduation rates. Yet it has been unclear if this type of programming is actually improving student outcomes. As a result, this study asks: How does the implementation of the Specialist High Skills Majors (SHSM) contribute to student outcomes? Sub-research questions inquire about the consistency of the SHSM across Ontario, which students the SHSM has the greatest impact on academic success and if participation in the SHSM increases students’ academic success as defined by credit accumulation, marks, and graduation. The conceptual framework in this study is an amended version of Fullan’s (2007) critical factors that affect policy implementation.

The study’s methods first included reviewing Ontario School Information System data on student achievement in the SHSM program. Interviews with thirty-four people also took place in eight schools from a mix of four geographically diverse Catholic and public school districts in Ontario that had high student enrollment in the SHSM program.

While there were many findings within this study, four were key. The first finding was that there was great consistency to some aspects of implementing the SHSM program province-wide when there was top-down direction, while there was also great
variability in other areas where there was increased flexibility. The second key finding centers around the role of leadership, including effective styles of leadership, consistency in leadership, and the importance of delegating leadership responsibility. The third finding highlights the importance of resources in implementing change. The last finding discusses the type of SHSM student that is most successful in the SHSM program and how program implementation directly affects student success.
ACKNOWLEDGEMENTS

I wish to extend my sincere gratitude to my thesis supervisor, Dr. Ben Levin. Thank-you for being such an inspiring teacher and leader. Thank-you also for your continued guidance, support and the wealth of opportunities you have given me during my doctoral degree. I feel extremely fortunate to have you as my supervisor!

I wish to also extend great thanks to my committee members, Dr. Nina Bascia and Dr. Joe Flessa. I was fortunate to have both of you as instructors during my coursework. Your classes and your guidance helped shape many ideas within this thesis. Thank-you.

Lastly, I wish to thank my family. I can’t thank you enough for your ongoing support in each and every dream I have had over the years, including completing this degree. I am deeply grateful.
# TABLE OF CONTENTS

ABSTRACT .......................................................................................................................... ii

ACKNOWLEDGEMENTS ................................................................................................. iii

TABLE OF CONTENTS ..................................................................................................... iv

LIST OF FIGURES ......................................................................................................... viii

LIST OF TABLES ............................................................................................................. viii

CHAPTER I: INTRODUCTION ......................................................................................... 1
1.0. The Research Problem ......................................................................................... 1
2.0. Purpose, Research Questions & Brief Outline of the Study .............................. 2
3.0. Significance of the Study ..................................................................................... 3

CHAPTER II: LITERATURE REVIEW ......................................................................... 7
1.0. Literature Review Search ..................................................................................... 7
2.0. High Schools ......................................................................................................... 8
3.0. Student Disengagement and High School Drop Outs ...................................... 11
   3.1. Individual Factors ............................................................................................ 12
   3.2. Family ............................................................................................................. 13
   3.3. Institutional Factors ......................................................................................... 14
   3.4. Community ...................................................................................................... 16
   3.5. Summary ......................................................................................................... 16
4.0. The Student Success/Learning to 18 Strategy .................................................... 16
5.0. The Specialist High Skills Majors Program ....................................................... 18
6.0. Policy Implementation ....................................................................................... 22
   6.1. Need ................................................................................................................. 23
   6.2. Clarity .............................................................................................................. 24
   6.3. Complexity ...................................................................................................... 25
   6.4. Quality and Practicality of Program ............................................................... 26
   6.5. Community Characteristics ........................................................................... 27
   6.6. The District ..................................................................................................... 28
   6.7. The Principal .................................................................................................. 29
   6.8. Teachers ........................................................................................................... 30
7.0. Conceptual Framework ...................................................................................... 32

CHAPTER III: METHODS AND METHODOLOGY ................................................... 36
1.0. Research Instruments / Research Methods ....................................................... 36
2.0. Data Analysis & Method .................................................................................. 42
3.0. Ethics ............................................................................................................... 43
4.0. Participant Recruitment ............................................................................... 43
5.0. Limitations of the Research Design ............................................................... 44
CHAPTER IV: STUDY FINDINGS .................................................................................... 46

Sub-Question I: Program Consistencies ........................................................................ 46

1.0. Need .......................................................................................................................... 46
  1.1. Community Profiles ............................................................................................ 47
  1.2. School Profiles .................................................................................................... 47
    1.2.1. Central High School ...................................................................................... 50
    1.2.2. Cooke Secondary School .............................................................................. 50
    1.2.3. Delloview High School .................................................................................. 51
    1.2.4. Farmington Secondary School ...................................................................... 52
    1.2.5. Portsmouth High School ............................................................................... 52
    1.2.6. Southshore Secondary School ....................................................................... 53
    1.2.7. Valley Gardens Secondary School ................................................................. 54
    1.2.8. Welland Secondary School .......................................................................... 54
  1.3. Frustrations within Schools ................................................................................. 55
    1.3.1. Location ........................................................................................................ 55
    1.3.2. Breadth of Program ....................................................................................... 56
    1.3.3. Lack of Support of the Program .................................................................... 58
  1.4. Need Summary .................................................................................................... 60

2.0. Clarity & Complexity ............................................................................................... 61
  2.1. Bundled Credits ................................................................................................... 61
    2.1.1. Contextualized Learning Activities (CLAs) ..................................................... 63
    2.1.2. Cooperative Education .................................................................................. 64
  2.2. Certifications ....................................................................................................... 65
  2.3. Experiential Learning and Career Exploration ..................................................... 68
  2.4. Reach Ahead Experiences ................................................................................... 69
  2.5. Essential Skills and Work Habits ........................................................................ 69
  2.6. Monitoring ........................................................................................................... 70
    2.6.1. SHSM Monitoring Responsibility of District Leads ........................................ 70
    2.6.2. SHSM Monitoring Responsibility of Co-op Teachers .................................. 71
    2.6.3. SHSM Monitoring Responsibility of Guidance & Secretarial Staff .............. 71
    2.6.4. SHSM Monitoring of SHSM Coordinators .................................................... 72
    2.6.5. Frustrations with Monitoring the SHSM Program ........................................ 72
  2.7. Community Partnerships ..................................................................................... 73
  2.8. Clarity & Complexity Summary ......................................................................... 75

3.0. Quality and Practicality of Program ....................................................................... 77
  3.1. Materials/Funding ............................................................................................... 78
    3.1.1. Funding Problems ......................................................................................... 80
  3.2. Professional Development Provided .................................................................... 81
    3.2.1. Co-op Teachers ............................................................................................. 81
    3.2.2. Administrative Professional Development ................................................... 82
    3.2.3. Teacher Professional Development .............................................................. 83
    3.2.4. SHSM Coordinator Professional Development ............................................ 85
  3.3. Program Quality and Practicality Summary ....................................................... 86
# Contents

4.0. Teachers................................................................................................................. 87  
4.1. Time to Discuss the SHSM .................................................................................. 88  
4.2. Change of Practice .............................................................................................. 89  
4.3. Teacher Summary ............................................................................................... 92  

5.0. Leadership............................................................................................................. 92  
5.1. District Leadership .............................................................................................. 93  
5.2. School Administration’s Involvement in the SHSM Program............................ 95  
5.3. SHSM Coordinator’s Leadership in the SHSM Program ................................... 98  
5.4. Administrators Helping to Change Practice...................................................... 100  
5.5. Leadership Frustrations ..................................................................................... 101  
5.6. Leadership Summary......................................................................................... 103  

Sub-Question 2: SHSM Student Profiles .................................................................... 106  
1.0. Recruitment ...................................................................................................... 107  
2.0. Marks & Attendance ....................................................................................... 108  
3.0. English Language Learners ............................................................................. 109  
4.0. Special Education Students ............................................................................. 110  
5.0. Course Profiles .................................................................................................. 113  

Sub-Question 3: Marks and Credit Accumulation .................................................... 118  
1.0. HEQCO Study Findings on SHSM Academic Performance............................ 119  
2.0. Red Seal Numbers ........................................................................................... 119  
3.0. Chapter Conclusion .......................................................................................... 125  

CHAPTER V: CONCLUSIONS .................................................................................. 128  
1.0. Conceptual Framework....................................................................................... 128  
2.0. Findings ............................................................................................................. 129  
2.1. Program Variability and Program Consistency ................................................ 129  
2.1.1. Program Consistency .................................................................................. 129  
2.1.2. Program Variability .................................................................................... 132  
2.2. Leadership ......................................................................................................... 134  
2.3. Resources .......................................................................................................... 136  
2.4. The SHSM Student Profile .............................................................................. 139  
3.0. Recommendations ............................................................................................ 140  
4.0. Final Remarks ................................................................................................... 143  

CHAPTER VI: APPENDIX ....................................................................................... 144  
Appendix A: Contextualized Learning Activities Example .................................... 144  
Appendix B: Letter of Information .......................................................................... 149  
Appendix C: Consent Form ....................................................................................... 151  

REFERENCES........................................................................................................... 152
LIST OF FIGURES

Figure 1: Fullan's (2007) Factor's that Affect Policy Implementation.............................. 33
Figure 2: Revised Factors that Affect Policy Implementation.............................................. 35

LIST OF TABLES

Table 1: Interview Questions ......................................................................................... 39
Table 2: Community Profiles .......................................................................................... 47
Table 3: School Profiles (as of 2010-2011 school year) ................................................. 48
Table 4: Educators with SHSM Monitoring Responsibilities ............................................ 69
Table 5: Professional Development Co-op/Guidance Teachers' Perceived Received ...... 82
Table 6: Professional Development Administrators' Perceived They Received .......... 83
Table 7: Professional Development Subject Teachers' Perceived They Received .......... 83
Table 8: Professional Development SHSM Coordinators' Perceived They Received ...... 85
Table 9: Change of Teaching Practice .......................................................................... 89
Table 10: District Leadership in the SHSM Program ...................................................... 93
Table 11: School Administrator Leadership in the SHSM Program .............................. 96
Table 12: SHSM Coordinator's Involvement in the SHSM Program .............................. 98
Table 13: Students by Special Education Status ............................................................ 113
Table 14: 2008 – 2009 Student Language Course Profiles .......................................... 116
Table 15: 2008-2009 Student Math Course Profiles ...................................................... 116
Table 16: 2009-2010 Student Language Course Profiles .............................................. 116
Table 17: 2009-2010 Student Math Course Profiles ...................................................... 117
CHAPTER I: INTRODUCTION

This thesis consists of five chapters. Chapter One articulates the research problem and statement of purpose. It provides the rationale and background for the research problem, and provides a brief outline and the significance of the study. Chapter Two reviews the research literature on student disengagement in school and program implementation. This chapter also discusses the Student Success/Learning to 18 Initiative (SS/L-18) and the Specialist High Skills Major program within it. Lastly, Chapter Two discusses the conceptual lens that is the basis of this study. Chapter Three explains how the research problem will be investigated and why particular methods and techniques are chosen. Accounts of the procedure, sample size, method of selection, research instruments, ethics, and limitations of the study are provided. Chapter Four outlines the findings of the study. Chapter Five analyzes the findings of the study, relates them to the academic literature pertaining to each topic and offers conclusions to the study.

1.0. The Research Problem

In 2003, Ontario launched a large-scale, multi-year public education reform, called the Student Success-Learning to 18 Strategy (SS/L-18). At the secondary school level, the SS/L-18 Strategy intended to increase secondary school graduation rates from 68% in 2003-04 to 85% by 2010-11, reduce secondary school leaver rates, and increase student participation in learning. Phase Three of the SS/L-18 Strategy began in December 2005 with the introduction of the Learning to 18 legislation (Bill 52) and additional funding for the development of the Specialist High Skills Majors (SHSM) programs. This Strategy was intended to encourage alternative and flexible educational opportunities and foster student engagement. It also aimed to ensure that students successfully complete their secondary schooling with the knowledge required to pursue the work and learning opportunities following graduation, whether it be in college, university, an apprenticeship or the workforce.

Nine years have passed since the initial graduation targets were established by the Ontario government. Results on the provincial literacy test and credit accumulation in
the earlier years of high school, which strongly predicts graduation rates, have improved. Graduation rates have also been rising. As of 2012, Ontario has increased its five year high school graduation rate from 68% to 82%. This means an additional 20,000 students per year are graduating in a timely way from Ontario high schools compared to 2004 (Levin, 2012). The Canadian Council on Learning (CCL) also conducted a program evaluation in 2008 on the SS/L-18 Strategy consisting of several hundred semi-structured field interviews and focus groups and 14,000 survey respondents. They reported findings that were predominantly positive. The CCL found that this Strategy “was met with an enthusiastic response from all parties” (CCL, 2008, p.vi). Improved communication across system actors, increased flexibility in meeting diploma requirements, increased focus on a caring school culture, and increased focus on tracking and monitoring individuals were reported outcomes from the SS/L-18 Strategy (CCL, 2008).

However, despite the positive results, success has not occurred for all students. Some students continue to be disengaged, fail to obtain credits, and drop out of school. While new programming, such as the SHSM, has been implemented in Ontario as part of the SS/L-18 Strategy, it is unclear if this type of programming is actually improving student outcomes, aiding students who were already finding success in school, or are not impacting any students. The essential question then becomes not simply “is the program implementable and does it work?” but “is the program implementable and for whom, where, when and why does it work” (Honig, 2006)?

2.0. Purpose, Research Questions & Brief Outline of the Study

The purpose of this study is to understand how the implementation of the Special High Skills Majors (SHSM) program in Ontario schools contributes to student outcomes. The theory of action for the SHSM, as indicated by the Ontario Ministry of Education (2011), is to create a program for grade 11 and 12 students that focuses on a career path that matches student skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD). Not only does this program aim to increase graduation rates by increasing relevancy and student interest, but it also aims to link students’ high school experience to post-secondary aspirations, whether it be an apprenticeship, training, college, university or the workplace. This occurs through the
five components of the program, which include: 1. Bundling core curriculum and cooperative credits, 2. Certification and Training, 3. Experiential Learning and Career Exploration Activities, 4. Reach Ahead Experiences, and 5. Essential Skills and Work Habits. These components will be outlined in greater detail in the literature review.

In relation to this program’s theory of action, the central research question for this study is: How does the implementation of the Specialist High Skills Majors (SHSM) contribute to student outcomes?

Sub-research questions imbedded within the main research question include:

1. How consistent are the features of the SHSM across Ontario?
2. For which students does the SHSM have the greatest impact on academic success?
3. Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation?

3.0. Significance of the Study

Public education in Ontario commands a significant share of the provincial budget and large-scale educational changes are costly and potentially risky (CCL, 2009). With 1.3 billion dollars invested (Ministry of Education, 2004) in a strategy that aims to improve graduation outcomes, questions about the value added by education policies are certainly asked. Given this initiative’s promise - to create a significant level of educational change - the implementation of education policy warrants careful scrutiny. Furthermore, school systems are now held accountable for demonstrable improvements in the academic achievement of all students, including increasing equity (Honig, 2006). Therefore, a study that analyzes this Strategy is politically relevant for the government as well as the public.

This study is also significant because it builds on the research conducted by the Canadian Council on Learning (2008) and a report from the Higher Education Quality Council of Ontario (Levin & Segedin, 2011; Maharah, Levin & Segedin, 2012). In 2008, the Canadian Council on Learning conducted a program evaluation of the SS/L-18 Strategy to determine if this Strategy was both aligned with the Ministry’s goals and if it produced intended outcomes. In this report there were fifteen questions asked. Most of
these questions were broadly looking at the SS/L-18 Strategy, but two questions directly related to the SHSM program. These two questions asked: Is there any evidence that structures and supports are changing to better provide viable pathways for all students to learn to 18 years and beyond? Is there any evidence that new learning opportunities are changing to better capture and build on the strengths and interests of all students? In this report, it was determined that

…many secondary school students and staff agree that initiatives such as Dual Credit programs, Specialist High Skills Majors (SHSMs), expanded cooperative education, apprenticeships, and School-College-Work Initiatives (SCWIs) help students by providing them interesting new learning opportunities (p.3).

It was also found that almost all school staff respondents believed that the SHSM help students gain self-confidence (94.8%), maintain their interest in school (94.7%), and prepare for post-secondary education and training (94.7%).

However, despite these impressive numbers, 40.9% of the teachers and 75.8% of the students who completed the online survey stated they were not familiar with Specialist High Skills Major (SHSM) programs. This finding, the report indicates, was not surprising given the fact that SHSMs were not yet widely implemented (CCL, 2008).

Yet, this is not true today. Since the program’s commencement it has grown significantly.

The SHSM program began in 2006-07 with 600 students in 27 programs in 44 schools. In 2010-2011 there were over 28,000 students in 1,050 programs in 540 schools (A. Cartile, Personal Communication, February 9, 2011). With such growth in numbers and so many schools, perhaps now is a time to more fairly assess the SHSM program. It may be an accurate time to understand how the implementation of the SHSM contributes to student outcomes. In other words, this study is building upon the findings of the CCL study to see how the SHSM program has developed and to understand if the way this program has been implemented is helping students achieve more success in school.

The second study on which I am building this thesis is one that Levin, Maharaj, and I are conducting for the Higher Education Quality Council of Ontario. We are working with Ministry of Education and collecting data from OnSIS to understand the effect of participation in the SHSM and dual credit programs on student achievement
(graduation rates, grade point averages and credit accumulation). This study will build on this provincial data by looking at the programs at the school level. Some of the initial findings include:

- There are varied levels of participation in SHSM programs by school boards across the province.
- There are a higher proportion of males enrolled in SHSMs compared with the rest of the cohort.
- Students enrolled in SHSM programs are more likely than non-participating students to have a special education classification, especially behavioural issues, language impairment or a learning disability. They are less likely than non-participating students to be autistic or gifted.
- SHSM programs are attracting a large number of students from the applied stream and whose goals are predominantly college or workplace oriented. It appears that the SHSM programs are reaching the desired target audience.
- Students enrolled in SHSM programs enter the program with somewhat higher marks and higher rates of credit accumulation in grade 10 than non-participating students. In grade 11, students enrolled in SHSM programs improve their performance in comparison with those not enrolled.

While the HEQCO study is interested in student outcomes related to these programs, this thesis aims to understand how the implementation of the Specialist High Skills Majors (SHSM) contributes to student outcomes. This will be found by combining the quantitative data from the HEQCO study with the mixed methods approach in this study, which analyzes the implementation of the SHSM in eight Ontario schools, in four different school boards.

Finally, this thesis is significant because systemic approaches to changing the way schools operate are occurring throughout the world. Many jurisdictions and countries have made efforts to increase the number of students graduating from high school, to improve high school outcomes, and to change patterns of post-secondary participation. Different strategies have been used to do this, including changes in school curriculum and program requirements. Analyzing the SHSM program which aims to improve high
school outcomes will help us understand if this is a viable way for improving graduate rates.

The following chapter will provide the literature review and conceptual framework for the study.
CHAPTER II: LITERATURE REVIEW

This thesis chapter first offers an overview of the literature review search and the types of relevant literature found for this study. Second, research on high schools, student disengagement, and students dropping out of high school are discussed. Third, there is discussion on the research regarding barriers to program implementation. Fourth and finally, a variety of theoretical frames that are relevant to this study are outlined before the conceptual framework chosen from this study is offered.

1.0. Literature Review Search

The literature review for this research proposal originally stemmed from my first Masters thesis conducted at the University of Western Ontario. The topic of this thesis was on the school-related factors that led to student disengagement. It also discussed the SS/L-18 Strategy and whether this initiative was engaging students in school. With this research foundation, I began researching the SS/L-18 Strategy and the programs within it that promote student engagement in more detail. I read numerous Ministry reports and the program evaluation on the SS/L-18 Strategy conducted by the Canadian Council on Learning. One particular program, the Specialist High Skills Majors (SHSM), sparked my interest from my research and from my prior knowledge as a teacher. To learn more about this program I interned at the SHSM department at the Ontario Ministry of Education in Spring 2010. During this internship, the SHSM Ministry Coordinators shared their data and explained the program to me in great detail. To support the information I was learning from the Ministry, I researched in much greater detail the factors that affect student disengagement in school. Since I had only looked at the school-related factors in my previous thesis, I looked more deeply into the topic for all factors that limit student achievement in school. At the same time, my coursework at the Ontario Institute of Studies in Education (OISE) and in my own reading I was learning about change from a system-wide, district and school perspective. Michael Fullan’s book \textit{The New Meaning of Educational Change} (2007) was of particular importance, especially as it highlighted program implementation, which I am interested in. From Fullan’s (2007) resource list, suggestions of readings from my thesis supervisor and later my
thesis committee, and an on-line and library search for journal articles and books, I read in greater detail about program implementation. I read around the literature fairly widely on all of these topics before I narrowed down how I would conduct my study. The literature review highlights my research process, as do this study’s research questions that were derived from this research process.

2.0. High Schools

In order to understand the factors that limit students from being successful in high school, it is first important to understand high schools as an institution. Quite often elementary and high schools are discussed uniformly in terms of leadership, school structures and how programming should be implemented within them. Not recognizing the differences between the two types of schools can be problematic because high schools are far different and more organizationally complex than elementary schools. High schools are significantly larger, high school teachers are deeply entrenched in the subject specialties and are more resistant to change, there are more curricular and extra-curricular options within high schools, and there is greater diversity in both student achievement and student diversity than in elementary schools. By examining high schools as a unique and different institution compared to elementary schools, one can understand the challenges students, teachers and administrators may face.

First, the sheer size of high schools makes these schools very different than elementary schools. For example, in Ontario, elementary schools typically have around 350 students, while in high schools enrollment is typically around 1,000 students (Levin, 2012). To meet student need, high schools also have a teaching staff that is much larger than elementary schools. Rather than having 15-20 teaching staff, Ontario high schools often have between 40-80 teaching staff (Levin, 2012). The sheer size of the organization makes it difficult for teachers and school leaders to know the student body well. It is also difficult for teaching staff and school leaders to know their colleagues well. This is a challenge as teachers and school leaders are increasingly encouraged to make school a warm, inclusive, student-centered environment for students. It is also a challenge as school leaders and teaching staff because they are encouraged to build a positive, professional learning community among themselves that allows teachers to build a shared
school vision. Furthermore, school leaders also have an added challenge to ensure that all staff attend meetings and professional development and participate in the vision of the school. The leader must also find time to follow-up with all teaching staff, in addition to all other duties that are expected of this role. While all school leaders have the challenge to ensure there is accountability within the school s/he is managing, this is a greater challenge to the secondary school leader due to the size of the building and the number of people who work within it.

A second challenge in high schools that does not occur in elementary schools is that high school teachers are deeply entrenched in their departmental identities. High school teachers teach their subject specialties, not most subjects like elementary teachers do. As a result, there is often a sense of departmental/subject identity, practice and professional community that is deeply woven into the social, political and intellectual workings of a high school teacher (Siskin, 1997). Departmental loyalty is increased because each department performs somewhat independently and does not often actively (nor necessarily see a need) to communicate with other departments. This may be because each department has an organized leader, (who is paid a moderate stipend in Ontario schools), and each department has its own history, traditions and loyalty. This loyalty may result in a general unwillingness to participate in a unified school vision if departmental visions run contrary to the school vision.

A greater variety of curricular and extra curricular options is a third challenge that high schools have compared to elementary schools. In high schools, course offering have expanded to incorporate more student interest and all post-secondary pathways. Additionally, high schools have many more extra-curricular activities than elementary schools have. These range from prom and semi-formals, to sports teams, plays and musical events, which occur before and long after school hours. The number of extra-curricular activities in high schools is difficult to manage because leaders are pulled in so many different directions. While elementary principals often “do it all”, this is next to impossible for a high school leader. The large number of activities makes it impossible. As a result, a high school leader needs to prioritize or delegate responsibility to a greater degree because this leader cannot “do it all” (Grubb, 2010).
A fourth challenge that exists in high schools much more so than elementary schools is the resistance to instruction reform and improvement (Cuban, 1993). High school teachers are much more individualistic and as discussed earlier, departmentalized than in elementary schools. As a result, high school teaching is often more traditional, more teacher-centered and more concerned with information transfer and content coverage than understanding and “higher-order” abilities (Grubb, 2010). This leads to greater difficulty when teaching an increasingly diverse study body that high school teachers teach.

In high school there is greater diversity in student achievement and a greater diversity among students within in a building compared to elementary schools. In terms of academic achievement, high schools have a greater challenge in meeting student need than in elementary school. For example, in grade 1 there may be about a year’s difference in achievement among students. By 10th grade, that gap has widened. In grade 10, some students are performing at or beyond grade level while others may be performing at a grade 3 or 4 level (Levin, 2012). This is a challenge for students because high school is the first time in a student’s life where course completion and grades have actual meaning. It is a challenge to teachers because while streaming or tracking intends to manage the gaps of knowledge between students, high school teachers are often ill-equipped to know how to teach students well with such different academic ability. High school teachers are mostly subject-matter experts who typically have not been trained in how to accelerate students. Teachers are typically not taught how to teach difficult students and the combination of monotonous teaching and resistance to learning can be debilitating to students (Grubb, 2010; Oakes 2004). Even the interventions or remediation to help students get back on track are often weak at best, as some patterns and student expectations are ingrained in the students themselves. Nevertheless, high schools are responsible for the high school graduation rate to rise while simultaneously preparing students for “the rest of their life”. That is a large weight to carry that does not occur in elementary schools (Grubb, 2010).

In summary, high schools teachers, administrators and students face different challenges than they do in elementary schools. The size of the high school, deep-seated loyalties to subject specialties, a lack of willingness to change, and diversity in terms of
student achievement are all challenges that occur in high schools. For some people, these challenges are mere distractions or can cause a minor setback. For others, high schools can be seen as an institution of great opportunity. For others still, the high school years can present too much of a challenge. In particular, some student may find the high school years very difficult to navigate, become disengaged and drop out of school. There are many reasons behind student disengagement, and these reasons will be discussed in detail below.

3.0. Student Disengagement and High School Drop Outs

In many ways, student disengagement and high school drop outs are no longer mysterious topics (Jimerson, 2000). Five decades of empirical research have uncovered that dropping out of school is not typically an instantaneous event, but rather is the culmination of a long-term process of academic disengagement (Rumberger 1995; Sinclair, Christenson, Lehr & Anderson, 2003). Most students who eventually drop out begin disengaging from school long before. They have often detached from school, disconnected from its norms and expectations, reduced any effort and involvement at school, and withdrawn from a commitment to school and to school completion (Balfanz, Herzog & Mac Iver, 2007).

As a result, we now know that there are certain indicators or signposts that have been found to predict student disengagement in school and dropping out. While there has not been any study that has been able to predict dropouts or graduates with 100 percent accuracy, nor has there been any consensus on the percentage of students predicted to drop out with a single or a combination of risk factors, we do know that there are some common causes that lead to students disengagement and dropping out of school. These indicators, collected from numerous empirical research studies and meta-analyses in the past five decades, can be grouped into four categories: the individual student, family, school, and community. While all of the factors are listed in each section, only the elements that can be measured within this study, due to access of information, will be discussed at any length.
3.1. Individual Factors

Individual factors identified in the literature that result in early school leaving include: age, gender, ethnicity, disabilities, absenteeism, negative school behaviour, peer groups, academic performance and stressful life events.

Disability. Students with disabilities have been reported in reviews of research to have similar types of risk factors as early school leavers, but their risk factors are often compounded (Hammond et al., 2007; Lehr, Johnson, Bremer, Cosio, & Thompson, 2004; Lyche, 2010). Wagner, Newman, Cameto & Levine (2006) in their study found that students with disabilities are on average three grade levels behind in both reading and math, having lower grade point averages, and a higher likelihood of having failed a course than students without disabilities.

Absenteeism. According to numerous individual studies and reviews of American studies on dropping out of school, one of the most powerful predictors of whether a student will complete high school is attendance (Balfanz, Durham & Plank, 2008; Hammond et al, 2007; Heppen & Therriault, 2008; Jerald, 2006; Mac Iver & Mac Iver, 2009). This raises the issue of which comes first, poor attendance or poor performance. Allensworth & Easton (2007) in their study of Chicago Public Schools and Heppen & Therriault (2008) in their review of literature indicated that missing more than 10 percent (roughly 10 days per semester) of instructional time is cause for concern. Balfanz, Herzog & Mac Iver (2007) found in their study in the School District of Philadelphia, that of the students who attended school less 80 percent of the time only 60 percent of these students were in the 9th grade as expected, and 28 percent had already left the district. By grade 11, only 15 percent of the students were in the 11th grade as expected, and 57 percent had left the district. Ultimately, only 13 percent of the students with this flag graduated from the school district on time, with another 4 percent graduating 1 year late. Balfanz, Durham & Plank (2008) similarly found that absenteeism has a strong correlation to dropping out of school. In their original study, Balfanz, Durkham & Plank (2008) found that before students drop out, students miss anywhere from a total of year to a year-and-a-half of schooling from the 6th grade forward. Most miss progressively more days of school year by year and many are attending only part time during the year prior to dropping out. Yet, it is important to note that students who have high absenteeism are not
necessarily disengaged with school. Bridgeland, Dilulio Jr. & Morison (2006) found in their American study that 22 percent of identified early school leavers dropped out because they had to care for a family member and approximately one in three of the early school leavers in this study said they left because they had to get a job. They also found that missing too many days and having trouble catching up was the second most reported reason for dropping out of school.

**Academic Performance.** Both individual studies and reviews of research (Allensworth & Easton, 2007; Heppen & Therriault, 2008; Jerald, 2006; Rumberger, 1995) have found that poor academic performance, whether it is measured through grades, test scores or course failure, is one of the most consistent predictors of dropout. In Allensworth & Easton’s (2007) multi-year study of Chicago Public schools, it was found that GPA is the best indicator for predicting non-graduates. In this study, students with a 2.5 GPA (C+ average) in their freshman year have a very high likelihood of graduating within four years—86 percent did so in the 2000–01 freshman cohort. However, virtually no student with an average lower than a D in the freshman year earned a Chicago Public School Diploma. While the number of courses failed is a predictor of dropping out of school, which courses that are failed is also a significant predictor. Balfanz, Herzog & Mac Iver (2007) found in their study that students who failed either a mathematics or English course in the sixth grade rarely graduated from high school.

### 3.2 Family

Family-related factors, such as low socio-economic status, parental education, income or occupational level, minority status, high mobility, and family structure, including single-parent homes, level of household stress, family dynamics and values and attitudes about schooling, have all been linked to students leaving school early. Unfortunately, the province and individual schools do not collect data that may link family factors/behaviours and student disengagement. Therefore, I was not able to examine these factors within this study.
3.3. **Institutional Factors**

Institutional factors that have been identified in the literature for leaving school early include school size and location, school policies, an irrelevant curriculum, streaming, a poor school climate and not feeling a sense of belonging.

**School Location and Size.** The school location has been found to contribute to students’ poor academic performance and dropping out of school (Hammond et al., 2007; Krahn & Taylor, 2007; Lamb, Walstab, Teese, Vickers & Rumberger, 2004). This may be because a large community or a densely populated area can produce more educational resources for students. School location could also be a factor because sometimes the differences in performance by school location are the result of the different socio-economic context of these locations (Lyche, 2010). In addition, absenteeism, which is one of the leading predictors of dropping out, was found to be higher in larger schools (Bryk & Thum, 1989). Bryk & Thum (1989) suggest that larger schools are more problematic environments for students and teachers, despite having more faculty resources in terms of teachers in larger schools. Student discipline problems are often greater as well due to greater internal academic differentiation through tracking.

