UNDERSTANDING HOW THE IMPLEMENTATION OF THE SPECIALIST HIGH SKILLS MAJOR PROGRAM CONTRIBUTES TO STUDENT OUTCOMES

LAUREN SEGEDIN *Greater Essex County District School Board*

ABSTRACT. The Specialist High Skills Majors (SHSM) program has been implemented in Ontario as a way to increase secondary graduation rates. This study's aim was to understand how the implementation of the SHSM program impacts student outcomes. The conceptual framework consists of an amended version of Fullan's (2007) critical factors that affect policy implementation. The study's methods analyzed provincial student achievement data. Thirty-four interviews from four school districts in Ontario occurred. A true need, program clarity and simplicity, equality of resources, and strong leadership were found to affect program implementation, and in turn, student outcomes.

COMPRENDRE COMMENT LA MISE EN OEUVRE DU PROGRAMME DE LA MAJEURE HAUTE SPÉCIALISATION CONTRIBUE AUX RÉSULTATS DES ÉTUDIANTS

RÉSUMÉ. Le programme de la Majeure Haute Spécialisation (MHS) a été mis sur pied en Ontario dans le but d'augmenter les taux de diplomation au secondaire. L'objectif de ce projet de recherche est de cerner de quelle manière l'implémentation du programme MHS a un impact sur les résultats des étudiants. Pour ce faire, une version révisée du cadre conceptuel de Fullan (2007) sur les facteurs critiques influençant la mise en œuvre de politiques est utilisée. En ce qui a trait à la méthode de recherche, les données provinciales sur le rendement des élèves ont été analysées et 34 entrevues au sein de quatre districts scolaires ontariens ont été réalisées. Les facteurs identifiés comme ayant un impact sur la mise en œuvre du programme et donc, sur les résultats des élèves, sont le fait que celui-ci répond à un réel besoin, est clair et peu complexe, offre une égalité des ressources et est soutenu par un fort leadership.

In 2003, Ontario launched a large-scale, multi-year public education reform, called the Student Success-Learning to 18 Strategy (SS/L-18), which is now referred to as the Student Success Strategy. At the secondary school level, the Student Success 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 Student Success Strategy began in December 2005 and included the development of the Specialist High Skills Major (SHSM) program. The SHSM program intended to encourage alternative and flexible educational opportunities, let students focus on a career path that matches their skills and interests while meeting the requirements of the Ontario Secondary School Diploma (OSSD), and prepare them for learning opportunities following graduation, whether it be in college, university, an apprenticeship or the workforce.

More than 10 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 2016, Ontario increased its high school graduation rate from 68% to 85.5%. This means an additional 190,000 students have graduated in a timely way from Ontario high schools compared to 2004 (Ministry of Education, Ontario, 2016).

The Canadian Council on Learning (CCL) conducted a program evaluation in 2008 on the Student Success Strategy. This study consisted of several hundred semi-structured field interviews and focus groups, and 14,000 survey respondents. The CCL (2008) found that the Student Success Strategy "met with an enthusiastic response from all parties" (p. 93). 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.

Despite these 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 program, has been implemented in Ontario as part of the Student Success Strategy, the impact of this type of programming is unclear. Thus, this study's aim is to understand how the implementation of the SHSM program impacts student outcomes.

THE STUDY

This study grew out of my work as an educator who has largely taught students who are at risk of dropping out of school. Having been exposed to many initiatives targeting disengaged students, I was interested to know the impact of the SHSM program in terms of academic performance, marks, and credit accumulation, all of which lead to high school graduation. More specifically, I wanted to compare the students enrolled in the SHSM program to those students who were not, in order to understand if the SHSM program aids in high school completion. Secondly, I was interested to know which methods were most effective for successful program implementation.

To investigate this problem, a modification of Michael Fullan's (2007) critical factors that commonly affect policy implementation serves as this study's conceptual framework (see Figure 1).
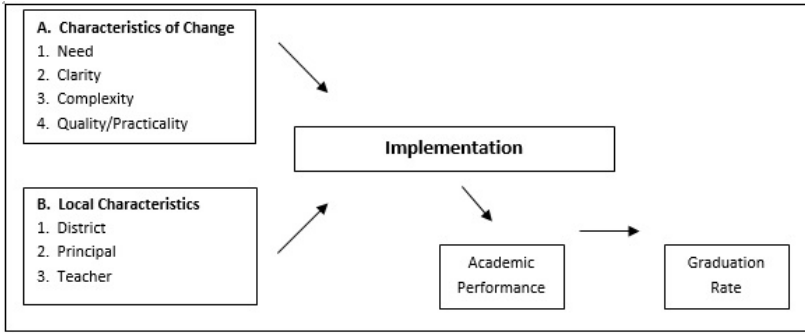

