

The Ontario Student Achievement Division Student Success Strategy Evidence of Improvement Study

Submitted to:

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Submitted by:

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Table of Contents

Table of Contents	2
List of Tables	4
List of Figures	4
Context & Background	5
Purpose	8
Student Achievement Division: an illustrative chronology	10
Student Achievement Division: a brief history	13
A Leadership Infrastructure	16
Programming for Student Engagement	17
Capacity -building for Effective and Differentiated Instruction	18
Focused Interventions	18
Legislation and Policy Development	20
Research, Monitoring and Evaluation	20
Ontario’s student performance and graduation rates have improved	21
Indicators tracked	21
Credit accumulation	24
Graduation rate	25
Complementary Indicators of Improvement	26
Source: Ontario School Information System (OnSIS)	28
Source: Ontario School Information System (OnSIS)	29
Performance on EQAO assessments	29
Source: Education Quality and Accountability Office (EQAO)	30
Transition to Post-Secondary Education	30

Eliminating Plausible Alternative Explanations for Student Success	32
Are the apparent successes a product of measurement error?	32
Have demographic changes produced the illusion of success?	32
Have educational standards declined?	34
Methodology	34
Results.....	35
Source: Education Quality and Accountability Office (EQAO)	35
Source: Education Quality and Accountability Office (EQAO)	36
Source: Education Quality and Accountability Office (EQAO)	37
Observations	38
Coherence	38
Logic.....	38
Literature.....	38
Complementarity of Effort and Objectives	39
Monitoring and Evaluation.....	40
Tentative Conclusions	41
A Post-Script.....	42
References	43
Appendix A: Mapping Objectives.....	46
Appendix B: Mapping Evidence	63

List of Tables

Table 1: Quantitative and Qualitative Indicators of Student Success	23
Table 2: Summary Statistics for Grade 9 Mathematics Mark Records and EQAO Scores by School Year, 2006-07 to 2012-13.....	35

List of Figures

Figure 1: Percentage of Students Earning Credits Required for Their Grade Level	25
Figure 2: Ontario Provincial Cohort Graduation Rates: 2003/04 to 2012/13	26
Figure 3: Percentage Point Improvement in Pass Rate of Grade 9 Compulsory Courses 2005-05 to 2012-13	27
Figure 4: Percentage Point Improvement in Pass Rate of Grade10 Compulsory Courses 2005-05 to 2012-13	27
Figure 5: Percentage Point Improvement in Course Pass Rate by Course Type 2009-10 to 2011-12	29
Figure 6: Percentages of students at levels 3 & 4 EQAO / OSSLT Assessments	30
Figure 7: New Registrants in Ontario Universities Transitioned Directly from Ontario Secondary Schools	31
Figure 8: Grade 9 Academic Mathematics Achievement 2006/07-2012/13.....	36
Figure 9: Grade 9 Applied Mathematics – Mean Achievement 2006/07 – 202/13	37

Context & Background

In Ontario, large scale school reform began in the 1990s when the Rae government introduced the Common Curriculum, announced de-streaming of the Grade 9 program, and established specific learning outcomes for Grades 3, 6, and 9, along with a set of cross-curricular learning outcomes. The Rae government also established the Royal Commission on Learning, which recommended the creation of an arm's length organization to develop and administer standardized provincial assessments.

When the Harris government replaced the Rae government in 1995, a new set of reforms was introduced. These included the creation of the Education Quality and Accountability Office (EQAO) and the subsequent introduction of standardized provincial assessments. The Harris government reforms also included: new curricula at both the elementary and secondary levels (along with prescribed learning expectations, timelines and methods of assessment); replacement of broad-based learning outcomes with detailed expectations, all of which were to be taught; the introduction of a mandatory standard provincial report card; a return to streaming in Grade 9; the replacement of the 5-year high school program with a 4-year program; new diploma requirements, including the requirement to pass the Ontario Secondary School Literacy Test ; amalgamation of school boards; the introduction of a mandatory entry-to-practice exam for teachers; large budget cuts; and new provisions mandating the amount of instructional time in a teacher's day (Earl, Freeman, Lasky, Sutherland, & Torrance, 2002).

When the McGuinty government replaced the Harris government in 2003, another new round of school reforms was introduced. The McGuinty reforms were designed to change school and classroom practices while engaging teachers in a positive way and generating public support for public education in Ontario. To accomplish this, the approach to reform maintained respect for professional knowledge and practice, and emphasized professional capacity-building and strong leadership (Levin, 2008). The McGuinty reforms revolved around two key goals: to improve literacy and numeracy achievement among elementary school students and to increase graduation rates (which had been falling) among high school students.

Since 2003, the Ontario Ministry of Education has pursued a broad strategy to improve student success, close gaps in achievement between students, and build public confidence in Ontario's publicly funded education system. The broad strategy has encompassed a wide range of initiatives and has employed a variety of policies and practices in furtherance of these three broad objectives.

The origin of the strategy that underpins the individual initiatives for grades seven to twelve can be traced in part to reactions to a four-year double-cohort study by Alan King

(King, 2002, 2003; King et al., 2004), which examined the performance of students going through the new program requirements and cited alarmingly low graduation rates within the province (68% in 2003-2004). This work also identified credit accumulation in Grade 9 and 10 as a key predictor of secondary school graduation. In subsequent research, Ferguson, Tilleczek, Boydell, Rummens, Cote, and Roth-Edney (2005) identified student disengagement as a critical component of students' early departure from secondary schools. Together, these studies motivated the development of a range of programs designed to help every Ontario student to acquire sufficient credits to graduate from secondary school (see also Institut Franco-Ontarien, 2005) and the continuation of efforts already underway such as the Ontario Skills Passport (OSP), a way for youth to show employers the skills they had acquired.

The initial Student Success / Learning to 18 strategy (SS/L18) was a broad, province-wide effort to ensure that every student was equipped with the tools to successfully complete secondary school and reach her or his post-secondary goals, including apprenticeships, matriculation to college or university, or transition to the workplace. As part of that strategy, the Ministry of Education consulted widely, implemented funding, policy and legislative changes. The Ministry also provided resources and training to encourage the development of educational opportunities that reflect regional, social, and cultural differences affecting students' learning experiences and outcomes and to foster positive student engagement with education in a manner that respects their individual needs and circumstances.

The Strategy was designed to meet five key goals focused on the secondary school system:

1. Increase graduation rate and decrease drop-out rate;
2. Support a good outcome for all students;
3. Provide students with new and relevant learning opportunities;
4. Build on students' strengths and interests; and
5. Provide students with an effective elementary to secondary school transition.

Although not explicitly expressed by its architects, the Strategy rested upon values about what schools should do for students or enable them to do, and about the relationship between those who govern Ontario's system of secondary education and those responsible for carrying out its mission:

- Schools should equip all students with the skills they will need as lifelong learners.
- Schools should accord equal respect to all secondary school programs and post-secondary destinations, including immediate post-secondary

employment, apprenticeship and other forms of training, college study, and university attendance.

- Schools should provide all students with opportunities to explore the connections between what they learn in school and future employment or study.
- Schools should credit student accomplishments and build upon those accomplishments to help students overcome the barriers that they have yet to master.
- Schools should eliminate or minimize the difficulties that students face when they make a transition from one level to the next.
- Schools should accommodate the different ways that students learn.
- Schools should actively engage all students and enable them to persist in school despite the challenges they may face (Canadian Council on Learning, 2008)

As illustrated in the SSL-18 logic model, the Strategy is presently based on six levers for educational reform including:

- a Leadership infrastructure to deliver the strategy within school boards and schools;
- programming for student engagement that meets a wide variety of learning and youth developmental needs;
- capacity -building for effective and differentiated instruction;
- focused Interventions that are designed to support schools in reaching students who may be at risk of not graduating;
- legislation and policy development in support of increased student success; and
- research, monitoring and evaluation that models evidence-based inquiry and decision making.

The Canadian Council on Learning undertook an evaluation of the SSL-18 strategy for the Ontario government in 2007-2008. It found evidence of an overall shift from an implied or presumed focus on the learner to an explicit and highly intentional focus on the learner as the focal point for the work of schools, improved communication among different system actors, increased flexibility in meeting diploma requirements, increased focus on a caring school culture, increased focus on tracking and monitoring individual students, and expanded program choices and flexibility for students.

The evaluation identified significant academic-related benefits arising from these changes, including smoother transitions from secondary school to postsecondary

education and/or work and between the elementary and secondary levels; improvements in test results; and improvements in graduation rates and decreases in drop-out rates. The evaluation also documented systemic benefits that included changes in values, dispositions or beliefs manifested across individuals and/or at various levels of the educational system, among which the most frequently cited benefits are culture change and an improved professional culture.

As mentioned earlier, Government provided additional financial and human resources to support the change process and the changes themselves. The Canadian Council on Learning's evaluation concluded that many factors were instrumental in helping to increase student success. Those factors included:

- targeted funding;
- the designation of dedicated student success staff in each school and of Student Success Leaders in each board;
- increased scheduling and funding flexibility;
- the provision of professional development opportunities;
- improved information sharing about individual students;
- increased focus at key transition points of students' educational trajectories;
- specific components of the SS/L18 Strategy that acted as foundations or rallying points for the development of supportive pedagogical practices and alternative means of assessing student progress and success;
- the increased availability of long-established programs such as cooperative education and apprenticeships; and
- the development of innovative offerings such as the Specialist High Skills Majors.

Purpose

Through a meta-analysis of existing evidence related to the strategy, available within the Ontario Ministry of Education, Directions Evidence and Policy Research Group, LLP (*Directions*) chronicled the Student Success / Learning to 18 Strategy since the 2008 external evaluation featuring evidence of impact on improving student achievement based on the following guiding questions as follows:

1. What initiatives and/or activities have been developed and/or implemented by the Student Success/Learning to 18 Branches since the

last evaluation of the strategy in 2008 to improve student achievement in Ontario secondary schools?

2. What evidence demonstrates the level of continuing impact of Student Success/Learning to 18 initiatives and/or activities in terms of improving student achievement in Ontario schools?

To those ends, using existing evidence including internal and external program evaluations, final year end reports, studies, summaries, and a variety of capacity building resources *Directions*:

- examined the available data pertinent to determining whether and in what ways Ontario's students have improved their school performance and outcomes; and
- constructed an historical account of the various initiatives, policies and practices employed by the Ministry that were intended to contribute to the improvement of student success and the reduction or elimination of achievement gaps between students.

Directions was provided with information about the secondary school initiatives pursued by the Student Achievement Division (SAD) in a variety of formats, including:

- a summary guide of all the initiatives that provided answers to questions we had presented to the Student Achievement Division about each initiative;
- a copy of the logic models for each initiative (where these were available);
- presentation and information materials used in sharing information about the initiatives;
- copies of major evaluation and/or research reports conducted on SS/L18 and/or discrete initiatives;
- artifacts specific to each initiative; and data pertaining to the impact and/or outputs of individual initiatives.

In order to make sense of the relationships among the various sources of data about an initiative and to make sense of the relationships among initiatives, *Directions* engaged in a process of data reduction to systematically document and synthesize the volume of material. *Directions* also sought to represent the material in a form that might facilitate drawing inferences. Given the volume of material and the resources available, *Directions* selected initiatives that would illustrate the broad scope of the efforts that had been made since 2003. *Directions* created a brief history of the initiatives highlighted, a chronology of them, and mapped the intended objectives of those initiatives (either

stated or inferred, against the five major goals of the Student Success/Learning to 18 Strategy).

Capturing something as dynamic as the broad range of initiatives and efforts over such a lengthy period of time is a daunting task. One must keep in mind that it is not possible to comment about every initiative or every effort. Nor is it possible in a relatively brief overview to reflect the evolutionary and responsive character of the initiatives or efforts, though it was evident that they had changed in response to the exigencies faced at particular times.

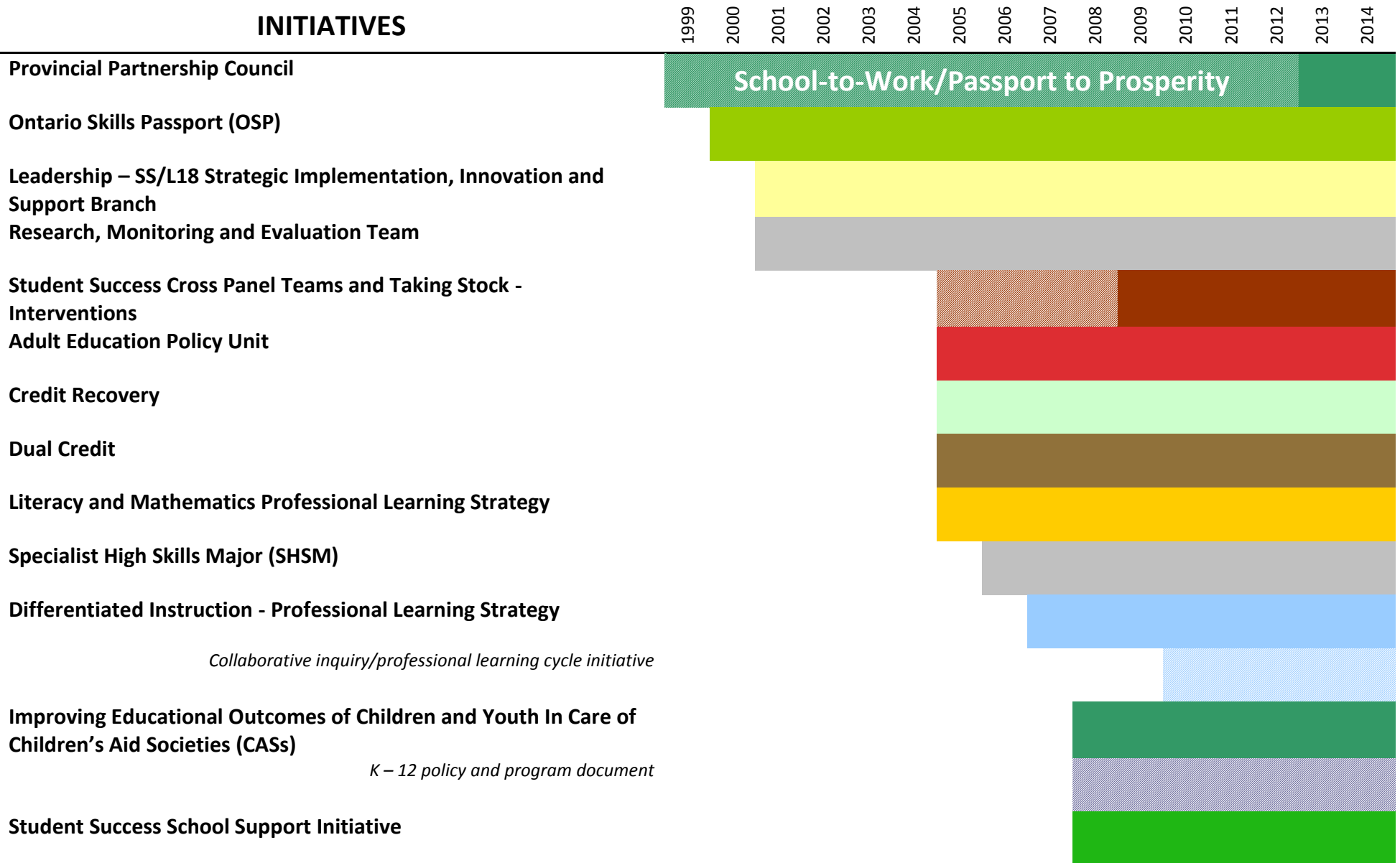
Student Achievement Division: an illustrative chronology

The initiative chronology provides a visual guide to the timing of each initiative and depicts how the scope of the initiatives undertaken under the ambit of SS/L18 has changed over the years. As such, it is a useful “first reference” at the evolution in focus of SS/L18 initiatives.

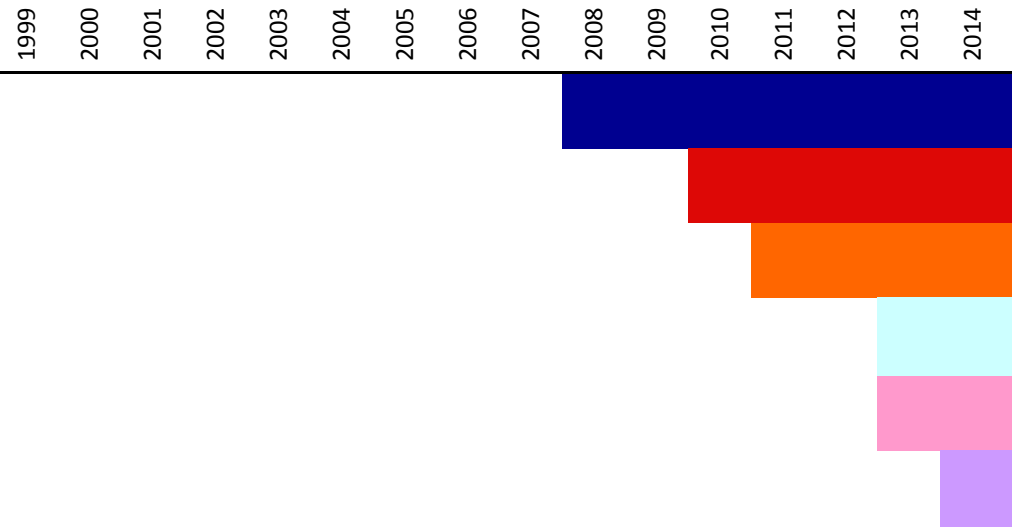
Some initiatives that have come to be integrated into SS/L18 actually predate the onset of the Strategy. Although they appear aligned to the overall SS/L18 goals, it was not clear from the available document if they were perceived as core elements of the Strategy, as complements to other initiatives, or if they were integrated out of concerns for efficiency.