**Relevant Curriculum.** Major reviews of Canadian public education, including the Hope Commission in 1950, the Hall-Dennis Report of 1968, the Secondary Education Review Project in 1982, the Radwanski Report of 1987, the Royal Commission of Learning in 1995, and the *Double Cohort Study: Phase 3 Report for the Ontario Ministry of Education* by Dr. Alan King (2004) have acknowledged that a relevant curriculum is a critical ingredient to students staying in school. The Radwanski Report (1987) concluded that many students were uninterested in what they were being taught at school and that they lacked appropriate skills and knowledge (Royal Commission on Learning, 1995). Similarly, Bridgeland, Dilulio & Morison (2006) in their American study and Segedin (2012) in her Canadian study, found that students who have dropped out of school cite “uninteresting classes” as contributing to their dropout decisions. Making school more interesting and linked to post-secondary studies or the world of work, has been found in individual studies and two synthesis of research (Balfanz & Letgers, 2006; Mac Iver & Mac Iver, 2009; Segedin, 2012) to increase student graduation.
**Streaming.** Streaming” or “tracking” of high school students through different sequences of core courses (e.g., English, science, mathematics) has been practiced in Canada and other developed countries for decades. Streaming is a process that is based on the assumption that students learn better and have positive attitudes about themselves and school when they are grouped with other students with similar academic ability. However, research has found that streaming largely perpetuates social inequalities, which affects how students perform in school (Krahn & Taylor, 2007; Oakes, 2004). Curtis, Livingstone & Smaller (1992) in their study of streaming of working-class kids in Ontario schools found that students from working class families are five times as likely to complete university, as unskilled workers’ kids. Similarly, in a 2007 study of streaming in the 10th grade in four Canadian provinces, the odds of students having all post-secondary education options open were two and a half times higher for 15 year olds who had at least one university-educated parent compared to their peers whose parents had not completed university (Krahn & Taylor, 2007). Despite these findings, there is no reputable scientific evidence that shows working-class kids have less innate ability than their dominant-class peers (Curtis et al., 1992).

**School Climate.** Dropout rates were reported to be lower at schools with more personal relationships in the Mac Iver & Mac Iver (2009) meta-analysis. Interviews with dropouts in the Bridgeland et al. (2006) study and interviews with students, parents, and teachers by the Boston Youth Transitions Task Force (2006) have all emphasized the importance of teacher-student relationships for addressing issues of failure and/or dropout. The Lyche (2010) meta-analysis reported that a welcoming and engaging school environment often occurs through extra-curricular activities, school level transitions, and helping the development of positive social bonds and attachment to school with interventions such as tutoring and mentoring. Dei, Mazzuca & Zine (1997) reported that teachers who have high expectations of their students are often described in familial terms or as being ‘a friend’. They move beyond the confines of the classroom lecture and interact among people in a ‘community of learning’ where all students’ input and experiences are incorporated in order to engage student interest and elicit their best performance. Finally, a general dislike of school is one of the primary indicators of low commitment to school that has been linked to school dropout. “Didn’t like school” was
the top reason (51%) given for leaving by dropouts in a 1988 national survey (Jordan, Lara & McPartland, 1994). These dropouts also reported leaving because they were failing or couldn’t keep up (44%), couldn’t get along with teachers (34%), and/or felt like they didn’t belong at school (33%) (Jordan et al., 1994).

3.4. Community

Although all institutions have an impact on students lives, schools are perhaps one of the most central institution in a child’s developmental process (James & Partee, 2003). However, students are often treated as isolated entities within this institution due to lingering reluctance to embrace families and community resources necessary to improve student success. At the secondary level this is challenging, as parents tend to lessen their involvement in their children’s schooling as they grow older. Also, efforts to develop and sustain school-family-community connections are often difficult to achieve due to differences in cultures, competition for resources and control, limitations in time, mistrust, and bureaucratic and funding barriers (NRCIM, 2004). Additional information about the relationship between the community, school and the student are discussed in section 6.5.

3.5. Summary

In summary, there are many indicators of student disengagement in school. While all factors have an effect on student engagement and academic success in school, there is no combination of factors that can predict which student will or will not graduate from high school. Consequently, various initiatives and programs have been and continue to be implemented into high school in order to help reduce high school drop outs and disengagement in school. The SS/L-18 Strategy with its SHSM program is one way that the Ontario government aims to increase student academic achievement and graduation outcomes.

4.0. The Student Success/Learning to 18 Strategy

In 2005 the Ontario government implemented a Strategy to increase high school graduation rates. Instead of using a one-size-fits-all approach in education policy,
success was, and still is, perceived as extending beyond college and university to include apprenticeships and skilled job placements. As cited in Levin (2012) and in more detail in Levin (2008), the main elements of this SS/L-18 Strategy included:

- Creating dedicated infrastructures in the ministry and school boards, staffed by outstanding educators, to lead and guide the overall initiative;
- Engaging school and district leaders to set ambitious but achievable targets and plans for increased student success;
- Developing a student success leadership team in every school district and every school;
- Providing extensive, carefully targeted professional development for educators to support the strategies;
- Targeting attention to key underperforming groups, including some minority students, ESL students, students in special education, aboriginal students, and boys;
- Supporting effective use of data to track students and intervene early where problems are occurring;
- Supporting a ‘student success teacher’ in every high school as a champion for success for all students;
- Building stronger transition models between elementary and secondary schools so students get off to a good start in grade 9;
- Increasing the focus on and resources for literacy and numeracy in all areas of the high school curriculum;
- Introducing legislation to embody the changes in the overall strategy and also requiring students to be in a learning situation (school, college, apprenticeship, work with training, and so forth) until high school graduation or age 18;
- Revising curricula in some key areas, such as mathematics and career education;
- Creating a Student Success Commission, with representatives from the teacher federations, principals, and superintendents, to support effective implementation of the strategy in schools and to prevent disputes at the local level;
- Supporting research to find, understand, and share effective practices;
- Supporting ancillary practices, such as an expansion of tutoring and fuller engagement of parents and communities;
• Expanding program options through more cooperative education, credits for genuine external learning, and dual credit programs with colleges and universities; and
• Creating a ‘Specialist High Skills Majors’ program that allows school boards to work with employers and community groups to create packages of courses leading to real employment and further learning.

While there were many elements to this Strategy, the Specialist High Skills Majors (SHSM) was one key programming change. The SHSM was created to provide students with opportunities to customize their high school experience and focus on skills relevant to the world of work. This program also intended to build on students’ strengths and interests through a variety of new and enhanced learning options (Ministry of Education, 2011). This program, among others, was perceived as important to improving graduation outcomes.

5.0. The Specialist High Skills Majors Program

The Specialist High Skills Majors (SHSM) is a ministry-approved program that encourages students to focus on a career path that matches their skills, interests, and aspirations while meeting the requirements of the Ontario Secondary School Diploma (OSSD). There is also flexibility in the SHSM program, so students can shift between pathways should their goals and plans change as they move toward the OSSD.

As of the 2010-2011 school year there were 18 sectors students could specialize in from Agriculture to Transportation. Each SHSM consists of five required components: 1. Bundled Credits; 2. Certification and Training; 3. Experiential Learning and Career Exploration Activities; 4. Reach Ahead Experiences; and 5. Essential Skills and Work Habits (Ontario Ministry of Education, 2011). Each of these elements is described in more detail below.

First, the SHSM program requires a bundle of 8-10 courses in the student’s selected field. The compositions of these bundles are outlined in the Ontario Ministry of Education SHSM program requirements. This bundle of programs includes four major credits, two to four “other” credits and two cooperative education credits. The major credits – two Grade 11 and two Grade 12 credits – allow students to build a foundation of sector-focused knowledge. These credits are specific to the post-secondary destination
and may be: Ontario curriculum credits; ministry-approved locally developed credits; or ministry-approved credits for learning acquired outside the Ontario curriculum, such as dual credits. The two to four “other” credits incorporate a minimum of six hours of learning in required curriculum subjects in order to contextualize the subjects’ curriculum expectations to the SHSM sector. This is completed through Contextualized Learning Assignments (CLAs). CLAs use sector-specific content while meeting one or more curriculum expectations, in order to make course content relevant and connected to their SHSM sector. (See Appendix A for an example). Prepared CLAs can be found in the Ontario Educational Resource Bank, and can be delivered to an entire class, to individual or small groups in class or through independent learning. Lastly, two cooperative education courses provide authentic learning experience in a workplace setting that will enable students to apply and practice the sector-specific knowledge and skills they have gained in their courses. Together, the major credits, the “other” credits and the cooperative education courses complete the bundle of required SHSM credits.

Second, each SHSM requires sector-recognized certifications that have been identified through sector consultations. These are externally recognized qualifications that are relevant to the particular field. Examples of sector certifications depend on the sector but can include First Aid, Cardiopulmonary Resuscitation (CPR), Workplace Hazardous Materials Information System (WHMIS), Fall Arrest/Fall Protection training, among others.

Third, SHSM students are expected to have Experiential Learning and Career Exploration Activities within their program. These consist of planned learning activities that take place outside the classroom and can include job shadowing, job twinning, work experience, or career exploration activities (i.e. work tours). These experiences are separate from their cooperative education experiences.

Fourth, Reach Ahead Experiences are required to connect SHSM students to their postsecondary plans. These experiences enable Grade 11 and 12 students to make informed choices about future careers. Reach Ahead Experiences can include, but are not limited to: interviewing an employee in the field of work the SHSM student is considering; visiting an approved apprenticeship delivery agent; attending a number of college or university classes in the student’s area of interest, among others.
Fifth, the development of Essential Skills and Work Habits are a component of the SHSM program. These skills and habits aim to prepare students for lifelong success during co-op placement and via the Ontario Skills Passport (OSP), a web-based resource. “The OSP is a bilingual, web-based resource that provides clear descriptions of the Essential Skills and Work Habits important for work, learning, and daily living” (Ontario Ministry of Education, 2011, SHSM Policy and Implementation Guide, A1-14-15). SHSM skills students are to gain include: reading; writing; computer use; money math; data analysis; decision making; problem solving, etc. Work habits include: working safely; teamwork; reliability; entrepreneurship, and so forth. These skills are gained through sample tasks OSP provides. The OSP website (http://skills.edu.gov.on.ca) provides examples of Essential Skills and Work Habit tasks.

In addition to the five required learning components of the SHSM, these programs have 14 additional criteria used to assess readiness to offer an SHSM program. A checklist of these criteria are provided in the SHSM: Policy and Implementation Guide (with an additional electronic template for expanding the checklist) where boards/schools are to take each element under consideration, state evidence that each criteria has been considered and if it has not, outline which next steps are required. These criteria include: the five learning components of the SHSM program; teacher expertise in the chosen sector and their willingness to champion the SHSM; current employment trends in this sector in your region; student enrolment/interest; opportunities for students with special education needs, English Language Learning, or are from Aboriginal descent; support by administration; partnerships with sector business/industry/community; partnerships with other schools and college/university and industry training; available resources and facilities at the school and community levels; support by school staff and administration; and a school SHSM advisory team to champion and guide implementation (Ontario Ministry of Education, 2011, SHSM Policy and Implementation Guide, B2-4).

To aid districts and schools, the Ontario Ministry of Education provides each district with funds to hire, if they so desire, a SHSM leader in order to coordinate change at the school level. These positions are in addition to the student success leaders that are employed in each secondary school. The staff at the Ontario Ministry of Education work with the SHSM leaders and bring them together at least annually to share experiences and
ideas across districts. The Ministry staff also offers support by providing a guide that supports the planning, developing and implementation process involved in launching a SHSM. For example, this guide helps districts and schools understand the key components of all SHSM programs, which SHSMs can/should be offered, the key factors to consider when planning an SHSM, how to build supportive partnerships, how to establish a school SHSM team, how to build awareness and growth in your SHSM, and how to monitor student and program success in each SHSM program.

Materials and resources are provided for teachers to support the implementation of the programs. The SHSM e-Community web-site, a password-protected site, provides educators with opportunities to share resources, including those specifically developed to support SHSM programs. In addition, schools are allotted funding for many different resources based on board/school need, including: staff professional development; mentorship opportunities with business and industry; student transportation; teacher and student certification in sector-recognized certifications; capital equipment; supplies of consumables of the program, curriculum resources (i.e. CLAs), etc. The Ministry of Education contributes $10,000 in funding for year one with 0-20 students enrolled in a SHSM. For a program that has 20-40 students, a school is given $15,000. A program that has 40+ students enrolled in a SHSM receives $20,000. Additionally there is $300 given for each student to cover certification and training, and transportation. Funding is also given to programs in their second and third year of implementation defined by a budget produced by the school. Regardless of this budget, the $300 per student is given every year (Ontario Ministry of Education SHSM Training, May 2010).

Strong relationships and partnerships between schools boards, post-secondary institutions, the community and business/industry sectors are also perceived as critical to implementing SHSMs. These partnerships can be opportunities for delivering certifications and training, professional development for staff, and Reach Ahead opportunities for students involving postsecondary institutions and community partners, and cooperative education. These partnerships are heavily emphasized and required to launch an SHSM in a school.

While the Ministry documents provide an outline for the policy, implementation and resources for a SHSM program, it is important to note that the implementation of the
program at the school level may look different from one school to another. Understanding the barriers to policy implementation help to explain why programs may look different in alternative contexts.

6.0. Policy Implementation

Today, various organizational actors across many institutions are now envisioned as playing a role in improved school performance (Anderson & Togneri, 2005; Honig, 2006). And “because a policy is little more than a plan outlining what should be learned…its implementation is open to interpretation at different levels and by various players in the school system” (Werner, 1991, p.108). Put differently, the difficulty of integrating policy into an arena where there are many different institutional actors is that not all individuals have the same interpretations or the same goals (Apple, 1983; Clune, 1990; Datnow, 2006). For example, community members may have long-term plan for the community, while students are interested in the short-term benefits that may affect them individually in terms of education, jobs or prestige. Likewise, teachers and administrators may be concerned about student outcomes, but they are also concerned about their individual goals, including income and working conditions, that may or may not be aligned with the current reform goals (Loeb & McEwan, 2006). Change requires working with multiple influences or contextualized layers simultaneously. And understanding the differences across actors is essential for understanding how to successfully implement a policy.

Implementation then requires the integration of more general knowledge of change with detailed knowledge of the politics, personalities and history particular to each situation (Fullan, 1991). What works in one situation may or may not work in another. In fact, variation is typically the rule rather than the exception. “The essential implementation question then becomes not simply “what’s implementable and works” but “what is implementable and what works for whom, where, when and why?” (Honig, 2006). Research aims to uncover the various dimensions that affect implementation. Therefore, each dimension of policy implementation needs to be analyzed, as it is moving in multiple directions among the actors and relationships within an organization or service over time (McLaughlin, 2006). Michael Fullan in his book The New Meaning of
Educational Change, 4th edition (2007) identifies critical factors that commonly affect policy implementation. The headings below are drawn from his work.

6.1. Need

Perceiving that an innovation is needed is important to the implementation process. Since schools are often faced with extensive improvement agendas, there must be a clear “fit” between a new program and the school needs. While there are many policies that are perceived as necessary from a political perspective, whether they are seen as needed in schools is a different matter. There are a number of reasons that the SS/L-18 Strategy can be perceived as needed in Ontario. These can include: 1. equity; 2. high economic costs of students who drop out of school, and; 3. a shortage of employees in the skills trades.

First, greater equity in education outcomes is a focus throughout the world. Many countries report high levels of political commitment to social inclusion and equality of opportunity (Levin & Segedin, 2011). In Ontario, for example, “school populations have never been more diverse than at present time, nor has the demand to accommodate difference ever been more insistent” (Harper, 1997, p.192). As a result, the Ontario government has recently created an Equity and Inclusive Education Strategy (2009) which envisions that all students, parents and school communities are respected, and every student receives high expectations for learning in a safe and caring school community. Various programs, such as the SHSM, are created to provide equity, and support all students regardless of their personal background or aspirations. With this policy, the government and school system is assuming responsibility to provide the opportunity for equitable outcomes for students with different abilities and interests.

Second, according to a Canadian Council on Learning report (Hankivsky, 2008) a student who ‘drops out’ of secondary school can expect an income loss of more than $100,000 over their lifetime compared to individuals with a high school diploma (and no postsecondary education). In addition, the average public cost of providing social assistance is estimated at over $4,000 per year, per student who does not graduate. Students who ‘drop out’ are more likely to be imprisoned. They also have fewer years at a reasonable quality of life, as there are strong associations between education and health.
With nearly a third of students not completing their high school education, this would mean significant costs to society. Programs such as the SHSM, that intends to meet the needs of more students, provide an opportunity to improve equitable outcomes, which will lower societal costs.

Third, in the coming years, Ontario faces a serious skills shortage. As greater numbers of workers prepare to retire and fewer young people enter the workforce, the Conference Board of Canada (2007) estimates that there will be a skilled employee shortage of more than 360,000 by 2025 and that could grow to more than 560,000 by 2030. According to Ontario’s Workforce Shortage Coalition (n.d.), many business associations and trade councils have raised alarms about this challenge, including the premiers of all provinces. No nationally concerted coordinated action has taken place according to this Coalition, but in looking at the SS/L-18 Strategy, it appears that there may be some. With the emphasis of cooperative programming, primarily in the skilled trades, it appears that the SS/L-18 Strategy also matches the employment needs of Ontario.

While there are many reasons for initiating the SS/L-18 Strategy, it is unclear if these reasons are understood or felt at the local level. Understanding at the local level is particularly important because educators who are implementing the change are less likely to “buy-in” to a program if they do not understand or believe there is a need for that program (Wolhsetter, Datnow & Park, 2008). If those involved with change, be it at the government, district or school does not understand why a particular program may be necessary to meet student and societal needs, then a lack of commitment to a program will be more likely to occur.

6.2. Clarity

Unclear goals and unspecified means of implementation are significant problems at the implementation stage. At the policy level, educational change has been conceptualized and fine tuned, often after years of analysis and debate. However, the people who implement policies and programs often find that the change is not very clear as to what it means (Werner, 1991). If policies are unclear it is easier for schools or
districts to adopt the policy in principle, but it often does not get implemented or is implemented in a way that is very different from what was intended.

On the other hand, if the change is too prescriptive, change is also unlikely to occur (Clune, 1990; Fullan, 2007). The top-down view of policy that ignores or downplays the influence of context has been criticized for not being sensitive to the daily lives of educators (Bascia & Hargreaves, 2000; Datnow & Park, 2009; Elmore, 1979). Instead, a mutual adaption view of policy has been adopted, in which effective implementation ultimately depends on how individuals interpret and enact the policies (Datnow & Park, 2009). Put differently, implementation of change initiatives involves the interaction between the policy, local educators, and the setting in which the policy is enacted. However, if the policy is unclear at the onset, the understanding or adaption at the local level will not be in line with the original policy objective.

6.3. Complexity

As discussed above, educational change is multidimensional and can be quite complex. The perception of complexity, however, is dependent on the individuals responsible for making a change and/or implementing that change. In other words, the level of complexity of any given task depends on the starting point of an individual or group. One person may perceive a change to be easy and manageable, another may perceive it to be quite complex. The difference in perception may be related to experience, understanding or education on the topic.

Fullan (2007) suggests that there are at least three factors related to complexity that occur when implementing any new program or policy, and the complexity of these factors depend on the starting point of an individual. These factors include: 1. the possible use of new or revised materials; 2. the possible use of new teaching approaches; and, 3. the possible alteration of beliefs (i.e. understanding underlying particular new policies or programs). For a person who has the skill or beliefs that matches the new policy, the proposed change will seem comparably simple and straightforward. Conversely, an individual who has to learn one or more dimension of a policy in order to implement it may find it difficult or complex. In addition, the particular dimension that an individual must reconcile with also influences whether a change appears complex. For
example, a change in material or resources can be challenging, especially if no professional development is provided to explain the process or the changes that need to be made. However, if new skills are required to implement the new materials, a change in teaching style (often deeply ingrained) will be needed. This will take much more professional development and time than would a change in materials. Beliefs are even more difficult to alter. A change in belief essentially asks individuals to change their values about teaching and learning, to re-configure these values in order to mesh with the policy, and then to use these new values to provide a new foundation for planning and teaching. This may create doubts about competence, purpose and self-concept in some teachers. In others it may not. There are thousands of people with all different realities. Yet, how these subjective realities are addressed is crucial for whether changes become meaningful (Fullan, 2007).

While there are a variety of starting points for each educator, research shows (Bascia & Hargreaves, 2000; Honig, 2006; McLaughlin, 2006) that it is advantageous to put into place assistance or professional development in order to support learning that may need to occur. Teachers are relatively inexperienced in envisioning and planning effective school improvement. Few have been involved in such a process. Few would know where to begin. Yet, if teachers are to implement change, they need knowledge of how to do it. Often they need more professional development. Professional development will be discussed in more detail below in section 6.8.

6.4. Quality and Practicality of Program

The quality of a program is often measured by front-end quality or capacity-building (Fullan, 2007). Capacity building can include funding that includes targeted and sustained professional development, high quality resource materials, creation of networks of teachers across schools and districts, and teacher support initiatives such as coaches and teacher leaders (Levin, 2008).

While capacity building is important, providing resources that are practical is also important. Practical changes are those that address salient needs that fit well with the teachers’ situation, that are focused, and that include concrete how-to-do-it possibilities. As Fullan (1991) states, “practical does not mean easy, but it does mean the presence of
next steps” (p.73). In other words, programs must have clarity, reduced amount of complexity and built in capacity building to have both quality and practicality.

6.5. Community Characteristics

Community characteristics that influence policy implementation include demographics, and the strength of relationships between schools and the community, including employers.

First, the demographics of a community can influence the success of an innovation’s implementation in many ways. Schools that are pursuing goals that are consistent with the goals of the community will typically perform better (Loeb & McEwan, 2006). Community support may result in increased funding and higher student enrollment, which often supports a program’s implementation. However, if the school and community are disconnected with their educational goals, this may cause difficulties (Fullan 2007). For example, if a community wants a particular program implemented in their school, they may put pressure on schools to adopt the program. On the other hand, if a community does not like a particular change in their schools they may actively discourage implementation (Loeb & McEwan, 2006). Either way, community characteristics have an influence on the types of programs that are implemented in schools.

Second, building strong relationships and close connections among teachers, districts, families, and community organizations is seen as indispensable to successfully implementing programs. As policy implementation includes educators, parents, and students, as well as nonprofits, employers and others, without an engaged community, schools may find themselves in a constant battle for resources of all kinds (Bryan, 2005; Epstein, 2008; Sanders & Lewis, 2005). Schools alone lack the necessary resources to address the large number of obstacles to learning, and family and community members can contribute to the work of the school, including planning and implementing curricular and extracurricular activities (Bryan, 2005). Forming community partnerships has also been associated with increased learning opportunities for students, community development (Sanders & Lewis, 2005) and increased post-secondary aspirations for students (Epstein, 2008). This is because family and community involvement through
workshops or cooperative programs allow more people to become involved with teens in discussions and decisions about school. Without these partnerships, many students are left with an incomplete support system on school matters (Epstein, 2008).

While community partnerships are found to be important, it is often a struggle to create such partnerships. According to Foley (2001) in a study that included 13 principals serving schools from grades 7-12, the limitations of having collaborations were not necessarily due to a lack of interest, but were linked to the number of obstacles, including the need for professional development on how to form and implement a collaboration, and time management skills. Similarly, a study of 443 National Network of Partnership Schools (Sanders, 2001) found common obstacles to implementing community partnerships: lack of time, difficulties identifying community partners, time constraints, communication, focus, and a lack of school leadership. Also, a gap in educators’ understanding of how to integrate community connections, especially at the high school level, is a problem in implementing collaborative-based programming. To overcome such obstacles, broad support for partnerships, an engaged committee or team responsible for partnership planning and implementation, adequate funding and practical tools and guidance has been found to be effective (Sanders & Lewis, 2005).

6.6. The District

While school reform has occurred at the provincial or state level with policy creation, it also occurs at the level of implementation, affecting both the school district and the individual school. At the district level, reform aims to improve education through policy initiatives that target all or most schools, teachers, and/or students within a district (Anderson & Togneri, 2005). At the school level, reform aims to improve teaching and learning needed in the local context (Anderson & Kumari, 2009).

In many instances, the focus on the individual school has been perceived as the central location where reform strategies are needed. Common-sense would also suggest that schools, consisting of administrators and teachers who directly know and interact with the students who make up the school system, would be the key area where reform strategies are needed (Smith & O’Day, 1990). Yet, it would be inaccurate to suggest that this is the only area where reform strategies are needed. Literature on school district
change emphasizes the interconnected nature of the district’s role and the individual school’s role in the school reform process (Anderson & Togneri, 2005; Campbell & Fullan, 2006; Murphy & Hallinger, 1989). A great deal of effective school change cannot occur without district level change first taking place, and later providing the support and guidance necessary for school change. Change is a multi-level process and each level is intertwined.

6.7. The Principal

Principals’ actions serve to legitimate whether a change is to be taken seriously. The school principal is the person most likely to be in a position to shape the organization’s conditions necessary for success, including the development of shared goals, collaborative work structures and climates, and procedures for monitoring results (Fullan, 1991). Unless the principal is equipped with the knowledge of how to facilitate and support effective change, s/he will not be able to understand teachers’ concerns, support them psychologically or with resources (Fullan, 1991). Unlike administrators at the district level, few school administrators have exposure to or training in the kinds of skills that would permit them to develop a long-range implementation plan (Louis, 1989). However, without professional development and support from the district level, whether it is technical assistance, appropriate courses, or on-going, in-school assistance, school administrators will not likely gain the skills that are critical to implementing school change (Louis, 1989). Effective leadership at both the district and school level prioritizes professional development for school administrators. Improving building-level leadership is one of the most promising approaches districts can take to fostering change (Louis, Leithwood, Wahlstrom & Anderson, 2010). Without professional development that is linked to improved job performance, school change and effective implementation of programming is less likely to occur. School leadership must be in place in order to provide the tools and support for their staff in implementing any change.

Leadership style is also important when implementing change. Research frequently emphasizes five characteristics of effective leadership: 1. a shared sense of school purpose; 2. developing a climate of high expectations and improvement of teaching and learning; 3. instructional leadership which focuses on goals for
improvement of student academic outcomes; 4. a range of activities aimed at intellectual stimulation for staff; and 5. the need for a visible presence in school who models the shared values of the school (Hallinger & Murphy, 1985; Leithwood & Duke, 1999). These characteristics typically include administration and staff collaboratively defining the school’s mission together with clear, measurable goals that are focused on student progress of its students. Within this positive school-learning climate there is coordination of instruction and curriculum where student progress is monitored, instructional time is protected, and professional development is promoted. School leaders create an ‘academic press’ through the development of high standards and expectations in a culture of continuous improvement. Additionally the principal is highly visible and a model of desired behaviour. The principal provides intellectual stimulation and individualized support for teachers while also providing recognition, knowing problems of the school, seeking new ideas and is approachable (Hallinger, 2003). While the role of the principal is still developing, this role, like all others in the implementation process, is a challenging, but necessary one. It also is one of the most significant roles in implementing change.

6.8. Teachers

School improvement affects the collective as well as the individual (Anderson & Kumari, 2009), so it is imperative to include all teachers when implementing change. However, with the busyness and often spontaneous events putting teachers into a position of reaction rather than reflective planning, (Fullan, 2007) it may be difficult to find time to implement change initiatives. Furthermore, the endless waves of change, in addition to the isolation from other adults that limits thoughtful planning and reflection, often creates distrust, disinterest, and a lot of extra work to try to implement new changes. As Fullan (1991) states,

The personal costs of trying new innovations are often high and seldom is there any indication that innovations are worth the investment. Innovations are acts of faith. They require that one believe that they will ultimately bear fruit and be worth the personal investment, often without the hope of an immediate return. Costs are also high. The amount of energy and time required to learn the new skills or roles associated with the new innovation is a useful index to the magnitude of resistance (p.73).
Still, some teachers, depending on their personality, previous experiences, and stage of career, are willing to persist in program implementation. Yet, many of those who are willing often do not how. Teachers rarely have access to this type of information or the opportunity for personal contact with people who can help them operationalize change (Fullan, 2007). This is needed as teachers, like all other people, do not typically abandon one set of activities before assuming another; they cannot simply shed their old ideas, skills, philosophy, and practices about schooling and their place within it (Bascia, 1996; Spillane, Reiser & Gomez, 2006; Honig, 2006). As a result, teachers often understand new forms of instruction through their pre-existing beliefs and experiences, and are likely to gravitate to their prior practices (Smith & O’Day, 1990). This is especially true if surface changes instead of deep pedagogical changes are implemented. Structural changes are easier to bring about than normative ones (Fullan, 2007) and reform efforts that focus on surface changes, such as materials and project routines, and neglect the knowledge or principles that motivated the innovation, may result in limited change or “lethal mutations” of the project (McLaughlin, 2006).

To make deep pedagogical changes, professional development is needed. Concrete and skill-specific training has been found to be effective, but only for the short run (Fullan, 2007). This is because the use of new materials and methods is often mechanical without the underlying ideas becoming assimilated. In other words, the learning of new skills through demonstration and practice does not necessarily include the learning of the conceptual understanding for lasting use. The most effective professional development includes concrete, teacher-specific training activities with continuous support during the process of implementation (Fullan, 2007). This support can come from collaboration with peers, leadership, and others who may be part of this process (Lieberman & Mace, 2008; Louis, Kruse, & Associates, 1995).

The strength of professional relationships is one element that influences the degree to which teachers change their practice. While opportunities to interact with other teachers are often limited, it is important for teachers to engage in frequent talk about teaching practice. Learning from one another through practice (learning as doing), providing feedback, developing a shared language and shared beliefs about teaching, and critically
designing and evaluating teaching materials and practices together is also helpful in the implementation process (Lieberman & Mace, 2008; Louis, n.d.; Stoll, Bolam, McMahon, Wallace & Thomas, 2006). Since most teachers do not have adequate information access, time or energy to implement changes, working together in professional learning communities appears to hold considerable promise for capacity building for sustainable improvement (Lieberman & Mace, 2008; Louis, n.d.; Stoll et al., 2006).

7.0. Conceptual Framework

To determine a conceptual framework for this study I read through the literature review in context to this study’s research question which asks: How does the implementation of the Specialist High Skills Majors (SHSM) contribute to student outcomes? Careful consideration of this thesis’ sub-research questions also occurred, which include:

1. Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation?
2. For which students does the SHSM have the greatest impact on academic success?
3. How consistent are the features of the SHSM across Ontario?

With the research literature and these questions as my study’s base, I first turned to Michael Fullan as a viable frame for this study. Michael Fullan in his book *The New Meaning of Educational Change, 4th edition* (2007) identifies many of the critical factors that commonly affect policy implementation, including the ones discussed above. Fullan’s (2007) factors include: Characteristics of Change (Need; Clarity; Complexity; Quality/Practicality); Local Characteristics (District; Community; Principal; Teacher); and External Factors (Government and other agencies). Within this framework, individual factors that affect policy implementation are acknowledged, but he also locates them within the context of a whole system (Figure 1).