FIGURE 1. *Revised factors that affect policy implementation*

Fullan's (2007) framework informs how change and implementation work at a system-wide level. While all nine of these factors are interrelated, the volume and depth of Fullan's (2007) original framework was too large for this study. Only seven were included. The community, while an important player in the SHSM program, was omitted. Interviewing community partners was perceived as too large for the scope of the study. The external factor (i.e. government) was not included in the framework because this study was interested in the implementation of the governmental policy. Lastly, Fullan's (2007) framework was altered to include the relationship between program implementation, student academic performance, and graduation rates. This relationship was integral to the study. Therefore, a modification of Fullan's (2007) work serves as this study's conceptual framework.

LITERATURE REVIEW

In many ways, student disengagement and high school dropouts are no longer mysterious topics. 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 drop out begin disengaging from school long before. These students 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).

At this time, 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. However, we do know that there are some common causes that lead to student 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 (Bridgeland, Dilulio, & Morison, 2006; Dei, Mazzuca, McIasaac, & Zine, 1997; Hammond, Linton, Smink, & Drew, 2007; Heppen & Therriault, 2008; Jerald, 2006; Mac Iver & Mac Iver, 2009; Oakes, 2004; Segedin, 2012).

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. According to numerous studies on high school drop outs, two of the most powerful predictors of whether a student will complete high school is attendance and academic performance (Balfanz, Durham, & Plank, 2008; Hammond et al, 2007; Jerald, 2006; Mac Iver & Mac Iver, 2009). Allensworth and Easton (2007) and Heppen and Therriault (2008) have indicated that missing more than 10 percent (roughly 10 days per semester) of instructional time is cause for concern. This raises the issue of which comes first: poor attendance or poor performance. Poor academic performance, whether it is measured through grades, test scores or course failure, is one of the most consistent predictors of dropout. Allensworth and Easton (2007) found that GPA is the best indicator for predicting non-graduates, while Balfanz et al. (2007) found that students who failed either a mathematics or English course in the sixth grade rarely graduated from high school.

A student's family background and home experience can have a powerful influence over educational outcomes, including dropping out of school (Hammond et al, 2007; Oakes, 2004). Family-related factors, such as low socioeconomic status, whether measured through parental education, income or occupational level, minority status, high mobility, and family structure, level of household stress, family dynamics and values and attitudes about schooling, have all been linked to students' leaving school early (Hammond et al, 2007; Lyche, 2010; Oakes, 2004; Rumberger, 2001). Of the multiple social inequalities that exist in society, socio-economic status appears to be the greatest factor that limits student success. It is not uncommon that the students who do not often succeed in school are the students who are poor, are the least likely to have educated parents, and are least likely to know how to find success in school (Oakes 2004). The research literature highlights that early leavers are drawn disproportionately from the ranks of low socioeconomic status. In virtually every study of academic achievement, family socioeconomic status is highly predictive of dropping out. Even controlling for a host of other factors, students from low social class families were found to be twice as likely to drop out compared to students from average social class families (Rumberger, 1995).

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 (Hammond et al, 2007; Jimerson, Egeland, Sroufe, & Carlson; 2000; Oakes, 2004; Segedin, 2012). Major reviews of Canadian public education have acknowledged that a relevant curriculum is a critical ingredient to students staying in school (King, 2004; Radwanski, 1987; Royal Commission on Learning, 1995). Students who have dropped out of school cite uninteresting classes and the curriculum not relating to their lives as contributing to their dropout decisions. "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 (Curtis, Livingstone, & Smaller, 1992; Krahn & Taylor, 2007; Oakes, 2004). Schools with more personal connections between students and teachers, and that have teachers with high expectations have been a predictor to students staying in school (Dei, Mazzuca & Zine, 1997; Mac Iver & Mac Iver, 2009).

School-community connections has been noted as an important factor in students staying in school (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. Research shows that teacher practices to involve families are as or more important than family background variables such as race or ethnicity, social class, or marital status (Epstein, 1996). At the secondary level this is challenging, as parents tend to lessen their involvement in their children's schooling as they grow older.

A great deal of literature has been written on the many factors that affect student disengagement in school. At the same time, various initiatives and programs have been created and implemented into high school in an attempt to increase student academic achievement and improve graduation rates. The SHSM program is one of these initiatives.

The SHSM program requirements

SHSM is a program that aims to provide students with opportunities to customize their high school experience and focus on skills relevant to the world of work. In this program there are currently 19 sectors students can specialize in, ranging from Agriculture to Transportation. Each sector consists of five required components for program completion: 1. Bundled credits, 2. Certifications, 3. Experiential learning and career exploration activities, 4. Reach ahead experiences, and 5. Essential skills and work habits.