The core initiatives of SS/L18 appear to have been implemented between 2005 and 2008. The chronology suggests that these were intended to close achievement gaps, support students at risk, and offer variety of learning options and pathways to ensure a successful outcome for all students.

INITIATIVES



INITIATIVES



Initiatives were ordered according to available start and end date information.

Components that were identified as stand-alone but that were incorporated into broader initiatives are denoted in italics under their corresponding initiative. Their chronology is depicted in diagonal lines of the same colour as their corresponding initiative.

Initiatives that changed names or that came to incorporate previously discrete components (such as School to Work/Passport to Prosperity) or whose implementation occurred at distinct period from initial conceptualization are represented jointly through a combination of solid lines and diagonal lines of the same colour.

Student Achievement Division: a brief history

While much of the impetus for the initiatives designed to improve student achievement and success followed the double cohort studies by Alan King (King, 2002, 2003; King et al., 2004) that cited low graduation rates within the province (68% in 2003-2004), there were initiatives generally devoted to improving secondary success that preceded what became known as Student Success/Learning to 18. One such initiative was the Passport to Prosperity. In 2012, the Passport to Prosperity strategy was transformed from a regionally focussed program working through local training boards and industry education councils to a centralized forum for supporting the transition from secondary education to employment that operates under the ambit of the Provincial Partnership Council (PPC), providing employer outreach activities to promote, expand, and deepen experiential learning opportunities for secondary students; employer recognition awards, and a forum for facilitating teacher-employer relationships and developing resources to promote experiential learning.

Another early initiative that was incorporated into the Student Achievement Division was the Ontario Skills Passport (OSP). The OSP was initiated by the Ontario government in 2000 to support school-work transitions and address youth unemployment issues by providing clear descriptions of the skill requirements for success in entry-level occupations for students planning a transition from school to work (i.e., a “Skills Passport” that would enable students to market themselves by showing employers the skills they have acquired). The Provincial Partnership Council (PPC) also advocated for the “Skills Passport” to support the government’s commitment to build a skilled labour force in order to remain competitive in a global economy.

2003-2004 was the first year of the implementation of the Student Success/Learning to 18 Strategy. The strategy had five key goals: increasing the provincial graduation rate and decreasing the drop-out rate; supporting a good outcome for all students; providing students with new and relevant learning opportunities; building on students’ strengths and interests; and providing students with an effective elementary to secondary school transition (Ungerleider, 2008, p.1). The strategy itself consisted of a number of complementary initiatives that had a specific purpose and focus. Chief among the initiatives was a complement of dedicated ‘student success’ personnel, including school based *student success teachers* and school board based *student success leaders*. The former were school based educational professionals whose responsibilities focussed on ensuring that students at risk of early school leaving were helped to address the challenges facing them so that they could remain in school and earn graduation. Most of the latter were supervisory-level school board officers reporting

to the director of education whose responsibilities included ensuring that the various initiatives carried out under the ambit of SS/L18 were implemented as intended.

While the transition from elementary to secondary school is often difficult for students, it is especially demanding for students who face academic and social challenges. Developed to provide the support for students making this change, the Grade 8 to 9 Transition Planning Initiative fostered closer collaboration between elementary and secondary schools, the creation of a welcoming secondary school atmosphere, the identification of a caring adult who would partner with students, the development of student profiles that would highlight a student's strengths, and the creation of class schedules tailored to students perceived to be at risk.

The programmatic initiatives included the provision for students who had failed a course to repeat only those learning objectives and related portions of the course that they had failed to master. This initiative, referred to as *credit recovery*, allowed students to recoup credits without having to repeat the entire course. Credit recovery was designed to engage or re-engage students with their schooling, increase course completion rates, and, in turn, increase graduation rates.

Credit rescue was an initiative designed to help students who were in danger of failing a course in which they were currently enrolled. Credit rescue was a practice by school boards to intervene in the education of students prior to their failing a course by providing extra help during lunch or after school, through homework clubs, and at specially designated days toward the end of terms. Its purpose was to decrease failure and the feelings of hopelessness that failure engenders, encouraging students to remain in school (improving retention rates), facilitating transition to the next level and improving the chances that the students would reach graduation.

The *credit recovery* and *credit rescue* initiatives were complemented by a cross-curricular focus on literacy and a focus on effective teaching and assessment in mathematics. Conducted under the label of later literacy, the initiative involved the development and provision of resources for teachers, cross-curricular meetings of teachers for the purposes of planning and implementing multi-modal approaches to literacy instruction, and the implementation of the Ontario Secondary School Literacy Course (OSSLC) for students who had not successfully passed the Ontario Secondary School Literacy Test (OSSLT). The numeracy initiative included revisions to the applied mathematics curriculum, the development of resources for teachers and attention to the assessment strategies that teachers were encouraged to use.

SS/L18 also included a suite of program options designed to engage students more fully in exploring the opportunities for study, further study and for transition to the workforce.

Specialist High Skills Majors (SHSM) permitted students to focus their secondary school studies

in a specific area of interest while still meeting the requirements for high school graduation. *Dual Credit* programs permit students enrolled in secondary school to take college or apprenticeship courses that count towards both their OSSD and post-secondary certificate, diploma, degree or apprenticeship certificate of qualification. *School-College-Work (SCWI)*, which had been supported since 1997, was expanded to all Ontario school boards and colleges. SCWI regional planning teams worked collaboratively to provide learning opportunities that would prepare secondary school students for a successful transition to post-secondary study and to the workforce.

To make more obvious the connection between what students were studying in school and the skills required in the workplace, Cooperative Education and Apprenticeship were expanded, two programs that pre-dated SS/L18. Cooperative Education opportunities included site visits, job shadowing and short placements prior to a full coop placement. The expanded apprenticeship emphasis included bringing grade 8 students to technology classrooms for workshops, specialized course scheduling to permit a student to pursue an apprenticeship, and courses tailored to the specific apprenticeship area.

Cognizant that these modifications to the secondary school program might not be sufficient for students who had become disengaged with school, there was an increased emphasis on the expansion of Alternative Programs, opportunities for students to become re-engaged with schooling outside of the regular high school classroom setting and schedule. Often such programs were conducted off-site in office-like settings where the timetables were flexible and there was significant social and emotional support for the students.

Today the Division's work is conceptualized and carried out under the ambit of six key levers of secondary reform that are intended to be responsive to needs identified through stakeholder consultation, monitoring, and internal and external evaluation. For example, the School Support Initiative was designed in response to the lessons learned from the 2008 SS/L18 that indicated that targeted supports were needed by boards that had a significant number of secondary schools where student achievement was below the provincial rate. The initiative is intended to contribute to improved student achievement by building the capacity of the principal as an instructional leader and by enhancing the instructional practices in the classroom.

Because each facet of the Division's work has its own purposes, initiatives do not fit neatly into a single category as all initiatives call for policy development, programming, monitoring, leadership, etc. Nonetheless, we have attempted to respect the way that the Division represents the initiatives in its logic model.

A Leadership Infrastructure

The main purpose of the leadership infrastructure is to build leadership capacity for improving student success and achievement at the board and school levels. To that end, the Ministry has created a leadership infrastructure to support the strategy within school boards and schools and to provide support to the initiatives that make up the Ministry's student improvement efforts. For example, teams of principals have been established on a regional basis for the purpose of developing leadership capacity with respect to research, policy and practice. The ministry's approach is to encourage collaboration and co-learning with teachers.

School-based Student Success Teams, with membership from administration, student services, special education, SHSM and Coop teachers, and classroom teachers, monitor all students in the school that are considered to be at-risk of not graduating and coordinate the implementation of strategies that best match the needs of the students they have identified. The school-based Student Success teams also develop transition plans to support the migration of students from feeder elementary schools to the secondary school. Cross Panel teams, a subgroup of the student success team with additional members from feeder elementary schools, lead the transitional work between panels.

The Student Success Leaders in each board, often supervisory officers, coordinate the activities of the Student Success teams through the school principal, monitor the assignment of student success teachers, coordinate the professional learning of the student success teachers and monitor the progress of all students considered at-risk. The SSLs work with the student success teams to plan how the funds provided to the boards (through the Grants for Student Needs and Transfer Payment Agreements) are allocated to the key initiatives and strategies the teams have chosen to improve student achievement.

The Director, Managers and Education Officers of the Student Success/Learning to 18 Strategic Implementation, Innovation and Support Branch in the Ministry of Education provide overall direction and coordination to the board and school level initiatives, often working (since 2012) through seven External Student Success Education Officers (ESSEOs) based in the Ministry's regional offices.

The School Effectiveness Framework K-12 (SEF K-12) supports educators in their pursuit of improved student achievement and well-being. The SEF K-12 is a self-assessment tool for schools. It is intended to:

- help educators identify areas of strength, areas requiring improvement and next steps.
- act as a catalyst for shared instructional leadership through collaborative conversations focused on high levels of student learning and achievement.

- promote inquiry focused on student learning, achievement and well-being that is aligned with strategy goals and effective teaching and learning practices/strategies.
- support educators in determining explicit, intentional and precise improvement planning decisions which inform monitoring and feedback for continuous improvement and future planning in relation to enhanced student learning, achievement and well-being.
- maintain communication with stakeholders to foster increased public confidence about school effectiveness.
- build coherence in and across schools and districts.

Revised in 2013, the SEF is linked to the Board Improvement Planning for Student Achievement (BIPSA) and School Improvement Planning (SIP) with a focus on students. Together the SEF and the SIP are part of a process for school board and school self-assessment, planning, implementation monitoring, and adjusting activities and actions to improve student success (Ontario Ministry of Education, 2013). The emphasis here as elsewhere in the ministry efforts is to encourage and support decisions that are informed by research and evaluation, i.e., evidence.

Programming for Student Engagement

This category includes the Ministry's development of policies and program frameworks, the monitoring of program implementation and program effectiveness, and support of adjustments to initiatives described above such as Specialist High Skills Majors, Dual Credit, Expanded Cooperative Education, Ontario Skills Passport, and the Ontario Youth Apprenticeship Program. In addition to these initiatives, programming for engagement includes Student Voice and adult education and continuing education.

The Student Voice initiative, established in 2008, was designed to encourage students to share their ideas about improving Ontario's schools and engaging students more fully in the education system. The goals of the initiative were to:

- re-engage students by learning more about factors that help them learn;
- help students develop a sense of belonging;
- help students to identify things that would strengthen their belonging academically and socially.

Student Voice consists of three main elements.

- A Minister's Student Advisory Council composed of 60 students from grades 7-12 provides advice about student engagement and school improvement.

- Also, forums with students are held regionally to learn about factors that facilitate or impede learning and engagement. Student-team teams work collaboratively and the results of student inquiry are presented to their school, school board and the ministry. Students as Researchers Conference was held in 2014.
- Finally, as a part of “SpeakUp” program, students may apply for grants for student-led projects focussed on student engagement.

Lack of integration and co-ordination in the provision of education to adult learners was identified as early as 2004 in the *Ontario Learns: Adult Education Review* (2004) [<http://www.tcu.gov.on.ca/adultedreview/report.html>]. The review made recommendations about: investment in skills development, learner pathways, accessibility and inclusion, innovation and excellence in teaching and learning, funding and accountability, and research. An Adult Education Policy Unit was established in 2005 that reports to both the Ministry of Education and the Ministry of Training, Colleges and Universities to follow up on the report’s recommendations and to develop an adult education policy framework that focusses on increasing accessibility for all adult learners, improving navigation and pathways, and developing common assessment tools and resources to ensure recognition of prior learning and transferability of credits.

Capacity -building for Effective and Differentiated Instruction

Efforts in this category are designed to support school board and school leaders through the Ministry’s Differentiated Instruction Professional Learning Strategy, Collaborative Inquiry in Literacy and Math, Middle Years Collaborative Inquiry to improve student achievement for students who may be at risk of not graduating. The focus of these supports is classroom instruction, since student success would be difficult, if not impossible to achieve, without effective instructional support. While these instruction-focussed initiatives will benefit all students, they are seen as an essential part of the strategy for those at risk of not graduating.

Focused Interventions

Under this category, the Ministry pursues interventions to complement the ones above by focussing interventions upon students at risk through Transition Planning, Student Success School Cross Panel Teams, School-Within-a-College (SWAC), Credit Recovery/Credit Rescue, Re-engagement 12 12+, School Support Initiative, Supervised Alternative Learning, and Improving Educational Outcomes for Children and Youth in Care.

Informed by research conducted by Bruce Ferguson in 2005 and 2010, the grade 8-9 Transitions initiative that was launched in 2005 has evolved to include grades 7-through 12 and was renamed the Student Success School and Cross Panel Teams initiative in 2009-10. As the name implies, the initiative is designed to provide support for smooth student transitions between elementary/intermediate and secondary schools. The initiative includes a monitoring

component, Taking Stock, to track the supports established in schools and school boards for students at risk of not being successful in their secondary school programs. The Ministry has conducted regional sessions from 2005 to the present that focus on providing instructional continuity from elementary through secondary school, education and career planning supports and opportunities in the school and classroom that focus on engaging students who have persistent achievement challenges and are thus at risk of leaving school before graduation. The initiative also seeks to align the work of Student Success School and Cross Panel Teams with the School Effectiveness Framework, Board Improvement Plan for Student Achievement and School Improvement Plans.

In 2006, as part of its effort to improve student success, the government of Ontario raised the school leaving age to 18. Although they were not proclaimed, sanctions related to non-attendance by 16 and 17 year olds were contemplated in the legislation raising the school leaving age. The Ministry of Education committed to consulting further about the sanctions and to reviewing regulation for excusing non-attending young people, called Supervised Alternative Learning for Excused Pupils (SALEP), which had not been reviewed for at least 20 years.

While small in number, 37 Ontario school boards had approximately 2,100 students in SALEP in 2007-08.¹ The programs varied across boards. Some arranged extensive programs with counselling, workshops, volunteering, training and work opportunities, while others had minimal contact with the student once the student was approved for SALEP.

During 2009 and 2010, the Ministry consulted with educators, attendance counsellors, social workers, school administrators, students, parent groups and community agency representatives. Those consulted agreed that a more structured version of SALEP could be a useful tool in maintaining a link to learning for highly disengaged students when other measures have not been successful. SALEP was replaced by Supervised Alternative Learning (SAL) in 2011, an initiative that requires planning and monitoring of students to ensure that student needs are met, including such features as a formal SAL plan, a transition plan and a board staff person who monitors the student and acts as a “caring adult” to re-engage students. The purpose of SAL is to assist students either to return to school or to proceed to their next step when they reach the age of eighteen: apprenticeship training, college, independent living, university, or the workplace. In 2011-12 academic year, 4,444 students were registered in the program.²

¹ Source: Information for the SAD Student Success Strategy Evidence of Improvement Study

² Source: 2011-12 SAL Final Roll up

Re-engagement 12 12+ was a response to recognition that a significant number (16,000)³ of students in grade 12 leave Ontario's secondary schools prior to graduation despite the fact that, having earned 24 credits, they would earn their OSSD with another year of study were they to re-engage with their schooling and receive focused support and close monitoring. Beginning 2010, school boards were required to identify and contact students who were no longer enrolled or who were still enrolled but not attending to prompt their return and reengagement with school.

Creating Pathways to Success, another of the student focussed initiatives, is a career planning program intended to help students to identify their personal and career goals and a plan to achieve them. The process focusses on four questions that students are asked to consider: Who am I? What are my opportunities? What do I want to become? What is my plan for achieving my goals?

Legislation and Policy Development

Under this category are the Ministry's efforts to develop the legislation, regulation, and policy and program memoranda necessary to ensuring coherence and the necessary authorization for the initiatives pursued (see, for example, Ontario Schools, Kindergarten to Grade 12 Policy and Program Requirements, 2011 at <http://www.edu.gov.on.ca/eng/document/policy/os/ONSchools.pdf>).

Research, Monitoring and Evaluation

The Student Achievement Division monitors initiatives and uses both internal and external evaluations to inform decision-making. In addition, the Ministry provides information to school boards about the performance of students who attend schools in the board to encourage boards to use data to inform their decision-making. The Research, Monitoring and Evaluation team is principally responsible for the design, development and coordination of large-scale collection, analysis and reporting of data from ministry school board and school sources to support the monitoring and evaluation of the effectiveness of the Student Success Learning to 18 Strategy. It has responsibility for gathering, storing and analyzing Student Achievement Division data as well as linking to data from other sources.

