



## MEASUREMENT REPORT: LEARNING

### Report No. 18-113

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COMMITTEE OF THE WHOLE (PUBLIC)

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Learning is one of the OCDSB's strategic objectives for 2015-2019. It is defined as "a culture which develops creative, confident and engaged learners who model the Characteristics and Skills expressed in our Exit Outcomes for graduates". The objective states: **By 2019, the District will improve the achievement of students in all educational pathways.**

To support achievement, the OCDSB is committed to understanding the learning needs of our students. As we monitor our progress in this area, this report discusses key work that has been carried out to support student learning. In addition, this report is accompanied by:

- Detailed quantitative evidence of student achievement: Annual Student Achievement Report (ASAR; Appendix A); and
- The identification of priorities which will set District direction in support of student achievement and well-being this year: Board Improvement Plan for Student Achievement and Well-being (BIPSAW; Appendix B).

The information provided in these documents demonstrates how the meaningful use of data can inform our practice.

Primary data for assessing progress on the learning objective are our standardized assessment results for literacy and numeracy (EQAO). To put these results into context, they are examined in comparison to the provincial average. In 2017-2018, OCDSB students outperformed their provincial counterparts on 7 of 10 EQAO assessments. To better understand trends over time, 2017-2018 results were compared to average results across the previous three years. Analyses revealed that the proportion of students meeting, or exceeding, the provincial standard on EQAO assessments (noted as 'success rate' in the figure below) increased in 4 of the 10 areas.

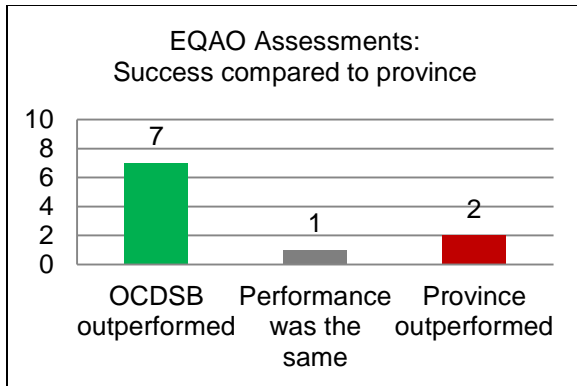


Figure 1. OCDSB success on EQAO assessments compared to the province.

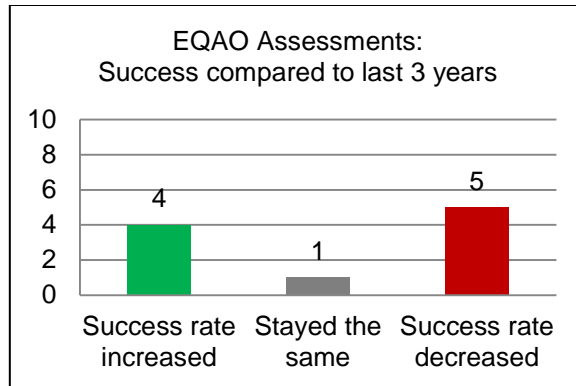


Figure 2. OCDSB success on EQAO assessments compared to the last 3 years.

Analysis of the District's EQAO results, alongside other achievement data, is presented in detail in the ASAR, Appendix A. Given the breadth of the data in the ASAR and the BIPSAW, this document highlights specific pieces of work that support learning at the OCDSB. The discussion of this work and the progress made last year has been organized according to the strategies for the learning objective. The strategies are:

- Promote and encourage the personalization of learning and enhance instructional practice to meet the individual needs of learners;
- Improve and increase access to the educational pathways for every student; and
- Optimize School Learning Plans to develop strategies to support achievement in targeted areas (e.g. numeracy and literacy).

Each of these strategies, and corresponding evidence, will be discussed in turn.

**Strategy #1: Promote and encourage the personalization of learning and enhance instructional practice to meet the individual needs of learners.**

*The Early Literacy and Numeracy Observation Tool (ELNOT);*

The ELNOT resource has been designed to provide Early Years educators with a sound classroom assessment that measures emergent literacy and numeracy skills. The skills of interest have been identified by research as being important building blocks for future development and successful outcomes. In 2017-2018, the District engaged in the development of district-level normative data, which provides educators with an important point of reference to screen for early intervention and to assess developmental growth of children during the two-year kindergarten program. Over a thousand students were randomly selected from 65 schools for the norming project, with attempts to ensure District representation according to superintendency, types of programs offered, and socio-economic status. The resulting resource provides educators with a tool kit for better understanding students' learning needs in both literacy (e.g., letter identification; concepts about print; phonological awareness; etc.) and numeracy (e.g., number identification; counting; cardinality; etc.).