Bundled credits. The first component of the program is a bundle of 8-10 required courses in the student's selected field. The major credits — four Grade 11 and Grade 12 credits — allow students to build a foundation of sector-focused knowledge. The two to four "other" credits incorporate a minimum of six hours of learning in core curriculum subjects to contextualize the subjects' curriculum expectations to the selected sector. This is completed through Contextualized Learning Activities (CLAs). Prepared CLAs can be found in the Ontario Educational Resource Bank, and can be delivered to an entire class, in small groups or through independent learning. The last element of the bundled credits is two cooperative education courses that provide authentic learning experiences in a workplace setting.

Certifications. Each SHSM also requires sector-recognized certifications that have been identified through sector consultations. Certifications offered depend on the sector but can include First Aid, cardiopulmonary resuscitation (CPR), fork lift training, and customer service, among others.

Experiential learning and career exploration activities. Experiential Learning and Career Exploration Activities 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).

Reach ahead experiences. Reach Ahead Experiences connect SHSM students to their postsecondary plans. These experiences can include, but are not limited to, visiting an approved apprenticeship delivery agent, and attending a number of college or university classes in the student's area of interest.

Essential skills and work habits. 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 placements and via the Ontario Skills Passport (OSP), a web-based resource.

In addition to the five required learning components of the SHSM, these programs have 14 additional criteria used to assess school readiness to offer an SHSM program, including current employment trends in a sector's region and student enrolment / interest. The Ontario Ministry of Education offers support through a guide that supports the planning and implementation of a SHSM program. Funding is also provided for capital equipment and certification and training.

Understanding how policies are implemented, however, is paramount to understanding if the implementation of this program contributes to student outcomes.

Factors that affect program implementation

Michael Fullan, in his book *The New Meaning of Educational Change* (2007), identifies critical factors that commonly affect policy implementation.

Need. While policy may be put in place by the government, in order for success-ful implementation to occur at the local level, it must be perceived as needed. There must be a clear perceived fit between the program and a school and/or the innovation (Fullan, 2007).

Clarity. Unclear goals and unspecified means of implementation are significant problems at the implementation stage. At the policy level, educational change may be conceptualized and fine-tuned, often after years of analysis and debate. However, the people who implement policies may find it unclear. Unclear policies may result in schools or districts adopting the policy in principle or implementing it in a way that is far different from what was intended. On the other hand, if policy is too prescriptive, change is also unlikely to occur, especially if it disregards the influence of context and is not sensitive to the daily lives of educators (Bascia & Hargreaves, 2000; Datnow & Park, 2009).

Complexity. Educational change is multidimensional and can be quite complex. Fullan (2007) suggests that there are three factors related to complexity when implementing any policy, and 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. For a person who has the skill or beliefs that match the new policy, the proposed change will seem comparably simple and straightforward. Conversely, an individual who has to learn one or more dimensions may find a policy difficult to implement.

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, targeted and sustained professional development, high qual-ity resource materials, networks of teachers across schools and districts, and teacher support initiatives, such as coaches and teacher leaders (Fullan, 2007; Levin, 2008).

The district. Most definitions of leadership contain two functions: providing direction and exercising influence (Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2005). 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. Yet, leadership does not just occur at the district level. Both district and school leadership provide a critical bridge between most educational-reform initiatives and having those reforms make a genuine difference for all students (Leithwood et al., 2005).

The principal. The principal is the leader of a school. Evidence suggests that school leadership practices that include setting the direction of the school through an identified and articulated vision, fostering the acceptance of group goals, and creating high performance expectations account for the largest proportion of a leader's impact (Hallinger, 2003; Leithwood, Day, Sammons, Hopkins, & Harris, 2006). While the literature on leadership has grown rapidly over the

past two decades, we still have limited knowledge about how types of leadership predict performance (Bass, Avolio, Jung, & Berson, 2003). At best, Leithwood et al. (2005), suggested that the available evidence only allows us to infer some broad goals that successful leadership will need to adopt, while acknowledging that additional research must occur to identify leadership practices that are successful in achieving school improvement.

Teachers. School improvement affects the collective as well as the individual so it is imperative to include all teachers when implementing change (Anderson & Kumari, 2009). 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).

METHODS AND METHODOLOGY

To answer the question of how the implementation of the SHSM program affects student outcomes, a mixed methods approach was taken.

The study first began with a broad review of the Ontario School Information System (OnSIS) data on student achievement in the SHSM program. These 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 school board, special education status, credits obtained, grade point average, and track / stream of 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 similar students who were not in the program.