It is not possible to enumerate all of the various monitoring and evaluative activities that the Ministry employs. Nonetheless, the efforts of the Ministry to encourage school boards and schools to use data in their decision-making are extensive.

The Ministry of Education, Student Success Learning to 18 Implementation, Innovation and Support Branch provides Indicator Reports to School Boards that include data about many

³ Source: Information for the SAD Student Success Strategy Evidence of Improvement Study

related aspects of student performance. The reports are designed to prompt boards to use the data as a staging point for a discussion about progress over time and the kinds of initiatives and effort they might apply to improve performance. The ministry's approach to using data is consistent with its overall approach of articulating clear expectations for performance and outcomes and leaving to the judgment of the professionals working in the field how best to meet those expectations and achieve those objectives.

Ontario's student performance and graduation rates have improved

Indicators tracked

We have reviewed information about 18 initiatives/ studies using documents provided by the Ministry. Documents (PowerPoints, excel files and reports) were examined to identify information related to indicators of student success. For two initiatives (FMNI School Support and CSAP highlighted in grey in Table 1) only general information was provided that did not include any results of evaluations, reports, or data files illustrating trends in student achievement. For BIPSA and CYIC, the Ministry has provided information about the indicators being collected, how it was insufficient to determine trends in the data. However, the information provided by the Ministry indicates that as a part of the BIPSA initiative, the Ministry works with the boards to support the board's improvement planning for student achievement process based on the board's regular ongoing collection, analysis, interpretation and monitoring of student-level data (which includes all the indicators listed here and more) with a view to identify trends in strengths and needs. The Ministry's BIPSA regional teams monitor these indicators as part of their preparation for the BIPSA visits to engage in a collaborative inquiry to achieve the board's BIPSA goals. However, *Directions* did not have access to the reports to determine direction of changes observed.

Most of the initiatives use data collected by the Ministry to evaluate their success. We have identified a number of quantitative and qualitative indicators reported (or mentioned) in the documents. Quantitative indicators are based primarily on the data from the OnSIS system. These include graduation rates, enrollment, course pass rates, number and rate of credit accumulation, EQAO assessment results in Math and EQAO OSSLT assessment results (scores, % of students passing assessments) completion rate of the literature graduation requirement, mark distributions, percentage of students receiving over 80% in English mathematics and science. Some initiatives also track their program-specific enrollment, retention and graduation rates. Where possible, we have also recorded qualitative / survey based indicators mentioned in the documents (however, our list is not exhaustive as this was not the primary focus of this report). In addition to the quantitative data mentioned above, some initiatives also survey and/ or interview teachers, school staff and students to explore students' progress and learning

experiences. The documents mention a range of student outcomes such as the development of new social and learning skills, higher student engagement and self-esteem, better achievement, higher attendance, new career skills, better transition to post-secondary education. However, this information is collected inconsistently making it impossible to identify trends across time.

Table 1: Quantitative and Qualitative Indicators of Student Success

		Quantitative indicators														Qualitative or Survey based indicators (self-reported)								
		Credits accumulation (% of students reaching required # of credits)	Rate of credit completion (credit achieved vs credit attempted)/ Pass rate /credit accumulation	Graduation rate	Retention	Re-engagement	Pass rates / course/ Grades	Enrollment	EQAO Math	% literacy requirement completed/ OSSLT	% community involvement hours completed	# of registrants in ON universities/ colleges	Red Seal certification	Coop credits	# of students in OYAP/ Apprenticeship	Achievement in college/ university	Student engagement	Achievement	Confidence/ self-esteem	Other (understanding, classroom management etc)	Attendance	Career ed/career choices/ certifications	Better transition to PSE	Social skills
1	Leadership - SSL18	+		+			+		+	-				+										?
2	Adult Education	+?	+?	+?	+?									+?								?	?	?
3	Credit Recovery		+				?																	
4	DI-PLS																							
5	Dual Credit		+	+	+																			
6	FNMI Student Engagement	?	?	?	?	?				?	?													
7	FMNI School Support																							
8	Children and Youth In Care	?	?	?		?																		
9	Ontario Skills Passport																							
10	12 12+ Re-engagement Strategy		-	+/-		+				-	-													
11	Student Success School Support	+					+		+					?	?									
12	Specialist High Skills Major		+											?	?									
13	Student Voice Initiative																							
14	SAL		?																					
15	BIPSA ⁴	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
16	College Mathematics Project (ER)		+				+/-							+		+								
17	College Student Achievement Project (ER) ⁵																							
28	Who does not go to post-secondary education? (ER)								+	-				+		+								

+ = increased; - = decreased; +/- = mixed trend; T= teacher reported; S=student reported; ? =limited information was provided, insufficient to determine trends. **Highlighted in grey** = no data is available. (There was insufficient information to determine whether effects were significant)' ER – external research

⁴As a part of the BIPSA initiative, the Ministry's BIPSA regional teams monitor student-level data (which includes all the indicators listed here and more) as part of their preparation for the BIPSA visits to engage in a collaborative inquiry to achieve the board's BIPSA goals. However, *Directions* did not have access to the reports to determine the direction of changes observed.

⁵ CSAP database was not available at the time of this report

Credit accumulation

Table 1 above summarizes indicators mentioned in the documents reviewed by *Directions*. As seen in the table, credit accumulation data, the number and percentage of students who completed the number of credits required for their grade level, is the most commonly used overall indicator of student progress. Initiatives typically examine the related indicators - course pass rates, the number of credits attempted, the number of credits earned, and the rate of credit completion (by calculating a ratio of earned credits as opposed to attempted credits). The majority of initiatives (that provide this information) report that the credit completion rates have been increasing. For example, documents submitted for review concerning the Specialist High Skills Major program suggest that the credit completion rate has increased from 94.4% in 2009-10 to 95.4% in 2012-13.^{6,7} For students participating in the expanded opportunities for cooperative learning the credit completion rate has increased from 87.9% in 2008-09 to 90.2% in 2011-12.⁸ The Dual Credit program also reports a small increase in credit completion rate (from 79.1% in 2008-09 to 80.6% in 2011-12).^{9,10,11,12}

Overall in the province, credit accumulation according to grade level has been increasing between 2007-08 and 2011-12.¹³

⁶ Source: Ontario School Information System (OnSIS)

⁷ Source: Ontario School Information System (OnSIS)

⁸ Source: Ontario School Information System (OnSIS)

⁹ Source : Regional Planning Teams Student Data Reports, 2008-09

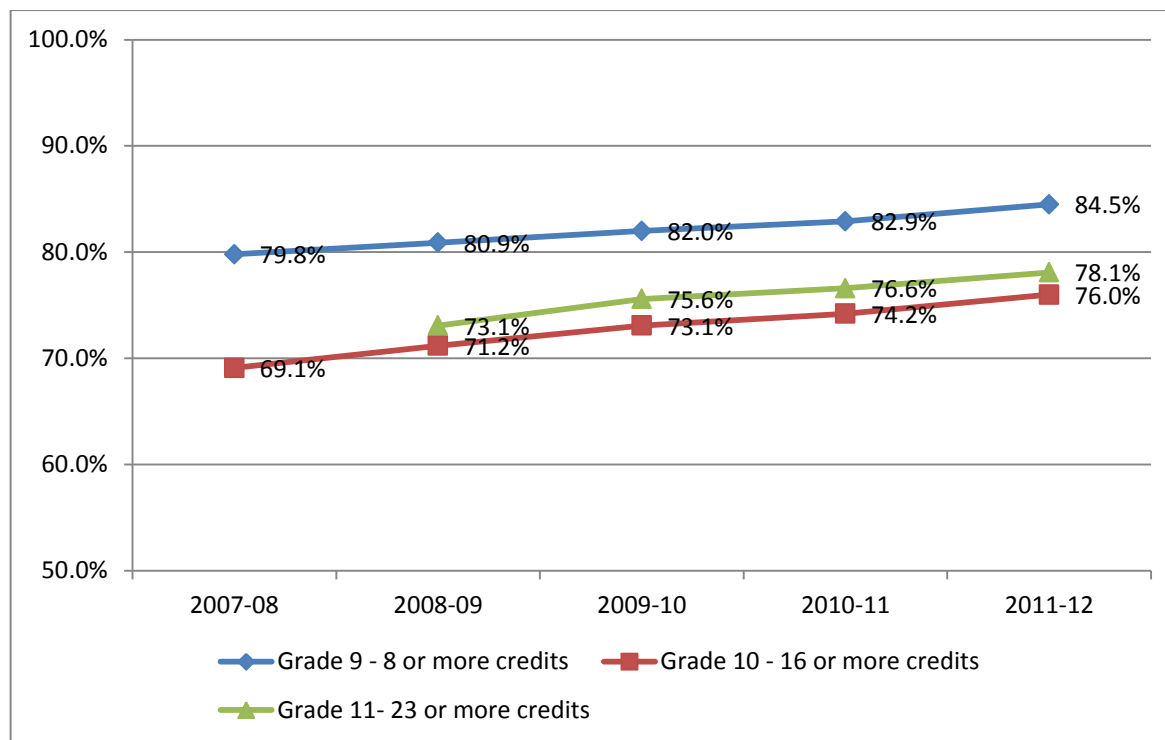
¹⁰ Source : Regional Planning Teams Student Data Reports, 2009-10

¹¹ Source: Enterprise Data Collection System (EDCS), 2010-11

¹² Source: Enterprise Data Collection System (EDCS), 2011-12

¹³ Sample DSB - School Indicator Data Summary - June 2014

Figure 1: Percentage of Students Earning Credits Required for Their Grade Level



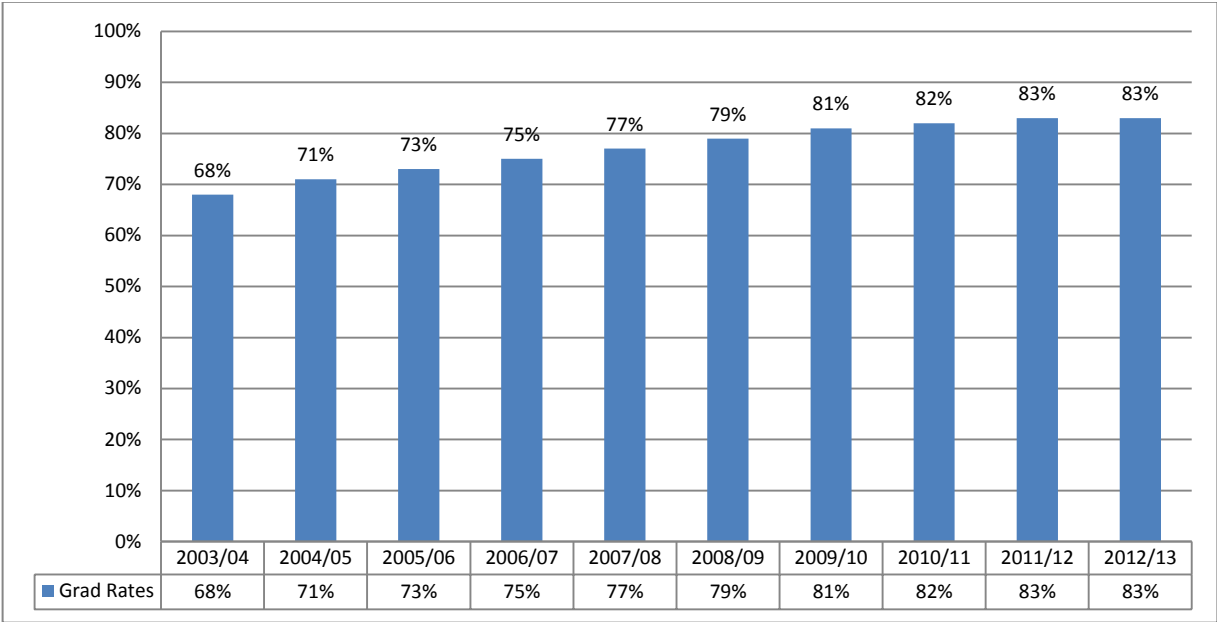
Source: Ontario School Information System (OnSIS)

Graduation rate

Since 2003, student performance and graduation rates in Ontario have improved. The section that follows focusses primarily on the graduation rate increase and the complementary increases in course pass rates.

Ontario calculates its graduation rate based on each group of students (or cohort) that enters Grade 9 in Ontario in a given year. The percentage of the original Grade 9 cohort who receives a diploma within five years is the reported graduation rate. Due to incomplete reporting of student data in the past, the Ministry uses a large, representative subset of the most reliable data to calculate the provincial cohort rate. The subset includes a majority of students and schools and is representative of the diversity of situations in Ontario, e.g., students in all regions, in all sizes of schools, English and French language, public and Catholic.

Figure 2: Ontario Provincial Cohort Graduation Rates: Publicly Funded High Schools 2003/04 to 2012/13



Source: Ontario School Information System (OnSIS)

Graduation rates in Ontario have increased steadily over the period 2003/04 to 2012/13. As noted above and represented in Figure 1 above, the graduation rate increased from 68% to 83%.

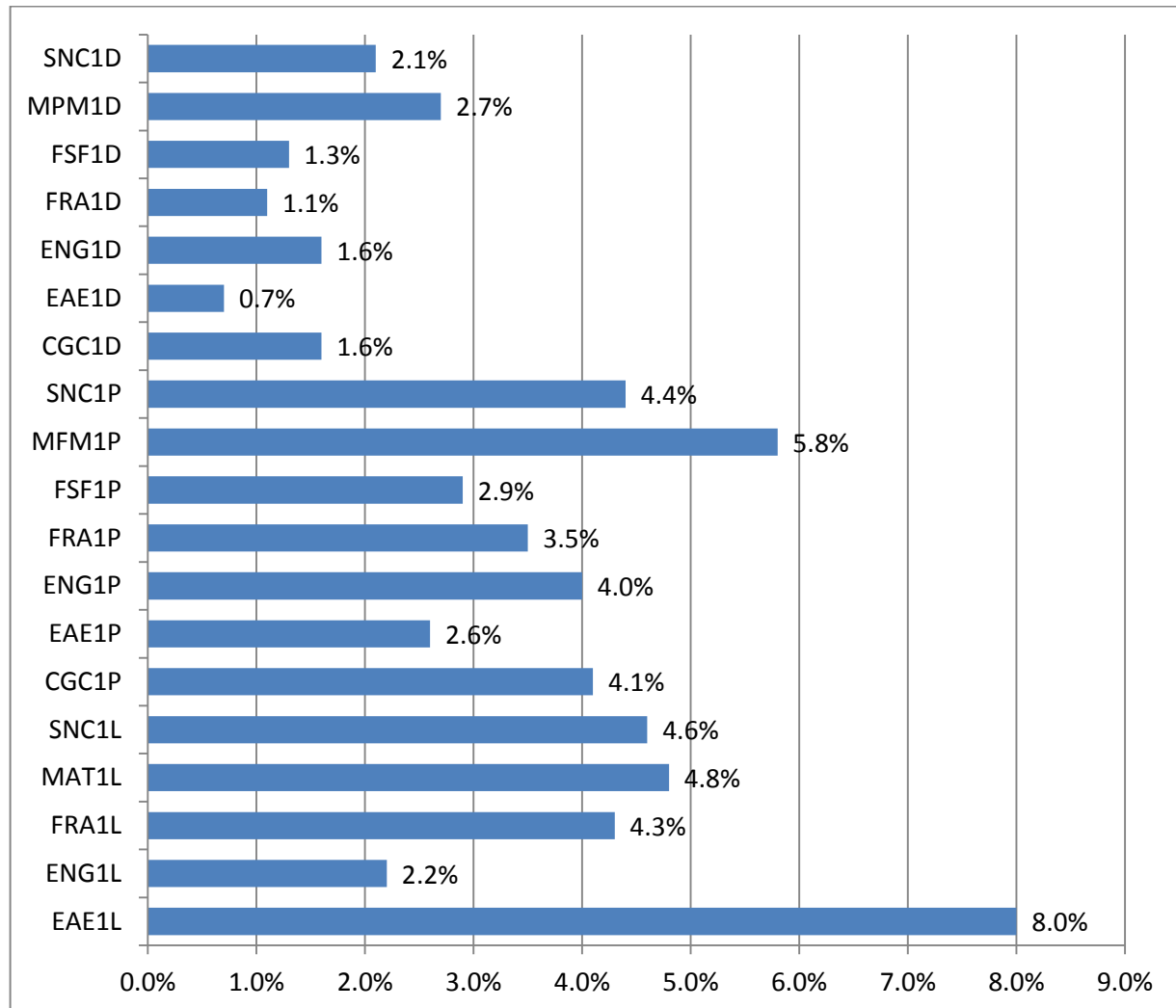
Directions confirmed the estimated provincial graduation trend using data from Statistics Canada about the percentage of 16 to 19 year olds who had successfully completed upper secondary programmes in public schools in 2008, 2009, and 2010. The proportions reported by Statistics Canada differ from those provided by the Ministry of Education because of the different methodologies employed, but the pattern of increasing graduation rates is similar (see <http://www.statcan.gc.ca/pub/81-604-x/2013001/tbl/tbla2.2-eng.htm>, <http://www.statcan.gc.ca/pub/81-604-x/2012001/tbl/tbla2.2-eng.htm> and <http://www.statcan.gc.ca/pub/81-604-x/2011001/tbl/tbla2.2-eng.htm>)