This framework served as a significant influence on the literature review for this study. However, while this conceptual framework informs how change and implementation works at a system-wide level, the volume or depth of this strategy I believed was too large for this study. And, despite the depth of this study, it does not
Figure 1: Fullan's (2007) Factor's that Affect Policy Implementation

A. Characteristics of Change
1. Need
2. Clarity
3. Complexity
4. Quality/Practicality

B. Local Characteristics
5. District
6. Community
7. Principal
8. Teacher

C. External Factors
9. Government and others

IMPLEMENTATION

place the student within this framework, which is integral to this study. Furthermore, Fullan’s (2007) model is a relatively linear, classic approach to policy implementation, which underplays context, micropolitics, and perceives conflict as problematic, not a natural part of the implementation process. While Fullan (2007) offers one view of implementation and is an important voice in the field, alternative frameworks were sought.

Spillane, Reiser & Gomez (2006) offer another framework. These researchers found that there are many explanations why policy does or does not get implemented. These explanations range from the design of the policy to the resistance of those responsible for implementing policy in schools and school districts. Resistance at the local level can stem from administrators or teachers who are unconvinced by the new program or a failure to understand the policy at hand. Understanding a change requires policy implementers to use their prior knowledge and experience to interpret the incoming change, while actively constructing meaning from their interactions with the environment of which policy is part. Yet, this sense-making is not interpreted by an individual alone. Each change is rooted in a social context that affects individual actors at multiple levels of the education systems - teachers, principals, school board members, students, and community residents – and within the politics, culture and history of a place (Loeb & McEwan, 2006; Spillane et al. 2006). Policies operate through these settings and the history and culture of the jurisdiction explains the differing responses to policy
directives (Honig, 2006). The will of the actors to implement a policy – as well as their capacity to do so – determines the success of implementation.

This framework too was a valid lens for this study. However, again this framework appears to be too large. It would require interviewing actors at different levels of the change process and placing these actors within the context of their setting. Perhaps conducting a case study of one particular place would have solved this problem. Yet, it would not have accurately answered the research questions I posed on the consistency of SHSM programs across Ontario. So, again, additional frameworks were analyzed.

Levin (2012) offers an alternative framework for looking at change and policy implementation. His framework includes four core strategies:

1. Know the status and progress of every student, know the reasons for any problems, and intervene as soon as there are signs of difficulties.
2. Provide a program mix and approach that enables a good outcome for every student.
3. Connect schools deeply to their local and broader community.
4. Improving daily teaching and learning is essential to achieving better high school outcomes; to do this requires a thoughtful and specific strategy.

This framework also seemed to be a possible lens for this study. It is located within the literature on change. Unlike the other two frames, it primarily concentrates on teaching and learning, data, the community and programming, which are important topics within the SHSM program and this study. This framework also has a scope that is manageable for this study, as it does not specify which actors are involved in educational change. On the other hand, drawbacks to this framework include the lack of focus on policy implementation. This framework discusses change and school improvement, but does not focus on policy implementation, which is the focus of this study. So, again this did not seem to be the best fit for the study.

In the end and after more searching, I believe that a modification of Fullan’s (2007) model would be best. The scope of the framework is still too large for this study, so eliminating some of the factors was necessary. Instead of looking at all 10 of Fullan’s factors, I decided to only look at the local or school level of policy implementation. For
this I included 1. Need; 2. Clarity; 3. Complexity; 4. Quality/Practicality; 5. The District; 6. The Principal; and, 7. Teachers. Students, while central to the study, were seen as the motivation for the initiation of the program and not necessarily a factor for program implementation. I too am not looking to hear the student voice, primarily due to the difficulty to obtain ethics approval for such an undertaking. So, they were not added to this framework. The community is also important to the SHSM program; however, researching this element in combination with the others would be too large for the scope of the study. It would require visiting numerous cooperative placements and interviewing numerous community partners. I also thought that these voices would not necessarily answer any of the research questions more sufficiently than the data I would obtain from the teachers and leadership at the school level, as well as the provincial data. Therefore, only 7 of Fullan’s (2007) 10 implementation factors were included in this study’s conceptual framework (Figure 2). Lastly, I felt it was important to indicate that the factors that affect implementation also influence student academic performance and the high school graduation rate. Since this is what the study aims to determine, I included in the framework below.

Figure 2: Revised Factors that Affect Policy Implementation
CHAPTER III: METHODS AND METHODOLOGY

This section explains how the research study was carried out and why particular methods and techniques were employed. Accounts of the research design, procedure, size of sample, method of selection, choice of variables and statistical analysis are provided. Limitations in the method are described.

1.0. Research Instruments / Research Methods

When studying change and policy implementation, it is essential to understand change at a large, system-wide level, as well as at the individual school level. To understand change at the school level, we must be aware of the actions and reactions of individuals involved in program implementation, including administrators, teachers and students. To understand change at a system-wide level, we must combine the knowledge and outcomes of these individual situations with broader system-wide student outcomes.

To incorporate this study’s aims, the methods of this study included:

1. A review of the Ontario School Information System (OnSIS) data on student achievement in the SHSM program. This data reflected two years of student achievement, starting with June 2009 baseline data for all students who are completing grade 10, whether or not they were enrolled in the SHSM program the following year. Variables included gender, school board, ESL status, special education status, credits obtained, grade point average, and track or stream for math and English classes. Essentially, I was interested to see how students were performing in grade 10 and if their academic performance (i.e. grade point averages, credit accumulation) increased or decreased once they entered the SHSM program, when compared with other similar students. To gain this understanding, the 2009 data of Ontario’s grade 10 students was compared to the June 2010 data, of these same students. This showed if student academic performance increased or decreased by the end of grade 11, based on their enrollment (or lack of enrollment) in the SHSM program. Later, data will be collected and analyzed from June 2011 to see if student achievement changed by the end of year 12.

2. A review of the data on the number and location of SHSM programs in Ontario took place. From this data, four districts were chosen. These districts were chosen due to
geography, and highest student enrollment (15% or more students in the district enrolled in a SHSM program), and a mix of public and Catholic boards. From there, one school from each of these four districts was identified as the school with highest SHSM enrollment, based on the number of SHSM students there were enrolled in the SHSM program in the school. One other school per district (in the same four districts) was identified as the school with the lowest SHSM student enrollment, based on the same criteria.

3. One-day school visits were conducted in all eight schools and typically consisted of 20-45 minute interviews with one administrator, one SHSM Coordinator, two teachers (one English and one math teacher), and a co-op teacher. However, there were some variations to the list of interviewees in some schools. For example, in some schools the co-op teacher was also the SHSM Coordinator\(^1\). Guidance teachers sometimes were substituted or were added to the schedule due to their involvement in the program. In two schools, two co-op teachers jointly interviewed instead of one. SHSM-related administrators in two cases did not interview as they were new to the school and could not give the necessary information. Also, two SHSM sector leads were interviewed in two schools instead of a subject teacher or an unavailable SHSM Coordinator. In total, there were thirty-four interviews with three to five interviews conducted in each school. This resulted in interviews with eleven subject teachers (six English, five math), six administrators, seven co-op teachers, one guidance teacher, seven SHSM Coordinators (two of which were also co-op teachers who were unaccounted for in the above co-op teacher interview number), and two sector leads.

An interview with an administrator was desired to offer an understanding of the Board’s role in the SHSM program and the administrative role in implementing a SHSM program and how the SHSM was implemented in their school. The SHSM Coordinator provided an understanding of the program as a whole and how each piece of the SHSM fits together. The SHSM Coordinator also provided insight into the district and school leaders aided in the implementation of the program, how the program was implemented in practice, and how the program requirements were monitored. The math and English

\(^1\) The SHSM Coordinator is a teacher leadership position within the school where a teacher is typically allotted one period per term to manage/monitor the SHSM program and its corresponding student requirements.
teacher were important interviewees as they discussed how the Contextualized Learning Activities have been implemented into classes. These teachers also provided insight into the school leadership of the SHSM program. Finally, a co-op teacher was interviewed to understand how placements and community partnerships have been formed and how SHSM leadership has impacted the implementation of the program. All roles were seen as important to the SHSM to be successfully implemented.

There were a total of twenty-two interview questions. These questions were similar to survey questions with their 1-5 rating scale. While this provides a quantitative basis to rate the interviewees’ responses equally, the interview format also provided an opportunity for participants to expand their answers and give examples. In addition, this format was desirable as one in-person interview was not possible. Alternatively, this interview was completed via email.

The interview questions were linked to the study’s research questions and conceptual framework (See Chart 2). Eighteen questions refer to the research question: How consistent are the features of the SHSM programs across Ontario? These questions are directly linked to the conceptual lens of this study and the program’s requirements. They were asked to understand the need, clarity, complexity, quality/practicality of the program and what the role of the staff and administration are. Three questions refer to the second research question: For which students does the SHSM have the greatest impact on academic success? These questions are asked to understand which students are participating in SHSM programs. In particular, stream, special education status, English language status are of particular importance. This data will compliment the HEQCO data and the literature review on student achievement in school. One question refers to the research question: Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation? This question will also compliment the HEQCO data and literature review by asking if marks and attendance are a factor in selecting students for the program.

While there was a total of twenty-two interview questions, not all interviewees were expected to answer all interview questions. Due to the nature of some of the interviewees’ positions within the school/program, they would not know the answers to all the questions. Therefore, the SHSM Coordinators were asked all twenty-two
Table 1: Interview Questions

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<tr>
<th>Research Questions</th>
<th>Conceptual Framework</th>
<th>Methods</th>
<th>Interview Questions</th>
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| How consistent are the features of the SHSM programs across Ontario? | • Need  
• Clarity  
• Complexity  
• Quality/Practicality  
• District  
• Principal  
• Teacher | • SHSM Coordinator Interview  
• Principal Interview  
• Co-op Teacher Interview  
• Subject Teacher Interviews | Introductory Questions  
1. How many SHSM programs do you have in your school?  
2. How many years has your SHSM program been in your school?  
3. How was it decided which SHSM sectors were fitting for your school?  

Resources and Leadership  
4. What resources and facilities were made available to support the SHSM in your school? (i.e. professional development, program funding)  
5. On a scale of 1-5, where 1 means that there is little district participation and 5 means there is great district involvement, how involved has district leadership been involved in your school’s SHSM? What has their role entailed?  
6. On a scale of 1-5, where 1 means that there is little school leadership and 5 means there is great school leadership, how involved is the school leaders in implementing the SHSM program? Briefly explain this role.  

Staff  
7. How many staff members are directly involved in the SHSM program? What roles do they hold? Briefly explain what these roles entail.  
8. On a scale of 1-5, where 1 means little professional development and 5 means extensive professional development, how much professional development was provided to assist teachers and administrators in implementing the SHSM program in your school? Examples?
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• Clarity  
• Complexity  
• Quality/Practicality  
• District  
• Principal  
• Teacher | • SHSM Coordinator Interview  
• Principal Interview  
• Co-op Teacher Interview  
• Subject Teacher Interviews | 9. On a scale of 1-5, where 1 means little change in teaching practice and 5 means significant change in teacher practice, how much change in practice have teachers experienced in implementing the SHSM program? Examples?  
10. On a scale of 1-5, where one means little assistance and five means significant assistance, how much has the principal assisted in any changes of practice? Examples?  
11. On a scale of 1-5, where 1 means little opportunity to discuss the SHSM program with other teachers and 5 means great opportunity to discuss the SHSM program with other teachers, how much opportunity do teachers have to discuss the SHSM program about any difficulties or successes they have had with other teachers? Examples? |

**Program Guidelines Outlined by Ministry**
12. All SHSM programs are required to have bundled credits. What do your SHSM bundled credits look like in practice at your school? What do your CLAs look like at your school?  
13. All SHSM programs are required to have SHSM Certification and Training. What do SHSM Certification and Training look like in practice at your school?  
14. All SHSM programs are required to have SHSM Experiential Learning and Career Exploration Activities. What do SHSM Experiential Learning and Career Exploration Activities look like in practice at your school?  
15. All SHSM programs are required to have Reach Ahead Experiences. What do the SHSM Reach Ahead Experiences look like in practice at your school?  
16. All SHSM programs are required to have Essential Skills and Work Habits. What do your SHSM Essential Skills and Work Habits look like in practice at your school?
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<td>For which students does the SHSM have the greatest impact on academic success?</td>
<td>• Academic Performance</td>
<td>• HEQCO study data</td>
<td>17. All SHSM programs are required to have Community Partnerships. What do your SHSM Community Partnerships look like in practice at your school?</td>
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<td></td>
<td>• Graduation Rate</td>
<td>• SHSM Coordinator Interview</td>
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<td>• Principal Interview</td>
<td>18. All SHSM programs are required to be monitored and evaluated at the school level. What does monitoring and evaluation of your SHSM(s) look like at your school?</td>
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<td>• Coop Teacher Interview</td>
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<td>19. On a scale of 1-5, where 1 means special education students hardly participate and 5 means they highly participate, what is the participation for students with special education needs in the SHSM?</td>
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<td>20. On a scale of 1-5, where 1 means English Language Learners (ELL) hardly participate and 5 means they highly participate, what is the participation for students with ELL needs to participate in the SHSM?</td>
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<td>21. On a scale of 1-5, where 1 means students in the academic stream hardly participate and 5 means they highly participate, what is the participation for students within the academic stream in the SHSM program? Is there equal recruitment regardless of students’ course choices?</td>
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<td>22. Are marks a factor in selecting students for the program? Is attendance? If so, in what way?</td>
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<tr>
<td>Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation?</td>
<td>• Academic Performance</td>
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questions because they are the lead of the program and they would typically know all the
intricacies of the program. The administrators were asked nineteen questions, with only
the questions about the school administrator omitted. Co-op teachers answered twelve of
the twenty-two questions with only the questions about the Ministry requirements omitted
because they would not typically know or need to know the answer to these questions.
Subject teachers were asked seven of the twenty-two questions, answering only questions
that would pertain to them and their knowledge of the program.

4. Government data from the SHSM implementation guide, brochures, and SHSM
enrolment data, including the number of years each SHSM sector was in the school and
the number of students in each sector was provided from many schools. School data,
such as credits, marks and attendance of SHSM students was not provided from the
schools due to confidentiality reasons.

2.0. Data Analysis & Method

The data for this research project was analyzed in different manners. First, the
OnSIS data was already be analyzed within a study I am working on for the Higher
Education Quality Council of Ontario. Dr. Ben Levin is the principal researcher for this
study. In this study OnSIS data on student achievement in the SHSM program and the
dual credit program is being gathered. As discussed above, this data will reflect two
years of student achievement, starting with June 2009 baseline data for all students who
are completing grade 10, whether or not they were enrolled in the SHSM program the
following year. This data shows how students are performing in grade 10 and if their
academic performance (i.e. grade point averages, credit accumulation) increased or
decreased once they enter the SHSM program when compared with other similar
students. To gain this understanding, the 2009 data of Ontario’s grade 10 students was
compared to the June 2010 data of these same students. This shows if student academic
performance has increased or decreased by the end of grade 11, based on their enrollment
(or lack of enrollment) in the SHSM program. Later, data will be collected from June
2011 to see if student achievement changed by the end of year 12.

Second, all the interviews were transcribed, coded to link to this study’s conceptual
framework, and analyzed using MAXqda2 computer software.
Third, each of the schools was analyzed, not as a case study per se, but to locate patterns among schools, with most (or least) variance and similarities. School profiles were developed based on observation, school and provincial data, and the interviews. For example, each school was defined by its size, percentage of SHSM students’ enrolled, demographic information, as well as general observations that I noticed when I was on-site (i.e. SHSM advertisements on the walls of the school).

3.0. Ethics

Ethics in this study encompasses issues of consent and confidentiality. First, an ethics review was completed, submitted, and passed by the University of Toronto’s research ethics committee before this study commenced. Second, the school boards involved in the study were contacted, appropriate paperwork was submitted, and permission was granted before conducting the study. Third, steps were taken to ensure that all participants did not feel forced to participate in this study. The participant recruitment method, which will be described below stressed that participants were under no obligation to participate in the study and would not be subjected to any form of discrimination or penalty should they refuse to participate. Fourth, it was clearly indicated within the Letter of Information (Appendix B) that the participants’ identities would be kept anonymous.

4.0. Participant Recruitment

Teachers and administrators from the selected schools were recruited in two ways. First, I contacted the SHSM district lead in the potential six districts from the criteria outlined above; I hoped four would agree to be part of this study. In this introductory email I explained the project. I indicated that I wished to interview one administrator, the school SHSM Coordinator, a co-op teacher, one English teacher, and one math teacher involved in the SHSM program, in two schools in their district. I offered to answer any and all questions that these board leads may have. I asked for their support or aid in the ethics approval process or to at least inform me of whom I should contact for ethical approval. I also asked for their support in the recruitment process at the school level by way of speaking to individual principals and asking for their support. Four boards
showed interest in participating in this study, so I contacted ethical approval committees and superintendents at these boards to obtain permission to conduct this study. After completing the necessary paperwork, I eventually was granted permission at all four school boards to conduct my study.

When ethics approval was granted at the district level, I contacted the selected schools’ principals to seek their participation in the study. Again I explained the study, attached the letter of information and answered all questions about the study. I left it to the discretion of the principals and/or vice-principal to choose the teachers to be interviewed for the study, based on the criteria I outlined. After we mutually agreed upon the interview date, administrators arranged the interview schedule based on teachers’ teaching schedules. Also, some principals or vice-principals had teachers read the Letter of Information (Appendix B) and had them sign the consent forms (Appendix C) that was attached to the email I sent the principal before I arrived. For the others, I provided the Letter of Information and Consent Form before the interview, and answered any corresponding questions.

5.0. Limitations of the Research Design

One limitation of this study is its scope. It is commonly understood that in order for effective educational change to occur, a system-wide approach is needed. Vision and implementation of a program is an inclusive act that includes many actors including, politicians, districts, schools, teachers, students, communities and others. While the literature review of this study discusses these many interrelated factors that influence policy implementation, the scope of this study cannot include interviews with all stakeholders. Therefore, I chose to study the local level and interviewed school level implementers – principals and teachers. This is a limitation because to separate one element of the change process gives an incomplete sense or understanding of how change is implemented. However, this limitation is a practical and necessary one for the scope of this study.

A second limitation of this study is the absence of the student voice. As programs like the SHSM are created to help students be more successful in school, it would be
advantageous to hear the student perspective in order to understand how the SHSM is helping (or not helping) them succeed academically in school. However, due to the difficulty in gaining ethical approval, especially in so many school boards, I decided against it. I do believe that the data from the HEQCO study as well as the data collected in this study may give some insight into how the SHSM is impacting student achievement in school. Also, some teachers gave me written and verbal student feedback they had prepared for the interview, in regards to the SHSM program.

A third limitation of the study is that the quantitative data I used was gathered and analyzed for another study. While the HEQCO study Dr. Ben Levin is conducting is asking similar questions (albeit with a different scope of this study), and the OnSIS data is being collected by the Ministry for similar purposes, it is not data that I collected myself. I do not know the exact structures put in place by the Ministry when they collected their data, which can be perceived as a limitation. Furthermore, the statistical analysis for the HEQCO study was not completed by me, but by other members of this research team. This could also be perceived as a limitation to the study. However, these limitations could also be seen as strengths. For example, access to the Ministry’s data can also be perceived as a strength of the study since I would not otherwise have access to the scope of data that they can provide. It is also a strength because I personally was unable to get student data at the school level due to the difficulty in gaining ethical approval, especially in so many school boards. So relying on the HEQCO data was paramount to the study in understanding student outcomes related to the SHSM program. I also believe this data deepened and enhanced my predominantly qualitative study.

A fourth limitation is that this study’s scope was limited to educators I interviewed at 8 different schools across the province. While this methodological choice allowed for greater breadth in understanding the SHSM program throughout the province (which compliments the provincial data from the HEQCO study data I used), it does not provide the level of depth that fewer case studies would provide. Nevertheless, I was interested in gaining a province-wide perspective of the program, so I thought it would be best to study a wider variety of schools throughout the province. Also, with the common responses among schools, in the end I felt that 8 schools, while still limited, did provide adequate depth to the study.
CHAPTER IV: STUDY FINDINGS

This chapter of my thesis outlines the findings of this study. The findings for all three sub-questions, which ask about SHSM program consistency province-wide, the academic success of students within the SHSM program, and which students the SHSM has the greatest impact upon, will be discussed in the corresponding sections below.

Sub-Question I: Program Consistencies

The first sub-question for this thesis is: How consistent are the features of the SHSM across Ontario? Consistency is determined by how the program is implemented in each district and in each school. In order to determine the program consistencies across the province, questions regarding the SHSM program, school leadership, staff involvement, resources, and the SHSM program requirements in practice, were asked in each of the eight schools in this study. The answers\(^2\) will be discussed in conjunction with this study’s conceptual framework.

1.0. Need

As outlined in the literature review, the first element for successful implementation of any program is a perceived need for a program. Need for a program may be understood from a political perspective, but it also can be related to the economic and social dynamics of a school and/or community.

In order to understand if there was a perceived need for the SHSM program in each of the schools in this study, SHSM Coordinators and school administrators were asked about student enrolment in the SHSM program, the growth/breadth of the SHSM program\(^3\), how it was decided which SHSMs were fitting for the school, and how many years the SHSM programs have been in their school. During the interviews frustrations

\(^2\) The quotes chosen for this study are representative of a general perspective shared by interviewees, unless otherwise indicated.

\(^3\) The growth of the program reflected by numerical data was difficult to obtain. The ever-changing role of the SHSM Coordinator and administration resulted in lost or inconsistent data. This is discussed in more depth under the heading of school leadership.
regarding the school’s location, the breadth of the program, and the lack of involvement/belief in the SHSM program by staff were also discussed. From these interviews, community and school profiles were developed.

1.1. Community Profiles

In the community profile (Table 2), the school’s location, the size of the community, the economic driver of the community and the mean household income for that community were included. This data which was found in a variety of locations within the Statistics Canada website (Statistics Canada, 2012), helps to shape an understanding of the programming or SHSM sectors that may be suitable for a particular area.

<table>
<thead>
<tr>
<th>School</th>
<th>Location in Ontario</th>
<th>Size of Community</th>
<th>Economic Driver of Community</th>
<th>Mean Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>North East</td>
<td>5,000</td>
<td>Automotive manufacturing</td>
<td>$65,000</td>
</tr>
<tr>
<td>Cooke</td>
<td>East</td>
<td>16,000</td>
<td>Agriculture</td>
<td>$60,000</td>
</tr>
<tr>
<td>Dellview</td>
<td>South West</td>
<td>130,000</td>
<td>Manufacturing; Industrial</td>
<td>$65,000</td>
</tr>
<tr>
<td>Farmington</td>
<td>North</td>
<td>15,000</td>
<td>Farming; Forestry</td>
<td>$35,000</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>East</td>
<td>16,000</td>
<td>Industrial</td>
<td>$50,000</td>
</tr>
<tr>
<td>Southshore</td>
<td>South West</td>
<td>500,000</td>
<td>Industrial; Manufacturing</td>
<td>$75,000</td>
</tr>
<tr>
<td>Valley Gardens</td>
<td>North</td>
<td>4,500</td>
<td>Lumber</td>
<td>$40,000</td>
</tr>
<tr>
<td>Welland</td>
<td>North East</td>
<td>20,000</td>
<td>Industry; Manufacturing; Trades</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

1.2. School Profiles

School profiles were next developed for each school (Table 3). School profiles include the size of the school, student enrolment, and the number of students enrolled in
Table 3: School Profiles (as of 2010-2011 school year)

<table>
<thead>
<tr>
<th>School</th>
<th>Type of School</th>
<th>Student Enrolment</th>
<th>No. of Enrolled SHSM Students</th>
<th>SHSM Sectors &amp; Length of Time they have been in the School</th>
<th>Why SHSM was chosen</th>
<th>Stream of most SHSM students</th>
<th>No. of ELL students in SHSM</th>
<th>No. of Spec. Ed. students in SHSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Public</td>
<td>900</td>
<td>40 (4%)</td>
<td>1. Construction*5 (3 years) 2. Business (4) - two new SHSMs coming fall 2012</td>
<td>-Lead (sector) teacher advocates</td>
<td>college</td>
<td>N/A</td>
<td>Few</td>
</tr>
<tr>
<td>Cooke</td>
<td>Public</td>
<td>480</td>
<td>36 (7.5%)</td>
<td>1. Transportation (4 years) 2. Health &amp; Wellness* (1)</td>
<td>-Lead teacher advocates</td>
<td>university</td>
<td>N/A</td>
<td>20%</td>
</tr>
<tr>
<td>Farmington</td>
<td>Public</td>
<td>850</td>
<td>47 (5.5%)</td>
<td>1. Hospitality &amp; Tourism (5) 2. Transportation (4) 3. Wealth &amp; Wellness* (3)</td>
<td>-strong programs already in school</td>
<td>college; university</td>
<td>N/A</td>
<td>25%</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>Public</td>
<td>530</td>
<td>55 (10.4%)</td>
<td>1. Construction (2) 2. Environment (4) 3. Hospitality &amp; Tourism (5) 4. Manufacturing (3) 5. Transportation (4)</td>
<td>-needs of community, student need &amp; teacher qualifications</td>
<td>work; college</td>
<td>N/A</td>
<td>50%+</td>
</tr>
</tbody>
</table>

4 The percentage of the student population is included in the brackets, but keep in mind only students in grade 11 & 12 can enroll in this program.
5 * means that the majority of SHSM students are enrolled in that sector. Schools without a * means even distribution of students among sectors.
<table>
<thead>
<tr>
<th>School</th>
<th>Type of School</th>
<th>Student Enrolment</th>
<th>No. of Enrolled SHSM Students</th>
<th>SHSM Sectors &amp; Length of Time they have been in the School</th>
<th>Why SHSM was chosen</th>
<th>Stream of most SHSM students</th>
<th>No. of ELL students in SHSM</th>
<th>No. of Spec. Ed. students in SHSM</th>
</tr>
</thead>
</table>
| Southshore      | Catholic       | 2250              | 465 (20.6%)                 | 1. Arts & Culture (1)  
2. Business (2)  
3. Construction (4)  
4. Energy (2)  
5. Health & Wellness* (4)  
6. Hospitality and Tourism (4)  
7. Information & Communications Technology (3)  
8. Justice, Community Safety & Emergency Services (1)  
9. Manufacturing (4)  
10. Sports (2)  
11. Transportation (4)                                                                                       | Lead teacher advocates                  | work; college                                      | Few                                           | Unsure                        |
| Valley Gardens  | Public         | 400               | 165 (41%)                   | 1. Arts & Culture (5)  
2. Construction (4)  
3. Energy (3)  
4. Environment (3)  
5. Health & Wellness* (4)  
6. Justice, Community Safety & Emergency Services (4)  
7. Transportation (5)                                                                                   | Needs of students and community considered | All                                          | N/A                                           | All students with an IEP are enrolled |
| Welland         | Public         | 1400              | 405 (29%)                   | 1. Arts & Culture (3)  
2. Business (2)  
3. Construction (1)  
4. Health and Wellness* (3)  
5. Hospitality and Tourism (1)  
6. Manufacturing (1)  
7. Environment (2)  
8. Transportation (3)  
- 2 new sectors coming fall 2012                                                                         | -strong teacher advocates & strong programs already in school | college; university | N/A                                           | 12.5%                                |
SHSM programs. School profiles also include the SHSM sectors in each school, the reason why these sectors were chosen and the length of time that these sectors have been in the school. Lastly, the stream of most SHSM students, the numbers of English Language Learners and special education students have also been included to understand the type of student the SHSM program is attracting. The topics within the school profile stemmed from the literature review and emerged as important trends within the interviews.

1.2.1. Central High School

Central High School is a public high school located in north-east Ontario. Central High School is located in an automotive manufacturing town of 5,000 people, where the mean household income is approximately $65,000. Central High School has about 900 students and currently has two SHSM sectors, with two more planned for fall 2012. A total of 40 students or 4% of the student population is currently enrolled in the SHSM program in this school. The Business SHSM, which is in its third year, has 10 students enrolled. The Construction SHSM has been running for four years and has 30 students enrolled. The Construction SHSM began because a lead teacher advocated for the sector. The Business SHSM began because it was felt by the SHSM Coordinator that Business would be a good SHSM sector for females, as the Construction sector primarily targets male students.

There are no students designated as English Language Learners at Central High School, and only a few of the students in the SHSM program are designated as a special education student. However, in the Construction SHSM, which consists of almost all workplace and college-bound students, there are a lot of at risk students who have not had a lot of success in school. Students in the Business SHSM are mainly college or university-bound students and are quite successful in school.

1.2.2. Cooke Secondary School

Cooke Secondary School is a public high school in eastern Ontario. It is located in a town of 16,000 people with the mean household income of approximately $60,000.
The economic driver of this community is the agricultural sector. Cooke Secondary School has a student enrolment of approximately 480 students, and has two SHSM sectors with a total of 36 or 7.5% of the student population enrolled in this program. The first SHSM sector, Transportation, has been running for four years. The second SHSM sector, Health & Wellness, has the majority of SHSM students and is completing its first year. These SHSMs were chosen based on resources already in place, such as a relatively new auto shop and an existing Learning and Working with Children course that fit well into the Health and Wellness sector. There are no students who are classified as an English Language Learner in Cooke Secondary School. Approximately 20% of students in Cooke Secondary School are designated as special education, and that percentage is reportedly mirrored in the SHSM program. The majority of SHSM students in Cooke are university-bound students.

1.2.3. Dellview High School

Dellview High School is Catholic high school located in south-western Ontario. Dellview High School is located in a manufacturing/industrial-based city of approximately 130,000 people, where the mean household income is around $65,000. Dellview has a student enrollment of approximately 1,000 students and 176 (17.6%) of them are SHSM students. Dellview has seven SHSM sectors. The construction sector has been in the school for five years. Dellview has had the Hospitality & Tourism and Transportation sectors for four years, Business, Health & Wellness and Information & Communication sectors for two years and the Sports sector for one year.

SHSM sectors were first decided to be undertaken by a 16-person program council, consisting of administrators and department heads. This council decides if the SHSM sector is a good fit for the school by looking at the advantages and disadvantages of potential sectors. Then the council discusses its decision in individual departments to see if a teacher has interest and passion to be the teacher lead of a SHSM sector. If it does, they apply to the Ministry of Education for sector approval.

Dellview has the highest number of English Language Learners in the district and it was felt that there were a lot of special education students in the school as well. However, it was uncertain how many English Language Learners (ELL) or special
education students were enrolled in the SHSM programs as this program is centrally run and there is nowhere on the application for students to indicate these factors. It was felt that the number of ELL and special education students mirrored the student enrolment. It was also felt that the majority of the SHSM students were college-bound.

1.2.4. Farmington Secondary School

Farmington Secondary School is a public high school in northern Ontario. Farmington is located in a city of approximately 15,000 where the mean family income is roughly $35,000. Forestry and farming form the backbone of the local economy. Farmington Secondary School has a student enrolment of approximately 850 students. Farmington is one of the largest high schools in the district and has three SHSM sectors. The first sector, Hospitality & Tourism began five years ago and currently has 11 students enrolled. The second SHSM, Transportation, began four years ago and has 10 students enrolled. The third SHSM, Health & Wellness began three years ago and has the largest student enrolment, consisting of 26 students. In total 5.5% of the student population is enrolled in the SHSM program. These sectors were selected because there were programs/resources already in place in the building. For example, Farmington had built a $500,000 chef’s kitchen from a previous initiative two years prior, and had a passionate culinary arts teacher.

Farmington Secondary has no students designated as English Language Learners. Approximately a quarter of the SHSM students are special education students, but the majority of these students are college or university-bound.