Second, a review of the data on the number and location of SHSM programs in Ontario took place. Districts were selected due to geography, high student enrollment (15% or more students in the district enrolled in a SHSM program), and a mix of public and Catholic boards. Six districts fit these criteria and four agreed to participate in the study. From there, one school from each of these four districts was identified as the school with the highest SHSM enrollment and one school per district was identified as the school with the lowest SHSM student enrollment. Interviews occurred at these schools.

Third, one-day school visits were planned for the eight schools participating in the study, consisting of interviews with one administrator, one SHSM teacher leader, two teachers (one English and one math teacher), and a co-op teacher. All of these roles are required for implementation of the SHSM program.

Teachers and administrators from the selected schools were recruited in two ways. After the district agreed to participate in the study and ethical approval was granted, principals from the school with the highest and lowest SHSM student enrollment were contacted to seek their participation in the study. An administrator at these selected schools sent the study's letter of information and the consent form to co-op teachers, the SHSM teacher leader, and English and math teachers. In many schools, there was only one person who could be selected per role due to size of the school. The English and math teacher were generally the Department Heads in the school. School administrators and I then chose a mutually agreeable interview date, and administrators arranged the interviews based on teachers' schedules. Before these interviews began, I reviewed the letter of information and consent form with each educator.

The data for this research project were analyzed quantitatively and qualitatively. First, the OnSIS data were gathered and the analysis examined the cohort of Ontario students who entered their first year of secondary school (Grade 9) in 2007-2008 and were enrolled in secondary school in 2008-2009 and 2009-2010. The first phase of the study involved understanding the profile of students enrolling in the SHSM program compared to that of the entire Ontario high school population. This involved calculating descriptive statistics looking at gender, second language status, and special education status. The second phase of the study looked at how students performed in Grade 10, prior to entering the programs, 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. To further explore the relationship between participating in SHSM programs and students' achievement, a subset of students not in these programs but comparable in prior achievement to participating students was created using 2008-2009 average marks and credit accumulation. The mean differences of 2010-2011 average marks, credit accumulation, and high school graduation status between groups of participating and non-participating students were then compared.

Second, all the interviews were transcribed verbatim, coded and categorized according to a priori and emergent codes, and MAXqda2 computer software was used to code the interview transcripts.

Third, all of the schools were 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).

STUDY FINDINGS

This study's purpose was to understand how the implementation of the SHSM program impacts student outcomes. In order to determine how and why the program was implemented, interviewees were asked questions related to the conceptual framework. From these interviews, school profiles were also developed.

Program need

As outlined in the literature review, the first element for successful implementation of any program is a perceived need for a program. In this study, the perceived need for the program varied. For example, the number of SHSM sectors ranged from 2-11 per school. Student population enrolled in the SHSM program also ranged from 4% to 41%. The majority of the students were in the college stream, and enrollment of special education students varied from few to more than 50%, depending on the school. Typically programs were chosen to support successful programs already existing in the school and/or a teacher advocating for a program.

The rural locations of some schools caused concerns regarding the need for the program, as there were few co-op placements. For example, a co-op teacher at Central High School[2] stated: "businesses we've used for decades are out of business, so what do you do? A lot can't take a kid on because they had to lay someone off." In areas like these, there was concern about whether the program actually supported an economic need in the community.

The need for the program was also discussed in terms of how staff perceived the program. In all schools, at least one interviewee discussed how staff did not perceive a need for the program and therefore did not fully support it. For example, one co-op Department Head at Welland Secondary School stated: "I'm am 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."

A co-op teacher at another school (Farmington) also wondered about the need for the program, as he felt:

> employers don't give a shit if [students] have First Aid or fork lift training or whatever because the employer has to give that training again...It's being marketed to the kids as being really inviting, but really, no one gives a shit.

With some (sometimes key) staff not supporting the program, interviewees questioned whether the SHSM sectors chosen by schools actually met school or community need.

Clarity and complexity

Unclear goals and unspecified means of implementation are significant problems at the implementation stage of any program. Yet, if a program is too complex, educators may not understand nor feel equipped to implement the program. To

understand the clarity and complexity of the SHSM program, educators were asked how each of the five required elements of the SHSM looked in practice.

In terms of bundled credits, seven of the eight high schools stated they follow the Ministry outline. However, CLAs, a requirement of the bundled courses, were largely not being delivered by many or all of the teachers in six of the eight schools. CLAs incorporate a minimum of six hours of learning that contextualizes core subject area curriculum (e.g. English, science, math) to SHSM sectors. The failure to deliver this program component is because CLAs have reportedly not been mandatory, encouraged, supported, or monitored for completion by administration or program leaders in any of these schools. Teachers at six schools felt that many CLAs are poorly planned, poorly formatted, inconsistent among sectors, inaccessible, and lengthy. Teachers reported little to no professional development to aid in CLA delivery. Interviewees at every school also expressed aversion to changing their practice. As one English teacher at Portsmouth High School stated, "there is quite a bit of resentment among the core teachers having to change a project so it is sector-related." However, this English teacher did reluctantly state that she "warmed up to the SHSM over the past couple of years and the students do seem to enjoy it." The four other components of the program, Certifications, Experiential Learning and Career Exploration Activities, Reach Ahead Experiences, and Essential Skills, were typically being implemented similarly among schools and districts. This suggests that the clarity and complexity of the program was manageable in all areas but one.