*Professional Development;*

In 2017-2018, the OCDSB worked to enhance instructional practice in mathematics through professional development. Although professional development opportunities were limited due to the shortage of occasional teachers, staff received support through a K-12 network for School Learning Plan teams, including administrators, math leads, learning support/resource teachers, ESL leads, and digital lead learners. School Learning Plans had mathematics as a focus, and tracking the impact of the School Learning Plans for Student Achievement was done in part through the study of marker students' progress, based on their individual learning profiles. Furthermore, the EOSDN math project focused specifically on planning and responding to student learning needs, based on a study of their work and their personalized learning profiles.

In addition to a focus on mathematics, professional learning was provided to staff to support self-regulation in the Early Years. To support this learning, Learning Support Services provided a series of presentations to school teams at staff meetings and sessions were provided to educators who were new to teaching kindergarten. The focus on self-regulation supports student well-being, which in turn supports students learning, highlighting the intersection between these objectives.

*New Pedagogies for Deep Learning (NPDL);*

NPDL is a global initiative designed to enhance instructional practice through new pedagogies, learning partnerships, learning environments and leveraging digital technology. NPDL is centered on six global competencies: Character, Citizenship, Collaboration, Communication, Creativity, and Critical Thinking. These competencies align comprehensively with the OCDSB Exit Outcomes, as outlined in the figure below.



Figure 3. Alignment of OCDSB Exit Outcomes and NPDL Global Competencies.

One of the ways that the OCDSB supports educators in teaching these skills and characteristics is through the development of deep learning tasks. In 2017-2018, educators and students at 12 OCDSB schools embarked on deep learning journeys. Through NPDL, educators design experiences that build on learner strengths and needs, create new knowledge using real-life problem solving, and help all students identify their strengths, purpose, and passion. School learning teams were provided with support through professional development, in-school release time to work on collaborative inquiries, support from a technology coach, participation in an online

Google Community, and membership in the global deep learning partnership. This work has been integrated with support from Curriculum Services, Learning Support Services, and Business & Learning Technologies. The OCDSB will submit a selection of school-based projects from the 2018-2019 school year to the Canadian NPDL cluster for moderation in the spring. Past works from the OCDSB have been highlighted at both the national and international level through the NPDL Global Network.

*Collaborative Inquiry – Students with Autism Spectrum Disorder;*

Last year, a school team worked with a member of the Research, Evaluation and Analytics Division to conduct a collaborative inquiry measuring learning in students with Autism Spectrum Disorder (ASD). The goal of the inquiry was to use Augmentative and Alternative Communication (AAC) Prompting Hierarchy to increase student independence and reduce staff prompting. Specifically, the team investigated the intentional use of a prompting hierarchy for communicating “more” with 28 marker students (diagnosed with ASD; non-verbal; demonstrate joint attention). Students were monitored bi-weekly, over a 5-month period, and results showed that:

- 83% of students completed the task with a lower level of support; and
- 76% of students completed the task with fewer prompts.

In addition, staff feedback showed a reported increase in task independence for students, as well as a change in their own practices using the ACC prompting hierarchy (as shown in the figures below). Although a small sample, this inquiry provides evidence of student learning, educator learning, and provided an effective means of addressing and monitoring the needs of both groups.

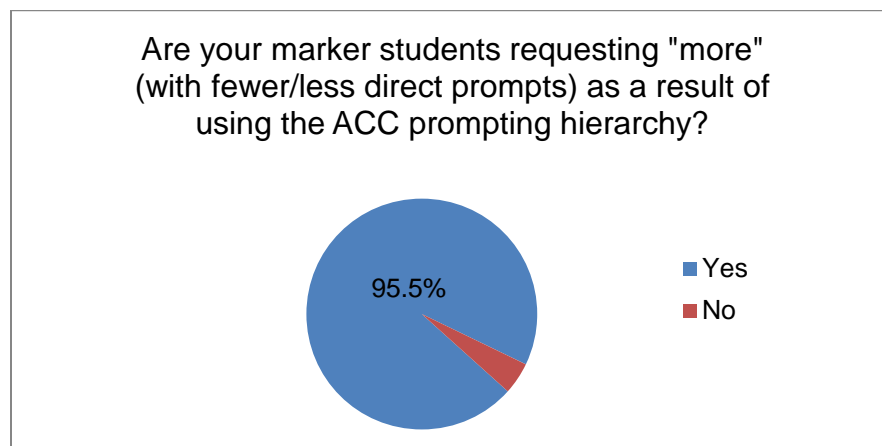


Figure 4. Staff reports of increased student independence on task (n = 22).