1.2.5. Portsmouth High School

Portsmouth High School is a public high school in eastern Ontario. Portsmouth High School is located in an industrial town of approximately 16,000 people and has a mean household income of $50,000. Portsmouth High School has a student population of approximately 530 students and has five SHSM sectors. Hospitality & Tourism has been a sector in Portsmouth for five years, Environment and Transportation sectors for four years, Manufacturing for three and Construction has been a sector in Portsmouth for two
years. There is an average of 11 students in each SHSM sector for a total of 55 or 10.4% of the student population in the SHSM program. The SHSM sectors were chosen by looking at the needs of the community, the needs of the students and the expertise in teaching qualifications. For example, the Manufacturing SHSM was chosen because Portsmouth High School is a technical oriented school/community. The principal had previously put over $130,000 worth of new machines into this shop, and the principal had handpicked the lead SHSM teacher from industry. The Manufacturing SHSM program was perceived by the principal to be a perfect fit for the school.

There are no students designated as English Language Learners in Portsmouth High School. Over half of the SHSM students in Portsmouth are special education students, and these students are encouraged to go into the SHSM program by the principal because of the fact that IEPs are portable and are recognized in post-secondary institutions. University-bound students make up at least half of the enrolment of the Environment SHSM. Students in the other four SHSM sectors go to college, or even more typically, the workplace.

1.2.6. Southshore Secondary School

Southshore Secondary School is a Catholic high school located in south-western Ontario. Southshore Secondary School is located in an industrial/manufacturing-based city of approximately 500,000 people where the mean household income is around $75,000. South Shore has approximately 2250 students with 465 (20.6%) of them SHSM students. Southshore Secondary has 11 SHSM sectors. Southshore has had the Construction, Health & Wellness (which is the largest sector), Hospitality & Tourism and Manufacturing sectors in their school for four years, Information & Communications Technology for three years, Business, Energy and Sports for two years, and Arts & Culture and Justice, Community Safety & Emergency Services for a year. Each SHSM sector has a key teacher who has advocated for the sector.

There are many English Language Learners at Southshore Secondary School, but most do not enroll in the SHSM. There is speculation by the SHSM Coordinator that these students have not heard about the program or do not understand what the program consists of. It is also unclear how many students with special education designation are
enrolled in the SHSM because this program is centrally run. While university-bound students enroll in the SHSM, it was felt that the majority of SHSM students are workplace or college-bound.

1.2.7. Valley Gardens Secondary School

Valley Gardens Secondary School is a public high school located in northern Ontario. Valley Gardens is located in a town of approximately 4,500 people with a mean household income of approximately $40,000. Lumber is the key economic driver for this town. Valley Gardens is the smallest high school in its district, with approximately 400 students. It has seven SHSM sectors. The sectors that Valley Gardens has are: Arts & Culture and Transportation which have been in the school for five years, Construction, Health & Wellness (the largest SHSM sector), Justice, Community Safety & Emergency Services which have been in the school for four years, and Energy and the Environment sectors which have been in the school for three years. Almost every grade 11 and 12 student or 41.5% of the student body is enrolled in a SHSM sector.

The SHSM sectors were chosen by the school based on community need, previous co-op placements, students’ Career Counseling Summaries (to discover which courses the students were taking), and through individual guidance interviews to discover students’ interests and career paths. It is this school’s theory to offer a SHSM that has the ability to suit all students’ interests rather than the students having to fit the sectors they offer.

Every special education student is enrolled in an SHSM sector. There are also a few Life Skills students enrolled, who will leave high school with an Ontario Secondary School Certificate rather than an Ontario Secondary School Diploma. Almost all university-bound students are enrolled, with only a few declining the program, largely because it will not fit into their schedule. Valley Gardens does not have any students designated as an English Language Learner.

1.2.8. Welland Secondary School

Welland Secondary School is a public high school located in north-east Ontario.
Welland Secondary School is located in an industrial/manufacturing/trades town of approximately 20,000 people. The mean household income is $55,000. Welland Secondary School has approximately 1,400 students and a little over 400 (29%) of these students are enrolled in one of eight current SHSM sectors. Health & Wellness (the largest sector with 46% of SHSM students enrolled) and Arts & Culture (15%) sectors have been in the school for three years, the Environment (3%) and Business (11%) sectors for two years, Hospitality (6%), Manufacturing (3%) and Construction (6%) for a year, and Agriculture and Sports sectors will begin in Fall 2012. Programs were chosen because there was either a strong program that already existed in the building and/or there was a key teacher who advocated for the program.

The majority of the SHSM students are college-bound (209), followed by university-bound (143), workplace-bound (48) and apprenticeship-bound (8). One-eighth (47 or 12.5%) of the students enrolled in a SHSM sector are designated as a special education student. There are no students who are designated as an English Language Learner in Welland Secondary School.

1.3. Frustrations within Schools

There were a number of frustrations within the schools that are related to the need for the program. The location of the school, the breadth of the program and the lack of support of the program within certain schools were addressed by staff in a number of schools.

1.3.1. Location

First, the location of the school in four school communities created some frustration in providing quality SHSM programs. Co-op placements for students, which are one of the requirements for the program, were one of the biggest obstacles to overcome in rural schools. For example, in Welland Secondary School, the school has 280 co-op placements annually and must fill them in a town the size of 20,000 people. This in turn causes concern about overtaxing the co-op placements, and the ability to find relevant co-op placements for students. Transportation to travel to co-ops is also a concern. High schools like Central have few employers within walking distance of the
school making co-op placements further away. With distance to co-ops and tumbling
timetables at schools it is sometimes difficult to get students to and from school and their
placements in an efficient manner.

In rural schools, such as Central, Portsmouth and Farmington, the changes of
employment patterns in these communities is also causing concern. For example, a
Central High School co-op teacher stated:

businesses we’ve used for decades are out of business, so what do you do? We go
into shop after shop after shop and they are twiddling their thumbs because they
have no work. A lot can’t take a kid on because they had to lay someone off. They are hurting.

Both co-op teachers in Central found it difficult to find student co-op placements if
employment is so low in certain sectors.

A Portsmouth High School co-op teacher voiced similar concerns about the
welding shops in their town. She stated that there are not as many placements as there
used to be and some are unionized, so they cannot hire students. Farmington Secondary
School too is located in an area that is experiencing economic difficulties in some sectors.
For example, the Hospitality and Tourism sector is suffering. The two co-op teachers at
this school stated there are few high-end restaurants and opportunities there. Students
who want valid work experience in this field will have to go to a much bigger city. With
many difficulties within rural communities to successfully run a SHSM program, the
need for this program was questioned.

1.3.2. Breadth of Program

While the location of the school has caused problems for schools to provide a
quality program, the breadth of the program in Dellview, Portsmouth, Southshore and
Welland high schools have caused frustrations and questions about the need for such a
large program.

In Dellview, staff discussed how large the SHSM program has become and
because no staff in the school receives paid time to manage this program, all staff
interviewed at this school believed the program is not as successful as it could be. For
example, all staff interviewed at this school found there is a disconnect between the
number of students signing up and the number of students completing the program. For example, Dellview had 176 students or 17.6% of the student population enrolled in the program. However, only 9% of the eligible SHSM students completed the program the year prior. Dellview’s school SHSM Coordinator and Guidance teacher realize that they need to meet, connect and support the several hundred students in this program, but they do not know how it is possible to find time to do that on top of their regular full-time teaching duties, especially when the SHSM program has not technically been assigned to anyone’s duties. Scaling back the size of the program was seen to be a possible solution. With the lack of staffing resources provided in-school because this program is run at the board-level, they feel they simply cannot meet the need of the students.

In Southshore, the administrator suggested that this school may also need to scale back on the number of students enrolled in the SHSM program to ensure the program is a good experience for the students involved. With this school having close to 500 students enrolled in the SHSM program, no paid SHSM Coordinator in-house, and according to this board’s reports, less than 20% of SHSM students completing the SHSM program, there is concern that the school may not be adequately meeting student need.

The administrator at Welland similarly stated that perhaps instead of growing their SHSM program in numbers, what they need to do is grow what they have, even if that means eliminating programs that are not doing well or are not meeting the student population. Having a high number of programs in the school, even with the financial support allotted to them, does not necessarily mean there is a need for them. Having a teacher advocate who really advocates for the program is needed in this school in the sectors that are not thriving. Without the needed teacher support, some SHSM sectors are not generating significant student interest and these sectors are not growing.

The Portsmouth High School co-op teacher also shared concern about the number of SHSM programs in the school, as some of the sectors have few students. This co-op teacher thought that with all of the SHSM programs and the corresponding courses that were required to run, whether or not there was a high student enrolment in them, was taxing on the electives and other programs in the school that students may be more interested in taking. She questioned the need for several of the sectors in the school and whether they were adequately meeting student need.
1.3.3. Lack of Support of the Program

The lack of staff support and/or involvement in the SHSM program was discussed in all schools. Almost all interviewees reported other teachers questioning the need for the program for a variety of reasons. These included: too many simultaneous initiatives, the SHSM does not hold administrative focus, a belief that ministry resources are being misused, not understanding the need for the program, and resentment about having to change teaching practice. With some (sometimes key) staff not supporting the program, it begs the question of whether the SHSM program actually meets school need.

First, multiple simultaneous initiatives in the building caused almost all educators at Central, Farmington and Southshore high schools to not be very involved in their SHSM program. The SHSM, as some teachers stated, is just one more initiative. Teachers have so many other duties, committees, and extra-curricular activities they are part of, the general feeling is if they do not have to be involved in an initiative, many will opt out of it. This is exactly what many have done in relation to the SHSM program.

The lack of administrative focus on the SHSM program at the school level was another reason why staff members were not involved in this program. One or two interviewees at Central, Dellview, Southshore, and Welland stated if this program was a priority of the administration, then they believed that all staff members in the school would be supportive of the program. They also felt the program would probably be more successful within the school if this program had administrative focus. However, current administrators in these buildings did not have this program at the forefront of their school agenda. Therefore, many staff members were not involved in the program.

Third, a disbelief that the ministry’s resources are being well used caused a lack of belief in the SHSM program in Farmington and Dellview. For example, in Farmington, the two co-op teachers made it clear that there was envy among some of the departments because some departments have a lot of financial support while others have none. One co-op teacher stated: “It’s like at Christmas when you got the big box and I got the little box.” All staff members want an equal share, but the school’s SHSM funding formula does not allow that to occur. Additionally, Dellview’s staff also had concern about how the ministry’s money was spent. According to the Dellview SHSM Coordinator, the school’s staff complains in the staffroom that this program is a waste of
Ministry resources because it puts extra resources into programs that help students outside of the classroom when they’re not going to class to begin with.

Fourth, there is a lack of support for the SHSM program by Farmington and Welland school staff because, according to the co-op teachers in both schools, not everyone understands why the program is needed. For example, the SHSM Coordinator and co-op teachers at Farmington acknowledged that colleges were now taking note of the SHSM red seal on the Ontario Secondary School Diploma, but they themselves believed that “having a red seal had no bearing on a student’s admission to a college program” (Co-op teacher, Farmington). Co-op teachers at this school personally did not see the relevance of the program. In fact, one co-op teacher at this school shared the lack of belief in the program’s red seal by stating:

...employers don’t give a shit if they have First Aid or fork lift training or whatever because the employer has to give that training again. It’s frustrating because it is misleading to the kids and it’s misleading to the kid’s parents. It’s being marketable to the kids as being really inviting but really no one gives a shit. Pardon my language and I hope I don’t sound pessimistic (Co-op teacher, Farmington).

This teacher, honest in his personal opinion, doubted that employers cared about a student obtaining a red seal on his/her diploma.

At Welland Secondary School they have similar problems. In this school, some sector leads and the co-op department head, who are key figures in the program, do not see the need for the program and do not openly advocate for the SHSM. According to the Welland SHSM Coordinator, some sector leads simply leave the SHSM applications on top of the paper towel dispenser in their classroom instead of informing the students about the SHSM program. Also, the co-op department head at this school who was interviewed stated:

I have a private saying about SHSM. It’s much ado about nothing. I’m also not big into credentialism. I don’t care about the red seal and I’m not a huge advocate of the program but if it hooks the students, then awesome. I just want those kids to become good workers and be happy.

While she wanted students to be successful, she, like reportedly many staff in this school, was not an advocate for the program. She did not feel the SHSM was a needed program.
Lastly, resentment about having to change one’s practice is a fifth reason why the SHSM program is or was not reportedly perceived as a needed by in all schools in this study. At least one staff member from each of the schools in this study stated that teachers were not or had not initially felt it was needed to their practice in any way to accommodate the program. For example, at Portsmouth High School, there was “quite a bit of resentment among the core teachers having to change a project so it was sector-related and not subject-related because the administrator said to do it” (English teacher, Portsmouth). However, this English teacher did reluctantly state though that she has “warmed up to the SHSM over the past couple of years and the students do seem to enjoy it.” A similar situation occurred at Valley Gardens. According to the SHSM Coordinator at Valley Gardens, their staff was initially apathetic to the program, thought the CLAs were onerous and the additional co-op was a lot of extra work until “they saw the relevance of the CLAs and certifications and teachers got some ownership and decision-making in it” (SHSM lead, Valley Gardens). Their newest administrator, who is a big advocate of the program, was one of the reasons why so many staff members became involved in this program. This will be discussed in more detail in the section on leadership.

1.4. Need Summary

In this study, the number of SHSM sectors ranged from two to eleven sectors per school. Student population enrolled in the SHSM program also significantly ranged from 4% to 41%. The majority of the students were in the college stream, there was typically no ELL students enrolled and the percent of special education students in the program ranged from few to more than 50+ of the students enrolled in the program. Typically programs were chosen due to programs already existing in the school and/or a teacher advocating for a program.

There were a number of frustrations within the schools that are related to the need for the program. The rural locations of some schools caused concerns about meeting co-op placement needs with a lack of transportation funding and the current economic downfall resulting in businesses closing.
The breadth of the program and the lack of support of the program within larger, centrally managed schools were addressed. Scaling back on SHSM programs was suggested as an option in these schools to effectively manage student need.

The lack of support of the program by staff was lastly discussed in all schools. Staff in all schools reported other teachers questioning the need for the program for a variety of reasons, including: too many simultaneous initiatives, the SHSM does not hold administrative focus, a belief that Ministry resources are being misused, not understanding the need for the program, and resentment about having to change teaching practice. With some (sometimes key) staff not supporting the program, some staff questioned whether some of the SHSM sectors chosen by schools actually meet school need.

2.0 Clarity & Complexity

As outlined in the conceptual framework and literature review, unclear goals and unspecified means of implementation are significant problems at the implementation stage of any program. However, change cannot be too prescriptive because the influence of the local context is also integral to any change. In addition, the perception of how complex educational change is by individuals further influences the implementation of any policy. If it is too complex educators may not understand, nor feel equipped to implement the program. Needing to alter resources, pedagogical practices and beliefs often equates to implementers feeling that an educational policy is complex.

To understand the clarity and complexity of the SHSM program province-wide educators were asked about how each of the five required elements of the SHSM looked in practice. Specifically, administrators and SHSM Coordinators in each of the 8 schools were asked how 1. Bundled Credits; 2. Certification and Training; 3. Experiential Learning and Career Exploration Activities; 4. Reach Ahead Experiences, and; 5. Essential Skills and Work Habits looked like in practice at their school.

2.1. Bundled Credits

SHSM programs require a bundle of eight - ten courses in the student’s selected field. This bundle of programs includes four major credits related to their post-secondary
field, two to four “other” credits (which incorporates the 6-10 hour CLA in core curriculum subjects) and two cooperative education credits.

When administrators and SHSM Coordinators at all schools were asked how the required bundled credit courses were implemented in practice at the school level administrators at Dellview and Southshore did not know what bundled credits were or how they worked. However, staff at seven of the high schools (Central, Dellview, Farmington, Portsmouth, Southshore, Valley Gardens and Welland) did know what they were and stated that they follow what the Ministry outlines for the SHSM bundled courses. Cooke Secondary School was the exception as this school generated their own bundled courses at the school level which was approved by the Ministry.

While most schools follow the Ministry outline for bundled courses, a number of frustrations with the bundled courses/required course options were voiced. These included the limited number of “optional” courses, double credit courses, and the too full academic student timetable.

Course offerings are a frustration at Catholic schools and smaller schools due to the amount of course options or course sections that can be offered at each school. Catholic students have fewer options because it is mandatory they take religion as one of their “options”. SHSM Coordinators at small schools, like Cooke and Portsmouth, stated course options are difficult because a course cannot be offered if not enough students are enrolled, due to staffing and funding purposes. Alternatively, if the course is held open because it is required it can become a “dumping grounds” for other students. This has reportedly created resentment among staff members in Cooke, Portsmouth and Welland, as these required, but not actively pursued courses take away from other elective courses in the school, such as business, history, the arts, etc. To try to avoid these problems, Central and Valley Gardens use e-learning options and Portsmouth joins workplace and college level courses together or asks the Ministry for course substitutions.

Providing dual credits combined with required SHSM bundled credits has caused some frustration at Cooke, which is the only school in this study to join dual credits with the SHSM. In this school two interviewees stated that there were problems with the high school and college curriculum matching up. For example, there were problems trying to fit three courses (a high school course, a college course, and a co-op) into a two period
time slot, especially when there is a wide range of academic ability. At Cooke, the English teacher/SHSM sector lead stated: “we have kids who struggle with the regular course let alone a first year college course on top of a co-op placement, and it is grade 11.”

Academic students at Central, Dellview, Portsmouth, Southshore, and Valley Gardens found it difficult to fit in all the required SHSM courses, such as tech and co-ops, when they have a timetable full of academic subjects. Enrolling in a SHSM program for these students may mean spending an extra year in high school and/or taking summer or weekend co-ops, if they are even offered. However, in schools where this is an option, summer or weekend co-ops are generating other problems. For instance, in some schools, like Farmington, summer co-ops are restricted to students who are a credit or two shy of graduating. In others, like Dellview and Southshore, the number of summer co-ops is soaring while businesses may be more reluctant to have summer co-op students with so many staff members away on holiday and unable to properly train students.

2.1.1. Contextualized Learning Activities (CLAs)

CLAs, as outlined, are part of the bundled credits. However, all teachers in Central, Dellview and Welland and the majority of teachers in Farmington, Portsmouth and Southshore reportedly do not deliver CLAs at their school. All interviewees at these schools stated that teachers have not delivered the CLAs because they typically have not been mandatory, encouraged, supported or monitored for completion by administration in any of these schools. It was also reported by one or more interviewees at each school that teachers do not deliver CLAs because teachers in their schools refuse to have different expectation for SHSM students, are unwilling to change their course content (typically the university-bound teachers), are not willing to mark additional activities if the student completes the CLA independently, and/or typically does not feel that CLAs add value to their program. There was also concern by Welland’s SHSM Coordinator that since most teachers came through the university system, they know little about the college system or how to identify with their tech students.

The emphasis on completing CLAs has risen in some schools. For example, Southshore’s subject teachers have to inform the Coordinator if they have either delivered
or handed out an independently-completed CLA, and whether a student has completed, not completed or refused to complete the independent CLA. Valley Gardens posts a list on the teacher conference so all staff can see each CLA requirement and which teacher has to deliver it. Teachers at Valley Gardens who deliver a CLA have to verify that their students have completed the CLA. Teachers have had some help in this process as the Valley Gardens’ SHSM Coordinator stated there have been district-wide PD sessions to help and inform teachers who are delivering CLAs. At Welland, where many teachers refuse to deliver the CLA, SHSM Coordinator at this school stated the co-op program has taken on this program requirement and delivers literacy and numeracy components for English and math in co-op. Their Board has articulated that some type of a CLA must be delivered and this is the compromise they have made.

For those schools and teachers who were delivering or attempting to deliver a CLA, there were numerous frustrations. At least one teacher at Cooke, Dellview, Farmington, Southshore, Valley Gardens and Welland felt that many CLAs are: poorly planned, poorly formatted, inconsistent among sectors and among programs, inaccessible and lengthy. All teachers but those at Valley Gardens reported little to no PD to help them know how to deliver these CLAs. One interviewee from Cooke also felt frustration because not all SHSM students were receiving CLAs in a school or in summer school and the school had to catch students up on this requirement after the fact. According to one or two subject teachers in Farmington, Dellview and Southshore, the lack of knowledge was creating stress on some teachers. As a result, in schools where the CLA was mandatory, some teachers reportedly chose to have students independently complete their CLAs. However, SHSM Coordinators in Cooke, Dellview and Southshore stated that students rarely completed their CLAs independently. Students reported to SHSM Coordinators that they felt that independent CLAs were not meaningful and they were not typically engaged in the activity, especially if they were in the college or workplace pathway.

2.1.2. Cooperative Education

All SHSM students are required to have two co-op credits as part of their bundled SHSM credits. With this required component of the SHSM, the co-op program at six of
the eight schools has experienced change. These programs have changed due to an increase of students, the increase of more at-risk students in co-op, and the responsibility for organizing co-op placements.

First, the growth of the co-op program has also created problems in all schools but Valley Gardens. Finding relevant placements for up to 400 students in the local community has been taxing, which was discussed above in the section on school location.

The inclusion of the at-risk student in co-op has caused co-op programs in all but two schools (Farmington, Portsmouth) to be much more flexible. This is due to a number of reasons. First, course content must be more flexible as there are now students with a wide scope of abilities taking co-op. Second, co-op in some schools, like Welland Secondary School, continually takes students throughout the term. This may be because a student is failing a course and needs an opportunity to be successful in school. Third, having at-risk students in the co-op program often means that the co-op teachers have to “massage” relationships with community employers or come up with alternative placements for more challenging candidates. As a result, sector teachers in Cooke and Welland often help with placing students in specific co-ops in order to not “burn bridges”. Some schools like Valley Gardens and Welland may place students in-school as an educational assistant or with employers who like working with at-risk students. Farmington and Portsmouth were the only schools that did not note any problems with at-risk students or co-op attendance among SHSM students.

The changing nature of co-op has also added responsibility to some teachers’ workload. At Central, for example, one the SHSM sector leads stated that in order to find appropriate co-op placements for his students he spends enormous amounts of time securing community partnerships for build sites, looking at building permits, applying for permits from the conservation authority, and completing drawings that have to be submitted to gain a building permit. He stated it takes a lot of energy and a sector teacher who is very committed to the program to ensure students have meaningful co-op placements.

2.2. Certifications

Each SHSM requires sector-recognized certifications that have been identified
through sector consultations. These are externally recognized qualifications that are relevant to the particular field. As a result, in all schools, every SHSM student is trained in Workplace Hazardous Materials Information System (WHMIS), First Aid and Cardiopulmonary Resuscitation (CPR). CPR is usually two or three full days of training and WHMIS and First Aid are often completed online. Two or three optional certifications are usually chosen by the sector leads or managed centrally.

At six of the eight schools (Central, Cooke, Farmington, Portsmouth, Valley Gardens and Welland) the certification options are chosen for the students by the sector teachers. Many of these certifications are delivered during class time or completed online. For example, Fall Arrest/Fall Protection Training may be given to Construction SHSM student during class time. CPR training is usually completed with all SHSM students simultaneously. The certifications are often delivered by teachers within the school, such as Fall Arrest/Fall Protection and Smart Serve (which is mandatory training for wait staff to serve alcohol), for cost savings purposes. Otherwise, outside agencies are selected, often due to price or greater certification authenticity and multiple sectors are typically trained together, for cost saving purposes.

Dellview and Southshore are the exception. Their certifications, like the rest of their SHSM program, are run centrally. In these schools, students sign up for certifications electronically. Students also receive reminder notifications regarding available certifications and confirmation notices if they have signed up for a certification. These are given during homeroom. This process was seen as both positive and negative by Dellview and Southshore staff. It is positive in that students can gain an overview of all the training that is available for them. Teachers and administrators can also see which students are enrolled in which certifications, which makes it an easy way to track students. It is problematic because certifications provided board-wide can fill up quickly on a first-come, first-serve basis (with some students not getting a chance to sign up), some students may be enrolling in too many sessions thus missing a lot of class, or students are not signing up for any certification at all and failing to meet part of the SHSM requirements. District-organized certifications is also perceived as problematic because there is no one at the school level to “chase” the students to make sure they are getting on the bus (where the training is supervised by a supply teacher for the board) or
to fill these spots with students on the waiting list, last minute. The result often is high absenteeism for some certifications, with students on the wait list not able to take advantage of the absences. It also means a loss of money for the board, as the financial commitment has already been made for all students who signed up for the certifications, whether or not they attend.

The amount of time and responsibility held by office staff to organize these district-organized certifications is also problematic. At Southshore, “the number of activities involved has been triple that of two or three years ago because there is lots of activities and events for students to sign up to that is relevant to their major” (SHSM Coordinator, Southshore). The office staff now has to monitor and generate attendance for trips, answer students’ questions about the program, and file tracking forms in each of the 400 SHSM students’ homeroom folders. This has caused the office staff to often stay after hours to complete the necessary paperwork.

Dellview and Southshore SHSM Coordinators spoke of their frustrations with no local SHSM Coordinator organizing certifications. SHSM Coordinators at Dellview, Southshore, Welland, and Valley Gardens also spoke about how students were frustrated with the amount of time certifications take for them to complete. Academic students are wary to miss classes, especially three days in a row for CPR training. At the other end of the spectrum, teachers wonder how fair it is to the rest of the student body for disengaged students to sign up for certifications when they are regularly absent from school. Some teachers see it as a waste of Ministry resources to help students outside of the classroom, especially when they are not going to class regularly.

A few solutions have been posed to overcome these obstacles. For the academic students who do not want to miss school, one School Board is looking into weekend certifications, like weekend/summer co-op, to allow students to gain certifications without missing any in-class time. Valley Gardens only holds certifications on Wednesdays, and teachers have all agreed to not hold tests on this day. This allows teachers to know which days students will be out of class and students will not miss consecutive days or any test days. As for students who are regularly absent, there is a general philosophy by districts and the Ontario Ministry of Education that perhaps enrolling students in certifications may trigger an interest that will reflect back to the
classroom. In other words, missing class to gain sector-related certifications may re-engage students in school. This philosophy is not shared by all teachers in all schools.

2.3. Experiential Learning and Career Exploration

SHSM students are expected to have experiential learning and career exploration activities within their program. These consist of planned learning activities that take place outside the classroom and can include job shadowing, job twinning, work experience, or career exploration activities.

In 6 of the 8 high schools in this study Career Exploration consists of going to the local university or college, having speakers come in to talk about the sector, job shadowing, taking a tour of a company or going to the Skills Canada competition. Portsmouth and Cooke were the exceptions and stated that the co-op experiences and Grade 10 Career Cruising were the designated Career Exploration days in the school. Career Cruising is an online, career guidance and planning system. It helps people of all ages to find the right career, explore education and training options, and build their own portfolio.

At Welland and Valley Gardens the SHSM Coordinator plans the Career Exploration activities. At Central and Farmington high schools the SHSM sector leads organize the Career Exploration activities. Southshore and Dellview had their Career Exploration days organized by the Board lead. Since Cooke and Portsmouth considered their Career Exploration days to be part of the regular curriculum, no one organized additional experiences.

It is important to note that when asked about Career Exploration activities, there was some discrepancy among interviewees about what the Career Exploration days consisted of. The administrator at Southshore did not know what Career Exploration days were. Also, the Southshore and Dellview SHSM Coordinators, with their events centrally organized, were not sure which Career Exploration activities were available to students.

Career Exploration Activities, like the certifications, were also a cause of concern in Dellview, Southshore and Valley Gardens. SHSM Coordinators who were interviewed
at these schools stated their colleagues voiced concerns about the amount of time that these experiences took out of class, especially with struggling students.

2.4. Reach Ahead Experiences

Reach Ahead Experiences are required experiences that connect SHSM students to their postsecondary plans. Reach Ahead Experiences can include, but are not limited to: interviewing an employee in the field of work the SHSM student is considering; visiting an approved apprenticeship delivery agent, and; attending a number of college or university classes in the student’s area of interest.

In this study, Reach Ahead experiences were quite similar. All schools’ Reach Ahead experiences have included visiting colleges and universities. Four of the eight schools (Cooke, Dellview, Southshore and Valley Gardens) considered Reach Ahead experiences to be largely interchangeable with Career Exploration days. In Central and Welland these days have also included students partaking in leadership conferences and watching or competing in the Skills Canada competition. In all schools, these events have been largely attended because central office has highlighted an event or because post-secondary visits have been initiated by various post-secondary institutions. To a lesser degree they have also been attended because a sector teacher in a school has taken initiative to take students to an event.

2.5. Essential Skills and Work Habits

Essential Skills and Work Habits are a required component of the SHSM program. They are skills learned at co-op placements and through the Ontario Skills Passport (OSP), a web-based resource.

Six of the eight schools in this study (Central, Cooke, Farmington, Portsmouth, Valley Gardens and Welland) use the Ontario Skills Passport (OSP) during the in-school component of their co-op placement for students to gain their SHSM Essential Skills and Work Habits. However, all co-op students, SHSM students or not, also complete the OSP. This program discusses all the skills students should be using during employment and gives them employability skills (i.e. punctuality, documentation, attendance). In addition to this program, Central’s construction program also holds an end of semester
interview with each student. During this interview each student is expected to give a list of the Essential Skills they experienced on their placement and an example of how this Essential Skill was developed.

By contrast, all of the staff at Dellview or Southshore and some of the staff at Farmington and Portsmouth did not know how the Essential Skills and Work Skills component of the SHSM was met. Educators either stated they did not know, guessed they were the learning skills on students’ report cards, or the skills students are expected to get in co-op.

2.6. Monitoring

In order for all elements of the SHSM program to be met, the SHSM requirements must be tracked. How it is tracked differed among schools. The chart below outlines which educator in which school is responsible for monitoring part of the SHSM program (Table 4). No one person does it alone in any school.

Table 4: Educators with SHSM Monitoring Responsibilities

<table>
<thead>
<tr>
<th>School</th>
<th>Educators with Monitoring Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>guidance, SHSM Coordinator, SHSM sector lead</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>guidance, SHSM Coordinator</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>board SHSM Coordinator, guidance, secretarial staff, SHSM Coordinator</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>guidance, secretarial staff, SHSM Coordinator, SHSM sector lead, SHSM team</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>co-op, SHSM Coordinator</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>board SHSM Coordinator, co-op, secretarial staff, SHSM Coordinator</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>Guidance, SHSM Coordinator</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>Co-op, guidance, SHSM Coordinator</td>
</tr>
</tbody>
</table>

2.6.1. SHSM Monitoring Responsibility of District Leads

At two schools (Dellview and Southshore), a district SHSM Coordinator monitors
a lot of the SHSM requirements. At these schools the district SHSM Coordinator tracks co-ops, courses and certifications. Students and school staff can access this information on-line and printed copies are sent to the school for the office staff to put into homeroom folders for students to view. These forms show the percentage of program completion the student has achieved and what parts have not been completed. All staff members who were interviewed in Dellview and Southshore very happy with the tracking forms. However, this is not to say there were not difficulties with this tracking system. One concern with a centralized tracking system is there is no one following through with tracking the CLAs in-school. Another problem is the difficulty getting students connected and involved with the website to sign up for certifications. For example, it is left up to the student to sign up for certifications and according to the SHSM Coordinator at Dellview many of the students are not doing so.