Complementary Indicators of Improvement

Ontario monitors the percentage point improvement in pass rates for compulsory courses at the grade 9 (Figure 3) and grade 10 level (Source: Ontario School Information System (OnSIS))

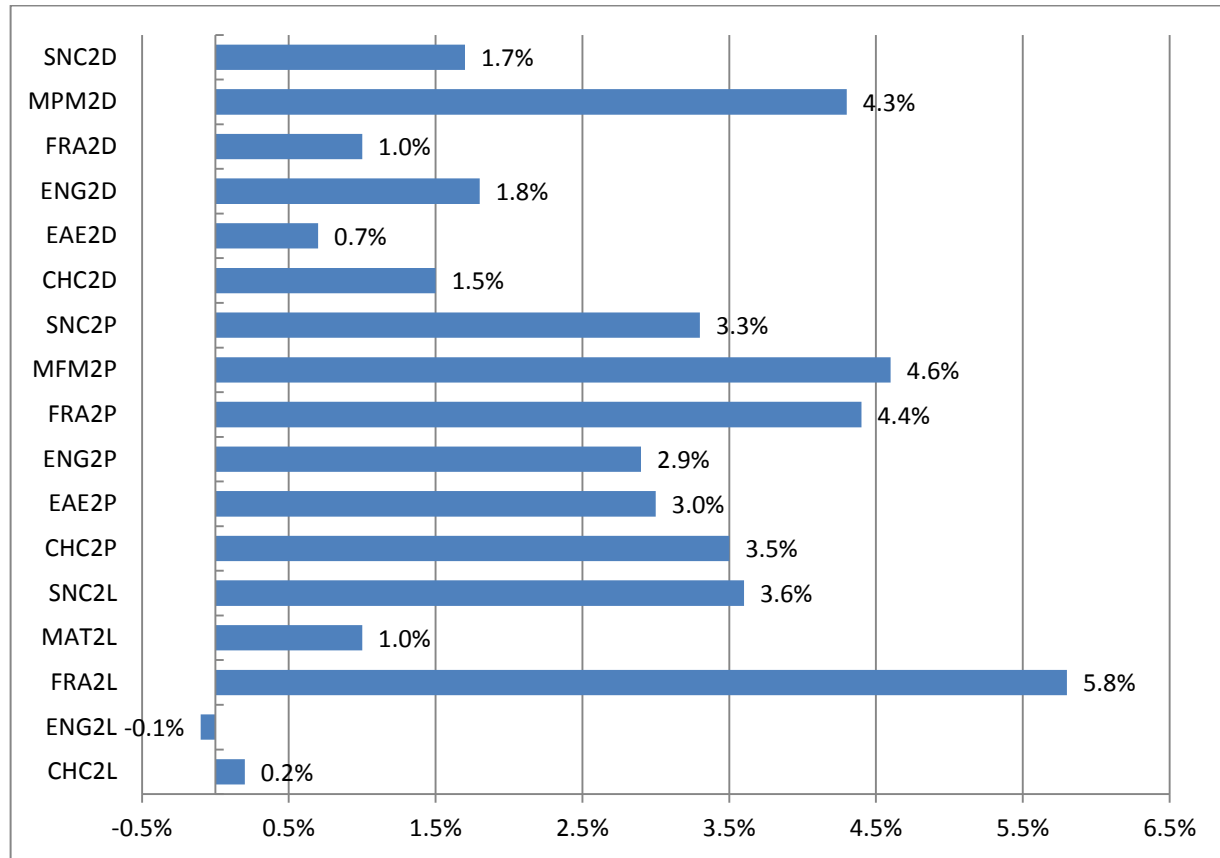
Figure 4). There has been consistent improvement in almost all compulsory course pass rates over the course of the same period. Locally developed and applied courses saw a higher increase in pass rates than academic and open courses (Figure 5- 1.9% and 1.7 respectively between 2009-10 and 2011-12 academic years for Grade 10 and 2.8% and 2% for Grade 9).

Figure 3: Percentage Point Improvement in Pass Rate of Grade 9 Compulsory Courses 2006-07 to 2012-13



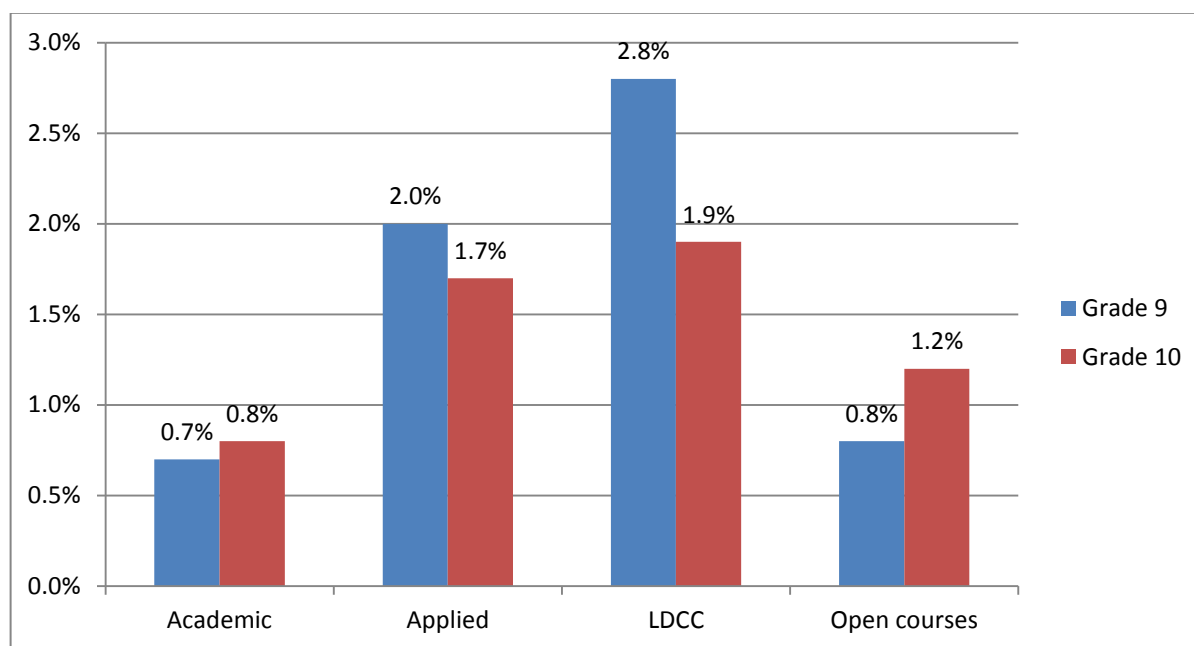
Source: Ontario School Information System (OnSIS)

**Figure 4: Percentage Point Improvement in Pass Rate of Grade10 Compulsory Courses
2006-07 to 2012-13**



Source: Ontario School Information System (OnSIS)

Figure 5: Percentage Point Improvement in Course Pass Rate by Course Type 2009-10 to 2011-12



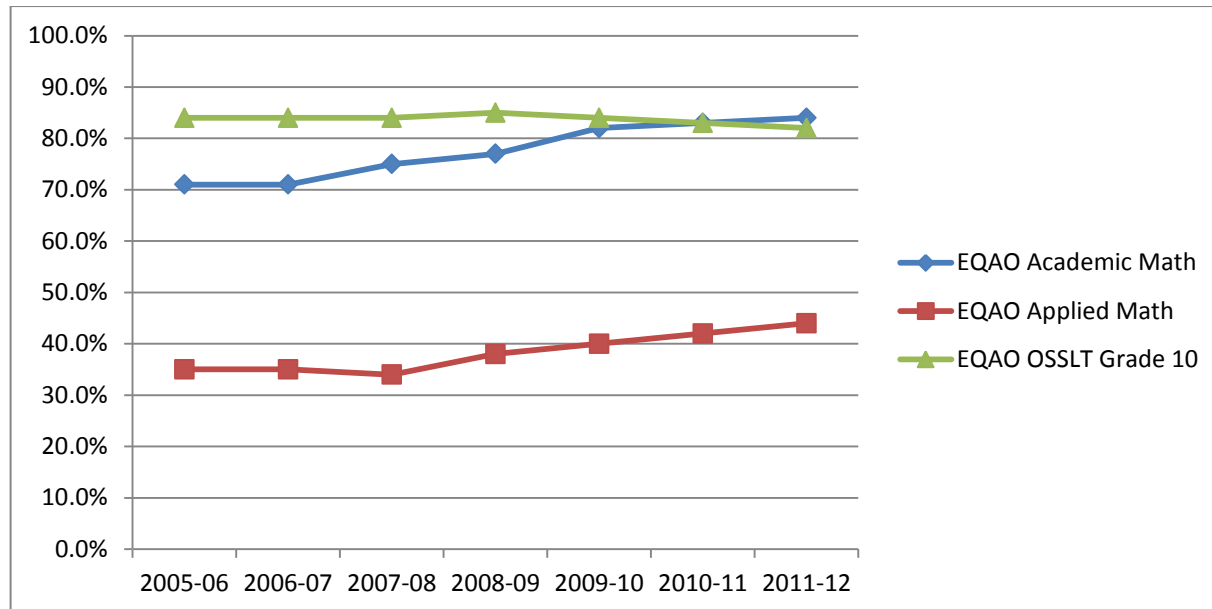
Source: Ontario School Information System (OnSIS)

Performance on EQAO assessments

Ontario students seem to be performing better on EQAO assessments in applied and academic mathematics¹⁴ as the percentage of students earning levels 3 and 4 on these assessments increased by 9 and 13 percent respectively between 2005-06 and 2011-12 academic years. However, there was a 2 percent decrease in the percentages of students who successfully completed the OSSLT assessment during the same time period.

¹⁴ Sample DSB - School Indicator Data Summary - June 2014

Figure 6: Percentages of students at levels 3 & 4 EQAO / OSSLT Assessments



Source: Education Quality and Accountability Office (EQAO)

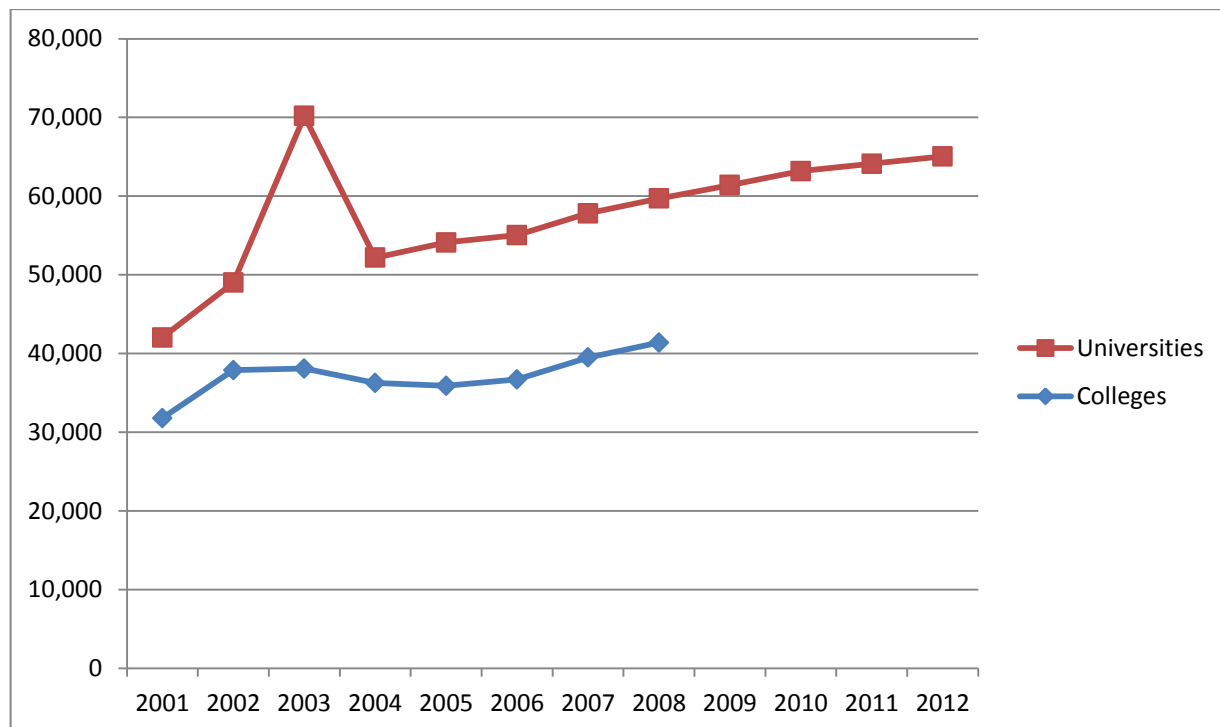
Transition to Post-Secondary Education

An external evaluation *Who Doesn't Go to Post-Secondary Education* has examined the characteristics of youth who do or do not pursue PSE directly after secondary school.¹⁵ The report compared the number of new registrants in Ontario colleges and universities who transitioned directly from Ontario secondary schools between 1999 and 2008. For university registrants, King et al.'s report used data collected by Council of Ontario Universities that is now available at www.cou.on.ca. Since 2008, COU has expanded the data publishing information to include the 2009-2012 academic years.¹⁶ Figure 7 presents the number of registrants in Ontario Universities from Ontario secondary schools as reported by the Council of Ontario Universities. The results are presented in the chart below, indicating a steady increase in students transitioning from Ontario secondary schools to universities between 2004 and 2012. A similar trend (reported by King et al) was observed for new registrants in Ontario colleges who transition directly from secondary schools.

¹⁵ King, A., Warren, W, King, M., Brook, J., & Kocher, P. (2009). *Who doesn't go to post-secondary education*> Final report of findings for Colleges Ontario Collaborative Research Project.

¹⁶ Council of Ontario Universities. (2013). *Application Statistics 2012*. Toronto : Council of Ontario Universities. Available online at : <http://cou.on.ca/publications/reports/pdfs/application-statistics-2012>

Figure 7: New Registrants in Ontario Universities Transitioned Directly from Ontario Secondary Schools



Source: Council of Ontario Universities; King et al. (2009)

As is clear from the data presented above, student performance in Ontario has improved steadily over time. A great proportion of students are enrolling in more challenging courses in which the pass rates are increasing, a general trend in improvement that reflects an increase in the graduation rate over the same period, more students seem to be meeting the credit accumulation requirements, and the number of students transitioning from secondary schools to Ontario colleges and universities is increasing.

Attributing these improvements to the suite of initiatives that Ontario has pursued would be to commit the logical fallacy *post hoc ergo propter hoc* [after this, therefore because of this]. In other words, it is fallacious to believe that simply because improvements have occurred after the introduction of various improvement initiatives that the improvements have necessarily been caused by those improvements. Although we cannot flatly state that the initiatives have **caused** the improvements, we can eliminate other plausible reasons for the improvements.

Eliminating Plausible Alternative Explanations for Student Success

There are three plausible reasons for the improvement in performance and graduation rates.

- There has been no true improvement because the differences noted over time are simply the results of measurement error.
- There has been improvement, but it is the result of changes in the student population.
- The improvement is not genuine because standards have declined over time.

Are the apparent successes a product of measurement error?

Might the results obtained in Ontario over the course of the period reflect measurement error, the difference between the value observed and its true value? All measurements are imprecise. In statistics, an error is not a "mistake". Variability is an inherent part of things being measured and of the measurement process. While we cannot rule out measurement error in any given year, the consistency of the results over time suggest that there has been improvement independent of any measurement error in any given year.

Have demographic changes produced the illusion of success?

Graduation rates and other measures can improve as a consequence of changes in the student population. Students living in communities with extreme poverty and social dislocation often perform poorly. Initiatives introduced in those communities can appear to succeed not because of the initiatives themselves, but because the nature of the community and its population have changed. Gentrification may have introduced more affluent and better performing students into the community whose performance contributes to the appearance of improvement in mean student scores. Was this the case in Ontario?

Did the Ontario student population change? Is Ontario attracting sufficient new high achieving students to change the achievement statistics?

Despite the fact that Canada's immigration policy favours individuals with stronger educational backgrounds, we know that students born outside of Canada and students whose first languages are neither English nor French who attend English or French language schools can face educational challenges. Many students meet these challenges and adapt well to schooling in the Canadian context. For example, young immigrants are more likely than their Canadian-born counterparts to go to university (Thiessen, 2007a). Immigrants for whom English is a second language show especially high rates of university attendance (Dinovitzer, Hagan, & Parker, 2003). Visible minority immigrants in particular are less likely to drop out of high school, more likely to take pre-university math courses in high school, and achieve higher grades in math than Canadian-born students (Thiessen, 2007b).