Program quality and practicality

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

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. Three districts manage the money centrally, while one gives money directly to schools. In some schools, the money is distributed unequally, fostering resentment in the school. For example, a co-op teacher at 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.... 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?

In other schools, the funding is spread throughout departments to foster staff support of the program. Sharing resources resulted in staff buy-in and "lots of extra-rich experiences that are related to the SHSM" (Administrator, Valley Gardens).

Professional development was also found to be uneven across the province. All SHSM teacher leaders and almost all co-op teachers felt they had significant professional development (rating of 4/5 or 5/5). However, most of this professional development occurred at district meetings, during lunch or during other informal meetings. These types of meetings were also felt to be, as the Farmington SHSM teacher leader stated, "not great PD but at least it gets people talking." By contrast, administrators felt they had little training on the program, if any at all (1/5). For example, the principal at Dellview High School felt "out of the loop" and in turn is "relying on my two lead teachers" to receive any needed PD.

Teachers

Similar to administrators, the interviewed subject teachers in seven of the eight schools stated they spent little to no time discussing the SHSM (rating of 1/5). This is because the SHSM program is rarely, if ever, discussed at staff or departmental meetings or associated with any professional development. The Welland SHSM Coordinator went as far as to say that the professional development is so poor at the school that "most of the teachers are 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." As a result, there typically was little to no change of practice related to this program (rating of 1/5), although it was not from a lack of interest. 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 contextualize these activities.

Leadership

In this study, all interviewees were asked about district and school leadership related to the SHSM program. Responses about leadership were quite divided. Half of the leaders received a rating of 3 to 5 out of 5, while the other half were ranked far lower. District and school leaders who exhibited an importance of the program by their involvement in the program were ranked high. Involved leaders also appeared to inspire their staff, and SHSM teacher leaders' involvement largely mirrored school leadership.

With leadership perceived by almost all teachers as most essential in implementing the SHSM program, there were frustrations on behalf of teachers about frequently changing leadership, whether it be SHSM coordinators, school

administrators, or district leadership. The turnover in leadership frustrated teachers because the change resulted in an inconsistent SHSM focus / school priority, and a loss of knowledge among leaders.

SHSM STUDENT PROFILES

To understand if the implementation of this program has impacted student achievement, the SHSM student profile is important because it helps to determine if the program is increasing academic performance and graduation rates. The SHSM student profile also informs which students the program is impacting, and if it is, by how much.

The province-wide data showed that there are a slightly higher proportion of students with a special education classification among those enrolled in the SHSM compared to students who are not enrolled. However, these students typically have learning disabilities but are not at-risk. SHSM students were largely in the college or apprenticeship stream. Interviewees stated that academic students participate less due to the SHSM sectors offered and scheduling / courses. This finding was also reflected in the province-wide data, which showed that students entering a SHSM program took Grade 10 applied level courses in significantly higher proportions than those students not enrolled. However, of those enrolled in a SHSM, the majority of students did take academic courses, but in lower proportions compared to those not enrolled. Data on SHSM marks and credit accumulation 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. Data also showed that after being enrolled for one year, students in the SHSM program increased their advantage of credits and have higher average marks, while maintaining less variability, than students not enrolled in the SHSM.

DISCUSSION

There were many findings that arose from this study, five being key for successful program implementation and improving student outcomes, namely: a true need, program clarity and simplicity, equality of resources, strong leadership, and student enrollment in the program.

Program need

Having a perceived need for the SHSM program played a significant role in this program's implementation. In schools where the community could support co-op placements or where school staff believed in the need for the program, the program had strong student enrollment in, and completion of, the program. Where there was little staff or cooperative education opportunities in the community, this too was reflected in student enrollment and program completion.

As discussed in the literature review, understanding the importance of a program at the local level is important because educators are less likely to "buy-in" to a program if they do not understand or believe there is a need for that program (Wohlsetter, Datnow, & Park, 2008). This appeared to be true when it came to the implementation of the SHSM program. In schools where staff did not understand the program or perceive the need for it, and community members could not support it in terms of cooperative education placements, the program had limited success. Professional development would have likely aided to a degree, but truly having a need in the community is a significant factor in impacting the program, and consequently, student outcomes.