2.6.2. SHSM Monitoring Responsibility of Co-op Teachers

Co-op teachers in four schools (Cooke, Portsmouth, Southshore and Welland) were involved in monitoring part of the SHSM program. Co-op teachers at Cooke, Portsmouth and Southshore stated that they monitor the SHSM students to ensure that everyone who needs a co-op is signed up for a co-op the following year. At Welland, a co-op teacher furthers this responsibility and asks the students about their co-op experience and if it was relevant to their SHSM.

2.6.3. SHSM Monitoring Responsibility of Guidance & Secretarial Staff

In five schools (Central, Cooke, Dellview, Farmington and Welland), a teacher or teachers from the guidance department tracks the students in the SHSM program to make sure that students are meeting the SHSM requirements. However, the guidance department at Dellview, Farmington, and Welland do not do this alone. The guidance staff at these three schools also works with secretarial staff to input this data onto the school’s data system (i.e. Trillium, Maplewood, Trevlac). The secretarial staff at Dellview and Southshore also monitors the attendance and trip information (health information) for the SHSM-related certifications, reach ahead and career exploration activities.
In Valley Gardens, the guidance department’s only responsibility is to monitor which students are in the SHSM program when they select courses so that students who are in the program do not mistakenly drop a course they need to obtain their red seal.

2.6.4. SHSM Monitoring of SHSM Coordinators

The SHSM Coordinators in six schools (Central, Cooke, Farmington, Portsmouth, Valley Gardens and Welland) have the responsibility to check that students’ courses and certifications have been attended and all data has been recorded. Central and Farmington’s sector leads also monitor some of the co-op placements and certifications for completion. The data is recorded by the SHSM Coordinator at their school.

At Farmington and Portsmouth, there is a committee of people who will go over lists of which students are missing certifications and how the program is faring, in terms of red seal numbers, attendance, etc. This committee typically includes an administrator, a guidance teacher, the sector leads, and the SHSM Coordinator.

The Cooke, Portsmouth, and Valley Gardens SHSM Coordinators monitor the delivery of the CLAs. These are the only schools where CLA-completion is monitored. To monitor the CLA the Coordinators either ask the teacher if the CLA has been delivered or teachers indicate they have online within a folder on the teacher conference.

2.6.5. Frustrations with Monitoring the SHSM Program

There were frustrations with the tracking system in six schools in this study (Central, Dellview, Portsmouth, Southshore, Valley Gardens and Welland). Reasons for frustrations with monitoring the SHSM program included: time, rigid post-secondary pathways, and the tracking software itself.

The time it takes to monitor the SHSM program was seen to be very labour intensive by those who monitor the program at four schools (Dellview, Southshore, Valley Gardens and Welland). For example, a Dellview guidance counselor stated that it took her and another guidance counselor almost eight hours to go through all the credit counseling summaries to make sure that co-ops were coded appropriately. This did not count the time it takes to work with students, reviewing course selections and encouraging certifications to meet all the requirements. She stated that because the
SHSM program is centrally monitored, there is also a disconnect in knowing who is responsible for monitoring SHSM requirements at the school level. This was also experienced by the Southshore SHSM Coordinator. This Coordinator stated that it is often difficult when the students incorrectly sign themselves up online for their certifications. It is noticed at the board-level, but then someone at the school level has to find those kids and inform them so they can fix the problem. Finding the time, especially with no one paid to undertake this responsibility, and with 300-400 students in the SHSM program, is difficult.

The rigid post-secondary pathways make it difficult for teachers to track the students in Central and Valley Gardens. Coordinators at these schools stated students often take courses in multiple streams so it is difficult to verify that the appropriate course code has been met. For example, a student could be taking college-level in most of his courses, but university level English or math. SHSM Coordinators at Central and Valley Gardens struggle with how to make sure the student can receive the red seal if they do not take the exact courses in each pathway.

The problem with the software program itself is often a frustration. The Dellview, Portsmouth and Welland SHSM Coordinators stated that the length of time to complete the tracking is long, especially when the software does not recognize a co-op course code or acknowledge a student has met a SHSM requirement. Also, because of the software used, the diplomas with the red seal are not printed with all other diplomas at some schools. For example, at Welland the SHSM Coordinator has to pull the Specialist High Skills Major students’ diplomas, supplement it with the red seal diplomas and check their completed record card. It’s very labour intensive and the Coordinator spends part of her unpaid summer holiday completing this task.

2.7. Community Partnerships

Having community partnerships is one required component of the SHSM program. However, how community partnerships are formed and progress, show some similarities and differences among schools.

First, all schools have co-op employers as community partners. In fact, schools like Central, Portsmouth and Welland stated that their administrator expected potential
SHSMs leads to talk to the community partners to ensure they would support the program with co-op placements, before they even applied for the SHSM program. Community partnerships in these schools were perceived as very important.

Second, all schools also have community partners who offer employment presentations. This may include businesses or employees from different career sectors coming in and explaining the job requirements for their job. In five schools, including Central, Farmington, Portsmouth, Valley Gardens and Welland, these presentations are a little more hands-on, including: community chefs visit the school and work with the students in the kitchen and/or building homes with local contractors, etc. Valley Gardens also hosts a career day that includes local and county-wide businesses to illustrate what types of jobs are available locally in each sector the school offers.

Third, colleges have been a strong community partner for five schools (Central, Cooke, Farmington, Portsmouth and Welland). Colleges have typically offered presentations at the schools and have invited students to the college for tours or demonstrations, with paid transportation included. Cooke has also partnered with a local college for a dual credit program, and at Portsmouth three college deans visited the high school when their SHSM programs first began because the colleges were looking to expand various college programs.

Valley Gardens and Farmington also have a steering committee dinner once a year to discuss the program with community partners. In Valley Gardens these meetings consist of discussions about which certifications and co-ops are valuable for each sector and which ones the schools are offering. Some of the community partners on the steering committee have become so involved that now the partners ask the school to partner with them on different projects. In Farmington, the administrator stated that the steering committee meetings are used to discuss which certifications and “soft skills” are beneficial to different sectors. Farmington, however, seemed to have a disconnect in the building around the involvement of community partnerships. While the administrator discussed community steering committee dinners, both Farmington co-op teachers stated that they “work with the community but the community doesn’t know what High Skills is. Other than co-op the community partners aren’t there.”

It is important to note that community partners with schools in more populated
areas seemed to be less prominent altogether, and those partnerships they do have tend to be managed centrally. For example, Dellview and Southshore are schools in urban centers and they have few community partnerships. Their partnerships consist of system-wide co-op placements, the support of their six board-wide Reach Ahead days and the Business Education Partnership. The Business Education Partnership is a non-profit organization that connects businesses and schools. In this board, the SHSM board leads have partnered with them, but this partnership has met with mixed results. In the Business Education Partnership, community partnerships must be teacher-led and teachers are not utilizing this program as much as hoped.

A final issue was time to form partnerships. At Central, for example, the SHSM Coordinator’s role was cut in half, and as a result, this school has found it more difficult to form and maintain community partnerships.

2.8. Clarity & Complexity Summary

Unclear goals and unspecified means of implementation are significant problems at the implementation stage. To understand the clarity and complexity, as well as the consistency of the SHSM program province-wide, educators were asked about how each of the five required elements (Bundled Credits, Certification and Training, Experiential Learning and Career Exploration Activities, Reach Ahead Experiences, and Essential Skills and Work Habits) looked like in practice at their school.

In terms of Bundled Credits, seven of the eight high schools stated they follow the Ministry outline in how they bundled the credits for each SHSM sector. Cooke High School was the only expectation. This school generated their own bundled courses at the school level which was then approved by the Ministry. However, a number of frustrations with the bundled courses/required course options were voiced in all schools, including fewer “optional” course options, double credit courses, and academic subject timetables that are too full to include a SHSM program.

CLAs, a requirement of the bundled courses, were not being delivered by many or all of the teachers in six of the eight schools. Teachers have not delivered the CLAs because they typically have not been mandatory, encouraged, supported or monitored for completion by administration or program leaders in any of these schools. For those
schools and teachers who were delivering or attempting to deliver a CLA, there were numerous frustrations. Teachers at six schools felt that many CLAs are: poorly planned, poorly formatted, inconsistent among sectors and among programs, inaccessible and lengthy. Teachers reported little to no PD to help them know how to deliver these CLAs and that not all SHSM students were receiving CLAs in a school or in summer school. The lack of knowledge was creating stress on some teachers.

Co-op, the last requirement of the bundled courses, has changed the co-op program in six of the eight schools due to an increase of students, the increase of more at-risk students in co-op, and the responsibility for organizing co-op placements.

Certifications, the second requirement of the SHSM, are delivered similarly at six of the eight schools. Many of these certifications are delivered during class time or completed online. Otherwise, outside agencies are selected, often due to price or greater certification authenticity and multiple sectors are typically trained together, for cost saving purposes. Dellview and Southshore are the exception. Their certifications, like the rest of their SHSM program, are run centrally. This process was seen as both positive and negative. It is positive because students can gain an overview of all the training that is available for them and staff can also track students. It is problematic because certifications provided board-wide can fill up quickly on a first-come, first-serve basis (with some students not getting a chance to sign up), some students may be enrolling in too many sessions thus missing a lot of class, or students are not signing up for any certification at all and failing to meet part of the SHSM requirements. A few solutions have been posed to overcome these obstacles, such as weekend/summer co-op, and designated certification days.

SHSM students are expected to have Experiential Learning and Career Exploration Activities within their program. In six of the eight high schools in this study, Career Exploration consists of going to the local university or college, having speakers come in to talk about the sector, job shadowing, taking a tour of a company or going to the Skills Canada competition. Portsmouth and Cooke were the exceptions and stated that the co-op experiences and Grade 10 Career Cruising were the designated Career Exploration days in the school. Career Exploration Activities, like the certifications,
were also a cause of concern regarding the amount of time that these experiences took out of class with both academic and struggling students.

In this study, Reach Ahead experiences in four of the eight schools were considered to be largely interchangeable with Career Exploration days. However, all schools’ Reach Ahead experiences have included visiting colleges and universities.

Essential Skills and Work Habits were conducted using the Ontario Skills Passport during school in six of the eight schools in this study. However, SHSM Coordinators and/or administrators four schools did not know what Essential Skills and Work Habits were.

Monitoring of the SHSM program is needed to ensure all students are meeting program requirements. How the program is monitored differed among schools. It typically included a guidance teacher and the SHSM Coordinator, and often included a co-op teacher, secretarial staff, SHSM board coordinators and in one case, a SHSM team. There were frustrations with the tracking system in six schools in this study. Reasons for frustrations with monitoring the SHSM program included: time, rigid post-secondary pathways, and the tracking software itself.

Lastly, all schools in this study have community partners. Co-op placements are community partners for all schools, as are employers who conduct employment presentations in schools. Colleges have been a strong community partner for five schools, while two schools have a steering committee dinner once a year to discuss the program with community partners to discuss valuable certifications and co-ops. Community partners with schools in more populated areas seemed to be less prominent altogether, and those partnerships they do have tend to occur centrally. Time to form community partners was also seen to be an issue.

3.0. Quality and Practicality of Program

The quality of a program is often measured by front-end quality or capacity-building (Fullan, 2007). This includes targeted and sustained professional development, high quality resource materials, creation of networks of teachers across schools and districts, and teacher support initiatives such as coaches and teacher leaders (Levin, 2008). To understand if the SHSM program has quality and practicality, all interviewees
were asked what resources and facilities were made available to support the SHSM in their school. Funding/materials and professional development were two items that were discussed in great detail.

3.1. Materials/Funding

As outlined in the literature review, the funding formula for the SHSM is as follows: The Ministry of Education contributes $10,000 in funding for year one with 0-20 students enrolled in a SHSM. For a program that has 20-40 students, a school is given $15,000. A program that has 40+ students enrolled receives $20,000. Additionally there is $300 given for each student per year to cover certification and training, and transportation. Each successive year of a SHSM program receives funding defined by a budget produced by the school. Regardless of this budget, the $300 per student is given every year. This is the Ministry’s funding formula. Yet, the Ontario Ministry of Education leaves it to the discretion of each School Board to determine how the SHSM funds are best used in their Board/schools.

In four schools (Central, Cooke, Portsmouth and Welland), $2000-$5000 is allotted to each SHSM sector for capital costs. Capital money is spent on tools, tool boxes, computers, SMART Boards, printers, textbooks etc. Additional funding for certifications is given on a per student basis (approx $100/per student). Reach Ahead and Experiential Learning Experience funding must be applied for from the School Board which may or may not be approved. The subject teachers, including math and English teachers, receive no funding.

In Farmington and Valley Gardens all SHSM money goes directly to the schools. As such, the funding was thought to be exceptional in both of these schools by all staff members interviewed. The use of these funds in each school differed though. For example, Farmington did not have a significant need to purchase new equipment, as the programs already existed in the building. However, according to the Farmington administrator, the capital funds allowed for the release time of the sector teachers to start planning the Reach Aheads. It also allowed certain departments to get a lot of “extras” that other staff in their school did not. One co-op teacher in Farmington stated:
the money goes to one department and they buy all the bells and whistles and yet another department can’t afford textbooks or have rickety old TVs on carts while the high skill majors have nice flat screen TVs and new computers and SMART Boards. How bad it is in some areas are wondering how they will spend their money while another department doesn’t know how they can afford to replace a burnt out light bulb on the overhead in their classroom?

Due to the resentment regarding unequal financial support, teacher support for the SHSM program is low in Farmington.

Valley Gardens is the other school that receives all of the SHSM money directly at the school level. This has resulted in their “$110,000 school budget practically doubling” (Administrator, Valley Gardens) because of their high SHSM student enrollment. After the first year where the SHSM sectors kept their money for capital expenses, they decided that since all staff is involved, through delivering CLAs, certifications or SHSM major subjects, every department should receive SHSM money. Now, the leads keep the certification money and a portion of the capital money, and all other money is set aside for the rest of the school. As a result, Valley Gardens bought new textbooks, and put SMART Boards and computers in every classroom. The remaining money can be sought after by staff to whichever sector it would support. This results in material objects and “lots of extra-rich experiences that are related to the SHSM” (Administrator, Valley Gardens). For example, Valley Gardens’ staff took the grade 9 science, all geography classes and the students from the Environment SHSM students to Algonquin Park for an Environment sector-related field trip.

Dellview and Southore’s SHSMs have been managed centrally. At Dellview, it was stated by their Coordinator that the money and resources are at the board. Schools can apply funding on an annual basis. For example, the math department at Dellview received funding for graphic calculators and the SHSM Coordinator received money to purchase an inventory tool to help connect student interests to the sectors. Southshore Secondary stated that the amount of money they are allocated is based on the number of sectors and number of students in each sector. Once the money reaches the school, the SHSM team (vice-principal, guidance and the school’s SHSM Coordinator/co-op teacher) decide how the money will be spent. The entire staff is allowed to make requests in writing about resources they would like to purchase, and must include a rational of how
the requested resource is supporting the SHSM students. However, it was stated that these funds do not nearly cover the requests. Southshore’s administrator stated they receive $30,000 in funding and had $100,000 worth of submissions for funding in the school.

All schools but Dellview and Southshore have money set aside to pay their SHSM Coordinator for time to monitor and track the SHSM. However, the amount per school differs, often due to the breadth of the program. For example, during a full school year, Cooke, Farmington, Portsmouth and Valley Gardens allot one period per term for SHSM Coordinating. Central receives one period for the entire year, and Welland receives three paid periods for the entire year. Each period costs approximately $16,000.

### 3.1.1. Funding Problems

Despite the money allotted to each school, there are still a number of funding issues. These include a lack of funding for transportation in rural schools and the SHSM required experiences, a worry SHSM Ministry money will cease, and unequal funding within a school.

First, funding for transportation is an issue. SHSM Coordinators and co-op teachers in all the rural schools interviewed in the study, except Valley Gardens, voiced concern about the amount of money they received for transportation, and how it did not reflect transportation costs. For example, at Central the transportation for the house-build project costs a lot of money because they have to get to their building site every day. All other co-ops are also often away from the small town’s center and there is concern about sustainability of the program with the lack of transportation funding. While transportation costs to co-op placement was not an issue at a more urban school like Welland, the SHSM Coordinator at this school was concerned about the transportation costs for certifications, Career Exploration and Reach Ahead experiences that they have had available. Getting students to and from off-site certifications was costly and there again was concern about sustainability of these types of activities.

Second, there is worry from at least one person at all schools that SHSM money will eventually cease to come from the Ministry. It was mentioned at Portsmouth and Southshore that there was less money coming from the Ministry than a few years ago.
There is also worry in these schools, as well as all others, that eventually all SHSM money will stop and sustaining the program may be difficult. For example, the Cooke SHSM Coordinator stated:

as the programs get older the only money that is given to the school is for certifications and that is a concern because stuff wears out and breaks down and there is always new stuff to purchase. How can you make these programs self-sustain with zero dollars. It would be too difficult to sustain these programs with zero funding coming in from the Ministry to support the school.

There was concern by the Cooke Coordinator that as programs develop, capital equipment may wear out and there will be no budgeted money to replace it.

Third and last, there was a concern about the way money is distributed among the school. As indicated above, in Farmington some departments are thriving financially while others are in need of funding.

### 3.2. Professional Development Provided

Within the funding formula outlined above, the Ministry allots money for SHSM-related professional development (PD) of teachers and administrators. The Ministry also hosts SHSM information sessions each year on both new and seasoned SHSM sectors. Attendance to these events is voluntary, but encouraged.

In this study, all participants were asked about the level of PD they received in regards to the SHSM program. The amount of PD greatly differed per role, so findings are described per role.

#### 3.2.1. Co-op Teachers

Co-op teachers were asked to rate on a scale of 1-5 the amount of SHSM-related PD that they felt they had received (Table 5).

At least one co-op teacher from all schools but Dellview felt that they had significant PD; they all had attended at least one SHSM regional meeting. However, of these co-op teachers, six had a varied role in the SHSM program: two had previously been a SHSM Coordinator, three were presently a SHSM Coordinator and one had been a SHSM sector lead.
Table 5: Professional Development Co-op/Guidance Teachers’ Perceived They Received

<table>
<thead>
<tr>
<th>School</th>
<th>PD Co-op Teachers’ Perceived They Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>1; 3.5 (Previously a Sector Lead)</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>4 (Presently SHSM Coordinator)</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>1 (Guidance interviewed instead)</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>1; 3</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>5 (Previously a SHSM Coordinator)</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>4 (Presently SHSM Coordinator)</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>5 (Presently SHSM Coordinator)</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>5 (Previously a SHSM Coordinator)</td>
</tr>
</tbody>
</table>

The two co-op teachers and the one guidance teacher who had not received PD or had to gain it on their own were quite frustrated. For example, the guidance teacher at Dellview, who also tracks the SHSM certifications and course selections stated: “I’ve had no PD. I’m catching mistakes is what I’m doing. There has been no PD whatsoever when it comes to the SHSM.”

While the co-op and guidance teachers who doubled as SHSM Coordinators were receiving SHSM training, co-op and guidance teachers who were not SHSM Coordinators had not received any SHSM PD despite their significant role in the SHSM.

3.2.2. Administrative Professional Development

Administrators were asked to rate on a scale of 1-5 the amount of SHSM-related professional development that they felt they had received (Table 6).

All of the administrators who were interviewed for this study felt that they had not had a significant amount of training, if any at all. The administrator at Southshore was new to overseeing the program and had received no training related to the SHSM. The administrator at Farmington had been to one regional meeting, while the principal at Dellview has been feeling “out of the loop” and in turn is “relying on my two lead teachers” to receive any needed PD. However, the teachers he is relying on at Dellview also stated they had little to no PD.

Interestingly, administrators at Valley Gardens and Welland who have sat on a board-level committee to implement this program still they felt they had received little
Table 6: Professional Development Administrators’ Perceived They Received

<table>
<thead>
<tr>
<th>School</th>
<th>PD Admin. Perceived They Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>Did not interview</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>Did not interview</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>2.5</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>3</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>1</td>
</tr>
</tbody>
</table>

training in implementing the program. Instead, they, like the administrator at Portsmouth, stated that they received a lot of reading materials about the program and “you have to turn the paper into something that makes sense” (Administrator, Portsmouth). In these cases, professional development came in the form of paperwork and the administrators had to sort out the program themselves, with little assistance.

3.2.3. Teacher Professional Development

Core subject teachers (i.e. math, English) were asked to rate on a scale of 1-5 the amount of SHSM-related professional development they felt they had received (Table 7).

Table 7: Professional Development Subject Teachers’ Perceived They Received

<table>
<thead>
<tr>
<th>School</th>
<th>PD Teachers’ Perceived They Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>Did not interview</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>1</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>2</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>1</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>4</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>Did not interview</td>
</tr>
</tbody>
</table>
All teaching staff who interviewed at Valley Gardens seemed very comfortable (rating of 4) with the amount of professional development they have had. However, all the teachers who were interviewed from this school stated that originally there was little PD (rating of 1). Yet, with such a high student enrollment in the program and their new administrator whose administrative focus is the SHSM program, the PD dramatically improved in recent years. As a result, there are many staff and departmental meetings where the SHSM requirements are discussed in regards to how they could fit it into their courses. This school also had “a retreat day where the entire team sat and looked through the documents and tried to familiarize ourselves with them” (Administrator, Valley Gardens). Staff also have access to SHSM-related professional learning, which many teachers take, and is “paid out of the SHSM money” (Administrator, Valley Gardens).

While teachers at Valley Gardens felt they had ample training, all teachers at all other schools did not have received much, if any, training. For example, only all the subject teachers at Cooke and Valley Gardens and one subject teacher at Central knew how many SHSMs were in their school, let alone the requirements for the program. However, the four teachers who did know the requirements within their school, excluding Valley Gardens’ teachers, were either handing students Contextualized Learning Activities that their SHSM Coordinator gave them (Cooke, Portsmouth), “doing my own thing” (Math Teacher, Cooke), “getting access to the online resources that have been developed” (English teacher, Dellview) or watching a media clip that was broadcasted on their local television station about one of their SHSM programs (Central). Most of the teachers at all schools are reportedly, as the Welland Coordinator stated: “not aware of what each program means and they don’t have a clue what the kids have to do to get the red seal.”

It is important to note that while the majority of subject teachers do not receive much if any SHSM professional development, one teacher from Farmington, Portsmouth and Southshore high schools seemed quite embarrassed by this fact and wanted more knowledge. For example, a Southshore English teacher stated:

most of my knowledge comes from my students who are in the SHSM program, but I think it would be nice for more leadership in terms of having some type of PD for teachers who are teaching the courses where they need to contextualized these activities. We have no training to go over the CLAs.
She, like two other educators in this study, wanted more SHSM professional development. Unfortunately, according to Coordinators at Cooke and Welland high schools, originally there was PD at their schools, but due to teacher turnover most of the teachers who were originally involved are no longer there.

### 3.2.4. SHSM Coordinator Professional Development

SHSM Coordinators were asked to rate on a scale of 1-5 the amount of SHSM-related professional development they felt they had received (Table 8).

<table>
<thead>
<tr>
<th>School</th>
<th>PD SHSM Coordinators’ Perceived They Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>4</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>4</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>2</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>Did not interview</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>4</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>5</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>3-4</td>
</tr>
</tbody>
</table>

All SHSM Coordinators that were interviewed for this study felt quite well prepared for this role. SHSM Coordinators from six schools (Central, Cooke, Farmington, Southshore, Valley Gardens, and Welland) all stated they had gone to at least one Ministry-led SHSM meetings held several times a year. These meetings typically explain the SHSM program to all school leads/teams in the Board and some planning time is allotted with individual schools or across the Board’s SHSM programs. Unfortunately, for the SHSM Coordinator at Cooke, these types of meetings have not happened for two years.

For those Districts that still have Board-wide SHSM meetings, these days are perceived as beneficial, although not ideal PD. For example, the Farmington SHSM
Coordinator stated that these meetings are “not considered great PD but at least it gets people talking.” The Coordinator at Dellview similarly stated that he had attended these meetings, but “they didn’t tell me what I am supposed to be doing. I wasn’t given any PD on that specifically.” Coordinators at Southshore and Welland stated that though they attend these board SHSM meetings they would not consider the meetings at the Board-level to be professional development. They believed it mostly is an information share, especially due to high teacher turnover in the role; however, the Welland Coordinator still believed these meetings “are worth my time.”

Only the Valley Gardens Coordinator stated she had a very positive SHSM professional development experience. She stated she has gone to “every Ministry thing and gone in place of the Board Lead to SHSM things” since the SHSM program first began. She also held the role as a school SHSM Coordinator since the program began. This may be the reason for her confidence. By contrast, the others felt informed about the program, but unsure about how they should be running their program. There seemed to be many unanswered questions or problems (i.e. transportation, funding formula) that needed to be addressed and they were unsure of the answer to these problems.

3.3. Program Quality and Practicality Summary

The Ontario Ministry of Education leaves it to the discretion of each School Board to determine how the SHSM funds are best used in their Board/schools. In four schools, money is allotted to each sector for capital costs. Additional funding for certifications is given on a per student basis and Reach Ahead and Experiential Learning Experience funding must be applied for from the School Board. The subject teachers receive no funding. In Farmington and Valley Gardens all SHSM money goes directly to the schools and is thought by these school administrators to be exceptional. Farmington keeps money in each sector creating resentment in the school with the unequal funding availability within departments. Valley Gardens keeps the certification money and a portion of the capital money in specific sectors with all other money split among the rest of the school. This works well and fosters staff support of the program. Dellview and Southore’s SHSMS have been managed centrally, with all money and resources kept at the Board. All schools but Dellview and Southshore also have money set aside to pay
their SHSM Coordinator for time to monitor and track the SHSM. Despite the money allotted to each school, there are still a number of funding issues. These include a lack of funding for transportation in some rural schools and the SHSM required experiences, a worry SHSM Ministry money will cease, and unequal funding within a school.

Professional development of staff is financially supported within the Ministry’s funding formula. In practice, all SHSM Coordinators and at least one co-op teacher from seven of the eight schools felt that they had significant PD; they all had attended at least one SHSM regional meeting and many had attended Board meetings for SHSM information sharing. This is because many co-op teachers had been or are currently a SHSM Coordinator. By contrast, all of the administrators who were interviewed for this study felt that they had not had a significant amount of training, if any at all. Similarly, all interviewed teaching staff did not feel they had received much, if any, training.

4.0. Teachers

School improvement affects the collective as well as the individual (Anderson & Kumari, 2009), so it is imperative to include all teachers when implementing change. However, the endless waves of change, in addition to the isolation from other adults that limits thoughtful planning and reflection, often creates distrust, disinterest, and a lot of extra work to try to implement new changes. Some teachers are willing to persist in program implementation, but many may not know how. They rarely have access to this type of information or the opportunity for personal contact with people who can help them operationalize change (Fullan 2007). As a result, teachers are likely to gravitate to their prior practices (Smith & O’Day, 1990).

To make deep pedagogical changes, professional development is needed. The most effective professional development includes concrete, teacher-specific training activities with continuous support during the process of implementation (Fullan, 2007). This support can come from collaboration with peers, leadership, and others who may be part of this process (Lieberman & Mace, 2008; Louis, Kruse, & Associates, 1995). While opportunities to interact with other teachers are often limited, it is important for teachers to engage in frequent talk about teaching practice.
To understand if teachers had time to talk about their practice or had experienced change of practice due to the SHSM program, interviewed teachers were asked about these topics. Relevant professional development was also inquired about, and was included in the section above.

4.1. Time to Discuss the SHSM

Teachers were asked to rate on a scale of 1-5 the amount of time they felt they had to discuss the SHSM program among staff.

The time to discuss the SHSM among staff members was similar in all schools among teachers directly involved with the SHSM (i.e. Coordinators, sector leads, co-op). Interviewed teachers in these roles rated their response between a four or a five. However, most of this time for talk was at district meetings, limited to discussions while passing in the hall, during lunch or during other informal meetings. Teachers seemed to feel this worked adequately in most schools, except Welland. The Welland SHSM Coordinator felt meeting was necessary, but when she (infrequently) calls meetings the sector leads reportedly do not attend. Therefore, this Coordinator has to talk to teachers one-on-one about funding or Certifications.

In contrast to the SHSM Coordinators and co-op teachers, all the subject teachers in five of the eight schools (subject teachers at two schools did not interview) stated they spent little to no time discussing the SHSM (rating of 1). This is because the SHSM program is rarely, if ever, discussed at a staff or departmental meetings. For example, the Welland administrator in charge of the Professional Learning Community (PLC) does not feel discussing the SHSM is not a relevant use of PLC time. At Dellview, where department heads do discuss the SHSM at their heads’ meeting, within their own departments they do not spend formal planning time to talk, co-ordinate or plan CLAs.

Subject teachers at Dellview, Farmington, Portsmouth and Southshore stated that the only time they do talk about the SHSM is in the staff room, usually accompanied with frustration and negativity. Negativity among teachers reported occurred because teachers have to implement CLAs and do not want to, teachers are frustrated about the amount of time students are away for Certifications or Reach Ahead Experiences, the unbalanced
funding in the school, among other topics. These frustrations have all been previously discussed above.

The teaching staff at Valley Gardens was different than all other schools in this study. The two teachers who interviewed at this school rated the time they talk about the SHSM at a four or five. At this school staff members discuss the SHSM at every- or every other staff meeting, at department heads meetings, at PLC meetings, and in department meetings. During these meetings the Valley Gardens staff will discuss CLAs, budgeting and SHSM enrollment. There are also SHSM steering team meetings twice a year or when there is a significant SHSM event happening in the school (i.e. community partnership meeting; Career Day). At the end of the year, the entire staff also will discuss aspects of the program are or are not working and things they want to tweak. The entire staff is involved in the program, talking, teaching and receiving funding from the SHSM.

4.2. Change of Practice

Interviewed educators in all schools in this study were asked: On a scale of 1-5, where 1 means hardly any change in teaching practice and 5 means significant change in teacher practice, how much change in practice have teachers experienced in implementing the SHSM program. In most schools there has been reportedly little change of teaching practice since the SHSM program has been implemented (Table 9).

<table>
<thead>
<tr>
<th>School</th>
<th>Changes in Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>range of 1-2</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>1</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>0; 5 (1 person only)</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>3</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>range of 2-3</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>range of 2-5</td>
</tr>
</tbody>
</table>
At Central it was a general consensus by the four people who interviewed that there was little to no change in teaching practice (0-1). In this school, no teachers stated they experienced any change. Teachers are not delivering CLAs and are not involved in the program. The co-op teachers stated they had experienced little change in practice (1) because the clientele has changed a little. However, as one co-op teacher said that “it’s made it busier in some respects, but I wouldn’t say more complicated. You just have to juggle faster”. At Cooke there has been no change in teaching practice as a result of the SHSM. The SHSM Coordinator/co-op teacher at Cooke explained that the “core courses are just going with what we are already offering, and because of the CLAs being more as independent units those haven’t changed classroom practice so very much”.

In Dellview, delivering CLAs is not mandatory so according to Dellview’s SHSM Coordinator, teachers are only involved in “handing out forms, and upcoming event reminders.” No change of teaching practice has been experienced in this school.

The four Farmington educators who interviewed stated they did not experience any changes of practice. While the administrator at Farmington stated that “delivering a CLA does not change the teacher’s pedagogy”, this did not seem to be a problem regardless because the co-op teachers and an English teacher admitted the CLAs are not being implemented, so teachers experienced no changes of practice due to the SHSM program.