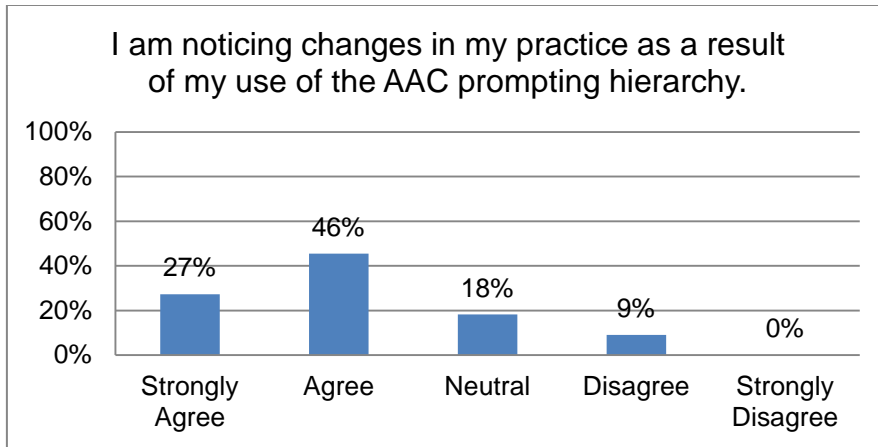


Figure 5. Staff reports of changes in their practice (n = 22).

#### *Collaborative Inquiry – Alternate Program;*

Another Collaborative Inquiry was conducted to better understand the learning needs of students in the Alternate Program. Historically, EQAO participation rates are low for students in this program, and therefore evidence to inform school planning has been limited. To address this need, school teams gathered information on how well student needs are being met; what is being done to meet those needs; and in what ways/areas we can improve.

Staff designed a survey to collect feedback from students in the Alternate Program, who had earned 23 credits or more (n = 127). The survey consisted of questions that allowed students to express their views and feelings related to their personal experiences in the Alternate system. Once the survey closed, the lead teachers then held four focus groups, each with a sampling of students who had taken the survey. This enabled teachers to ask more specific questions, seek clarification, and gain further insight into the students' experiences.

Results from the Collaborative Inquiry were deemed very useful by school teams, especially when planning for the upcoming school year. As highlighted in the figure below, students expressed appreciation for the flexible learning environment of the Alternate Program. Students also reported that their learning was supported by the ability to take one course/classroom at a time, the variety of methods to earn credits, and the choice of courses.

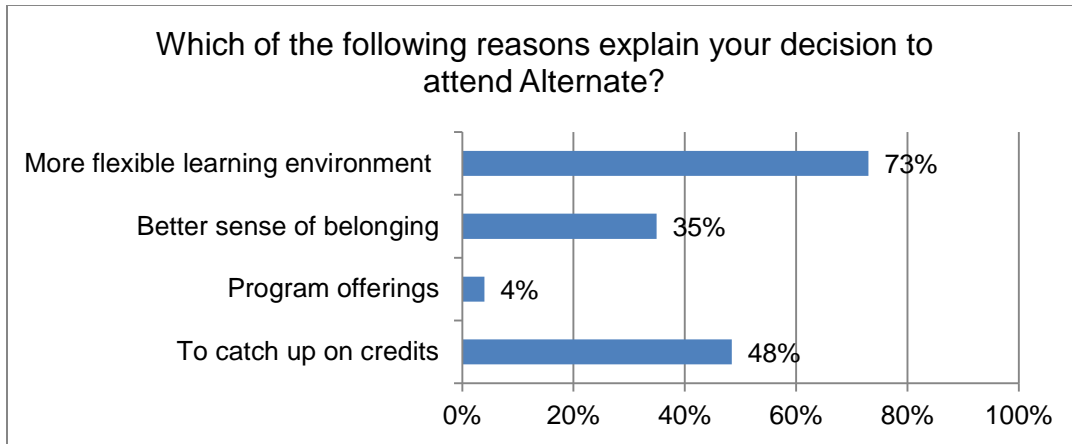


Figure 6. Students' reasons for attending an Alternate Program.  
*Note.* Students could select more than one reason, therefore totals exceed 100%.