Despite these successes, many immigrant students face persistent difficulties with language and literacy, lagging behind in reading achievement and performing less well than Canadian-born students on literacy assessments (Gluszynski & Dhawan-Biswal, 2008). A study commissioned by the Canadian Council on Learning and Citizenship and Immigration Canada examined the educational pathways and academic performance of students in Canada's main immigrant destinations (Toronto, Montreal, Vancouver) who do not speak English or French at home (McAndrew et al., 2009). This work revealed large differences between different groups of immigrants. For example, Chinese speaking immigrant youth tend to do at least as well (and often better) than Canadian-born youth in terms of high school graduation rates, grades, and enrolment in the courses normally required for university admission. In contrast, other immigrant groups, such as Spanish, Creole or Vietnamese speaking groups, perform well below their Canadian-born counterparts on all three of these measures.

According to information supplied by the Ministry of Education, Education Statistics and Analysis Branch, the proportion of Ontario students born outside of Canada increased slightly between 2006-07 and 2011-12.

- In 2006-07, 7.98% of elementary school students were reported by school boards as not being born in Canada. In 2011-12, this percentage increased by 0.48 percentage points to 8.46%.
- In 2006-07, 12.58% of students in secondary schools were reported by school boards as not being born in Canada. In 2011-12, this percentage increased by 0.39 percentage points to 12.97%.

Moreover, the proportion of students whose first language spoken is neither English nor French also increased during the same period:

- In 2006-07, 15.01% of students in elementary schools were reported by school boards as having a 1st language spoken that was not English or French. In 2011-12, this percentage increased by 1.50 percentage points to 16.51%.
- In 2006-07, 12.66% of secondary school students were reported by school boards as having a 1st language spoken that was not English or French. In 2011-12, this percentage increased by 3.07 percentage points to 15.73%.

In our view, the changes in student composition over the course of the period in question are not sufficient to account for the improvements observed in graduation rates, pass rates, and EQAO mathematics performance.

Have educational standards declined?

It is not very difficult to create the impression of improvement in student achievement if the standards for judging achievement have declined. While it is difficult to imagine a system-wide deterioration in educational standards over the period of interest to this study, one might argue that the effect of the suite of efforts to improve student outcomes was to signal educators that, rather than expend effort in attempts to improve achievement, that they simply should allow standards to decline, creating the illusion of improvement where none exists and diminishing the meaning attached to the marks assigned to students for their work.

To eliminate this plausible alternative to true improvement in student performance, we asked the Education Statistics and Analysis Branch to examine the high school grades assigned by teachers to students enrolled in mathematics over the period and an external benchmark for student achievement: student scores on the annual assessment of mathematics conducted by the Educational Quality and Accountability Office (EQAO) at the grade 9 level. EQAO assessments provide a consistent external source for the measurement of achievement over time. By understanding how this relationship has (or has not) changed provides a context for the interpretation of improvement in the indicators of student success.

Methodology

Because students' patterns of meeting course requirements are very dissimilar, it is difficult to calculate a meaningful grade point average. Therefore, we have used the marks assigned by teachers for grade 9 academic and applied mathematics courses for school years 2006-07 through 2012-13 as a proxy for overall student performance in secondary school. We selected these marks because all students must enrol in either academic or applied mathematics in order to earn graduation. Where more than one record for a student was present, the mark associated with the course with the earliest start date was used. In cases where more than one mark record was found for a course with the same start date, the higher mark was kept, as the majority of duplicate records showed one zero mark and one non-zero mark.

We selected for an external reference student scores for both EQAO's Grade 9 academic and applied mathematics assessments for school years 2006-07 through 2012-13. Where more than one EQAO result was present, the result associated with an earlier term was kept in order to align with the approach applied to the mark records. In cases where more than one result was found for the earliest term, the higher result was kept in order to align with the approach applied to mark records.

For each student, the grade 9 mathematics mark and the EQAO score were joined for each school year from 2006-07 to 2012-13. Records in which the same course (Applied or Academic) was indicated for both the mark and EQAO result were retained. Among student records with both a mark record and EQAO result, 99.9% (1,024,544 of 1,025,259) showed the same course for both their mark record and EQAO result and were subject to analysis.

Using the joined data, summary statistics (means and standard errors) derived and compared for each combination of: academic and applied courses, mark records and EQAO scores, and school years. The EQAO scores range from a low of Level 1 to a high of Level 4 and include five subcategories with each level (.1, .3, .5, .7, and .9) indicating student performance within the levels (EQAO, 2013, p.11).

Results

Table 2 contains the summary statistics for grade 9 mark records and EQAO scores of students enrolled in academic and applied mathematics for the school years 2006-07 to 2012-13.

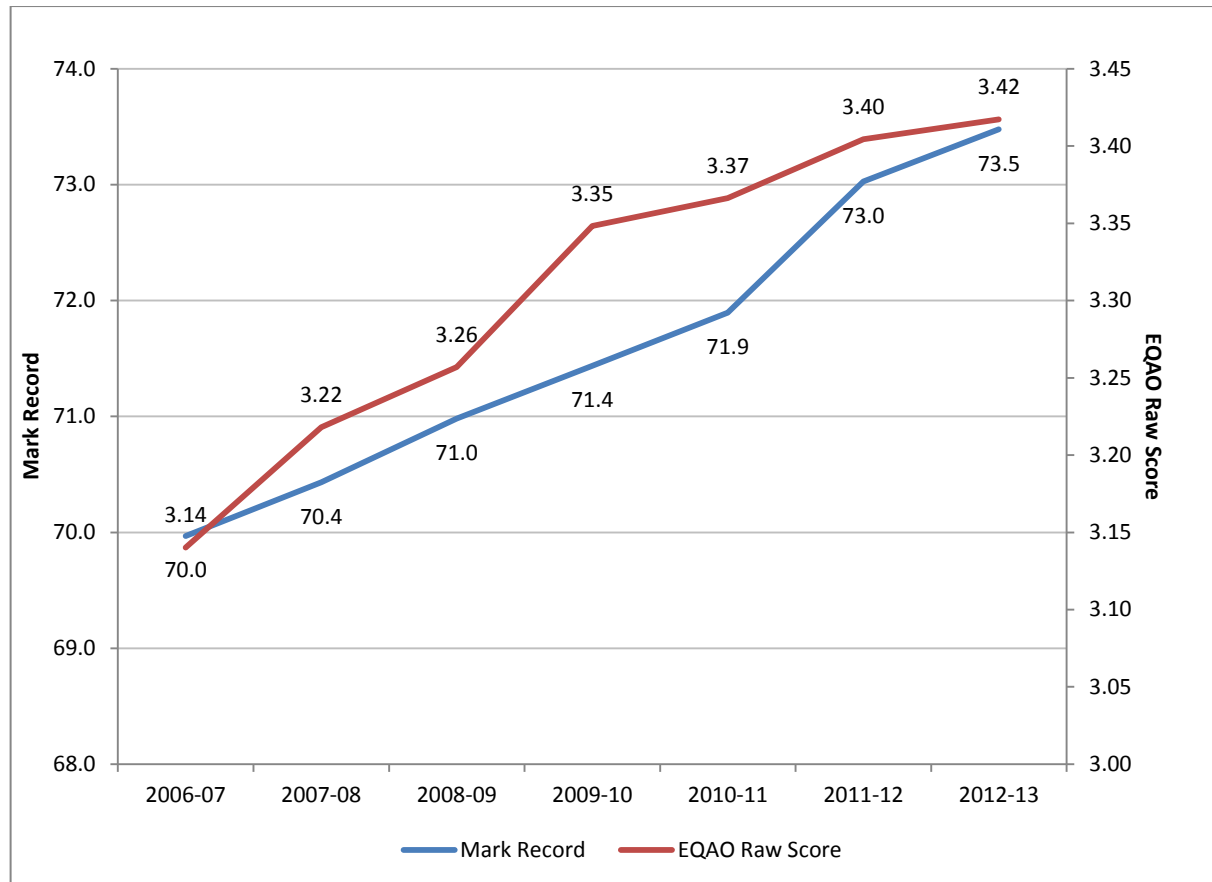
Table 2: Summary Statistics for Grade 9 Mathematics Mark Records and EQAO Scores by School Year, 2006-07 to 2012-13

Academic Course		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	Mean	70.0	70.4	71.0	71.4	71.9	73.0	73.5
Mark Record	S.E.	15.5	15.4	15.3	15.1	15.2	15.0	14.9
	Mean	3.14	3.22	3.26	3.35	3.37	3.40	3.42
EQAO	S.E.	0.71	0.68	0.67	0.63	0.64	0.64	0.64
Applied Course		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	Mean	62.3	62.5	63.3	63.9	64.7	65.2	65.7
Mark Record	S.E.	15.6	15.6	15.5	15.4	15.2	15.3	15.5
	Mean	2.63	2.58	2.67	2.72	2.75	2.81	2.80
EQAO	S.E.	0.93	0.94	0.93	0.92	0.91	0.90	0.90

Source: Education Quality and Accountability Office (EQAO)

These data are also portrayed graphically in the figures that follow. Figure 8 contains the results for students enrolled in Grade 9 academic mathematics.

Figure 8: Grade 9 Academic Mathematics Achievement 2006/07-2012/13



Source: Education Quality and Accountability Office (EQAO)

The mean mark of students in grade 9 academic mathematics has increased over time and the standard deviation of the mean has decreased.

The mean student score on the EQAO Grade 9 Assessment of Mathematics - Academic Course has increased over time and the standard errors of the mean have declined.

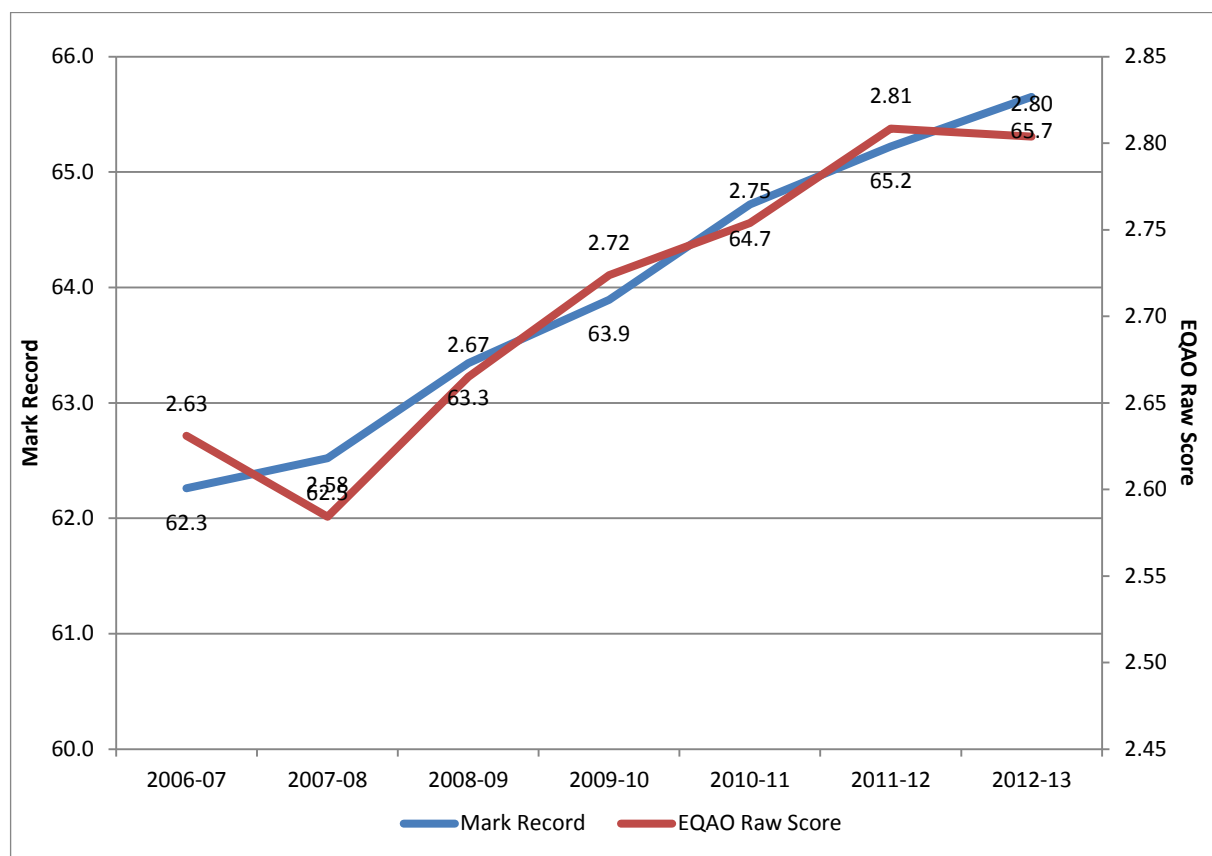
The correlation between marks and EQAO scores for grade 9 academic students has increased steadily from 0.73 in 2006-07 to 0.77 in 2012-13.

Figure 9 contains the results for students enrolled in Grade 9 applied mathematics. The figure indicates that:

- The mean mark of students in grade 9 applied mathematics has increased over time and the standard errors of the mean have declined.

- The mean student score on the EQAO grade 9 assessment in applied mathematics has increased over time and the standard errors of the mean have declined.
- The correlation between marks and EQAO scores for grade 9 students in the applied mathematics course has increased steadily from 0.61 in 2006-07 to 0.71 in 2012-13.

Figure 9: Grade 9 Applied Mathematics – Mean Achievement 2006/07 – 2012/13



Source: Education Quality and Accountability Office (EQAO)

Both student marks and EQAO scores have increased over the period from 2006-07 to 2012-13. Moreover, the increased correlations between EQAO mathematics scores and mathematics marks indicate a closer connection of student marks and EQAO raw scores. These trends indicate that the changes in the marks over time likely reflect true improvement in student abilities as assessed by the EQAO and not a diminution of the standards teachers apply to the judgement of student performance.

The high levels of student achievement in Ontario are evident in other external assessments, though, unlike the assessments conducted by EQAO, they are not aligned closely with the

Ontario provincial curriculum. Ontario grade 8 students participating in the 2010 PCAP (Pan Canadian Achievement Program) Mathematics Assessment earned scores above the Canadian average, mirroring similar results from 2007 (Council of Ministers of Education Canada, 2010). Data from the Programme for International Student Assessment performance of 15 year old students in mathematics, reading and science indicate that Ontario students perform consistently at the average performance for all of Canada (Brochu, Deussing, Houme, & Chuy, 2012).

Taken together, we have confidence that the increase in student graduate rates in Ontario reflects a true improvement in student outcomes and not a decline in standards. Indeed, improvements in mathematics learning may not be fully reflected in the course marks.

Observations

Coherence

Over the course of the six years since the first evaluation of SS/L18, the Ministry has brought increasing coherence to its efforts including the creation of the Student Achievement Division. The use of the six key components seems a useful way to represent the Ministry's student achievement efforts.

Logic

Logic models - graphical representation of the programs and services provided within a strategy, and the intended outputs and outcomes produced as a consequence of the programs and services – are helpful in determining whether the underlying theory of change is sound and in identifying indicators for demonstrating success. At the time of the first evaluation of SS/L18, there was no logic model for either the strategy as a whole or of the individual initiatives that were carried out under the ambit of SS/L18. Since that time, the Division appears to have made increasing use and effective use of logic models.

Literature

That most of the initiatives pursued by the Ministry cite pertinent research literature is admirable. However, it is often difficult to determine how the literature cited was identified, what other literature was considered, why the particular literature cited was selected, and what specific use was made of the material cited. While it is likely that those involved in the development of the initiatives could provide such information, its absence is noticeable and raises questions about the evidentiary process used to inform their development.

Complementarity of Effort and Objectives

Based upon what is a review of the documentary evidence limited by time and resources, there appears to be complementarity among the Ministry's goals and among the initiatives pursued toward those goals. We created a map of the various initiatives and the activities associated with the initiatives in relation to the five key goals of Student Success Learning to 18:

- Increase graduation rate and decrease drop-out rate;
- Support a good outcome for all students;
- Provide students with new and relevant learning opportunities;
- Build on students' strengths and interests; and
- Provide students with an effective elementary to secondary school transition.

Our primary purpose was to determine whether the alignment between the initiatives/activities and the five key goals was explicitly stated or whether we had to infer the alignment. Appendix A contains the map.

The exercise made more obvious the fact that the five key goals of student success are not, in fact, all goals – but a mix of goals, objectives and strategies. Supporting a good outcome for all students is at a higher level of generality than increasing the graduation rate and decreasing the drop-out rate. Building on students' strengths and interests, providing students with new and relevant learning opportunities, and providing students with an effective elementary to secondary school transition are strategies. Moreover, in our attempt to align initiatives/activities to the five key goals we had to infer the alignment more frequently than was explicitly stated in the material we reviewed. In several cases, we were uncertain about the alignment.

Our analysis also led us to the conclusion that initiatives that are meant to support pedagogical development, growth in leadership capacity (at the school administrative level) or that are more generally dedicated to supporting SS/L18 (SSL and SST roles, policy instruments, funding planning, research and data monitoring) are harder to directly link to the overall SS/L18 goals. Our analysis suggests that the linkages between these initiatives and SS/L18 will be obvious to those within Ministry and certainly within the higher echelons of the educational structure in Ontario, but that they might be less visible for teachers and school administrators as well as for those "on the outside". As illustrated by our objectives classification in Appendix B, we believe it would be beneficial to have a clearer articulation of the specific needs that these initiatives address, within the overall context of SS/L18, and in particular of the linkages between these initiatives and the specific, intended goals of SS/L18.