Three of the four educators who were interviewed at Portsmouth stated there has been little to no change in practice by implementing the SHSM program. The co-op teachers have minor clerical changes, such as using the “right tie-in code and making sure they have an appropriate placement” (Co-op, Portsmouth). The changes in the math department were slight, with one math teacher stating that he incorporates a measuring or budgeting unit into his class to meet CLA requirements. All students complete this unit, whether they are a SHSM student or not. The English teacher, quite grudgingly, stated that she felt she had experienced a fairly significant change of practice (3) because before the SHSM program was implemented her students “would read two novels and do a comparative essay. Now they design restaurants and garages and stuff like that.”

Southshore’s two subject teachers stated they had experienced little to no change in practice. For example, a math teacher stated “it doesn’t change our teaching practice
but I think we are trying to be intentional about being aware there are kids in the program and we try to address them when we can.” However, an English teacher at Southshore stated there has been virtually no change of practice (1) in this department. The university-bound teachers have not altered their practice except to give students their CLA as an additional project, which they say the students do not complete. In the college-bound program this teacher built the CLA into the program but it was a project she would have done regardless of the SHSM program. The only change of practice she actually experienced was “placing certification day reminders on the board to notify the students in case they forgot or didn’t check for themselves” (English teacher, Southshore).

At Valley Gardens High School, all four educators who were interviewed stated that change of teaching practice has been moderate (2-3). Changes have consisted of “more awareness about the pathways and more focus on the outcomes, not just throwing it in at the end” (SHSM Coordinator, Valley Gardens). As a Valley Gardens math teacher stated “it’s not significant practice change it’s just being very aware about what we are doing. At first it seemed completely overwhelming but now we’re getting the hang of it and we’re managing to weave it into the curriculum while making sure you are covering different sectors.” The other two educators interviewed at Valley Gardens had remarkably similar responses to this question. This showed a general consensus that teachers are changing their practice by simply being more aware of how to link the SHSM to their regular coursework to make it more interesting and applicable to the workforce and SHSM sectors.

At Welland the SHSM lead felt that she as a SHSM Coordinator has experienced a significant change in practice (5). The co-op program at Welland also had experienced a significant change of practice (5) because of the nature of the students in class. Co-op had previously included the highest performing students and now co-op teachers are “adjusting to full classes, providing e-learning co-op, finding placements and differentiating instruction in our classes to manage them.” Among teachers, the Welland SHSM lead felt there were varying degrees of change of practice. For example, she felt that some sector leads are experiencing a little change (2), while others are experiencing a more significant change (3-4) by providing more of a career focus and providing
connections to post-secondary options in all pathways. Additionally, the Welland SHSM lead felt that the subject teachers are not changing their practice very much (rating of 2) either. She said some teachers are “buying in” to the SHSM program when they attend Reach Ahead experiences. Unfortunately most teachers “do not seem to want to leave their classrooms” and she felt that many teachers still do not believe in the worth of the program.

4.3. Teacher Summary

Teachers were asked to rate on a scale of 1-5 the amount of time they felt they had to discuss the SHSM program. Staff members in all school who were directly involved with the SHSM (Coordinators, sector leads, co-op) rated their answer between four and five. However, most of this time was at district meetings, to other lead teachers they passed in the hall, during lunch or during other informal meetings. In contrast, the subject teachers in seven of the eight schools stated they spent little to no time discussing the SHSM (rating of 1). This is because the SHSM program is rarely, if ever, discussed at a staff or departmental meetings.

Interviewed educators in all schools in this study were asked if they have experienced any change of teaching practice due to the SHSM program. In five schools teachers reported they had little to no change of practice, teachers in three schools reported some change of practice (rating of 2-3) and in two schools two teachers reported significant changes in practice (5). Little change of practice occurred where CLAs are not being implemented and the program only requires minor clerical or pedagogical changes. Major changes that have been experienced were felt to occur due to the inclusion of at-risk students, providing e-learning, finding increased co-op placements, and differentiating lesson plans.

5.0. Leadership

As discussed in the literature review, district and school leaders’ actions serve to legitimate whether a change is to be taken seriously. Change is a multi-level process and each level is intertwined. District leadership is needed because a great deal of effective
school change cannot occur without district level change first taking place, and later providing the support and guidance necessary for school change. The school leader directly affects school change and assists in change of practices, including setting shared goals, collaborative work structures and procedures for monitoring results. Both district and school leaders are key figures for implementing change.

In this study, all interviewees were asked about district and school leadership in regards to the SHSM program. All teachers and administrators in this study were first asked to rate on a scale of 1-5 where 1 means little leadership and 5 means great leadership, how involved the district leadership is in the SHSM program. Teachers in this study were also asked to rank their school leadership on the same scale in terms of their principal’s involvement in the SHSM program. Lastly, teachers were asked to rank how much their administrator helps to change the staff’s practice. The responses widely varied.

5.1. District Leadership

As outlined above, administrators and teachers who were interviewed for this study were asked to rate on a scale of 1 to 5 the involvement of their district leadership in the SHSM program. In this study there were four participating school boards/districts. Districts have been labeled 1-4 to maintain anonymity (Table 10).

Table 10: District Leadership in the SHSM Program

<table>
<thead>
<tr>
<th>District</th>
<th>District Leadership in the SHSM Program</th>
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</thead>
<tbody>
<tr>
<td>District One</td>
<td>3; 5</td>
</tr>
<tr>
<td>District Two</td>
<td>4-5; 2-3</td>
</tr>
<tr>
<td>District Three</td>
<td>1-2 (both schools)</td>
</tr>
<tr>
<td>District Four</td>
<td>4; 1</td>
</tr>
</tbody>
</table>

The school board leader at District One received a ranking of 3 by all educators in one school in this study, in terms of his involvement in the SHSM program. At the other District One school the district leader received a ranking of 5. Interestingly this leader received two very different rankings for reportedly performing the same function at both
schools. According to the schools in this district, this district leader holds a paid position from the Ministry’s SHSM funding. His responsibility includes having financial responsibility over the program, approving Certifications and Reach Ahead Experiences. As the SHSM Coordinator at one school stated, “he’s sort of like a parent and says yes or no if we can go. We need to get permission.” While the District One leader was not reported to be very involved in the day-to-day realities of the school program, he reportedly will answer emails and come into the school if asked.

District Two has two district SHSM leads. Both schools in this district ranked their district leadership at 4-5, in terms of responsibility. The responsibility of these leaders includes working with the schools via email, phone or the SHSM district website. The district leaders arrange Certifications and trips, and communicate information to the sector leads and attendance secretaries promptly. These board leaders also go into career classes and answer students’ questions about the program, have attended the department heads’ meeting and departmental meetings if asked. They also work behind the scenes sending out forms, sending student reminders about certifications and other SHSM activities, and track students progress through the program. While these district leaders show a lot of involvement from a responsibility perspective, in terms of support, educators in both schools stated that these leaders sometimes fell short. Teachers ranked their district leaders between 2 and 3 in terms of support. As one English teacher at a school in this district stated:

with classroom implementation there was little support. It was a bit of a give and get: go to this and this is where you’ll find what you need to do it. But it is never quite that simple. It falls a lot on the teacher independently because sometimes it doesn’t really fit that well. There is a level of stress for sure.

This teacher, like all other teachers who were interviewed in the district, found that while the Board leads held a lot of responsibility, the lack of support in the classroom added stress to the teachers’ jobs at the school.

District Three’s SHSM school board leadership was ranked between 1 and 2. According to all staff who were interviewed in this district, their SHSM district leader gives schools information, such as forwarding Ministry deadlines and emails, and occasionally brings staff in to properly inform them how to use the on-line reporting program. Other than these functions, this leader is reportedly not involved with the
school’s SHSM programs. In fact, the involvement of this leader appears to starkly contrast to the lead they had previously. As reported by a teacher in both schools, the previous lead held county-wide SHSM meetings where schools got together. That no longer occurs. The lack of involvement may be because this SHSM district lead “has many portfolios, not just Student Success or the SHSM. He’s stretched too thin” (Administrator, District Three).

District Four ranked their SHSM district leadership at 4 out of 5 by an administrator in one school interviewed in this board. He ranked the district leadership at 4 because both the Superintendent and his assistant attend all SHSM meetings. This administrator felt that commitment from the top down sends a good message. By contrast, all other teachers in the same school and the other school in the same district ranked the district involvement at 1. According to all other staff, the district leader in this board meets at the beginning of each school year to go through budgeting concerns and projected student enrolment, and sends the occasional email related to SHSM Ministry deadlines. Emails are answered in a timely fashion, but the district lead is not involved in any other way. This again contrasts the past SHSM district lead where, according a teacher in both schools, there were monthly meetings and a lot more coordinated activities among schools. However, the current lack of district attention and focus may be because, similar to District Three, the SHSM district lead’s portfolio has merged with Student Success and E-Learning. Now one person is reportedly responsible for three portfolios instead of one.

5.2. School Administration’s Involvement in the SHSM Program

Teachers in this study were asked about to rank their school leadership on a scale of 1 to 5 in regards to their school leader’s involvement in the SHSM program. Originally I, the researcher, had thought the school leader would be the principal. However, this was not always the case. In some schools the SHSM program fell under the portfolio of the principal. In other schools the vice principal was in charge of the SHSM program. Regardless of who held the leadership role, leadership seemed to be quite divided between great involvement (5) and little to no involvement (1) in the SHSM program (Table 11).
Table 11: School Administrator Leadership in the SHSM Program

<table>
<thead>
<tr>
<th>School</th>
<th>School Administrator Involvement in the SHSM Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>3</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>4-5; n/a</td>
</tr>
<tr>
<td>Dellview High School</td>
<td>4-5</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>1</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>1-2</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>1-2</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>5</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>3</td>
</tr>
</tbody>
</table>

Portsmouth’s administration was ranked at a 1 by all staff who was interviewed in terms of leadership in the SHSM program. This staff stated that administrators are not involved in the SHSM except from a distribution of responsibility role. For example, an English teacher at Portsmouth stated that “the phrase that was going around with many of the staff members is that we were flying a plane that we were building as we were flying it. No one really knew what they were doing or what it was supposed to look like. We were just told to implement it.” A math teacher at Portsmouth had similar sentiments. She said that “we are told one time and the rest is in our hands. I don’t feel we have a lot of guidance.” This is an interesting finding as Portsmouth’s principal solely manages the SHSM school budget and was the principle driver in beginning three tech-related SHSM sectors in the school.

The administrator’s involvement at Farmington was rated at two. From the interviews it was understood that his job is to organize, monitor and support the program. He largely completes the SHSM purchasing and helps to organize certifications. While all interviewed staff at this school rated this administrator’s involvement at 2, all interviewed staff seemed quite apologetic to do so. They came to his defense and stated that their administrator is busy and cannot possibly cover everything at staff meetings, and that sector teachers should be holding more responsibility. Similarly, during the school’s administrator interview, he also stated that he would like sector leads to hold
more responsibility. He did not feel that the sector leads were very involved in the program.

At Welland, the administrator’s involvement was rated at 3 by both interviewed teaching staff. According to Welland’s SHSM Coordinator, “administration supports the program on paper, but in reality it doesn’t matter. They think just do it well and no one gets involved.” While this administration is supportive in terms of timetabling and in any organizational issues they may have, administration at this school reportedly has a “hands off” approach to the program, and do not seek to involve other staff in the program.

Central’s staff ranked their administrator’s involvement at 3 as well. According to the staff at Central their principal of two years is “cautious, but supportive” (Co-op, Central) of the SHSM program. While the SHSM program is not the principal’s focus in the school, and appears to have no interest in expanding these programs, the principal does support the program. For example, the principal has helped to fund the transportation for the Construction home build program.

Southshore’s staff all had similar feelings about their administration as did Central. However, they ranked their administrator’s leadership at 1 instead of a 3. For example, the English teacher at Southshore gave her administrator a rating of 1 because she said this administration does not provide leadership; the administration at this school does not tell the staff how to implement what they are supposed to be implementing. The math teacher simply stated that in this school the SHSM “really hasn’t been a priority program.” As a result, he ranked his administrators at 1.

The four interviewed teaching staff members at Dellview ranked their new administrator’s leadership at a 4 or a 5 because, as the Guidance counselor stated: “this school has been identified as a weak SHSM school and I think we are really pushing. The leadership has given it a real push” (Guidance, Dellview). At this school, the drive and complete support for the program is coming from the administration and teachers are “stepping up in the school to start to really move this in the school” (SHSM Coordinator, Dellview).

The staff at Cooke High School similarly rated their previous administrator’s involvement between 4 and 5 out of 5. All interviewed staff members felt this administrator was a large advocate of the program and was part of the program planning,
implementation, budgeting, and coordinating with community partners. With the new administrator arriving on scene a few months prior, this staff did not feel comfortable ranking her involvement.

Valley Gardens also ranked their administrator’s SHSM leadership at 5 by all interviewed teachers in the school. This principal was felt to have taken a great lead in promoting and providing opportunities for parents, the community, and the staff to be involved in and reap the benefits of the SHSM program.

5.3. SHSM Coordinator’s Leadership in the SHSM Program

When teachers were interviewed about the school leadership in the SHSM program, many teachers talked about their administrator’s involvement. However, others spoke of their SHSM Coordinator as the person who led the SHSM program. As a result, all teachers who were interviewed were asked to rate their SHSM Coordinator’s involvement in the SHSM program. The involvement of the SHSM Coordinator among schools was fairly split between being highly involved (ranking of 5) or showing little involvement (rank of 1-2). Two schools provided no response to this question (Table 12).

<table>
<thead>
<tr>
<th>School</th>
<th>SHSM Coordinator’s Involvement in the SHSM Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central High School</td>
<td>5</td>
</tr>
<tr>
<td>Cooke High School</td>
<td>n/a</td>
</tr>
<tr>
<td>Dellsview High School</td>
<td>5</td>
</tr>
<tr>
<td>Farmington Secondary School</td>
<td>2</td>
</tr>
<tr>
<td>Portsmouth High School</td>
<td>1-2</td>
</tr>
<tr>
<td>Southshore Secondary School</td>
<td>n/a</td>
</tr>
<tr>
<td>Valley Gardens Secondary School</td>
<td>5</td>
</tr>
<tr>
<td>Welland Secondary School</td>
<td>5</td>
</tr>
</tbody>
</table>

The SHSM Coordinators at Valley Gardens and Welland were ranked 5 out of 5 for their involvement in their school’s SHSM program by all interviewed teaching staff. All staff members at these schools fully acknowledged how much time and effort these
Coordinators put into the SHSM program. These Coordinators held the school SHSM Coordinator position since the program originated in their schools and their school staff did wonder what would happen if these Coordinators left the school.

The job of Coordinator at Valley Gardens and Welland includes tracking the students and the CLAs among the staff, ensuring students get their certifications and SHSM experiences, sending out reminder notifications of upcoming SHSM events to staff and students, interviewing the students, talking to community partners and parents, promoting the program and recruiting the students. With all the work that is involved in this job, they both stated they work very long hours, even though they have held this position since the program originated. For example, the Valley Gardens Coordinator stated: “I could spend all weekend on the computer checking things and in August I have every Credit Counseling Summary to make sure nothing has gotten screwed up. I spend hours, but that is just how we work.” The Welland Coordinator shared similar sentiments. She stated:

I do stay til 6:00 every night and I do spend a lot of Sunday’s here because this crazy stuff takes forever. So during the day I talk to kids and after school I’m doing crazy stuff and it’s very labour intensive. It has to be done and it is so good for the students and I love that, but 400 kids is very hard to manage and I can’t develop those relationships.

Due to the long hours and number of years she has spent on the SHSM program, she felt the job should be shared because it is so taxing. However, no one in her school was interested in sharing the job, as of yet.

The SHSM Coordinator’s involvement at Central and Dellview was also ranked at a 5 by all interviewed teaching staff. According to the staff at Central, the SHSM Coordinator at the school schedules the students into the correct time period, tracks the program, looks for resources and funding, will contact the Board office for support or if the program changes, and answers any program-related questions the staff may have. The Coordinator’s role at Dellview is to be the key communicator of the program by promoting it, making sure students are aware of the initiatives happening, and making sure the students are on track to graduating with a red seal. The fact that this Coordinator is so focused on the program may be related to the fact the school’s new administrator is now advocating for the program.
The Coordinator at Portsmouth was ranked by interviewed teaching staff at a 1-2 in regards to his involvement in the SHSM program. All interviewed teaching staff at this school stated that they are unsure what the Coordinator does. The previous Coordinator held many meetings, recruited students and followed-up with all elements of the program/teacher. It was reported by all staff that were interviewed that the current Coordinator does not do these things.

Interviewed teachers at Farmington stated their SHSM leaders were not very helpful (ranking of 2), even though the two SHSM leads track the student data and manage the finances. Regardless of these roles, all teachers interviewed were actually unsure who the true SHSM lead was, since two people were working on the program, but doing so inadequately. In fact, one person interviewed in this school stated that she did not care who was the SHSM leader, but wished there was at least one organized and SHSM-savvy staff member who is assigned as the go-to person. At present time there was not and she felt the program was suffering because of it.

There was little discussion about the involvement of the SHSM Coordinator at Cooke and Southshore. No one rated the teacher in this role. At Cooke all that was stated by an English teacher is “I talk with the Coordinator like you would with any colleague, in passing, on prep, on lunch, after school.” There was also mention that this Coordinator distributed CLAs to staff that were to be handed to students. Other than that, there was little direction given to teachers on their role in the program. At Southshore, the only discussion about leadership involvement centered around the school administrator and the district leads. The Coordinator’s role was not mentioned nor rated.

5.4. Administrators Helping to Change Practice

Teachers were asked to rank on a scale of 1-5 how much their administration helps to change the staff’s practice. Ten teachers when they responded to this question listed ways their administrator supported them, such as release time or help with problematic students. However, when I refocused the question and again asked to rank how administrators change teaching practice, all educators in six of the eight schools ranked their answer at 1. Administration did not help change practice for most teachers.
The majority of teachers in this study stated that they simply figured out what they needed to do themselves if they had changed their practice at all.

Only two schools did not rank their administrator at a 1 in terms of assisting with change of practice. These schools were Dellview and Valley Gardens. Dellview, whose staff rated their district leaders at a 3 in terms of changing practice, stated that the Board, with their resources, funding, and information sharing has changed practice. However, Dellview staff did not feel their school administration helped change teaching practice at all. By contrast, Valley Gardens’ staff stated their administration greatly (rating of 4-5) helps to change practice. The principal at Valley Gardens reportedly heavily supports PD and will provide funding and release time to take part in professional development away from the school and during professional learning community time during school. According to a math teacher at Valley Gardens, the principal at this school encourages us, comes up with math ideas and she sends lots of email with articles saying this might be good for SHSM in your class. So she’s thinking about it, she has ideas, she sends resources, and this semester she’s teaching the data management class so we share resources.

This principal with her involvement in the program is helping teachers practice by both leading by example, and supporting teachers in their professional growth.

5.5. Leadership Frustrations

While leadership was perceived as very important to implementing the SHSM program, there were a few frustrations on behalf of teachers surrounding this role. The change of leadership, whether it be SHSM Coordinators, school administrators or district leadership has caused frustration with at least one teacher at each school. The reasons for these frustrations include different SHSM focus/priority among leaders, new/inexperienced leaders, and portfolios merging producing a lack of time for the program.

First, administrative changes in the SHSM caused frustration with one teacher in six schools in this study. For example, since the SHSM program was implemented in schools between one and five years ago, the administrator in charge of the SHSM has changed at least twice at Central, Cooke, Dellview, Portsmouth, Southshore and Valley
Gardens. The inconsistent SHSM administrator has been perceived as problematic because each administrator has a different level of involvement and support for the program. For example, at Cooke, their previous administrator was very focused on the program, but their current administrator has not been very involved. Priorities change with each leader and this has been a source of frustration among schools.

Frequent changes in the SHSM leadership role have caused some concerns about how effectively the program is being run. This is especially frustrating because in many cases the new SHSM leaders do not receive any PD, or any timely PD on how to complete their job. As a result, in Portsmouth the change of the SHSM Coordinator has reportedly caused the program to decline and not run as efficiently as it had before. Cooke too is experiencing difficulty in growing the program when each new SHSM Coordinator is “scrambling, trying to talk to teachers who were Coordinators before in order to find out what they did and how to go from here” (SHSM Coordinator, Cooke).

At Southshore, due to the frequent administrative changes, the paper trail and background records of the SHSM are not kept well and have not been passed from leader to leader. This school desires a place where they can “seamlessly get the information and give it to the next person” (SHSM Coordinator, Southshore) especially as they will have a change of administrator again next year. By contrast, schools with consisted leadership, like in the case of Valley Gardens and Dellview, whose SHSM Coordinator has been there since the program originated have experienced little frustration and have the highest rate of red seal completion in this study.

Changes at the district level have also been a frustration for the SHSM Coordinator in four schools because many district leads do not have enough time to provide the needed support. For example, at Cooke, Farmington, Portsmouth and Valley Gardens, some of the portfolios have been merged and now the SHSM lead is in charge of three to four portfolios instead of one. A person who previously had was only managing the SHSM program had a lot of time for meeting with teachers individually and across schools. However, with one person managing three portfolios, in some cases the SHSM district lead no longer has the time.

Due to all these frustrations with leadership, there were eleven teachers at five schools (Central, Dellview, Farmington, Southshore, and Welland) whose educators
stated they wanted or needed more administrative leadership to effectively implement the SHSM program. Teachers at these schools all stated that if there was an administrator within the school who was solely (or more) dedicated to the initiative, much more would be accomplished. In Farmington, for example, an English teacher stated the program fizzled because her leader did not discuss the program any longer. At Central and Welland, teachers have received little, if any, direction about the SHSM from their administrator, so teachers often do not participate in the program. Central and Dellview’s staff both stated that if leadership is not top-town then the program will not be fully implemented. Teachers at these schools did not feel that their administrator was focused on this program as there was no top-down direction. The SHSM lead at Welland similarly stated that she would appreciate her administrator’s direction to tell her what she should or should not do and does not want to “work in a silo”. She would appreciate support and direction in the program. Even when she won an award from the Ontario Ministry of Education for Welland’s high number of SHSM red seals, no administrator from the school was going to go to the award ceremony. Only after the SHSM Coordinator stated it would be embarrassing to the school if no principal came did the interim principal reluctantly agree to come. This perceived lack of leadership was a source of great frustration in Welland.

5.6. Leadership Summary

In this study, all interviewees were asked about district and school leadership in regards to the SHSM program. District administrators in two boards were ranked at 1 and in the other two Boards educators ranked their leadership between 3 and 5. The districts with high ratings were ranked that way due to their financial and monitoring responsibilities, not due to their leadership support within the school. Low ratings were given due to little to no involvement in the SHSM program other than replying to emails. Holding multiple portfolios was reportedly the cause of little district involvement.

In-school leadership seemed to be quite divided between three schools whose leadership were greatly involved (4-5), two schools whose leaders were somewhat involved (3) and three schools whose leaders were involved little or not at all (1-2). Interestingly, SHSM Coordinators’ leadership largely mirrored the school leadership in
schools. In all but two cases, if administrators were not largely involved (4-5), neither were the SHSM Coordinators. If the administrator was involved in the program, in all cases, so were the SHSM Coordinators.

In schools with little leadership, staff is simply told to implement the SHSM program with little direction. Mid-ranking administrators support the program on paper, but do not make the SHSM an administrative focus within the school. High ranking leaders support the program by making the program a school focus and these leaders are involved in program planning, implementation, budgeting, and coordinating with community partners, etc. In the schools where school and SHSM Coordinator leadership did not match the involvement of the administration, SHSM Coordinators often put in long hours and longed for increased support.

Teachers were asked to rank how much their administrator helps to change the staff’s practice. Educators in six of the eight schools ranked their answer at 1. Administration did not help change practice for most teachers. The majority of teachers in this study stated that they simply figured out what they needed to do themselves if they had changed their practice at all. The administrators that did help change practice did so with resources, funding, supporting PD, and leading by example.

With leadership perceived by almost all teachers as most essential in implementing the SHSM program, there were a few frustrations on behalf of teachers surrounding this role. The change of leadership, whether it be SHSM Coordinators, school administrators or district leadership has caused frustration. The reasons for these frustrations include different SHSM focus/priority among leaders, new/inexperienced leaders, and portfolios merging producing a lack of time for the program.

6.0. Sub-Question 1 Summary

The need for the SHSM program seemed to vary across schools. The number of SHSM sectors (2-11) and the student population enrolled (4%-41%) in the SHSM program dramatically ranged in this study from few to many. Sectors were typically chosen due to programs already existing in the school and/or a teacher advocating for a program. There were a number of frustrations consistently voiced, including the rural
locations of some schools, the breadth and lack of manageability of the program and the lack of support of the program by staff members.

The clarity and complexity of the program seemed consistent. SHSM Coordinators in six of the eight schools in the study fully understand and knew all SHSM requirements when asked. However, despite some confusion, schools typically followed the same procedures for all five SHSM requirements and these elements seemed to be consistently implemented (or not implemented, in the case of the CLA) within schools. Frustrations in regards to clarity and complexity also seemed to be consistent. Frustrations here included the inclusion of at-risk students, finding increased co-op placements, finding time for certifications, co-op and making community connections. Monitoring the program was often inconsistently completed among schools/school boards, although frustrations were similar: finding time, rigid post-secondary pathways, and the tracking software itself.

Program Quality and Practicality was measured in terms of resources: funding and professional development. There were four different funding formulas outlined in schools/school boards in this study. Valley Gardens’ funding formula appears to be most efficient as it spreads SHSM funding among the school, which increases staff “buy-in” to the program. Other funding formulas have either created resentment among staff regarding unequal funding formulas or have been maintained at the Board level with limited funds funneling to the school level. The lack of PD among all staff members has created frustration and/or a lack of involvement with the program. While SHSM Coordinators and co-op staff often have SHSM-related professional development, administrators and most staff members do not. This appears to have limited “buy-in” to the program.

Teachers who were not in SHSM Coordinator roles felt they have little to no time to talk about the SHSM. The lack of time to talk about the program has resulted in little to no change of teaching practice. Administrators have typically not assisted in changes to teaching practice, although they too have typically not received any professional development on the program.

Leadership varied in regards to administrative involvement in the program. Districts administrators who were ranked high for their SHSM leadership were involved
financially, but showed limited involvement from a support role. Those district leaders who had little involvement in the SHSM program reportedly had too many portfolios to manage and did not have the time to give a lot of attention to the SHSM program. School leadership was also divided. In schools with little administrative and SHSM Coordinator leadership, staff is given little direction and consequently has not “bought into” the program. Mid-ranking administrators support the program on paper only and high ranking leaders support the program by making the program a school focus. Typically the leadership of the administration is mirrored by the SHSM Coordinator; however, in the schools where the administration and SHSM Coordinator leadership did not match, SHSM Coordinators often put in long hours and long for increased support.

Sub-Question 2: SHSM Student Profiles

The second sub-question this thesis asks is: For which students does the SHSM have the greatest impact on academic success? This question was asked to understand if the outcomes of the SHSM program (i.e. academic performance and graduation rate), as outlined in the conceptual framework, were indeed outcomes of the SHSM program. To answer this question, the profiles of the students who are in the SHSM program were first sought, as well as how students were recruited. The student profile is important because it helps to determine if the program is increasing academic performance and graduation rates, which students it is impacting, and if it is, by how much. The method of recruitment is important to know if all students, regardless of background, were seen as able candidates for the program.

Therefore, administrators, co-op teachers and the SHSM Coordinators were asked how students were recruited into the SHSM program. How students are recruited illustrates if there has been equal opportunity for students of all backgrounds and abilities to be included in the program. Administrators, co-op teachers and SHSM Coordinators were also asked if marks and attendance were a factor in selecting students. Marks and attendance often indicate student engagement in school, and thus it is important to know whether students who have not been previously engaged in school are included in the
SHSM program. Finally, the administrator, co-op teacher(s) and the SHSM Coordinator in each school were asked to rate on a scale of 1-5 the participation rate of special education students, English Language Learners and academic students. These questions were asked to understand if there is equal participation of students in the SHSM program regardless of a student’s academic background. This information was needed in order to understand which students enroll in the program and if this program includes students who have not been successful in school.

The findings from the interview questions above are at times complimented with data from a study funded by the Higher Education Quality Control of Ontario (HEQCO), when applicable.

1.0. Recruitment

Recruitment of students into the SHSM program at four schools (Central, Dellview, Farmington and Welland) has largely been a guidance responsibility, while in Portsmouth it has been the sector leads’ responsibility. Cooke and Valley Gardens’ SHSM Coordinators primarily recruit students. By contrast, Dellview and Southshore also have school board personnel regularly visit the school to recruit students.

Recruitment typically occurs during announcements, in class by sector leads, one-on-one meetings during a guidance appointment, or through presentations in grade 10 careers classes or in classes that would directly feed into a SHSM sector (i.e. an auto class which is directly related to the Transportation SHSM). These presentations generally occur in the spring during course selection time. Recruitment may also occur by student self-selection when they view the SHSM activities that are occurring in the school.

While there are no schools in this study that have much, if any, SHSM signage on the school walls/bulletin boards, there are SHSM awareness campaigns in some schools. For example, Portsmouth has a Career Fair, and Dellview and Southshore have a SHSM Board webpage. Southshore also has a Facebook page and gives out SHSM logoed t-shirts when the students have completed half of their SHSM program and sweatshirts when they have fully completed the program. These t-shirts can be worn during spirit days, once a week, as this school has school uniforms.
Valley Gardens is a bit more strategic with their recruitment as every grade 10 student is individually interviewed by the SHSM Coordinator before course selections are chosen. In grade 10, students work with the in-school SHSM Coordinator to complete a two-year course plan for grade 11 and 12. SHSM sectors, which are typically chosen, and the required courses within this program are selected at this time so students meet all SHSM program specifications. This information is passed to the Guidance department. Valley Gardens also gives a SHSM program presentation at grade 8 and grade 10 parents’ night. With Valley Gardens located in a small community, “the word has gotten out”, according a co-op teacher, and “students are interested in the program because their parents are interested in it.”

2.0. Marks & Attendance

Educators were asked if marks were a factor in selecting students for the SHSM program. Marks were not a factor in SHSM student recruitment in any of the schools in this study. Central and Farmington educators interviewed students for the program but were not concerned about marks. The administrator at Farmington stated he only needs to see an interest and dedication in the program and a willingness to fit co-op into their grade 12 timetable. Southshore, Valley Gardens and Welland educators believed that the program was part of their student success effort, as this program may be a way to engage students in school. Therefore, these schools accepted anyone who wanted to be involved. In fact, the Southshore SHSM Coordinator stated that it had been made clear to them from their school board to not discourage anyone from signing up, as it may be a way to re-engage students in school. At Cooke Secondary School all that is required is a completed application that is signed by parents, two references and the school administrator. The SHSM Coordinator at Cooke stated: “It’s really not a weeding out process. Limiting the enrollment would be a detriment to the school because if we weeded based on marks we’d have zero students.”

Educators were next asked if attendance is a factor in selecting students for the SHSM program. Attendance was not a factor in Cooke or Portsmouth. Central, Dellview, Farmington and Valley Gardens educators stated attendance only was a factor in grade 12 when co-op is required. With co-op placements often difficult to obtain, educators do not
want to put students into co-op placements if it puts that placement in jeopardy for future years. Having a meeting with students to see if they are dedicated to the program is often perceived as needed. Furthermore, the first few weeks of co-op are in-class, so this may be a time, as the Dellview co-op teachers suggested, for a trial period to see if a student’s attendance is consistent. If their dedication to the program is not proven students may be encouraged by staff members to reconsider if the program is suitable for them. However, it was mentioned by an educator at both Valley Gardens and Welland that sometimes when students are in co-op their attendance is much better, so it is difficult to tell. Neither school wanted to limit this opportunity because it may be the factor that re-engages students in school, whereas other schools felt obliged to.