Students also reported feeling comfortable asking school staff for support (as shown below), and being engaged in classroom/learning activities. Across the various types of activities surveyed about, students reported being engaged/highly engaged:

- When the teacher allows me to choose how I learn (92%);
- When the teacher is explaining the question(s) or activity (86%);
- When explaining my ideas to the teacher (91%);
- When the teacher involves me in planning/choosing options within the course (89%); and
- When working on hands-on activities (84%).

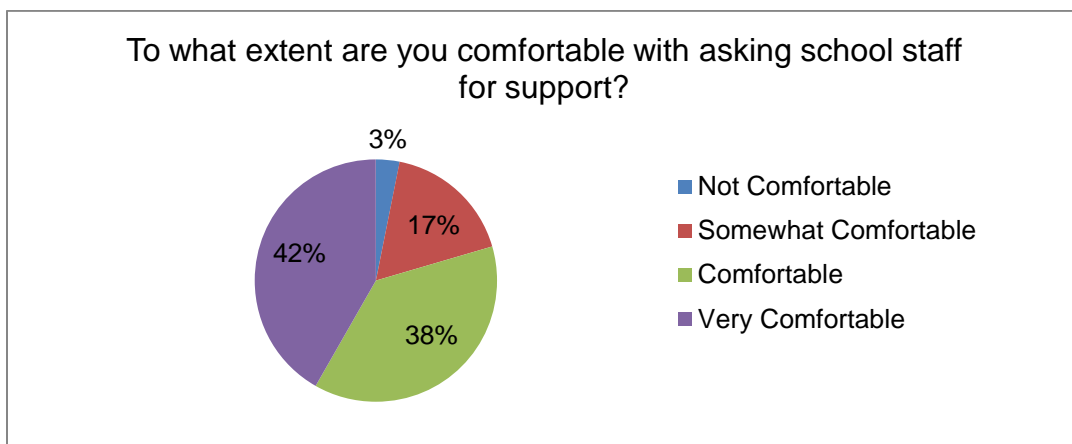


Figure 7. The extent to which surveyed students in the Alternate Program reported feeling comfortable asking school staff for support.

Additionally, students were asked about how the Alternate Program helped them develop various skills and prepare them for the future. Students reported that the Alternate Program helped them develop the ability to work independently and to advocate for personal and health and wellness (see graph below). Students also reported being prepared for their chosen pathway, following secondary school. The

most common pathway students reported planning to follow was college (62%). Of the students who planned to attend college next year, 71% reported being confident/very confident that they were prepared for this pathway by the Alternate Program. Of the students who planned to attend college eventually, 81% reported feeling confident/very confident that they were prepared.

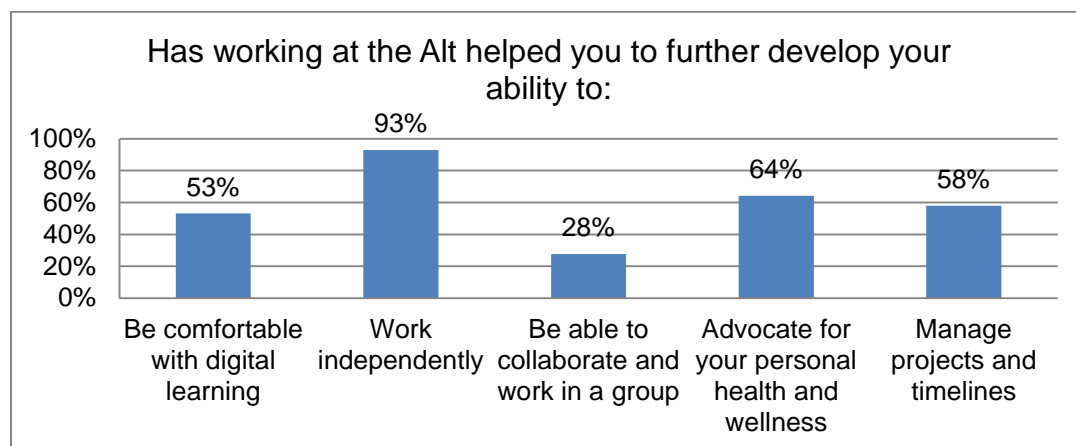


Figure 8. Student reports of abilities developed through the Alternate Program.  
 Note. Students could identify multiple abilities, therefore totals exceed 100%.