Clarity and complexity

In this study, it was found that the SHSM program was implemented similarly province-wide. This finding suggests that clear, structured, top-down direction given by policy makers aids in consistent program implementation. Yet, this consistency of policy implementation did not result in similar student involvement or outcomes. SHSM sectors ranged from 2-11 per school, student enrollment ranged from 4% to 41%. It would appear then that while clarity is important for program consistency, it does not result in consistent outcomes. Additionally, it is important to note that while program implementation was consistent provincially, it was only consistent in the areas where teacher practice did not have to be altered. The CLA, which requires a change of teaching practice, uses all three of Fullan's (2007) complexity factors that relate to program implementation — use of new or revised materials, new teaching approaches, and the possible alteration of beliefs. The CLA was the only element of the program that was not embraced or implemented to a significant degree. Research shows (Bascia & Hargreaves, 2000; Honig, 2006; McLaughlin & Talbert, 2006) that assistance or professional development is needed to support teacher learning. As we understand from this study, teachers received little professional development on CLA delivery. Teachers were then unwilling to embrace this element of the program that required them to change their practice.

Program quality

The quality of a program is often measured by capacity-building, such as professional development, resources, professional networks, and support initiatives (Fullan, 2007; Levin, 2008). The implementation of the SHSM program proved no different. In this study, schools that did not share resources and provided little teacher professional development typically had low student enrollment and few student outcomes resulting from the program. By contrast, where professional development and resources were equally distributed, a high student enrollment and consequently, more significant student outcomes resulted. This highlights the importance of consistent professional development and equal distribution of resources.

Leadership

The SHSM program requires a variety of leaders for implementation, ranging from district leadership, school leadership, and teacher leadership. 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, & Glaze, 2006). However, in this study, this did not seem to be the case. Yes, the programs that had greater breadth and better student outcomes had at least one strong consistent leader. Yet, never were all three leaders greatly involved. In fact, strong leadership was rarely found in two forms — district, school, or teacher leadership. For example, in Welland High School, success only occurred due to the level of commitment by the SHSM teacher leader. This educator organized the entire program and delivered the CLAs herself. The program was not promoted by the administrators at the school, but it still had higher enrollment and better student outcomes than the majority of the schools in the province. While unified leadership from the district to teacher leadership may be ideal, it does not seem to be necessary. On the other hand, for sustainability purposes, this does seem to be important, because if the teacher leader from Welland leaves, for example, it is likely that the program will end as well.

Other findings that arose from this study in terms of leadership included the importance of leadership consistency and the influence leaders have on sub-ordinates. Chapman (2005) found that frequently changing leadership results in the loss of experience, expertise, knowledge, and wisdom and can create ineffective learning environments and diminished school quality. Research also shows (Bass et al., 2003) that people want to emulate leaders who they trust (often gained through time), who share risks with the staff, who they perceive as fair, and who are consistent in his or her values and principles. This study showed similar findings. In Valley Gardens, where the school and teacher leaders held their roles for a long duration of time, were enthusiastic about the program, fair in the distribution of resources, and actively created and participated in the program's vision, the staff spoke very highly of their school leaders and shared their enthusiasm of the program.

Student enrollment

From this study, we know that SHSM students are typically college- or ap-prenticeship-bound students who have more credits and higher average marks, and less variability of credits and average marks than students not enrolled. SHSM students are not typically university-bound students, nor are they typi-cally at-risk students. Students enrolled in this program are higher achieving college- or apprenticeship-bound students. Interestingly, SHSM students are also students who are more likely to have a special education classification, but who outperform students who are not enrolled in the program, and continue to do so by an even wider margin once they are enrolled in the program. This suggests that while the program may not be targeting students who are at-risk

of not graduating from high school, it is helping students who have a special education classification to be even more successful in school.

What this province-wide data does not show is that program implementation plays a key role in student outcomes. Yes, academically strong college- or apprentice-bound students are enrolling in the program, but the interest and the value of the program seems to be closely related to program implementation. Schools that had a clear need for the program, professional development, equity of program resources, and at least one strong leader, showed greater interest and therefore, higher student enrollment in the program. Positive student outcomes, including increased marks, higher GPAs, and wider academic margins, compared to students not in the program, were also outcomes in such contexts.

There are also other positive outcomes related to this program. Students who complete the SHSM graduate with relevant work experience, sector-recognized certifications, a red seal diploma of distinction in their chosen field, a direction for their future, and the belief that college and apprenticeships is also a viable post-secondary pathway. These too are important and positive outcomes from the program.