Monitoring and Evaluation

Because of the large volume of material, *Directions* created a map of the types of evidence that led to an initiative or activity (“Foundational Evidence”), the evidence that has been tracked over the course of an initiative or activity to check how it was doing (“Monitoring Evidence”) and the extent to which outputs and / or outcomes related to an initiative or activity were assessed (the map produced can be found in Appendix B). The primary source for the map was the logic models for the initiatives or activities supplemented by other available documentation. Logic modeling guides the Student Achievement Division’s *Learning as we go* stance/ developmental evaluation for internal accountability to ascertain whether the work of the division is the best thing for students.

Time did not permit a close examination of the individual evaluation reports, the numerous Excel-based data and the various PowerPoint decks provided. Thus, we used the designation ND (not determined) to indicate that we were unable to make a definitive determination that the evidence referred to in the logic models had been tracked or whether there had been an “intention to track.” When we were uncertain about whether the immediate, intermediate, and long-term outcomes were being monitored, we also used the designation ND. We suspect that the approach taken was conservative, under-reporting the monitoring and evaluation that had occurred.

Directions compiled a list of the most common indicators that are being tracked by the initiatives/ programs as way to assess their success. Based on a brief examination of the documents provided, it seems evident that most evaluations were not conceived during the planning process, but occurred during or after implementation. The initiatives seem to rely upon data collected by the Ministry of Education rather than data gathered independently. Most additional data collection is undertaken at a single point in time with no cross year comparisons. None of the initiatives have been explored using an experimental approach. The information provided in documents was insufficient to determine whether the observed trends were significant. Several initiatives have templates and procedures for ongoing data collection, but relatively few initiatives have submitted annual reports or data files. Where data were provided, the data presentations made cross-year comparisons difficult.

Notwithstanding these limitations, we can say with confidence that the use of evidence to inform decision-making has been an important facet of the ministry’s student success work, it has made significant strides in this area over the last decade by developing capacity and promoting the use of indicators. The school board reports prepared by the Student Achievement Division that provide data about student performance and outcomes on an annual basis are a good example of the latter. The support the Division provides for school board planning, monitoring and evaluation and leadership development is an example of the

former. In addition, the Division has conducted internal evaluations or commissioned external ones. The latter category includes studies of student absenteeism (Bennett, 2010; Bennett, 2012), the achievement of first-year college students in Ontario (Orpwood, et. al., 2011), early school leavers (Ferguson, et. al. date), differentiated instruction (Whitley, et. al., 2012), and transition from elementary to secondary school (Tilleczek, 2010). Also external reports were conducted to explore student engagement (Willms, et. al., 2009; Willms & Friesen, 2012; Dunleavy, et. al. 2012).

Tentative Conclusions

On the basis of our limited study, we can say with some confidence that student outcomes and student performances in Ontario have continued to improve since 2008. The internal and external evidence pertinent to this point was consistent with this conclusion. We also eliminated, as best we could, the possibility – remote as it was – that the entire student population in Ontario is very different from what it was in 2008. The consistency in the improvement noted over the time period gives us confidence that the improvement is genuine and not the product of measurement error.

There are more students graduating from Ontario’s secondary schools than would have been the case in the absence of the efforts made by the ministry of education over the past decade. In fact, we have reason to believe that improvement in the graduation rate is understated. We are cognizant of efforts to encourage students who have left school prior to graduation to return to school and earn graduation.

In its 2008 report, the Canadian Council on Learning described the tendency to give initiatives “names” (Credit Rescue, Credit Recovery, Specialist High Skills Major, Grade 8 to 9 Transition Initiative, Dual Credit, School-College-Work, Later Literacy, etc.) One respondent made the trenchant observation that the individual “things with names” were less important than the overall shift in attitude toward the learner and the learner’s success. There has been no apparent diminution of things with names and acronyms. The tendency to name initiatives leads to the perception that each initiative is distinct from others whose purposes are the same or complementary. Although time and resources did not permit us to explore the issue, we wonder whether the tendency toward “things with names” was helpful or whether it leads to the overall focus becoming fragmented, resulting in initiatives that are seen as additive to the school’s work rather than further integrating and focussing that work.

The limited time and resources available to *Directions* for this brief study was insufficient to examine how the initiatives that were developed prior to or in conjunction with SS/L18 have evolved, whether they remain relevant, or whether they continue to reach the intended

student population, etc. Nor was it possible for us to assess the specific impact of those initiatives beginning in or after 2008-2009. We did not have the opportunity to explore with ministry staff how distinguishing among goals, objectives and strategies might make the linkages between the initiatives/activities it is pursuing and the outcomes it seeks more explicit.

The limited scope of this study did not enable *Directions* to provide a systematic and detailed review of the operation and achievements of the Student Achievement Division to ensure that its activities are aligned with Ministry priorities, it is optimally organized to carry out its responsibilities, that the activities pursued under its ambit are effective and efficient, or that those activities are having the desired long-term impact on Ontario's students.

Notwithstanding these limitations, we believe that the ministry through the work of its Student Achievement Division has created a suite of initiatives and engaged in a broad range of activities that have contributed to the gains in student performance and graduation rates that have been achieved.

A Post-Script

It is obvious that, each year, new students will enter school in Ontario, many of whom will face challenges that they must overcome in order to achieve success in school. The implication is that a focus on helping students to overcome the challenges they face that may prevent obstacles to their success is a problem that does not go away. It requires constant and consistent attention. In addition to the change in students, teachers, school administrators and system leaders specifically responsible for student success will change frequently, requiring careful attention to continuity of expertise and knowledge.

The efforts of the Student Achievement Division and the initiatives launched under its auspices have established a foundation for ensuring higher levels of success. But, if the efforts falter or the initiatives fail to change in response to changes in the student population and the challenges they face, the successes achieved will not be sustained.

Thus, it was encouraging to be able to appreciate the changes that have occurred in the way the ministry has addressed the challenges to student success. These include a more explicit explanation of how initiatives are intended to benefit students and how those initiatives work, closer monitoring and modification of the initiatives, and more and more focussed evaluation of the initiatives to inform planning and practice.

References

- Bennett, K. (2010). *Attendance Management Study*. Offord Centre for Child Studies, McMaster University
- Bennett, K. (2012). *Problematic Student Absenteeism Study*. Offord Centre for Child Studies, McMaster University.
- Brochu, P. Deussing, M.A., Houme, K., & Chuy, M. (2012). *Measuring up: Canadian results of the OECD PISA study*. Toronto: Council of Ministers of Education Canada
- Canadian Council on Learning. (2008). *Evaluation of the Ontario Ministry of Education's Student Success / Learning to 18 Strategy: Final report*. Ontario Ministry of Education. Retrieved from <http://www.edu.gov.on.ca/eng/teachers/studentssuccess/results.html>
- Council of ministers of Education Canada. (2010). *PCAP-2010: Report on the pan-Canadian assessment of mathematics, science, and reading*. Retrieved from [http://www.cmec.ca/429/Programs-and-Initiatives/Assessment/Pan-Canadian-Assessment-Program-\(PCAP\)/PCAP-2010/Public-Report/index.html](http://www.cmec.ca/429/Programs-and-Initiatives/Assessment/Pan-Canadian-Assessment-Program-(PCAP)/PCAP-2010/Public-Report/index.html).
- Council of Ontario Universities. (2013). *Application Statistics 2012*. Toronto: Council of Ontario Universities. Récupéré de <http://cou.on.ca/publications/reports/pdfs/application-statistics-2012>
- Dinovitzer, R., Hagan, J., & Parker, P. (2003). Choice and circumstance: Social capital and planful competence in the attainments of immigrant youth. *Canadian Journal of Sociology*, 28, 463-488.
- Dunleavy, J., Willms, J.D., Milton, P., & Friesen, S. (2012). What did you do in school today? The relationship between student engagement and academic outcomes. Canadian Education Association (CEA).
- Dunleavy, J., Milton, P., & Willms, J. D. (2012). What did you do in school today: Trends in intellectual engagement. Canadian Education Association (CEA).
- Ferguson, B., Tilleczek, K., Boydell, K., Rummens, J. A., Cote, D., & Roth-Edney, D. (2005). *Early school leavers: Understanding the lived reality of student disengagement from secondary school*. Final report submitted by Community Health Systems Resource Group and The Hospital for Sick Children to the Ontario Ministry of Education, May 30, 2005. Retrieved from <http://www.edu.gov.on.ca/eng/parents/schoolleavers.pdf>
- Gluszynski, T., & Dhawan-Biswal, U. (2008) *Reading skills of young immigrants in Canada: The effects of duration of residency, home language exposure and schools*. Statistics Canada Catalogue no. SP-849-06-08E.
- Institut Franco-Ontarien, Université Laurentienne. (2005). *Le décrochage au secondaire en Ontario français*. Final report submitted to the Ontario Ministry of Education, October 2005. Retrieved from <http://www.edu.gov.on.ca/fre/parents/schoolleaversf.pdf>

- King, A.J.C. (2002). Double Cohort Study: Phase 2 report for the Ontario Ministry of Education. Retrieved from <http://www.edu.gov.on.ca/eng/document/reports/cohortph2.pdf>
- King, A. J. C. (October, 2003). Double Cohort Study: Phase 3 report for the Ontario Ministry of Education. Retrieved from <http://www.edu.gov.on.ca/eng/document/reports/phase3/report3.pdf>
- King, A. J. C., Warren, W. K., Boyer, J. C., & Chin, P. (2004). Double Cohort Study: Phase 4 report submitted to the Ontario Ministry of Education, 2005. Retrieved from <http://www.edu.gov.on.ca/eng/policyfunding/reports.html>.
- Levin, Ben. (2008) How to Change 5000 Schools. A Practical and Positive Approach for Leading Change at Every Level. Cambridge, MA: Harvard Education Press
- McAndrew, M., Ait-Said, R., Ledent, J., Anisef, P., Brown, R., Sweet, R., Walters, D., Aman, C., & Garnett, B. (2009). Educational pathways and academic performance of youth immigrant origin: Comparing Montreal, Toronto and Vancouver. Report submitted to the Canadian Council on Learning and Citizenship and Immigration Canada. Retrieved from <http://www.ccl-cca.ca/pdfs/OtherReports/CIC-CCL-Final12aout2009EN.pdf>
- McAndrew, M., Ledent, J., Murdoch, J., & Ait Said, R. (2008). Academic performance of immigrant youth in Vancouver, Montreal and Toronto; The Montreal context. Presented at 10th National Metropolis Conference in Halifax, (Nova Scotia: April 4, 2008).
- Ontario Ministry of Education. (2013). *School Effectiveness Framework: A support for school improvement and student success K-12*. Toronto: Queen's printer for Ontario. ISBN 978-1-4606-2496-8 PDF
- Orpwood, G., Schollen, L., Leek, G., Marinelli-Henriques, P., & Assiri, H. (2012). College Math Project 2009-2011. York-Seneca Institute for Mathematics, Science and Technology Education (YSIMSTE).
- Thiessen, V. (2007a). The impact of factors on trajectories that lead to non-completion of high school and lack of post-secondary education among those with high reading competencies at age 15. Learning Policy Directorate, Strategic Policy and Research, Human Resources and Social Development Canada. Retrieved from http://www.hrsdc.gc.ca/eng/publications_resources/learning_policy/sp_794_11_07e/sp_794_11_07e.pdf
- Thiessen, V. (2007b). Academic performance, human capital skill formation, and post-secondary education: A comparison of First Nation, immigrant, visible minority, and other native-born Canadian youth. Canadian Labour Market and Skills Researcher Network: Working Paper Number 1. Retrieved from http://www.econ.ubc.ca/clsrn/publications/workingpapers/Thiessen_workshop_cover%20page.pdf

- Tilleczek, K., Laflamme, S., Ferguson, B., Edney, D.R., Girard, M., Cudney, D., & Cardoso, S. (2010). Fresh starts and false starts: Young people in transition from elementary to secondary school.
- Whitley, J., Cousins, J.B., Duquette, C., & Elliott, C. J. (2012) Evaluation of the Ontario Ministry of Education's Differentiated Instruction Professional Learning Strategy. University of Ottawa.
- Willms, J.D, Friesen, S., & Milton, P. (2009). *What did you do in school today? Transforming classrooms through social, academic, and intellectual engagement*. Canadian Education Association (CEA).
- Willms, J.D., & Friesen, S. (2012). *What did you do in school today? The relationship between instructional challenge and student engagement*. Canadian Education Association (CEA)

Appendix A: Mapping Objectives

INITIATIVES	Intended Objectives or Goals ¹	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Provincial Partnership Council (formerly a component of Passport to Prosperity)						
Ensure employer outreach to promote, expand and deepen experiential learning opportunities for secondary students	Inferred		X			
Facilitate teacher/employer relationships	Inferred		?	?		
Develop new shared resources to promote experiential learning	Inferred		X	X	X	
Ontario Skills Passport (OSP)						
Enable students to market themselves by showing employers the skills they have acquired, easing transition to work for Ontario's youth	Inferred		X	X		

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Leadership – SS/L18 Strategic Implementation, Innovation and Support Branch						
Impact students identified as at-risk in their schools, at the classroom level (SS teachers)	Inferred	X	X	X	X	?
Monitor, on an ongoing basis, all students in the school that are considered to be at-risk of not graduating, or who are in risk situations (SS teams)	Inferred	X	X	X	X	
Coordinate the implementation of student success strategies that best match the needs of the identified students (SS teams)	Inferred	X	X	X	X	
Work with feeder schools to develop transition plans to support students as they move from intermediate to secondary (SS teams)	Inferred		X			X
Support students with other transitional experiences as they progress along their education path (SS teams)	Inferred		X		X	X
Coordinate the activities of the Student Success teams through the school principal (SSLs)	Inferred		X			
Monitor the assignment of student success teachers (SSLs)	Inferred		?	?		

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Coordinate the professional learning of the student success teachers (SSLs)	Inferred		?	?		
Monitor the progress of all identified at-risk students (SSLs)	Inferred	X	X			X
Work with SS teams to plan how the funds provided to the boards are allotted and spent (SSLs)	Inferred		?	?		
Provides overall direction, considering feedback from all the nodes in the student success network (Directors)	Inferred		X			
Work with the central team to discuss and develop solutions based on challenges of practice (ESSEOs)	Inferred		X			
Research, Monitoring and Evaluation Team						
Improve data, research, monitoring and evaluation improves program effectiveness and the degree to which policy, programming and planning is evidence-informed	Inferred		X			
Contribute to improvement/refinement and positive impact on Student Success L18 and Student Achievement Division, and the Ministry goals, policies and programs	Inferred		?			

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Building the capacity to use evidence (including learning from internal/external research and evaluation) for effective decision-making through improving processes and access to appropriate data, analyses	Stated	?	?	?		
Collaboratively learn to inform next steps developmentally	Stated		?			
Create a better case for/promoting the use of student level data for indicators of success by conducting an internal impact evaluation in collaboration with ESAB to be more accountable for the investment	Inferred		?	?	?	
Build a culture of evaluative thinking through collaborative inquiry, action and reflective practice that is adaptive, precise, intentional and personalized	Inferred		X			
Model professional accountability	Inferred		?			
Integrate research, monitoring and evaluation across all initiatives	Inferred		X			

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Student Success Cross Panel Teams and Taking Stock - Interventions						
Develop Taking Stock as a way to track the supports put in place in schools and boards for students at risk of not being successful in their secondary school programs	Inferred		X			X
Support boards in providing instructional continuity from elementary through secondary school, education and career planning support	Inferred					X
Provide opportunities in the school and classroom that engage students particularly those who are at risk of not being successful and who have persistent achievement challenges	Inferred	?	X	X	X	
Align the work of Student Success School and Cross Panel Teams with the School Effectiveness Framework, Board Improvement Plan for Student Achievement and School Improvement Plans	Inferred		?	?		
Adult Education Policy Unit						
Address lack of integration and co-ordination service provision	Inferred	X	X	X		

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Invest in skills development, learner pathways, accessibility and inclusion, innovation and excellence in teaching and learning, funding and accountability, and research	Inferred	X	X	X	X	
Increase accessibility for all adult learners	Stated	X	X	X		
Improve navigation and pathways	Stated	X	X	X		
Develop common assessment tools and resources to ensure recognition of prior learning and transferability of credits	Stated	X	X			
Credit Recovery						
Enable a student to recover a credit that has been lost	Inferred	X	X	X		
Allow students to work on only those course expectations where the student has been unsuccessful	Inferred	X	X		X	
Improve student achievement by allowing students to demonstrate competence in material that previously defeated them	Inferred	X	X		X	

INITIATIVES	Intended Objectives or Goalsⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Dual Credit						
Help students complete their Ontario Secondary School Diploma (up to four optional credits)	Stated	X	X			
Help students make a successful transition to college or an apprenticeship program	Stated	X	X	X	X	
· Increase students' awareness of the various college and apprenticeship pathways available to them	Stated		X	X	X	
Enable students to gain greater insight into their education and career planning decisions	Stated		X	X	X	
Literacy and Mathematics Professional Learning Strategy						
Increase OSSLT success rates (stagnant since 2007)	Inferred	X	X			
Reduce OSSLT success rate gap between males and females as well as between students enrolled in Academic and Applied English classes	Inferred	X	X			
Renew extensive focus on professional capacity development with respect to adolescents' literacy skills	Inferred		?	?		