Interestingly, while it was stated that attendance could be a limiting factor for co-op at Farmington, no educator at this school experienced any SHSM student with bad attendance before or after admission into the program.

### 3.0. English Language Learners

Administrators, SHSM Coordinators and co-op teachers in this study were asked to rate on a scale of 1-5, where 1 means that students who are English Language Learners (ELL) do not participate and 5 means they highly participate, what is the participation rate for ELL students in the SHSM. All educators at seven of the eight schools ranked their answer at a 1. Educators at five schools (Farmington, Portsmouth, Valley Gardens, Central and Welland) ranked their ELL participation at a 1 because there were not any English Language Learners in their schools. Cooke High School also ranked their ELL participation at a 1 because while they only had a few ELL students, “for whatever reason this isn’t an area that seems to attract ELL students” (Cooke SHSM Coordinator). Southshore Secondary has one of the highest numbers of ELL students in their school board but the SHSM program is centrally run so the school did not exactly know how many students in their SHSM program were ELL. However, the ELL involvement was ranked at 1 in this school because it was believed that the students who are ELL “don’t really know about the program. The teachers say they are telling the students about it but they’re not always sure they are understanding it” (SHSM Coordinator, Southshore). Dellview High School had mixed responses. Two people ranked ELL involvement at 3,
another two ranked it at 5. This inconsistency was largely because their SHSM is also centrally run and there is nowhere on the application for students to indicate whether or not they are an ELL, so educators were uncertain about how many students in the SHSM program were English Language Learners. Regardless, in Dellview and all other schools in this study, it was felt that there was no discrimination against ELL students and teachers felt ELL students could participate if they wanted, although it appeared that few ELL students wanted to.

4.0. Special Education Students

In this study, administrators, SHSM Coordinators and co-op teachers were asked to rate on a scale of 1-5, where 1 means special education students hardly participate and 5 means they highly participate, what is the participation for special education students in the SHSM. This number is relatively easy to determine because all special education students have a documented Individual Education Plan (IEP) in their Ontario Student Record. An IEP designates students as being a special education student. However, many educators in this study often included at-risk students in their answer, even though many of the at-risk students are not designated as having special education status. This will be discussed in further detail below.

In this study, participation of special education students ranged from 1.5 (Cooke S.S.) to 5 (Valley Gardens H.S.), with six of the eight schools ranging between 2 and 3. The reasons why special education students did not significantly participate in SHSM programs within schools in this study include: course conflicts, student characteristics, the SHSM sector, or lack of access to data.

a) Course Conflicts: The SHSM Coordinator in Cooke H.S. stated that due to their small school there may be some course conflicts that may prevent special education students from participating. For example, second semester the credit recovery class is offered period one and that is when the shop classes are offered. So anyone who requires credit recovery, which is almost all IEP students, by default cannot take the shop classes for the SHSM simply based on scheduling.

b) Student Characteristics: At Farmington High School, special education students were not perceived by the co-op teachers to participate in the SHSM program
because “maybe the teachers chose the better star students in the classroom compared to
the lower students” (Farmington, Co-op teachers). The administrator at Farmington also
stated that “with spec. ed. a lot of them may have modified courses and they may not be
taking the English or math at the appropriate grade level so we don’t feel they qualify.”
The administrator at Farmington also suggested that there are not many special education
students involved because of “the nature of the student”. He elaborated by stating that “a
lot of them are leaving the program before finishing all the required elements like Reach
Aheads, CLAs, or co-ops.” The belief that special education students often leave the
program before they have completed their program requirements was also, but only,
shared by the administrator at Welland Secondary School.

It is important to note that these educators seem to equate special education
student with students who are at-risk and have behavioural issues. Many special
education students who participate in the SHSM program, as will be seen in the next
section, largely have learning disabilities not behavioural issues.

c) SHSM Sector: The SHSM sector seemed to make a difference to what type of
student the program was attracting. Portsmouth High school found that there were more
special education students than others in certain SHSMs. Central High School also
stated the sector made the difference in regards to the type of student it attracted. At
Central High School the SHSM Coordinator stated most of the students in the
Construction program had an IEP and that the construction teacher “has typically taken
on the most challenging kids”. In the Business SHSM at Central High School there were
few IEP students because it was felt that in Business the courses are “on the upper side of
difficult and the supports aren’t there for IEP students” (SHSM Coordinator, Central
High School). Welland Secondary School’s administrator similarly stated that:

generally at risk kids, not just kids who are IEP, tend to be in the Specialist High
Skills Major trades as opposed to Exploring the Arts and Health & Wellness. Our
Arts program often contains some high flying kids that are headed into something
related in university or a profession…. At-risk or spec. ed. kids are in
Transportation, Construction or Manufacturing and we have Hospitality and
Hospitality under the trades (Administrator, Welland S.S.).

This administrator, like other administrators and Coordinators from all schools in this
study felt there was a relationship between which sector and which stream a student was
in. Certain streams appear to lend themselves more easily to certain sectors.

d) Lack of Access to Data: Dellview and Southshore Secondary Schools belong to a district where the SHSM program is centrally run. In both these schools teachers and administrators were unsure how many students were involved in the SHSM. At both schools they openly stated they were guessing at the number of special education students they had, and did not know which SHSM students have an IEP. However, the SHSM Coordinator at Dellview High School stated “it’s probably the same percentage of students in the SHSM as it is the students who have an IEP in the school…I can’t guarantee it’s the same, but we don’t differentiate.”

Valley Gardens Secondary School was an exception in regards to the number of special education students enrolled in an SHSM program. This school had every senior special education student enrolled in an SHSM. They also included many Life Skills students who “with a great amount of effort and many years spent here will finally get their diploma but lots of them will graduate with a certificate because they don’t pass the literacy component and so on” (Administrator, Valley Gardens). It is their belief at Valley Gardens, according to the administrator, to try to give all students “a taste of it” even if they do not make it all the way through the SHSM program. For example, some of the CPR/First Aid trainers did not “feel some of the students had the communication skills to pass the testing piece. So in the end they said that the students should be trained but not to certify them to save someone’s life” (Administrator, Valley Gardens). Yet, despite the fact that not all students could get full certifications, all special education students were included in this school’s SHSM program.

4.1. HEQCO Study Results of Special Education Students

In the HEQCO study special education students appeared to be significantly participating in the SHSM and Dual Credits programs. In fact there are a slightly higher proportion of students with a special education classification among those enrolled in SHSM/DC compared to students who are not enrolled (20.5% vs. 18%). When differences among specific special education classifications were examined, there are significantly higher proportions of students with a learning disability compared with
students who are not enrolled. Conversely, there are significantly lower proportions of students with autism among those enrolled in SHSM/DC (Table 13).

Table 13: Students by Special Education Status

<table>
<thead>
<tr>
<th></th>
<th>Students Enrolled in SHSM/DC</th>
<th>Students Not Enrolled</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Proportion</td>
<td>Count</td>
</tr>
<tr>
<td>Autism</td>
<td>17</td>
<td>0.19%</td>
<td>732</td>
</tr>
<tr>
<td>Behaviour</td>
<td>83</td>
<td>0.93%</td>
<td>844</td>
</tr>
<tr>
<td>Giftedness</td>
<td>92</td>
<td>1.03%</td>
<td>2,855</td>
</tr>
<tr>
<td>Language Impairment</td>
<td>80</td>
<td>0.90%</td>
<td>858</td>
</tr>
<tr>
<td>Learning Disability</td>
<td>765</td>
<td>8.56%</td>
<td>9,612</td>
</tr>
</tbody>
</table>


5.0. Course Profiles

In this study, administrators, SHSM Coordinators and co-op teachers were asked:
On a scale of 1-5, where 1 means students in the academic (university) stream hardly participate at all and 5 means they highly participate, what is the participation for students within the academic stream in the SHSM program? This question was asked because while the SHSM program is part of the Student Success Initiative, largely intended for students who have not found a lot of success in school, it also is seeking to include academic (university-bound) students to aid them in finding their post-secondary pathway. Therefore, by asking this question, we can understand if the students enrolling in this program are generally workplace, apprenticeship, college-bound students or if academic students are enrolling in the program as well.

In this study, all educators at five schools (Central, Dellview, Farmington, Portsmouth and Welland) rated their academic student participation at 2. Cooke and Southshore rated their academic student participation at 3 and Valley Gardens rated their academic student participation at 4. The majority of the students participating in the
SHSMs were reportedly college-bound students. Reasons for few academic students participating included the SHSM sectors offered, and scheduling/courses.

  a) SHSM sector: At Dellview, Farmington and Welland, it was reported by all educators that many of the SHSMs are trades-related, so they found many of the students enrolled in the program to be workplace and college-oriented students. However, with the addition of the Sports and/or Health & Wellness SHSMs at Dellview and Farmington all educators noticed more academic students enrolling. At Portsmouth High School they all also found that students in the workplace stream are enrolled in the Hospitality & Tourism sector which provides more service-type jobs; students in the Environmental SHSM, which has few students, attracted more university-bound students. No other schools referred to the SHSM sectors being a factor in student enrollment.

  b) Scheduling/Courses: Many university-bound students are reported by all educators in six schools (Central, Cooke, Dellview, Farmington, Southshore and Valley Gardens) to not be enrolling because of scheduling. For example, the SHSM Coordinator at Central High School stated:

          a lot of the academic students can’t fit it into their schedule. Their goal is to achieve post-secondary and they want to get there faster and for this program the timetabling is a challenge. It may mean they may have to spend another semester, which is another year here at school just to fit it in.

At Southshore all the teachers interviewed similarly stated that academic students are reluctant to miss classes. “They are worried about marks and don’t have time for the certification and training” (SHSM Coordinator, Southshore). The Dellview High School SHSM Coordinator similarly stated that “students who want to graduate in four years and who have university stream are not going to fit that in. Unfortunately, they haven’t bought into it as much.”

Valley Gardens Secondary School which has almost all senior students in a SHSM program, stated that the only students who are not in the program are the “kids who refuse to do co-op. They mainly can’t fit it in because they are taking every science and every math and every English and if they want to take Music and Art there is no way they are going to give up their few electives” (Valley Gardens, SHSM Coordinator). Farmington Secondary School’s SHSM Coordinator similarly stated that most of their university students who are also tech-oriented do not have time for the double tech
courses that are offered in the school. Therefore, these university-bound students are not enrolling in the SHSM program because they do not have room in their timetable, in addition to all of their other courses.

Cooke’s SHSM Coordinator had a slightly different response. He stated that some of the university-bound students who were taking many SHSM courses and the corresponding certifications had not technically enrolled in a SHSM program because they did not want to take one or more of the required courses for the program, such as a required math course. Since they did not like or want one of the required SHSM credits and since there is little flexibility in the SHSM pathways, these students opted out of the program while still gaining all of the certifications and experiences that the SHSM program provides.

5.1. HEQCO Results of Student Course Profile

In the HEQCO study on Dual Credits and the SHSM, one of the research questions asks how does the profile of students enrolling in SHSM/DC programs compare to the general student population. While this question is slightly different than the second sub-research question in this thesis (For which students does the SHSM have the greatest impact on academic success?), the findings are related and therefore included.

According to the HEQCO data, students entering a SHSM/DC program took applied level courses in the year before entrance to the SHSM program in significantly higher proportions than those students not enrolled. However, of those enrolled in SHSM/DC, the majority of students did take academic courses, but in lower proportions compared to those not enrolled (Table 14 & 15).
A year after entering the program, it was found that students enrolled in SHSM/DC continue to take applied level courses in significantly higher proportions compared with those students not enrolled (Table 16 & 17).
Table 17: 2009-2010 Student Math Course Profiles

<table>
<thead>
<tr>
<th>Math</th>
<th>Students Enrolled in SHSM/DC</th>
<th>Students Not Enrolled</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>Academic</td>
<td>2,866</td>
<td>32.5%</td>
<td>57,251</td>
</tr>
<tr>
<td>Applied</td>
<td>5,202</td>
<td>58.9%</td>
<td>68,475</td>
</tr>
<tr>
<td>Other</td>
<td>756</td>
<td>8.6%</td>
<td>10,791</td>
</tr>
<tr>
<td>Total</td>
<td>8,824</td>
<td>100.0%</td>
<td>136,517</td>
</tr>
</tbody>
</table>

5.2. Sub-Question 2 Summary

Recruitment of students for the SHSM program has been similar among schools and typically occurs during announcements, in class by sector leads, one-on-one meetings during a guidance appointment, or through presentations in grade 10 Careers classes or in classes that would directly feed into a SHSM sector. Valley Gardens is a bit more strategic with their recruitment as every grade 10 student is individually interviewed by the SHSM Coordinator before course selections are chosen, and there are a variety of SHSM information sessions to increase parent “buy-in” to the program. This has resulted in almost all of their grade 11 & 12 students enrolled in the SHSM program.

Marks and attendance were not a factor in SHSM student recruitment in any of the schools in this study, although some students during an enrollment process may be questioned about their commitment to the program, and in turn do not sign up. Teachers are concerned about losing co-op placements if students are not committed and fail to meet this requirement.

There are few English Language Learners in this study participating in the SHSM program. This is largely because there are few ELL students with the schools in this study or teachers are unsure which students are ELL and why they are not signing up. The participation of special education students in the SHSM program ranged from 1.5 to 5 out of 5. The reasons why special education students did not significantly participate in SHSM programs within schools in this study include: course conflicts, student characteristics, the SHSM sector, or unknown data. By contrast, data from the HEQCO study revealed that there are a slightly higher proportion of students with a special
education classification among those enrolled in SHSM compared to students who are not enrolled.

Students in the SHSM program within this study also appeared to be largely in the college stream. Academic students do not appear to be participating in the SHSM as much due to the SHSM sectors offered, and scheduling/courses. The fact that most SHSM students are in the college stream is reflected in the HEQCO data. The HEQCO study shows students entering a SHSM/DC program took applied level courses in the year before entrance to the SHSM program in significantly higher proportions than those students not enrolled. However of those enrolled in SHSM/DC, the majority of students did take academic courses, but in lower proportions compared to those not enrolled.

Sub-Question 3: Marks and Credit Accumulation

The third sub-question this thesis asks is: Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation? The answer this question came almost solely from the province-wide data collected for the Higher Education Quality Council of Ontario (HEQCO). This study similarly asked: What is the impact on student achievement (i.e. course marks, credit accumulation) of enrolling in SHSM/DC programs?

The reason why the data for this question came almost solely from the HECQO study is because the data sought at the school level was not available. Due to confidentiality, it was deemed by the first school board I sought ethical approval from, as not permissible. Instead of pursuing this issue and increasing the ethical approval time or collecting uneven data among school boards, credit accumulation, marks, and graduation rates were not collected at the school level. The number of SHSM graduates (reflected by a red seal on the Ontario Secondary School Diploma) was collected at the school level but not in a way that would determine if the SHSM program was increasing graduation rates. In fact, the red seal graduation numbers were so low in many schools, that it was difficult to determine if SHSM graduates were in fact improving graduation rates. This will be discussed below.
1.0. HEQCO Study Findings on SHSM Academic Performance

The HEQCO study looked at how students in both the SHSM and Dual Credits programs performed in grade 10 and if their academic performance (i.e. grade point averages, credits earned) increased or decreased once they entered these programs, when compared with other students. This study found that students entering a SHSM/DC program have, on average, 3.8% more credits (i.e. about a half a credit) accumulated in the year before entrance, compared with those students not enrolled. There is also significantly less variability of credits accumulated in the SHSM/DC group (Maharah Levin & Segedin, May 2012).

After being enrolled for one year, students in SHSM/DC programs have increased their advantage in credits accumulated to 4.3% while maintaining significantly less variability. The average student in SHSM or DC earned 7.7 credits in their grade 11 year, while across the cohort the average was 7.3. This is a large difference given the size of the populations; 7.7 is close to a ‘full’ credit accumulation of 8.

Students entering a SHSM/DC program also have average marks that are 1.17% higher (i.e. about 1 mark) in the year before entrance, compared with those students not enrolled. There is also significantly less variability in the marks of the SHSM/DC group. After being enrolled for one year, students in SHSM/DC programs have increased their advantage in average marks to 2.01% (i.e. 1.5 marks) while maintaining significantly less variability. The average mark of students in these programs went up slightly, while the average for the rest of the cohort went down slightly.

2.0. Red Seal Numbers

All educators interviewed for this study openly discussed their red seal numbers. The SHSM red seal indicates completion of the SHSM program and appears on the Ontario Secondary School Diploma (OSSD). While the SHSM program has been in many schools for five years, SHSM completion numbers have been inconsistent among schools. For example, Cooke High School has had an SHSM program at its school for four years. In the 2010-2011 school year nine students enrolled in a SHSM program and no students received a red seal on their OSSD. The SHSM Coordinator predicted there
may be only one student gaining a red seal certification in the 2011-2012 school year. By contrast, in the four years Welland Secondary has had eligible SHSM graduates, they have moved from having five SHSM graduates to 133 in the present year. This has equated to a 67% red seal success rate in the 2011-12 school year.

While these two schools provided details about their red seal numbers, not all schools offered these numbers, mostly because many educators were not sure what their red seal numbers were. Therefore, it is difficult to speak of the exact red seal numbers. However respondents did discuss why their school is not graduating the majority or in some cases fewer than a third of the students enrolled in the SHSM program.

2.1. Red Seal Completion

The schools who were the most successful in their red seal numbers were Welland and Valley Gardens. These schools had 55-67% of their SHSM graduates graduating with a red seal. These two schools were also the only two schools that offered suggestions on how they had achieved an increase of red seal numbers.

At Welland the SHSM Coordinator stressed that it is important that students like their SHSM teachers and their co-op placements. Both Welland’s SHSM Coordinator and administrator stated that gaining student feedback on an informal basis and continually evaluating the program to see if they are retaining and renewing the program was a way to make the program more successful. Welland’s SHSM Coordinator also stated that frequently meeting with each SHSM student on a one-on-one basis twice a year helps to make sure they are meeting all program requirements.

At Valley Gardens the SHSM Coordinator equated their success largely with her willingness “to chase.” She is dogged in how she tracks the students and ensures they are attending their certifications and Reach Ahead Experience. She and the Valley Gardens administrator also has ensured that all key staff, such as guidance, knows how to bundle the SHSMs properly so students do not unknowingly drop a course needed for their red seal. In this school, a lot of the students are also really concerned about graduating with the red seal on the diploma. In an area where colleges, universities and community employers are recognizing the red seal, the students recognize its value, and deliberately seek this certification. Lastly, the teachers in the school are all supportive of the
program, and discuss as a school and in departments how they can continually weave the SHSM into the curriculum.

2.2. Reasons for Lack of Red Seal Completion

In all schools, there were four main reasons why teachers either knew or speculated students were not completing the SHSM program with the red seal. These reasons included: students not completing requirements, the fact that the SHSM enrolls all types of students, students’ lack of commitment to the program, and how both teachers and students need guidance and/or support in this program.

One reason why teachers knew that students were not receiving their red seal was because students were not gaining all the SHSM requirements. This was a problem noted by all interviewed SHSM Coordinators and administrators in six of the eight schools in this study, although the reasons why students were not getting their requirements varied. For example, in Clarington, Dellview, Portsmouth, Southshore, Valley Gardens and Welland it was noted that some students unknowingly missed a certification or dropped a course that was required for the SHSM. It was also noted that at the time the guidance department did not realize the course a student was dropping was a required SHSM course because the guidance department does not often receive professional development regarding the SHSM requirements. As a result, students were not deterred from dropping certain courses which made them ineligible for the SHSM red seal upon graduation.

Co-op, another required course, was a deterrent from some students receiving their red seal in Dellview, Southshore and Welland. Students have difficulty fitting in co-op into their schedule and with the economic downturn in some areas, businesses are finding it difficult to find placements for co-op students. As a result, schools are “looking at weekend, after-school or summertime co-op but there are a lot of hurdles there. Union hurdles as well as finding opportunities and people who are willing to take students during those hours are problems, but we’re trying to combat that” (SHSM Coordinator, Dellview).

A second reason why students were not receiving red seals, noted by one or two teachers in three schools (Central, Dellview, Valley Gardens), is because the SHSM includes all types of students. For example, at Central, they enrolled some of their most
disengaged students into the SHSM program and they “had two at risk kids that no matter what we have done, they haven’t been successful in school.” At Valley Gardens they also include all students in the SHSM program even if they are not likely to make it all the way through. They have students enrolled in their life skills course who will graduate with a certificate. Their philosophy is to not “say no and to give them the parts they can handle” (Administrator, Valley Gardens). At Dellview they similarly have included students in the SHSM program who are unlikely to graduate. For example, Supervised Alternative Learning (SAL) students are students who have left school and have been reintegrated into the school. According to a Dellview guidance counselor, “the SAL students have been signed up into the SHSM program but the way their schedule is, they may not have access to the correct courses and experiences needed for the SHSM program. They may not graduate either.” She wondered how these students would be able to get their red seal without anyone assisting them through the process or getting the correct courses they need.

The third reason why students are not obtaining red seals is a perceived lack of student commitment to the program. All teachers at all of the schools in the study made reference to this. For example, some students did not show commitment to the program because they stated they would come back for an extra year to complete the program but did not (Welland) whereas others had poor attendance and missed too many co-op hours (Central). Educators in all schools wondered if students were committed to the program because there were students in all schools in this study who did not even know they were in a SHSM program when asked. One or two educators at Dellview, Farmington, Portsmouth, and Valley Gardens also stated that students changed their mind about their career path, which is why they did not complete the program. There was some speculation by one teacher in Farmington, Portsmouth, and Valley Gardens that perhaps choosing a career in grade 10 is too early for students to fully commit to the program to gain the red seal. A teacher in Portsmouth also speculated that perhaps students were not committed to the program because students wondered what the red seal was really worth. The administrator at Valley Gardens alternatively suggested that the number of Certifications and time out of class was a reason why “some of the kids throw their hands in the air near the end of grade 12 and say I can’t do this anymore. I don’t care if I get the
full SHSM.” For these reasons discussed above, a lack of student commitment is one reason why teachers speculated students were not obtaining their red seal.

The fourth and last reason discussed why students may not be receiving the red seal on their diploma is because there is a need for more student guidance in managing the SHSM program. Dellview and Southshore’s SHSM programs are centrally organized and administrators and SHSM Coordinators in these schools felt they could only help students so much because they do not have time or they themselves need guidance. For example, Dellview and Southshore do not have anyone at the school level who was solely dedicated to this initiative. Because the SHSM Coordinator in these schools does not have a period designated to the program, there is no one to meet with the students to make sure they are enrolling in the correct courses and getting the right certifications. The administrator at Southshore had some serious concerns about this. He stated:

It is hard to keep up. We’re getting students in so at the front end we are good but the back end if the number in the end is not good and students come out without the courses and the Certifications in place there is no way we can go back. Furthermore, we don’t have the time to do it. If it gets too big how do you manage it to ensure it is a good experience for those involved. It shouldn’t be how many students do we have signed up, it should be more than that to it. At the other end or in between the follow-up needs to be looked at.

The administrator at Southshore also had concerns about knowing how many students they should be aiming to graduate with a red seal: “I don’t even know a number we should be aiming for. What is a realistic number given the number of students we have in an area?” This administrator felt he did not have any guidance to even move his staff forward.

At Dellview all interviewed teachers wished for more guidance to strengthen the culture of their school to get the red seal numbers. The SHSM Coordinator at this school stated: “it’s probably a combination of the culture of the students and of the staff not being involved or not wanting to be involved. If there is no consistency and no push from the top and no push from the middle with the staff and then a lack of caring of the students then it won’t work.” Although the new administrator was drawing more school focus to the program, the Dellview’s SHSM Coordinator felt the school needed more in-school guidance for the red seal numbers to rise.
2.3. Other Red Seal Problems

There were a number of other concerns raised by educators in this study about gaining red seal numbers. These included the Ministry not re-issuing Ontario Secondary School Diplomas with the red seal, the type of student enrolled, and the strict SHSM pathways.

First, the fact that the Ministry of Ontario will not re-issue an Ontario Secondary School Diploma if a graduated student returns for a fifth year to finish their SHSM requirement was a frustration for the SHSM Coordinator at Welland. The Welland Coordinator felt she was getting mixed messages from the Ministry regarding the worth of the red seal. This educator felt that it was important to the parents and students in the community that the students receive the red seal on their diploma. She hoped they would figure out a better way to solve this problem.

Second, there was a concern by a guidance teacher at Dellview about the Ministry emphasizing the increase of red seal numbers in order to closely match the number of students enrolled in the program. She stated “if it is a true student success initiative, then I think they need to look at the type of student they are trying to engage. For them to even jump on a bus to go for additional certification is kind of a big step. I don’t think it’s fair to claw back funding based on red seal rates.” She felt that if the Ministry wanted to engage all students, including some of the most disengaged students in the SHSM program then they should expect some students to not obtain the red seal.

Third, the strict pathways were seen as a problem in meeting red seal requirements. The SHSM Coordinator at Valley Gardens felt that the strict pathways are difficult in how you have to track the students. For example, students are expected to take courses in the same stream and when they apply for the program students outline the stream they are in. This Coordinator was concerned that while students may label themselves as one stream (i.e. college) due to certain social stigmas, students may be taking courses from a different one (i.e. workplace). As a result, if teachers do not put data that corresponds to the stream students labeled themselves into the SHSM computer program, then the student will not receive a red seal.
3.0. Sub-Question 3 Summary

Data on SHSM marks and credit accumulation derived solely from the province-wide data collected for the Higher Education Quality Council of Ontario (HEQCO) found that students entering a SHSM program have more credits and higher average marks and that there is less variability of credits and average marks than students not enrolled. It was also found that after being enrolled for one year, students in the SHSM program have increased their advantage of credits and have higher average marks, while maintaining less variability, than students not enrolled in the SHSM.

Red seal SHSM completion numbers were collected from this study. There was wide variance among schools in regards to the percentage of SHSM students graduating from the program. The two schools with more than 50% of their eligible SHSM students graduating in 2010-2011 school year with a red seal offered the following reasons for their success: 1. students liking their SHSM teachers and co-op placements; 2. gaining student feedback to improve/renew the program; 3. meeting with each SHSM student yearly on a one-on-one basis; 4. being willing to “chase” students; 5. a willingness to put in long hours, and; 6. administrative/staff/student support in the case of Valley Gardens. Schools who had less than 50% of their eligible SHSM students graduating stated students were not completing the SHSM program because: 1. students were not completing requirements; 2. the SHSM program enrolled all types of students, including the at-risk student; 3. student lack of commitment to the program, and; 4. a lack of guidance/support of the program from both staff and students.

3.0. Chapter Conclusion

This chapter outlined the findings of this study. Findings for all three sub-questions which ask about SHSM program consistency province-wide, the academic success of students within the SHSM program, and which students the SHSM has the greatest impact, were outlined and are briefly summarized below.

Overall, some elements of the SHSM program were variable while others were quite consistent among the schools in this study. The need for the SHSM program seemed to vary across schools in regards to the number of SHSM sectors and student population. However, the clarity and complexity of the program seemed consistent
among schools. The majority of schools in the study followed the same procedures for all five SHSM requirements and these elements seemed to be consistently implemented (or not implemented, in the case of the CLA) within schools. Program quality and program practicality was measured in terms of resources: funding and professional development. Funding formulas varied but the one that benefited the entire school (Valley Gardens) appears to increase staff “buy-in” and support of the program. Professional development for administrators and all staff members was perceived as needed in this study in all schools, especially to change teaching practice and gain staff support of this program. Leadership appears to be the biggest factor for successful program implementation, as administrative attitude and focus on the program was mirrored in staff attitudes. Administrators who were highly supportive and focused on the program had staff support and high student SHSM completion numbers. District leadership was also important. However, increased implementation support, in addition to financial support, was requested in all schools.

In response to the second sub-question which asks which students the SHSM has the greatest impact on academic success, it appears that the students who are in the applied/college stream, are English-speaking, and are special education student who have less variability of credits and average marks than do other students, have the greatest success in the program.

The third sub-question in this study asks if participation in the SHSM increases students’ academic success as defined by credit accumulation, marks, and graduation. The HEQCO data found that after being enrolled for one year, students in the SHSM program have increased their advantage of credits and have higher average marks, while maintaining less variability, than students not enrolled in the SHSM. Red seal numbers collected in this study showed great variability among schools regarding student completion. However, specific trends were related to high and low SHSM program completion rates. Schools with more than 50% of their eligible SHSM students graduating offered the following reasons for their success: 1. students liking their SHSM teachers and co-op placements; 2. gaining student feedback to improve/renew the program; 3. meeting with each SHSM student yearly on a one-on-one basis; 4. being willing to “chase” students; 5. a willingness to put in long hours; and; 6.
administrative/staff/student support of the program (Valley Gardens). Schools who had less than 50% of their eligible SHSM students graduating offered their reasons: 1. students were not completing requirements; 2. the SHSM program enrolled all types of students, including the at-risk student; 3. student lack of commitment to the program, and; 4. a lack of guidance/support of the program from both staff and students.

In the next chapter, conclusions and recommendations will be offered based on this study’s results.
CHAPTER V: CONCLUSIONS

This chapter discusses the findings and offers conclusions to the study.

1.0. Conceptual Framework

After completing the data analysis, I still believe that the conceptual framework chosen for this study was a solid choice. The seven elements chosen from Fullan’s (2007) eleven elements of program implementation were indeed manageable to research within this study. Additionally, the findings from my study seemed to match many of Fullan’s (2007) own findings. However, while this framework seemed to work for this study in many ways, once the data was gathered and the analysis began, it did not seem to be quite right. Something seemed to be missing. After a discussion with my thesis committee, it became clear that the problem with this framework is that it is static. In other words, it views schools and implementation of programs within them as uniform in nature. Yet, high schools are far different institutions than elementary schools. Therefore, it felt necessary to adjust the study’s findings with the understanding of high schools, the micropolitics within them and how implementing change within high schools is often a challenge. As a result of this additional lens added to this study’s conceptual framework, more meaningful findings were drawn from the study.

One other issue that arose from the study is the concept of student engagement in school. Fullan’s (2007) conceptual framework directly addresses the importance of students as a stakeholder in policy implementation. I also included literature in my literature review that emphasized the importance of programming that relates to student engagement, which is one aim of the SHSM program. Furthermore, there were some interviewees who spoke about the importance of the SHSM program as a way to engage students in school, and therefore worked hard in implementing the program. However, while this knowledge shaped my thinking in this study, the concept of student engagement in school was not addressed to a significant degree. This is because I was unable to gather data from students, due to challenges in ethical approval, so it is difficult to comment on this topic specifically. Therefore, the concept of student engagement in school was not addressed to a significant degree in my findings discussed below.
2.0. Findings

While there were many findings within this study, four were key. The first finding was that there was great consistency to some aspects of implementing the SHSM program province-wide, while there was also great variability in other areas. The second key finding centers around the role of leadership, including effective styles of leadership, consistency in leadership, and the importance of delegating leadership responsibility. The third finding highlights the importance of resources in implementing change. The last finding discusses the type of SHSM student that is most successful in the SHSM program and how program implementation directly affects student success.