FINAL REMARKS

The findings from this study suggest that the SHSM program, with its relatively early stages in development, is growing and expanding. Of course, there are areas that could be improved. More work appears to be needed in recruiting and maintaining at-risk students, as this is one of the aims of the Student Success Strategy and the SHSM program. A perceived and actual need for the program in the school and community is required. Resources should be shared equally school-wide. Any change in teaching practice required for this program must be supported through meaningful and on-going professional development. Aligned and consistent leadership from the district to the school that illustrates the program's importance is also needed for program sustainability and growth. Fullan (2007) points out that these are important factors that are needed for any successful program implementation. The SHSM program appears to be no different.

Despite the recommended changes mentioned above, this program does offer many positive student outcomes. The SHSM program is increasing student academic outcomes in school, especially among the students who have a special education classification. The SHSM program is equipping students with experience and skills that will only make them more marketable in the current, competitive market-place. Students are also beginning to understand that career possibilities, especially within the college and apprenticeship pathways, are available in a variety of occupational sectors. All of these outcomes from the SHSM program and the Student Success Strategy are indeed positive, as they help both our students and our current economy.

NOTES

1. This quantitative data was analyzed for a study completed for the Higher Education Quality Control of Ontario (HEQCO). This study asked similar questions (albeit with a larger and somewhat different scope), and the data was analysed by fellow members of our research team.

2. All high school names are pseudonyms.

REFERENCES

Allensworth, E., & Easton, J. (2007). *What matters for staying on-track indicator and graduating in Chicago public high schools*. Chicago, IL: Consortium on Chicago School Research.

Anderson, S., & Kumari, R. (2009). Continuous improvement in schools: Understanding the practice. *International Journal of Educational Development, 29*, 281-292.

Anderson, S., & Togneri, W. (2005). School district-wide reform policies in education. In N. Bascia, A. Cumming, A. Datnow, K. Leithwood, & D. Livingstone (Eds.), *International handbook of educational policy* (pp. 173-197). Dordrecht, Netherlands: Springer.

Balfanz, R., Durham, R., & Plank, S. (2008). *Lost days: Patterns and levels of chronic absenteeism among Baltimore City public school students 1999-00 to 2005-06*. Baltimore, MD: Baltimore Education Research Consortium.

Balfanz, R., Herzog, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: Early identification and effective interventions. *Educational Psychologist, 42*(4), 223-235.

Bascia, N., & Hargreaves, A. (2000). Teaching and leading on the sharp edge of change. In N. Bascia & A. Hargreaves (Eds.), *The sharp edge of educational change: Teaching, leading and the realities of Reform* (pp. 3-26). London, England: Routledge Falmer.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), 207-18.

Bridgeland, J. M., Dilulio, J. J., & Morison, K. B. (2006). *The silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises.

Campbell, C., Fullan, M., & Glaze, A. (2006). Unlocking potential for learning. Effective district-wide strategies to raise student achievement in literacy and numeracy. Retrieved from http://www. edu.gov.on.ca/eng/literacynumeracy/inspire/research/ProjectReport_full.pdf

Canadian Council on Learning. (2008). *Evaluation of the Ontario Ministry of Education's student success / learning to 18 strategy*. Retrieved from http://www.edu.gov.on.ca/eng/teachers/studentsuccess/ CCL_SSE_Report.pdf

Chapman, J. D. (2005). *Recruitment, retention, and development of school principals*. Paris, France: International Institute for Educational Planning. Retrieved from http://unesdoc.unesco.org/ images/0014/001409/140987e.pdf

Curtis, B., Livingstone D. W., & Smaller, H. (1992). *Stacking the deck: The streaming of working-class kids in Ontario schools*. Toronto, ON: Our Schools / Our Selves Education Foundation.

Datnow, A., & Park, V. (2009). Conceptualizing implementation: Large-scale reform in an era of complexity. In G. Sykes & D. Plank (Eds.), *AERA handbook on educational policy research* (pp. 348-361). Washington, DC: American Educational Research Association.

Dei, G. J. S., Mazzuca, J., McIsaac, E., & Zine, J. (1997). *Reconstructing "drop out": A critical ethnography of the dynamics of black students' disengagement from school*. Toronto, ON: University of Toronto Press.

Epstein, J. (1996). Perspectives and previews on research and policy for school, family, and community partnerships. In A. Book & J. F. Dunn (Eds.), *Family-school links: How do they affect educational outcomes?* (pp. 209-246). New York, NY: Routledge Taylor & Francis.

Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York, NY: Teachers College Press.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, *33*(3), 329-351.

Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). *Dropout risk factors and exemplary programs*. Clemson, SC: National Dropout Prevention Center, Communities in Schools.

Heppen J. B., & Therriault, S. B. (2008). *Developing early warning systems to identify potential high school dropouts*. Retrieved from https://files.eric.ed.gov/fulltext/ED521558.pdf

Honig, M. I. (2006). *New directions in education policy implementation*. Albany, NY: SUNY Press.