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Sustain and improve the growth of adolescent literacy skills	Inferred		X			
Meet the literacy needs of all learners and differentiate instruction appropriately	Inferred		X	X		
Build the capacity of literacy knowledgeable people in school boards through the development of networks, leadership, and resources	Stated		X	X		
Reach every student by reaching every teacher	Stated		X			
Embed literacy principles and practices in the instruction of subject content in all subjects in grades 7-12	Stated		X	X		
Support facilitated learning of mathematics by students through differentiated instruction, a focus on the mathematical processes and an emphasis on math talk learning communities	Inferred		X	X	X	
Aim to build individual and collective capacities to improve mathematics teaching and learning in Ontario	Inferred		?	?		
Establish communities of practice at every level of the system	Stated		?	?		

INITIATIVES	Intended Objectives or Goalsⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Provide precise and personalized instructional trajectories for students and teachers	Stated		X	X	X	
Gather and share local evidence of promising practices	Stated		?	?		
Harness collaborative technologies	Stated				X	
Employ research-affirmed and evidence-affirmed decision making	Stated		?	?		
Ontario Schools, Kindergarten to Grade 12 (OS), Policy and Program Requirements, 2011						
Specialist High Skills Major (SHSM)						
Expand quality learning opportunities and support success for all students	Inferred		X	X	X	
Differentiated Instruction - Professional Learning Strategy						X ¹⁷

¹⁷ Early implementation plans focused on grades 7-8, in particular

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Identify & address the needs of all students through effective instruction and assessment	Stated		X	X	X	
Support leaders and teachers in the implementation of a differentiated approach to instruction to meet the needs of all students in the classroom, including students with persistent engagement and achievement challenges	Stated		X	X	X	
Focus on the professional learning required to build educator capacity for personalized and precise instruction	Inferred		X	X	X	
Expand upon the instructional knowledge and skills of educators of grades 7-12 as they respond to the learning needs of all students	Stated		X	X	X	X
Build awareness and knowledge of differentiated instruction as part of a framework for planning and implementing effective instruction, assessment and evaluation practices as they are outlined in the Ontario curriculum	Stated		X	X	X	
Facilitate and support job-embedded professional learning opportunities including collaborative inquiry	Stated		?	?		

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Improving Educational Outcomes of Children and Youth In Care of Children's Aid Societies (CASs)						
Improve the educational success of children and youth in the care of or receiving services from CASs	Stated	X	X			
Ensure that they benefit from all the learning opportunities, supports and interventions available in schools	Stated		X	X		
Reduce impact of numerous residential changes and associated changes in school for youth in care	Inferred	X	X			
Contribute to preparing and supporting children and youth in care to effectively transition out of care	Inferred	X	X			
Student Success School Support Initiative						
Provide targeted supports aimed in a limited number of schools in boards which stand to make a contribution to the overall provincial performance with particular potential for meeting the graduation rate target of 85% by 2010 – 2011	Inferred	X	X			
Build the capacity of the principal as the instructional leader	Inferred		?			

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Enhance the instructional practices in the classroom	Inferred		?	?		
Student Voice Initiative						
Promote student engagement	Inferred	X	X		X	
Re-engage students and close the gap in achievement by learning more about what helps students learn	Stated	X	X		X	
Ensure that all students feel a sense of belonging and are able to participate in decisions impacting on their learning	Stated		X		X	
Involve students meaningfully in articulating what would help strengthen their engagement both academically and socially in classrooms and school	Stated	X	X	X	X	
12 12 + Re-engagement Strategy						
Reach disengaged students who are close to meeting graduation requirements and may be facing challenging circumstances	Inferred	X	X	X	X	

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Develop a plan of action with appropriate options for these students	Inferred	X	X	X	X	
Hire individuals to monitor the students and to intervene when appropriate	Inferred	X	X	X	X	
Supervised Alternative Learning (SAL)						
Offer a program that is in the student's best interests, reflects his or her input, and supports the student in meeting his or her goals	Inferred		X	X	X	
Assist students either to return to school or to proceed to their next step when they 18: apprenticeship training, college, independent living, university, or the workplace	Inferred	X		X	X	
34 Credit Threshold						
Have Ontario students finish secondary school and make the transition to their next step in four years	Inferred	X	X			
Ensure effective use of both students' time and education resources	Inferred	X	X			

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Support improved education and life planning for students, the Ministry released a revised education and career/life planning policy entitled <i>(Creating Pathways to Success: An Education and Career/Life Planning Program for Ontario Schools, Policy and Program Requirements, Kindergarten to Grade 12)</i>	Inferred	X	X			X
FNMI Student Engagement/Re-engagement Initiative						
Improve FMNI student re/engagement	Inferred		X	X		
Contact and mentor self-identified FNMI students who have left school before graduating	Inferred		X			
Encourage FNMI students to return and complete their studies so they can graduate	Inferred	X	X			
FNMI School Support Initiative						
Support School Support Initiative (SSI) professional learning teams	Inferred	X	X			

INITIATIVES	Intended Objectives or Goalsⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Close the achievement gap for FNMI students	Inferred	X	X	X	X	
Support SSI professional learning teams	Inferred		?	?		
Reduce self-identified FNMI students who are at risk due to credit loss	Inferred	X	X	X	X	
Broaden and deepen knowledge of evidence-based instructional strategies and assessment	Inferred	X	X	X		
Ensure culturally proficient pedagogy	Inferred		X	X	X	
Increase understanding of the learner	Inferred		X		X	
Cultivate asset-based thinking regarding the learner	Inferred		X		X	
Creating Pathways to Success Policy Development and Implementation (Revision of Choices Into Action)						

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Link with the SS philosophy, beliefs and programs including alignment with the pathways focus of the Student Success Strategy, Taking Stock and the School Effectiveness Framework	Inferred		?	?		
Support all students, starting in Grade 7, to begin a formal education and career planning process by documenting their achievement of the education and career planning competencies in an individual Pathways Plan	Inferred		X		X	X
Teach, assess and evaluation student's development and interpersonal skills as reflected in the Learning Skills and Work Habits sections of the provincial report cards	Inferred		X			
Provide all students an opportunity to reflect on their education and career planning experiences to date, to consolidate their learning and to focus on the further development of their Individual Pathways Plan (IPP), through the compulsory Grade 10 Career Studies	Inferred		X	X	X	
Starting in the 2012-13 school year, track the implementation of the IPP for students in grades 7-12	Inferred		X	X	X	

INITIATIVES	Intended Objectives or Goals ⁱ	Increase graduation rate and decrease drop-out rate	Support a good outcome for all students	Provide students with new & relevant learning opportunities	Build on students' strengths & interests	Provide effective elementary to secondary school transition
Develop and implement plans and participate in professional learning communities to share strategies and best practices	Inferred		X		X	
Experiential Learning						
Link with the Student Success philosophy, beliefs and programs	Inferred		?	?	X	

Appendix B: Mapping Evidence

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
Leadership – SS/L18 Strategic Implementation, Innovation and Support Branch	Yes	Other	See inputs listed in the SSL18 logic model 2013 08 26. Many of these appear to be the foundational evidence for this initiative.	Yes	Process	-A number of process related data sources appears to have been identified. It isn't clear to what extent this data has been reviewed on a regular basis or how it's being used. -See SSL16 logic model 2013 08 26.	Uncertain/ undetermined	Outcome	-Intended immediate, intermediate and long-term outcomes have been identified. -Much of the evidence that has been identified relates specifically to other initiatives (e.g. Dual credit, SHSM, Student Voice, etc.). -See SSL16 logic model 2013 08 26 Not clear what evidence exists and/or how it is used in relation to this specific initiative and its intended outcomes.
	Yes	Theoretical	-Implication from research on engagement (i.e., student's intellectual, institutional and social engagement -Willms, Mihaly Csikszentmihalyi flow theory, Daniel Pink Drive) will guide the work for SSL18 and improve student achievement and student well-being -The research of Dr. Bruce Ferguson, Early School Leavers: Understanding the Lived Reality of Student Disengagement from Secondary School, provides an Ontario context.						
34 Credit Threshold	Yes	Empirical	Over 10 years ago, Ontario's secondary school system was redesigned to support student completion of the credits required for graduation in four years, which is the standard across North	Uncertain/ undetermined	Process	The Ministry is collecting data as part of regular board reporting to monitor numbers of credits earned, and whether students are on track to graduate in four years and transition out of secondary school. From	Uncertain/ undetermined		The Ministry is collecting data as part of regular board reporting to monitor numbers of credits earned, and whether students are on track to graduate in four years and transition out of

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
			America. However, a third of Ontario students in the 2006-07 Grade 9 cohort (about 49,000) returned for part or all of a fifth year, including about 20,500 students who had already graduated in four years. Of the students who returned for a fifth year, approximately 10,730 earned more than 34 credits by the end of the fifth year, including about 9,000 students who had already graduated in four years and then returned. (from SS/L18 Improvement Study Guide).			SS/L18 improvement study guide. Not clear to what extent this data is being used directly in relation to the 34 credit threshold.			secondary school. From SS/L18 improvement study guide. Not clear to what extent this data is being used directly in relation to the 34 credit threshold.
Adult Education Policy Unit	Yes	Mix	<i>Ontario Learns: Adult Education Review (2004)</i> http://www.tcu.gov.on.ca/adultedreview/report.html Deloitte Adult and Continuing Education Business Model Review (2010) http://www.cesba.com/attachments/category/194/Adult%20Education%20Business%20Model%20Review%20Final%20Report%20Jan%2027%202011.pdf	Uncertain/ undetermined	Other	See also Information about the School Improvement Projects is available at http://www.cesba.com/index.php/resources/edu-sips-and-research-projects/264-school-improvement-website-information and project results, 2011-12 and continuing, at http://www.cesba.com/resources/edu-sips-and-research-projects/157-resources/edu-programs/287-karen.html	No		-Need to establish baseline data for A&CE programs - Challenges in collecting and reporting continuing education credit course data through board student management systems and the restructuring of continuing education Enrolment and PLAR for Mature Students data collection and reporting through OnSIS - Working with school boards to support Evidence-based school improvement planning in adult and continuing education
	Yes	Other	<ul style="list-style-type: none"> Ministers' Committee on Adult Education (EDU/TCU/MCI) Interministerial Reference Group on Adult Education Issues related to lack of integration and co-ordination in providing services were identified during the Ontario Learns: Adult Education Review (2004). See http://www.tcu.gov.on.ca/adultedreview/report.html 	Yes	Other	Deloitte Adult and Continuing Education Business Model Review (2010) http://www.cesba.com/attachments/category/194/Adult%20Education%20Business%20Model%20Review%20Final%20Report%20Jan%2027%202011.pdf	Yes		See also Information about the School Improvement Projects is available at http://www.cesba.com/index.php/resources/edu-sips-and-research-projects/264-school-improvement-website-information and project results, 2011-12 and continuing, at http://www.cesba.com/resources/edu-sips-and-research-projects/157-resources/edu-programs/287-karen.html

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
							Yes	Output	Learning resources: • PLAR Resource Development and Capacity Building http://www.cesba.com/resources/plar-resources.html http://www.cesba.com/resources/leadershipcapacity-building.html http://www.cesba.com/resources/introduction-to-adult-and-continuing-education.html http://www.cesba.com/resources/acronyms-and-glossaries.html http://www.cesba.com/resources/training-materials.html
							No	Outcome	No formal evaluations of the Adult Education initiative. A key challenge is the need to establish baseline data for Adult and Continuing Education programs. We have been working with Education Finance and ESAB to address challenges in collecting and reporting continuing education credit course data through board student management systems and the restructuring of Continuing Education Enrolment and PLAR for Mature Students data collection and reporting through OnSIS. Outcomes have been identified starting with immediate outcomes planned for June 2014.
Here related specifically to Adult Ed and			Mentioned in the Cross Panel Teamd and Taking Stock document. Not tracking evidence here as it's						

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
Continuing Hybrid Pilot			not clear how this fits into the overall Adult Ed Initiative.						
Creating Pathways to Success: An Education and Career/Life Planning Program for Ontario Schools, Policy and Program Requirements, K-Grade 12	Yes	Empirical	In the late twentieth century, career development theories suggested that with access to accurate information and some guidance, individuals would independently acquire the skills they needed for effective career planning. ¹ More recently, research has indicated that to make sound career decisions people also need to develop tools for processing the information. ² Traditionally, career development practice has operated on yet another assumption – that only some students require support and that they will seek out assistance as they need it. The reality is that the challenges and opportunities faced by students in this century are unlike those of any previous generation, and that all students today require specific knowledge and skills in education and career/life planning to support them in making sound choices throughout their lives. (see CreatingPathways.pdf)	Uncertain/undetermined			Uncertain/undetermined		
	Uncertain/undetermined	Other	Appears based on feedback and regular process and perceived need to update resources and policies.	Yes	Process	Some activity completion data appears to have been tracked. See "UpdatedGraphLogicModelEducCareerPlanningDec2012"	Yes	Output	Some activity completion data appears to have been tracked. See "UpdatedGraphLogicModelEducCareerPlanningDec2012"
	No		Did not see obvious foundation evidence for the the K-12 portfolio process described under the CPS process.	Uncertain/undetermined	Other	Not clear how portfolio implementation process has been integrated into practice.	Yes	Outcome	Short-, medium- and long-term outcomes have been identified (e.g. integration of revised materials into other ministry resources, improvement clarity, implementation at school level in terms of guidance practice) but it is not clear to what extent these were tracked or

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
									monitored.
Credit Recovery	Yes	Other	<ul style="list-style-type: none"> Guiding Principles are found in the Growing Success – Assessment, Evaluation and Reporting in Ontario Schools (2010) document and reflect principles agreed upon by the Student Success Commission See Cross Panel Team and Taking Stock Credit recovery has as its foundation Ontario Secondary Schools, Grades 9 to 12: Program and Diploma Requirements, 1999, which states that, for students who have failed a course, “Where possible the student should be allowed to repeat only the material relating to the expectations not achieved”. 	Yes	Tracking for match	Assume that tracking for match to intended students is being done, based on Two-stage evaluation of SS/L18 conducted by CCL team.	Yes	Output	<p>Accumulated credits are tracked provincially.</p> <p>CR program is currently being reviewed.</p> <p>Evidence exists and was, for example, reported in CCL's summative evaluation of SS/L18</p>
							Yes	Outcome	<p>Outcomes have been identified in terms of student achievement and graduation.</p> <p>Evidence exists and was, for example, reported in CCL's summative evaluation of SS/L18</p>
							Uncertain/ undetermined	Outcome	Outcomes have also been developed related to consistency on provision of Credit Recovery programs, opportunities that are available, refinement of program processes and practices. Less clear to what extent this has been monitored.
Differentiated Instruction - Professional Learning Strategy	Uncertain/ undetermined	Mix	Unclear from available documentation how much of the foundational evidence is theoretical vs. empirical.	Yes	Prof. learning	Numerous learning sessions and resources planned as part of DI PLS. Not clear how it was tracked.	Yes	Output	Output indicators have been identified (e.g. level of use of DI/CI resources). Appears to have been considerable evidence tracked across a variety of reports. See SSL18 DI PLS Logic Model-2013.