2.1. Program Variability and Program Consistency

One significant finding from this study was that there was great consistency in the SHSM program where the Ontario Ministry of Education clearly outlined the expectations for the program and tracked the program’s progress. With clear guidance, particular elements of the program were implemented relatively well and similarly province-wide. By contrast, where schools were allowed flexibility in creating their own methods for implementation or there were not clear methods for tracking the program, there was great variability and inconsistency, and ultimately less success in implementing these elements of the program.

2.1.1. Program Consistency

In this study it was found that there was a lot of consistency in the core elements of the SHSM program. In particular, the clearly outlined elements of the program – Bundled Credits, Certifications, Career Exploration Activities, Reach Ahead Experiences and Essential Skills and Work Habits - were not only implemented almost in entirety (with the exception of the CLA), but similarly implemented within schools. For example, Bundled Credits were implemented following the Ministry’s outline in seven of the eight high schools in this study. Certifications were delivered similarly in-house by subject teachers at six of the eight schools. Career Exploration Activities typically consisted of going to local universities or colleges at six of the eight high schools. Reach Ahead Experiences also typically consisted of going to local universities or colleges in all eight
schools. Lastly, Essential Skills and Work Habits were conducted using the Ontario Skills Passport in six of the eight schools in this study.

The uniformity and the similarity of the implementation techniques illustrate the importance of clearly outlining goals and expectations from the top down. While there is an entire body of literature that emphasizes the need to move way from centralized power outside the classroom in order to allow people who make up the system to have more autonomy and problem solving capabilities (Richardson & Placier, 2001), in some cases this does not appear to be best method of implementation. In this study, clear goals and expectations seemed to not only ensure that the requirements of the program were being adequately met in most schools, but were also being met similarly across the province. What is also important to note is that these same elements of the program had few issues in implementation. In fact, out of all the elements of the SHSM, only the number of the Certifications that were required was problematic. Otherwise there were few to no issue in implementing these elements of the program. The only exception to this rule was the CLA.

The CLA was the only requirement in the SHSM that consistently was not implemented in any schools, except Valley Gardens. Interestingly, it is also the only requirement that requires commitment of the entire staff, including academic subject teachers. All other SHSM requirements are managed by sector leads (who largely volunteered for this role and receive funding for their program) and the SHSM Coordinator (who volunteered for the role and is typically paid for their role and responsibilities). The CLA is the only requirement of the SHSM program that involves teachers who probably did not decide to participate in the program nor are typically given any funding, leadership or professional development on the program. Furthermore, the CLA is the only element of the SHSM that requires teachers to tackle all three of Fullan’s (2007) complexity factors: using new materials, new teaching methods, and altering beliefs about how their course/students are taught. These complexity factors married with the embedded departmentalism that occurs in high schools creates even a larger challenge to have the CLAs implemented. For example, to implement a CLA for the automotive SHSM, an English teacher typically follows a lesson plan and materials s/he they did not create. While these pre-written CLAs seemingly ease the challenge and/or
time commitment that it may cause an English teacher to create a six to ten hour unit related to one or more SHSMs in their course, delivering them may cause discomfort. Teaching new lessons and using materials that s/he has not typically taught may be uncomfortable and possibly resisted by teachers. This resistance may be furthered if these pre-made lessons cause a teacher to use new teaching methods or move away from teaching methods that may have not been typical within a subject specialty. In the case of the English teacher delivering an automotive CLA, it may require this teacher to incorporate a unit that focuses on terminology and writing for a particular field of work, rather than teaching essay writing or a novel study which are traditional units in many English classrooms. Delivering an automotive CLA may also create discomfort in an English teacher if s/he does not know anything about that particular field of work. It also may cause resentment or resistance from an English teacher if s/he must alter his/her beliefs about what should be taught in an English classroom. As a result, this teacher, along with many others, may simply decide not to implement the CLA. It is not required for them to do so in the curriculum and academic subject teachers rarely receive money or any added bonuses from the SHSM in the school. So, there is little incentive for these teachers to tackle any of the complexity factors or move away from the departmentalism that occurs in high schools. This is especially true if school leaders or districts themselves are unwilling to tackle these problems.

All districts in this study did not seem willing to tackle the concept of departmentalism or ask subject teachers to undertake any of the complexity factors that implementing a CLA would require. One school, Valley Gardens, did manage to break down the departmentalism in their school and not only delivered the CLAs, but teachers advocated for CLAs in the interviews conducted for this study. This, however, was a unique situation where the school leader, not the district leader, focused on a school-wide approach to the SHSM. All other schools in this study, by contrast, had school leadership and district leadership that stated that subject teacher did not have to implement the CLA, or after resistance was shown by staff, the topic was not broached again. Commonly, the CLA was avoided or ignored, implemented through the co-op component of the program in the school, or delivered by only a fraction of the subject teachers in a school, with little to no follow-up. By not requiring teachers to deliver the CLA, it appears that districts
and schools were maintaining status quo where departments are allowed to work in silos that do not interact with one another.

2.1.2. Program Variability

While there was consistency in the implementation of the SHSM where the elements of the program were clearly outlined by the Ministry of Education, in other areas of SHSM program where implementation was not clearly outlined, there was a lot of variability. In particular, funding, how the SHSM sectors were chosen, the method of SHSM student recruitment, and the method of tracking the SHSM program were all areas of wide variability between schools. Unlike the relative uniformity that came with clearly outlining the expectations of certain elements of the program, the lack of clarity in other areas resulted in great differences in participation and success of the program.

One area of variability occurred with the funding formula. The Ministry of Education provides standard funding province-wide per SHSM sector, per year of involvement, and per student in the program. There is also supplementary money allotted per student to cover the costs of Certification and Training and transportation. While the funding formula is uniform at the Ministry level, it is up to the discretion of each district to distribute the SHSM money in a fashion they choose. Consequently, in this study one district allowed all SHSM money to be directly given to the schools, one district kept funding entirely centralized at the district, while the remaining two districts had a funding formula somewhere in between. Interestingly, the different funding formulas had a direct result in the amount of staff commitment to the program. This will be discussed in greater detail in the Resources section below.

A second area of variability in the SHSM programs was how schools chose their SHSM sectors. The Ministry of Education outlines criteria schools need to “take into consideration” (SHSM Policy and Implementation Guide, B2.1) to assess the readiness of a SHSM program. These criteria include teacher expertise in the sector and their willingness to champion the SHSM, current employment trends in the sector and in their region, student interest, community support, among other factors. While all these criteria need to be “considered” by schools, in the interviews, it seemed as only one or two areas were actually considered when they decided to implement a SHSM sector. For example,
some schools stated they chose sectors largely based on existing programs and/or a teacher advocate (i.e. Farmington, Cooke) while another chose sectors based on community need, previous co-op placements, and student interests (i.e. Valley Gardens). The more criteria or considerations that a school appeared to meet seemed to result in more success in the SHSM program. For example, Valley Gardens is a rural school that has 400 students. This school has no difficulty in placing almost half of their student population into co-op placements every term in a community of 4,500 people. This is because there are strong community partnerships and clear community need for the SHSM sectors that this school offers. By contrast, Central High School, another rural school in this study, has 40 students that need to be placed in a community of similar size. However, this school often spoke of having great difficulty in obtaining relevant, local co-op placements for students. This may be because Central, unlike Valley Gardens, chose their SHSM largely because it had teacher advocates, not because there was great community need. As a result, Central is having less success with their SHSM program than Valley Gardens. This finding illustrates that if schools have not adequately met all or most criteria that the Ministry outlines as needed for successful SHSM implementation, then these schools may have much more difficulty growing their program than those schools that have seriously taken these criteria under consideration.

Recruitment methods to get students interested in the program were a third area of variability across schools. There are no clear guidelines on how schools are to recruit students. As a result, recruitment varied from relatively ineffective methods such as morning announcements in schools (i.e. Central, Portsmouth) to the most successful technique which was meeting with every grade 10 student individually to discuss the program (i.e. Valley Gardens). Despite the belief that schools may know how to recruit their students best, it was clear that some recruitment methods were more successful than others. Perhaps more direction would not only make recruitment more consistent province-wide, but more successful too.

The way the program was monitored was a forth area that significantly varied among schools. The person who monitored the program varied among teaching roles and support staff. Also the process and the actual computer software to monitor the SHSM program varied. The biggest similarity regarding tracking among schools was the
frustration teachers had with it. Six of the eight schools of this study expressed great frustration. Long hours (often unpaid) and frequent problems, such as the program not recognizing courses that students passed or the program not allowing students to take courses in different streams created frustrations among teachers. Again the lack of clarity and uniformity in terms of implementation outlined from the top created difficulty in implementing this important piece of the SHSM program.

With the variability in implementation of the SHSM program among schools, there were also great differences in participation and success of the program. As discussed earlier, creating more uniformity in how these elements are to be implemented appears to relate to the level of success experienced with implementing the SHSM program.

2.2. Leadership

Leadership was another key area found within this study. The style of leadership, consistency in leadership, and the importance of delegating leadership responsibility to members of all subject disciplines were themes that arose from this study.

First, there were a variety of leadership styles in implementing and leading the SHSM program, ranging from district leadership, focused school leadership, and little to no leadership in the program. Each style of leadership chosen had a direct effect on the success of the SHSM program.

District management of the SHSM occurred to some degree in all districts. However, despite the varying district leadership styles, interviewees at all schools did not feel that district leadership, in general, was very effective. For example, the SHSM district leads in Districts 1, 3 and 4 respond to emails and occasionally meet with SHSM school leads to discuss budgeting concerns, student enrolment or tracking of the program. Other than these functions, these leaders were reportedly not involved with the school’s SHSM programs. District 2 was different. District 2 managed the entire SHSM program centrally. While these leaders had great responsibility in managing the program and visiting the school to recruit students, there was a significant disconnect between the school staff and the SHSM program in their own school. There were also few students graduating with the red SHSM seal even though there were hundreds of students
technically enrolled in the program. Rather than trying to change the school culture in any way, this district seemed to be working around the staff in the building and not attempting to break down the silos or departmentalism that occurs in high schools. While one may imagine this method of leadership would work best to avoid putting a burden on the teaching staff or leadership of a school, this leadership style was seen as very ineffective.

School leadership also varied within the schools in the study, although focused school leadership in implementing and monitoring the program seemed to work best. In a school like Valley Gardens, the administrator was very involved in the program and has made the program a school focus. The staff, in turn, supported the program, CLAs were delivered and almost all eligible students were enrolled in the program. As a result, Valley Gardens has the highest percentage of students graduating with a SHSM red seal in the province. On the other hand, little school leadership in the SHSM program also had a significant impact on the SHSM program too. For example, Farmington Secondary School had little administrative and SHSM Coordinator leadership. Staff was given little direction, there was a lack of teacher support, CLAs were not delivered and student enrolment was not growing. With an absence of leadership the SHSM program became stagnant. Interestingly, regardless of the school leadership style, it was found was that enthusiasm of the administrator toward the program was typically mirrored in the staff. If the school leader was enthusiastic and focused on the program the staff was also enthusiastic; if the school leader was not enthusiastic, neither were the staff.

A third finding that came out of the study in terms of leadership was the need for consistency. The ever-changing leadership, whether it is a school or teacher leader, it is problematic. Frequently changing leadership reportedly causes problems and lack of consistency within a school. Administrators in this study changed schools frequently which consequently changed the focus/priorities of the school. Also, some schools, like Cooke, had SHSM Coordinators changing yearly or even per semester, causing an inconsistent focus and unclear program expectations. By contrast, in those schools like Welland and Valley Gardens, where the SHSM Coordinator has been in the role since the program began, there was consistency in the program and high red seal graduation numbers resulted. Yet, it is important to note that these consistent teacher leaders found
that with frequent administrative changes (sometimes with ones who do not support the program) it often results in long hours for the SHSM Coordinator and a longing for increased support. Having leadership that is consistent in the program appears to be a key factor in the success of the SHSM program.

A final finding in terms of leadership speaks to the need for administrators to have a person or people who help manage and implement the program. At times administrators need to share leadership and Valley Gardens Secondary School was an excellent example of the importance of shared leadership. In this school the administrator was very committed and advocated for the program. However, she also had a SHSM Coordinator who was equally committed to the program, a SHSM Steering Committee (representing all school subjects) who shaped the direction of the program, and staff who all supported the program. While the school leader was a driver of the program, the program was sustained by the involvement of other staff members from all subject disciplines. In this school, departmentalism was broken down and the school staff was unified in perceiving a need for the program. The administrator showed enthusiasm and set a direction for the program, but of equal importance was the delegation of responsibility and forming a committee of multi-disciplinary teachers to support the program.

2.3. Resources

Resources can come in any number of forms including financial and human resources. Policymakers, educators and the public often believe that increasing education spending will solve many educational problems. Yet simply increasing spending cannot resolve many issues. Research has found that students suffer not so much from inadequate revenues as from inadequate resources or inadequate management of resources (Grubb 2009). In this study, similar findings were discovered. In particular, it was found that adequate human resources, better management of resources, and truly having a need for a program so resources can effectively support the program, were all important elements to effective program implementation.

Interviewees in seven of the eight schools felt the overall support of the program from a human resource perspective was inadequate. All schools felt that the capital
funding for materials in the SHSM program were adequate, although typically not shared throughout the school. By contrast, the human resources provided for this program were felt to be inadequate. For example, one area from a human resource perspective that was felt to be inadequate was the SHSM Coordinator position. In all but one school it was felt that the SHSM Coordinator either needs some or additional paid work time in order to meet the expectations of this role. Payment desired was a period or two eliminated from their teaching schedule to meet the administrative requirements of this program. Time was one human resource item that was reportedly needed most.

Another area of need in terms of human resources was professional development. Not one administrator in this study stated they had received professional development in how to implement this program. These administrators only received the Ministry’s Policy and Implementation Guide. From there administrators were to successfully implement the program as desired within their own school. Without school administration receiving professional development of the program, it is unsurprising that the program was not an administrative priority in many schools. It is also unsurprising that school leaders did not provide professional development to their staff on the program. If leaders themselves do not have adequate knowledge or tools to inform teachers on how this program should be effectively implemented, they probably will not attempt to do so. So while the resources to support the program through capital expenses were sufficient, more investment in human resources was felt to be needed by almost all schools in this study, except Valley Gardens.

Staff at Valley Gardens did not feel they lacked resources. Every SHSM dollar that is allotted to a school by the Ministry of Education was given to the school. The administration at Valley Gardens in turn kept a certain percentage of money in each SHSM sector to pay for capital expenses. The remaining money was distributed among the school to support the SHSM program. With increased funding in each department to support the SHSM program, there was more staff commitment to the program. For example, grade 9 science and all geography classes accompanied the students from the Environment SHSM to Algonquin Park for an Environment sector-related field trip. The SHSM money from the Environment sector helped finance and support geography and
science classes that may not have been involved in the SHSM or been able to afford such a field trip. Sharing resources increased teacher commitment and support.

While having all the money at the school level and spreading it among the school’s departments was beneficial, the success of the program at Valley Gardens may also be attributed to the professional development the staff received on the program. A Retreat Day occurred where the Steering Committee who makes up more than half of the staff read through the Ministry documents together to make sure they understood and were meeting all expectations. The rest of the staff received professional development on the topic too. Every or every other staff meeting as well as time set aside for Professional Learning Communities included updates about the SHSM program and time to discuss how to make the program better. The entire staff was educated, committed and working toward successfully implementing the SHSM program. Therefore, while the financial resources from the program were perceived to be beneficial at this school, so were the human resources.

There is one note of caution. While giving adequate financial and human resources are important, proper management of these resources is needed. For example, the District 1 board-level SHSM leader was solely funded by SHSM money. This person reportedly fulfills his/her job to the same degree that the leads in Districts 3 and 4 do who manage multiple portfolios. This shows that more money and time does not necessarily equal quality. Additionally, giving all SHSM money to the school level appears to be best, but then again it is best if the school manages the money well. For example, in this study Valley Gardens managed their money well and spread it throughout the building. By contrast, Farmington who also had all their money at the school level kept all money within the SHSM sectors which created resentment in the building and an unwillingness to support the program. This suggests that while financial and human resources need to be present, how these resources are managed is of equal importance.

One final finding in terms of resources was the need to pay close attention to whether there is an actual need for a SHSM program in a school. If there is not an adequate need for the program in terms of staff or student interest, community support, among the many others factors, no amount of money is going to rectify the problem.
Having a true need of the program seems to also be key in the success of the SHSM program.

2.4. The SHSM Student Profile

Province-wide data was also used within this study to understand which students enrolled and were successful in the program. The HEQCO study provided this data and found that most students who enroll in the program are in the applied/college stream, are English-speaking, and are special education students who have little variability of credits and average marks. Furthermore, after being enrolled for one year, students in the SHSM program have increased their advantage of credits and have higher average marks, while maintaining less variability compared to students who not enrolled in the SHSM. This data points to the fact that the majority of SHSM students are higher achieving applied students. University stream and at-risk student are also participating, but this program seems to mostly target successful college-bound students. This may be because, as was outlined earlier in the study, university students are typically focused on academic programs and the extent of the SHSM program is difficult to manage in their full academic schedule. At-risk students may not be participating to a great extent because, as outlined in the literature review of this study, there are numerous factors that limit student engagement in school. The SHSM program is only tackling one or two of these school-related factors, such as relevancy of school and student-teacher relationships, but many of the individual, family or community factors that may be impacting a students’ success in school may be at work here. Without talking to the students directly, it is impossible to understand why more at-risk students are not enrolling in the program.

So while this province-wide data is valuable in illustrating the growing college post-secondary pathway, what this data does not show is that program implementation directly affects student enrolment and red seal graduation numbers. For example, in this study student enrolment and red seal graduation numbers were highest in schools that met student and community need, and where leadership and staff emphasized the importance of the program. Student enrolment and red seal graduation numbers were highest where students are coached one-on-one and given on-going guidance and support. Student enrolment and red seal graduation numbers were also highest where all students could
access all SHSM required courses, all stakeholders were aware of the different pathways that can stem from every SHSM sector, and student feedback was sought. These findings show that how the program is implemented does matter in recruiting, retaining and graduating students in all pathways with the SHSM red seal.

3.0. Recommendations

This thesis concludes with some implications from this study. These largely mirror the discussion above. Recommendations for each level of the education system and future research are provided.

3.1. Policymakers

- In this study it was found that almost all components of the SHSM program that the Ontario Ministry of Education clearly outlined and required schools to meet were met with few problems. This suggests that more top-down direction appears to be needed to ensure program implementation is consistent in the province. While a variety of options may be offered in how one may implement the program, clear direction appears to be needed for successful implementation of program requirements.

- The lack of uniformity in some aspects of the SHSM program was a significant issue that teachers and administrators faced in implementing the SHSM program. For example, the lack of one uniform funding formula and the absence of one uniform tracking program that was specifically created to monitor the SHSM program were frustrations in almost all schools in this study. This suggests that common resources province-wide to manage the program appears to be needed to effectively monitor and manage the SHSM program.

- In all schools in this study, there was discussion about the inability to meet certain SHSM program requirements. The number of Certifications, the delivery of the CLA and the inability for students to take courses in different streams caused frustration in all schools. With these findings, there may be cause to re-think the depth of some of the SHSM program requirements. Eliminating the number of Certifications or offering different ways students can obtain them (weekend or
summer Certifications) may be advised. Additionally, requiring the delivery of CLAs may need to be revisited. Unless more professional development is going to be provided to increase commitment from all stakeholders, it is unlikely if these activities will be delivered.

3.2. District Leadership

- There were a variety of funding formulas that school boards chose to adopt when dispersing the SHSM funding allotted by the Ministry of Education. As shown in Valley Gardens Secondary School, money appeared to buy loyalty and commitment from all staff members as funding was spread throughout the school. Therefore, consideration to giving all SHSM money directly to the schools is encouraged; however, as in the case with Farmington Secondary, if money is given completely to the school, school leaders may need to be advised on how to effectively manage this money to enhance staff commitment.

- In this study there was both a “hands-off” approach in district leadership in three school boards and complete management of the program in the fourth board. Neither management strategy was perceived to work well by any interviewees. Perhaps a balance of the two, with more district direction and support given at the school level to build their own program in-house, may work better.

- The frequent turn-over of administration which consequently resulted in a different amount of emphasis on the SHSM program caused frustration in all schools. This finding suggests that there is a clear need for consistent school leadership. Moving principals to new schools regularly is a common practice in Ontario schools. However, for maximum program growth and continuity in a school, it appears that principals need to remain in one school for a longer duration of time.

- Schools that had the most success in the SHSM program were schools that met all or most of the criteria outlined in the Ministry of Education’s SHSM Implementation Guide. On the other hand, schools that chose their SHSM program mostly due to a teacher advocate, and few other factors, were not as successful. This suggests that closer analysis for a true need for a SHSM program
in a particular school/community is needed. If there is not a need for the program it is unlikely that the program will be successful.

- A desire for professional development was discussed by administrators and teachers interviewed in every school in this study. School leaders need to have professional development provided to them in how to effectively implement Ministry programs and initiatives. If school leaders are not informed, teaching staff are unlikely to be informed either. A greater focus on professional development appears to be needed.

3.3. School Leadership

- In this study, the investment and interest in the SHSM program was reflected in the school staff at each school. This suggests that principals should implement programs they are inherently interested in. If the school leader is not enthusiastic about a program, neither will the staff.

- In this study, the most successful school was one where the principal advocated for the program, had a strong SHSM Coordinator in-house, had a Steering Committee from all disciplines, and staff were committed to the program. This not only shows that principals need to show their support for a program, but it also shows the need for administrators to learn to delegate responsibility in any program that is implemented.

- As outlined above, schools that had finances spread throughout the building increased the commitment of staff members. This finding shows that if leaders wish to gain support for any program, providing financial incentives appears to work well. However, providing unequal financial support throughout a school may result in resentment and lack of trust among staff.

- The need for consistency in school leadership was discussed above. Similarly, there also needs to be consistent teacher leaders in schools. Staff in buildings need to rely on their expertise and if this role continues to change, the level of expertise often changes as well. This was an occurrence in a number of schools in this study. This finding suggests that consistent teacher leadership is needed as much as consistent school leadership.
3.4. Research

- This study analyzed the impact of students in the SHSM program in terms their academic success in high school. To build on this study, future research on the post-secondary outcomes of SHSM students may be an area to study in order to understand if the SHSM is aiding students in their post-secondary aspirations.

- Departmentalism that occurs within high schools was one factor that limited schools from implementing a component of the SHSM program within this study. Studying implementation of programs in high school settings, with a particular interest to how departmentalism affects program implementation, is an area that may require further study.

- This study demonstrated that principal leadership in high schools has an influence on programming for student success. However, since most principal leadership research focuses on elementary schools, further research on the high school principalship is recommended.

4.0. Final Remarks

It appears that the SHSM program, with its relatively early stages in development, is growing and expanding to a significant degree. While there is areas in the SHSM program that could benefit from improvement, at this time we know that students who are enrolled in the SHSM are performing well academically, both in credit accumulation and grade point averages, and outperform students who are not in the SHSM program. This study also shows us that there is reason to be optimistic about the perception that all post-secondary pathways are viable. With SHSM students in all pathways, students are beginning to understand that career possibilities, especially within the college pathway, are available in a variety of occupational sectors. This, of course, is a significant aim of the SHSM program and the SS/L18 Initiative.
CHAPTER VI: APPENDIX

Appendix A: Contextualized Learning Activities Example

For the “other required credits” in the bundle of credits, students in a Specialist High Skills Major program must complete learning activities that are contextualized to the knowledge and skills relevant to the economic sector of the SHSM. Contextualized learning activities (CLAs) address curriculum expectations in these courses.

_This CLA has been created for teachers._
_It has not undergone an approval process by the Ministry of Education._

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### Overall expectations

**Developing and Organizing Content:** generate, gather, and organize ideas and information to write for an intended purpose and audience;

**Applying Knowledge of Conventions:** use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively;

**Reflecting on Skills and Strategies:** reflect on and identify their strengths as writers, areas for improvement, and the strategies they found most helpful at different stages in the writing process.

### Specific expectations

**Generating and Developing Ideas:** generate and focus ideas for potential writing tasks, using several different strategies and print, electronic, and other resources, as appropriate.

**Producing Finished Work:** produce pieces of published work to meet criteria identified by the teacher, based on the curriculum expectations select several examples of different types of

**Proofreading:** proofread and correct their writing, using guidelines developed with the teacher and peer.

**Publishing:** use several different presentation features, including print and script, fonts, graphics, and layout, to improve the clarity and coherence of their written work and to engage their audience.

**Metacognition:** writing that they think most clearly reflect their growth and competence as writers, and explain the reasons for their choice.

**Voice:** establish a distinctive voice in their writing, modifying language and tone skillfully and effectively to suit the form, audience, and purpose for writing.

### Essential Skills and work habits

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<td>√ Computer Use</td>
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<td>√ Finding Information</td>
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<th>Work Habits</th>
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<td>√ Organization</td>
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<td>√ Working Independently</td>
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**Instructional/Assessment Strategies**

**Teacher’s notes**

*This CLA is geared for a whole class, whether they are SHSM or non-SHSM students. Students who are in the cosmetology program (under the Health and Wellness SHSM) must choose this topic. Others can choose any other topic, SHSM-related or not. However, this CLA can be delivered as an ISU to SHSM students only as well.*

*You will need to book a computer lab for days 1 (optional, 2nd half of the period) and days 3-7 of this CLA.*

**Context**

Students entering any industry should be both knowledgeable of their field and able to communicate this knowledge to various audiences. Through creating a R.A.F.T.S. based portfolio, students are able to creatively display their knowledge of many different topics and tasks, for any number of audiences.

**Strategies**

*See lesson plans (Appendix A) at the end of this CLA for detailed instructions.*

**Day 1**
- State the Learning Goal  
- Class Discussion – What is a portfolio?  
- Rapid Write – Anything students know about portfolios  
- K-W-L Chart – Portfolio writing  
- Handout – Portfolio writing  
- Handout and Activity – Text Features  
- Exit Card – Complete the “L” part of the K-W-L chart

**Day 2**
- Go over the Learning Goal  
- Anticipation Guide – Portfolios  
- Gradual Release model – Examining Portfolios – Plus/Minus/Interesting and Voice  
- Hand out and go through R.A.F.T.S. Career Portfolio Task  
- Student begin brainstorming and a rough draft of their work  
- Exit Card – 2-3 things they learned in the lesson today

**Day 3**
- Go over the Learning Goal  
- Visual prompt – Example from previous day of a portfolio  
- Co-create success criteria  
- Students work on their portfolios  
- Exit Card – Any lingering questions; things they learned today
Days 4-7
- Go over the Learning Goal and Success Criteria of the task
- Students work on their portfolios
- Exit Card – Any lingering questions; things they learned today

Day 8
- Students finish their portfolios
- Students complete a reflection chart on their abilities in creating this project

Assessment and Evaluation of Student Achievement

<table>
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<th>Strategies/Tasks</th>
<th>Purpose</th>
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<tr>
<td>1. Class Discussion</td>
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<tr>
<td>2. Rapid Write</td>
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<td>4. Text Features Chart</td>
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<td>6. Portfolio Examples Analysis</td>
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<td>7. Career Portfolio</td>
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<td>8. Reflection</td>
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Assessment tools
- Portfolio Rubric
- Reflection Journal Rubric

Differentiation

Differentiation will be based on:
- Readiness
- Learner Profile
- Interest

Differentiation will take place through:
- Content
- Process
- Product
- Learning Environment

Resources
- Authentic workplace materials
- Portfolio examples
**Print resources**  
- All print resources (handouts) provided below.

**Software**  
- Word processing program and/or Microsoft Publisher

**Other resources**  
- Overhead projector  
- Sticky notes/cue cards  
- Board/Chart Paper

**Accommodations**
Accommodations will be made depending upon the instructional, environmental and assessment accommodations listed in the Individual Education Plan of any identified students.

For students not progressing:
- All the project to be completed with LST support  
- Provide on-going feedback  
- Chunk assignment for providing timelines for each stage  
- Students can work in pairs

**List of Attachments**
Appendix A: Lesson Plans  
Appendix B: K-W-L Chart  
Appendix C: Creating an Engaging Career Portfolio  
Appendix D: Using Non-Fiction Text Features  
Appendix E: Anticipation Guide – Portfolio Writing  
Appendix F: Career Portfolio Example Sheets  
Appendix G: Plus/Minus/Interesting Template  
Appendix H: Project Outline  
Appendix I: Career Portfolio Exemplar  
Appendix J: Career Portfolio Rubric  
Appendix J: Project Reflection with Rubric
Appendix B: Letter of Information

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Tel No. (416) 923-6641 Fax No. (416) 926-4741

Department of Theory & Policy Studies in Education

Page 1

ASSESSING THE IMPLEMENTATION OF THE SHSM IN ONTARIO HIGH SCHOOLS

Letter of Information

My name is Lauren Segedin and I am a doctoral student at the Faculty of Education at The Ontario Institute for Studies in Education of the University of Toronto. I am currently conducting research that is investigating how the implementation of the Specialist High Skills Majors (SHSM) contributes to student outcomes?

Sub-research questions imbedded within the main research question include:

1. Does participation in the SHSM increase students’ academic success as defined by credit accumulation, marks, and graduation?
2. For which students does the SHSM have the greatest impact on academic success?
3. How consistent are the features of the SHSM across Ontario?

If you agree to participate in this study, you will be asked to participate in a 30-45 minute semi-structured interview. Areas I plan to discuss are how the SHSM was implemented in your school and the role of different people (i.e. principal, teachers, students, etc.) in implementing the SHSM program.

Examples of questions that I have in mind but may or may not ask are:

1. Were there many resources (i.e. funding, materials) provided to teachers to implement the SHSM program?
2. Was there any professional development provided to assist teachers and administrators in implementing the SHSM program in your school.

You will be audio-taped during the interview and this will be transcribed into written form. You will be given a copy of your own transcript to comment on or correct. In the transcripts, names and other identifying information about you or your organization will be systemically changed. Once the audiotapes of the interviews have been transcribed,
the original or raw data will be stored under lock and key in a cabinet in the researcher’s home office. No one will ever have access to this raw data. Identifying codes that could connect you with your organization with the changed names will also be kept confidential. The timing for the destruction of the tapes and/or raw data is five years.

It is unlikely, but possible that you may feel uncomfortable responding to some of the questions during the interview. If this occurs, please let the researcher know if you experience any distress because of your participation in the study.

Participation in the study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your professional status.

If you have any questions about the conduct of this study or your rights as a research subject you may contact the University of Toronto’s Office of Research Ethics at 416-946-3273. If you have any questions about this study, please contact Lauren Segedin at 519-562-9120 or Dr. Ben Levin, Faculty Advisor, University of Toronto at 416-978-1157 or at ben.levin@utoronto.ca.

Sincerely,

Lauren Segedin
Appendix C: Consent Form

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Tel No. (416) 923-6641 Fax No. (416) 926-4741

Department of Theory & Policy Studies in Education

ASSESSING THE IMPLEMENTATION OF THE SHSM IN ONTARIO HIGH SCHOOLS

Consent Form

I have read the letter of information, have had the nature of the study explained to me and I agree to participate in the study. All questions have been answered to my satisfaction and I understand that I am free to withdraw my participation at any time.

_____________________________
Printed Name of Participant

_____________________________        ________________________
Participant's Signature     Date

Graduate Program in Educational Administration
REFERENCES