James, D. W., & Partee, G. (2003). *No more islands: Family involvement in 27 school and youth programs*. Washington, DC: American Youth Policy Forum.

Jerald, C. D. (2006). *Identifying potential dropouts: Key lessons for building an early warning system*. Washington, DC: American Diploma Project Network, Achieve.

Jimerson, S., Egeland, B., Sroufe, L. A., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts examining multiple predictors across development. *Journal of School Psychology*, 38(6), 525-549.

King, A. (2004). *Double cohort study: Phase 3 report*. Retrieved from https://educ.queensu.ca/sites/webpublish.queensu.ca.educwww/files/files/Research/SPEG/SPEG%20Double%20Cohort%20-%20Phase%203.pdf

Krahn, H., & Taylor, A. (2007). "*Streaming*" *in the 10th grade in four Canadian provinces in 2000*. Retrieved from http://www.statcan.gc.ca/pub/81-004-x/2007002/9994-eng.htm

Leithwood, K., Day, C., Sammons, P., Hopkins, D., & Harris, A. (2006). *Successful school leadership: What it is and how it influences pupil learning* [Report to the U.K. Department for Education and Skills]. Retrieved from http://webarchive.nationalarchives.gov.uk/20130401151715/http://www.education.gov.uk/publications/eOrderingDownload/RR800.pdf

Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2005). How leadership influences student learning. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/How-Leadership-Influences-Student-Learning.pdf

Levin, B. (2008). *How to change 5000 schools*. Boston, MA: Harvard Education Press.

Lieberman, A., & Mace, D. H. (2008). Teacher learning: The key to educational reform. *Journal of Teacher Education, 59*(3), 226-234.

Lyche, C. S. (2010). *Taking on the completion challenge: A literature review on policies to prevent drop out and early school leaving* [OECD Education Working Papers, No. 53] Retrieved from http://dx.doi.org/10.1787/5km4m2t59cmr-en

Mac Iver, D. J., & Mac Iver, M. A. (2009). *Beyond the indicators: An integrated school-level approach to dropout prevention*. Arlington, VA: The George Washington University Center for Equity and Excellence in Education.

McLaughlin, M. W., & Talbert, J. E. (2006). *Building school-based teacher learning communities: Professional strategies to improve student achievement*. New York, NY: Teacher College Press.

Ministry of Education, Ontario. (2016). *High school graduation rate reaches all-time high of 85.5 percent*. Retrieved from https://news.ontario.ca/opo/en/2016/05/high-school-graduation-rate-reaches-all-time-high-of-855-per-cent.html?_ga=1.236545217.1365297363.1463704272

Oakes, J. (2004). *Keeping track: How schools structure inequality* (2nd ed.). New Haven, CT: Yale University Press.

Radwanski, G. (1987). *Ontario study of the relevance of education, and the issue of dropouts*. Toronto, ON: Ministry of Education.

Royal Commission on Learning. (1995). *For the love of learning*. Ottawa, ON: Queens Printer for Ontario.

Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, *32*(3), 583-625.

Rumberger, R. W. (2001). *Why students drop out of school and what can be done*. Retrieved from https://escholarship.org/uc/item/58p2c3wp

Segedin, L. (2012). Listening to the student voice: Understanding the school-related factors that limit student success. *McGill Journal of Education, 47*(1), 93-108.

Sinclair, M. F., Christenson, S. L., Lehr, C. A., & Anderson, A. R. (2003). Facilitating student engagement: Lessons learned from check & connect longitudinal studies. *The California School Psychologist, 8*(1), 29-42.

Wohlstetter, P., Datnow, A., & Park, V. (2008). Creating a system for data-driven decision-making: Applying the principal-agent framework. *School effectiveness and school improvement, 19*(3), 239-259.

LAUREN SEGEDIN is a secondary teacher employed at the Greater Essex County District School Board (GECDSB). Lauren held the position of SHSM Board Lead at the GECDSB for four years and currently is a literacy instructional coach. Lauren completed her doctoral work at OISE, University of Toronto and her graduate work at the University of Oxford and the University of Western Ontario. Lauren.Segedin@publicboard.ca

LAUREN SEGEDIN enseigne au secondaire au sein du *Greater Essex County District School Board* (GECDSB). Lauren a occupé pendant 4 ans le poste de directrice du programme de Majeure Haute Spécialisation au GECDSB et est actuellement accompagnante en littératie. Lauren a complété ses études doctorales à l'Institut des études pédagogiques de l'Ontario, affilié à l'Université de Toronto, et sa maîtrise à l'Université d'Oxford et l'Université Western Ontario. Lauren.Segedin@publicboard.ca