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
									See also "evaluation data" provided in relation to Question 6 on the SS/L18 Improvement Study guide.
Collaborative inquiry/professional learning cycle initiative	Yes	Mix	<ul style="list-style-type: none"> Research (Timperley et al, 2007) says process of collaborative inquiry has impact on instructional practice, student engagement and achievement. 	Yes	Prof. learning	See a "professional learning" resources inventoried in relation to Question 7 on the SS/L18 Improvement Study guide, which also mentions that "Monitoring and evaluation strategies and professional learning supports have included collaborative inquiry using the professional learning cycle process since 2009-10."	Yes	Outcome	<p>Short-, medium- and long-term outcome indicators have been identified (e.g. level of use of DI/CI resources). Appears to have been considerable evidence tracked across a variety of reports. See SSL18 DI PLS Logic Model-2013.</p> <p>See also "evaluation data" provided in relation to Question 6 on the SS/L18 Improvement Study guide, which also mentions that "Monitoring and evaluation strategies and professional learning supports have included collaborative inquiry using the professional learning cycle process since 2009-10." FINALLY, SEE SUMMARY OF EXTERNAL EVALUATION OF DIPLS PROVIDED IN THE SS/L18 IMPROVEMENT STUDY guide.</p>
				Yes	Prof. learning	<ul style="list-style-type: none"> September/October Adobe Connect sessions with Student Success Leaders (SSLs) (2009-present) to outline annual professional learning focus/context, provide direction for development of board plans/reports for DI professional learning, feed back to SSLs based on analysis of DI board plans/reports, receive input on direction of DI PLS from SSLs Face to face meetings with SSLs and External Student success Education Officers (ESSEOs) (2007-present) as part of Student Success 	Yes	Outcome	<p>Since its beginning, the DI Professional Learning Strategy has been informed by evidence gathered through routine, purposeful and ongoing monitoring. These evidence sources include:</p> <ul style="list-style-type: none"> annual DI in Action surveys for teachers and school and board leaders annual board plans and reports (called RAFTs) for DI professional learning case study boards - 8 DI Project boards from 2007/8 –

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
						face to face meetings (2-3 times per year) • January /February adobe connect sessions for facilitators of collaborative inquiry learning teams (2011-present) • March regional sessions for boards to share practice (2007-2013) • Summer Program modules on DI and collaborative inquiry for board use (2009/10 – 2012/13) • Fall and Spring regional sessions for Student Success School and Cross Panel Teams which included a focus on strategies for student engagement and for educators, cross panel instructional consistency • Ongoing learning (differentiated instruction, collaborative inquiry) for case study boards: DI Project boards 2007/9-2011/12 - face to face or through adobe connect) and building Innovative Practice boards (fall and spring face to face sessions and adobe connect 2012/13 – 2013/14) • K-12 Capacity-building sessions for Literacy, Numeracy and DI (Fall, 2013, Spring 2014)			20011/12; 8 building Innovative Practice boards 20012/13 - 2013/14 (artefacts, plans/reports, video and feedback from educator collaborative inquiry teams) • a ‘DI-CI What Works’ website (DI-CI.ca) • the 2011-12 DI External Evaluation
				Yes	Prof. learning	• DI Teaching Learning examples in several subjects			
Dual Credit	Yes	Mix	Past reports, policy statements, prior research See Cross Panel Teams and Taking Stock	Yes	Process	See impact evidence and CCL team's Two-stage evaluation of SS/L18.	Yes	Output	-Student data report -Expenditures report -OCAS/OUAC application data -EOIS Apprenticeship data -College student achievement data CODE's year-end annual report

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
					Tracking for match	See impact evidence and CCL team's Two-stage evaluation of SS/L18.	Yes	Outcome	-HECQO study on impact of participation in dual credits and SHSM on student achievement -SWAC survey -Grad survey
Experiential Learning	Yes	Other	Consultations, reference groups and conceptual/position papers used to determine the orientation of the experiential learning initiative	Uncertain/undetermined	Other	Various consultative activities were meant to have taken place, and policies to have been developed.	Uncertain/undetermined	Outcome	-Intended immediate, intermediate and long-term outcomes have been identified. Not clear if how they were being tracked.

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
FNMI Student Engagement/Re-engagement Initiative	Yes	Empirical	<ul style="list-style-type: none"> An analysis of the 2011-2012 school year student information indicated that significant numbers of self-identified FNMI students in the province left school during the year or did not return in September even though they had not graduated (see chart below) 	Yes	Tracking for match	Self-identified FNMI student achievement data as the primary data source for monitoring and evaluating the impact of the FNMI Student Achievement Strategy (SAS), as this is the most reliable data set available. <ul style="list-style-type: none"> The FNMI Re-engagement Initiative tracks <ul style="list-style-type: none"> The number of self-identified FNMI students who disengaged The number of self-identified FNMI students who were contacted The number of self-identified FNMI who returned The number of credits attempted by those who returned The number of credits achieved by the self-identified FNMI who returned The number of self-identified FNMI students who completed their community involvement hours The number of self-identified FNMI students who achieved their Literacy requirement The number of self-identified FNMI students who graduated. 	Yes	Output	Self-identified FNMI student achievement data as the primary data source for monitoring and evaluating the impact of the FNMI Student Achievement Strategy (SAS), as this is the most reliable data set available. <ul style="list-style-type: none"> The FNMI Re-engagement Initiative tracks <ul style="list-style-type: none"> The number of self-identified FNMI students who disengaged The number of self-identified FNMI students who were contacted The number of self-identified FNMI who returned The number of credits attempted by those who returned The number of credits achieved by the self-identified FNMI who returned The number of self-identified FNMI students who completed their community involvement hours The number of self-identified FNMI students who achieved their Literacy requirement The number of self-identified FNMI students who graduated.
FNMI School Support Initiative	Yes	Empirical	See summary for FNMI Student Engagement/Re-engagement initiative	Yes	Tracking for match	See summary for FNMI Student Engagement/Re-engagement initiative	Yes	Output	See summary for FNMI Student Engagement/Re-engagement initiative

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
				Yes	Prof. learning	-Qualitative data collected through targeted activities in the Professional Learning Network sessions, and through final reflections submitted by the participants. • Support documents and structures provided through an E Community. • Professional Learning Network sessions for SSI FNMI Instructional Coaches • Principal and SO participation in the Learning Network sessions as well as separate sessions for SSI SOs See SS/L18 Improvement Study guide.	Yes	Output	-Quantitative data collected in same data format as School Support Initiative submitted by principal and Supervisory Officer (SO). See SS/L18 Improvement Study guide.
							Yes	Outcome	-Qualitative data collected through targeted activities in the Professional Learning Network sessions, and through final reflections submitted by the participants. See SS/L18 Improvement Study guide.

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
Improving Educational Outcomes of Children and Youth In Care of Children’s Aid Societies (CASs)	Uncertain/ undetermined	Mix	Logic model cites research showing lower outcomes for Crown Wards or youth in care.	Yes	Process	-Dialogue between the two sectors to address the issues, challenges and to develop practical solutions to improve educational outcomes of children and youth in care. -Sharing of promising education service delivery model.	Uncertain/ undetermined	Outcome	-Intended immediate, intermediate and long-term outcomes have been identified. Not clear if how they were being tracked. -Outcomes include increased awareness and focus, development of a provincial template to guide CAS-school board working relationship and development of local & student achievement protocols, model of effective education for target group, data collection strategy.
				Yes	Process	-Establishment of an Education Data-Sharing Working Group with CASs and school board representatives -Development of a Joint Protocol for Student Achievement Template (JPSA) in consultation with an external working group comprising of educators, CAS representatives and youth formerly in care. -Hosting cross-sector meetings.			
Literacy and Mathematics Professional Learning Strategy	Yes	Mix	See research cited in logic model, in beliefs section.	Yes	Prof. learning	Desired knowledge outcomes have been identified but it's unclear how they have been tracking this.			

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
	Yes	Empirical	<p>-We know from the Think Literacy Impact Study Report (May 2011) that there persists the view of some content area teachers that literacy instruction</p> <p>a. is distinct from content instruction;</p> <p>b. is the responsibility of Language/English teachers;</p> <p>c. should be completed before students reach the intermediate grades and, certainly, before they reach high school.</p> <p>-We know from the Think Literacy Impact Study that a renewed and more extensive focus on professional capacity development with respect to adolescents' literacy skills is needed.</p> <p>-We know from the Report into the Research on Adolescent Literacy Emphases (June 2011) that to sustain and improve the growth of adolescent literacy skills there needs to be a targeted approach to adolescent literacy, which should include</p> <p>a. the design and development of innovative and creative resources;</p> <p>b. supports for system leaders, coaches, and teachers;</p> <p>c. opportunities for further inquiry and research;</p> <p>d. ongoing assessment to monitor progress and success.</p>	Uncertain/ undetermined	Process	<p>Articulation of project in logic model suggests that increasing (or increased) use of the Adolescent Literacy Guide and collaborative inquiry, PLS strategy in schools would or should be monitored but it is not clear whether or not this has been done.</p> <p>-See also comment provided in the outputs section.</p>	Yes	Output	<p>-Extensive outputs have been identified in the form of specific products, networks, resource development, literacy coaching and leadership capacity building, etc. For example, make reference to development, implementation and revisions to a guide to adolescent literacy based on and reflective of foundational research for this initiative.</p> <p>-These could be both concrete outputs of the initiative as well as serve as monitoring evidence.</p> <p>-However, it's not clear if/how these are being tracked.</p>
							Yes	Outcome	<p>-Intended immediate, intermediate and long-term outcomes have been identified. Not clear if how they were being tracked.</p>
	Uncertain/ n/		The foundational evidence underpinning the SSL18	Uncertain/ n/	Prof. learning	Seem to have conducted a number of professional learning events but	Yes	Outcome	-Intended immediate, intermediate and long-term

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
	undetermined		Professional Learning for Mathematics Leaders and Coaches K-12 (PLMLC) is not readily apparent in the program's logic model.	undetermined		not clear how they tracked them (in terms of attendance, resources produced, etc.)			outcomes have been identified. Not clear if how they were being tracked.
Ontario Schools, Kindergarten to Grade 12 (OS), Policy and Program Requirements, 2011	Uncertain/undetermined	Other	-D42Feedback from educational stakeholders that one policy framework would align all the policies K-12. -Not clear how solid this evidence is. (See logic model.)	Uncertain/undetermined			Uncertain/undetermined	Outcome	Outcomes and/or outcome results have been noted in the Cross Panel Teams and Taking Stock document, as well as in the logic model, but it is not clear if these are intended or actual outcomes and if/how they were measured. Examples of how outcomes are measured include: -Understanding of how the policies and programs in Ontario schools work to support all students in being successful (intermediate outcome). -Sector has more clarity, consistency and accuracy in OSSD requirements. -Improves the clarity/communication for the sector (i.e., public, school and board administrators, internally within EDU) for all policy requirements related to elementary and secondary school education in Ontario -Promotes the consistency and accuracy in the implementation of policies and programs -Showcases all the policies that have been put in place to help kids be successful – increase public confidence in the system -People will see education in its totality (including, teachers, administrators, students and parents) – not operating in silos
							Uncertain	Other	Cross Panel Teams and Taking

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
							n/ undeter mined		Stock document mentions this: -Not receive any more inquiries regarding the location of policies. -Is it organized in a way that people can find the information. -Is the vehicle for communication working? Accuracy of questions will show
							Uncertai n/ undeter mined	Output	-Logic model indicates that a key activity is to "develop a K-12 policy document online linked to all other supporting documents ". Not clear if/how this has been monitored and to what extent they are monitoring ease of access and level of use of this policy to guide practice implementation and decision-making.
Ontario Skills Passport (OSP)	Uncertai n/ undeter mined			Uncertai n/ undeter mined	Other	User data from the OSP website Data on its use in SHSM programs Not clear if this used as process data See Cross Panel Teams and Taking Stock	Yes	Output	User data from the OSP website Data on its use in SHSM programs
							Yes	Other	Feedback from participants at OSP workshops, survey of OSP Web Development Advisory Committee members, student and teacher feedback from CESL Action Research
Provincial Partnership Council	Uncertai n/ undeter mined	Other	-Provincial Partnership Council - Industry leaders providing strategic direction and making connections between coop teachers, local employers and large employers. Based on available documentation, does not appear to have clearly articulated foundational evidence.	Yes	Other	- Communication materials - Employer Champion Awards – twice a year	Uncertai n/ undeter mined	Outcome	Very high-level immediate-, intermediate- and long-term outcomes were identified in the logic model. Not clear how or if these are being tracked.
							Uncertai n/ undeter mined	Other	Feedback from Hill & Knowlton, Feedback from teachers about

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
							undetermined		student learning, Employers feedback, Feedback from SHSM. Could represent a mix of output and outcome measures. Not clear how or if these are being tracked.
							No	Other	SS/L18 Improvement Study guide indicates no evaluation has been done to date.
12 12 + Re-engagement Strategy	Yes	Empirical	-Research looked at data analysed to look at number of students who were not returning after summer or non-graduates in Year 5 (disengaged or did not return after the 2008/09 year – projected on to the 2009/10 cohorts). See Cross Panel Teams and Taking Stock	Yes	Prof. learning	SSLs: -provided with the rationale, data from their boards, a model of a successful program and implementation strategies -provided with a slide deck to be used with the board identifying the students lost – communication of the moral imperative -Professional Learning All Student Success Leaders were presented with an overview of the initiative in June 2010, including a slide deck to share with board leaders. As well, promising practices were presented by boards who had already initiated programs to re-engage students. See Cross Panel Teams and Taking Stock	Uncertain/undetermined	Outcome	Outcomes and/or outcome results have been noted in the Cross Panel Teams and Taking Stock document but it is not clear if these are intended or actual outcomes and if/how they were measured.
				Yes	Process	-Review their data in June 2010 to determine accuracy and content, i.e. information on which students should be contacted to be re-engaged. See Cross Panel Teams and Taking Stock	Uncertain/undetermined		
Student Success School Support Initiative	Yes	Empirical	• The initiative was designed to target schools in boards that had a significant number of secondary schools where student	Yes	Tracking for match	o Some of the key indicators included credit accumulation rates, compulsory and optional course pass rates, and province-wide EQAO test			

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
			achievement was below the provincial rate.			scores. o Based on these indicators the Ministry identified the lowest-performing schools. o 27 schools in three large and low performing Boards were invited to participate through a collaborative process in 2008. Over the year, the initiative has expanded to include other boards and schools.			
				Yes	Tracking for match	See SSI Dashboard 2012-13 - with Numbers.pdf	Yes	Outcome	See SSI Dashboard 2012-13 - with Numbers.pdf
				Yes	Prof. learning	• Supporting documents: o Professional Learning 2008 to 2014 o Amalgamated Checklists o Flow Chart for Planning o The PL Cycle Update o Supervisory Officer Overview o PLT Checklist o Amalgamated SMART Goals o EBIS Structures and Tools o The School Support E Community Website o Professional Learning Slide Decks			
Specialist High Skills Major (SHSM)				Yes	Prof. learning		Yes	Output	Appear to have a number of data points on uptake of SHSM
					Tracking for match	Have data on student participation, retention, feedback	Yes	Outcome	Are tracking measurable outcomes. See SS/L18 Improvement Study guide.
Student Voice Initiative	Yes	Theoretical	Stated that there is research but logic model doesn't appear to specify what that evidence is				Yes	Output	Number of program outputs are mentioned in the Cross Panel Teams and Taking Stock document
							Uncertain/undetermined	Outcome	Outcomes and/or outcome results have been noted in the Cross Panel Teams and Taking Stock document but it is not clear if these are intended or actual outcomes and if/how they were measured.

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
Supervised Alternative Learning (SAL)	Yes	Other	•Consultation in 2009 and 2010 identified that there is a need to clarify policy and support consistent implementation of attendance and excusal policies and programs to re-engage young people not attending, and support better outcomes for those not on track to graduate.	Yes	Prof. learning	-Provincial/board/trustee training time tracked. -Guide developed and distributed. -Spring symposium held.	Yes	Output	
				Yes	Tracking for match	Using ONSIS data. Also have on data collection/programs at board level. See Cross Panel Teams and Taking Stock.	Uncertain/undetermined	Outcome	Intermediate and long-term outcomes have been identified but it's not clear whether these are intended or actual outcomes.
Student Success Cross Panel Teams and Taking Stock - Interventions	Yes	Theoretical	See Cross Panel Teams and Taking Stock	Yes	Process	-Student Success Leaders Working Meeting: Three meetings- November, March, June. -Student Success Leaders Monthly Regional Meetings: Two meetings will be held to reiterate and continue to focus on the five deliverables of the Student Success Teams. See Cross Panel Teams and Taking Stock	Uncertain/undetermined	Outcome	Outcomes have been identified but it's not clear to what extent they have been monitored for achievement. See Cross Panel Teams and Taking Stock
				Yes	Prof. learning	-Student Success School and Cross Panel Team Regional Sessions: Professional Learning opportunity for Student Success School and Cross Panel Team in their District provided. See Cross Panel Teams and Taking Stock			
					Tracking for match	See Cross Panel Teams and Taking Stock			
Research, Monitoring and Evaluation Team	Yes	Other	Assumption is that it developed as a result of an identifiable data, systems, and capacity gap.	Yes	Process	Although not explicitly stated in the logic model provided ("Logic Model RME draft Jan 17 2013"), it's likely that the program has ample	Yes	Output	Output data is likely available for work conducted by the RME.

Initiatives	FOUNDATIONAL EVIDENCE			MONITORING EVIDENCE			IMPACT EVIDENCE		
	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment	Evidence	Type	Reference/Comment
						monitoring evidence with regard to its activity and how it is working towards integration with other Ministry initiatives as well as educational system stakeholders and elements.			
				Yes	Other	Although not explicitly stated in the logic model provided ("Logic Model RME draft Jan 17 2013"), it's likely that the program has ample monitoring evidence with regard to its activity and how it is working towards integration with other Ministry initiatives as well as educational system stakeholders and elements.	Yes	Outcome	Immediate-, intermediate- and long-term outcomes have been identified. Not clear from the logic model provided ("Logic Model RME draft Jan 17 2013") how much they have tracked performance in relation to intended outcomes.

ⁱAn objective or goal or step was designated at “stated” only in instance where the referenced documentation specifically designated it as such. Taken as a whole, and as evidenced in this table, the majority of intended objectives or goals of these initiatives appear to be inferred. In other words, they were deduced from the specific tasks or activities associated with an initiative.