**Strategy #2: Improve and increase access to the educational pathways for every student.**

*Early French Immersion (EFI) Program;*

As of September 2016, the Kindergarten Program at the OCDSB consists of two years with 50% English and 50% French instruction. Importantly, this shift resulted in a change to the entry point to the Early French Immersion (EFI) Program (from the end to year 1 to the end of year 2) until after students have had the opportunity to experience learning in both official languages. Alongside changes to the Kindergarten Program, the OCDSB also implemented changes to the EFI program for grades 1-3 by changing the language of instruction for math from French to English.

By ensuring every kindergarten student has two years of 50% French exposure during their school day, we have sought to increase equity of access to the EFI program particularly for students who may not otherwise consider this option. To monitor the impact of these changes, we will consider both enrolment statistics and measures of student achievement (as they become available; with a detailed report scheduled for Spring 2022). The first cohort of students from the 50/50 Kindergarten Program is now enrolled in grade 1, for which enrolment statistics will be examined once they are finalized (with an interim report scheduled for Spring 2019). We can, in the meantime, consider enrolment trends from last year, which represent the cohort of students who experienced one year of 50/50 Bilingual Kindergarten before choosing a program stream for grade 1. Enrolment trends for this cohort show that an increasing number of students are opting for EFI. While this increase suggests that more students are



deciding that EFI is the right pathway for them, this increase does not suggest that the change is a result of the changes to the Kindergarten Program. In fact, trajectory of this increase is consistent with the pattern of enrolment we have seen in recent years (see figure below). Despite being unable to determine causality, we see an increasing number of students taking advantage of the opportunity for Early French Immersion at the OCDSB.

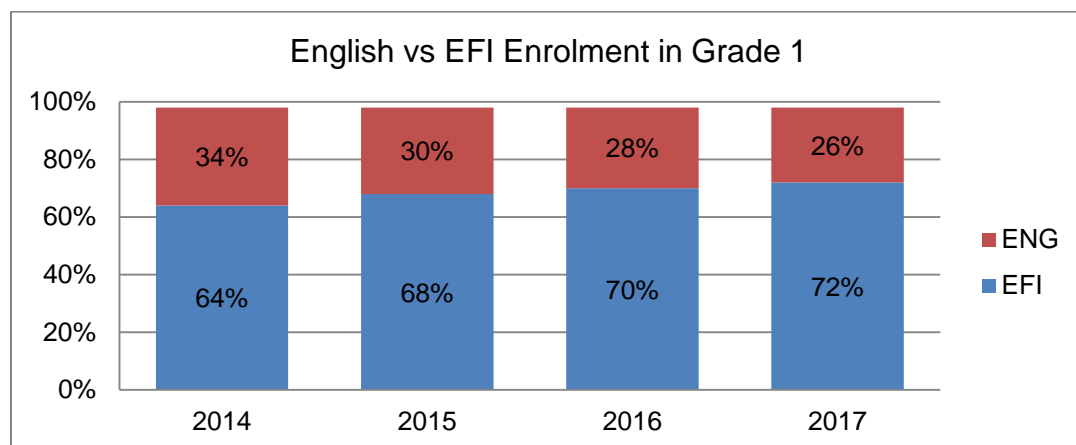


Figure 9. English vs. EFI enrolment trends for grade 1 students.  
 Note. Totals do not add up to 100% given a small proportion of students enrolled in other programs (i.e., Alternative; specialized classes).

*Virtual Learning Environment;*

The OCDSB’s Virtual Learning Environment (VLE) is now the home for the OCDSB Student Portal, providing all students with access to an Elementary or Secondary Student Toolkit containing links to a wide variety of electronic resources including Homework Help, Britannica School, the Ontario Educational Resource Bank (OERB), Mathies, and Bookflix. Students access their blended and online courses through the VLE, continuing to actively engage in their own learning while building digital fluency and communication skills. Through our membership in the Ontario eLearning Consortium, students are able to choose from 92 different eLearning courses, improving access to all educational pathways, including courses needed for SHSM programs, French language and French Immersion courses, and courses related to personal areas of interest. The OCDSB offered 95 sections in 2017-2018 as shown in the figure below.



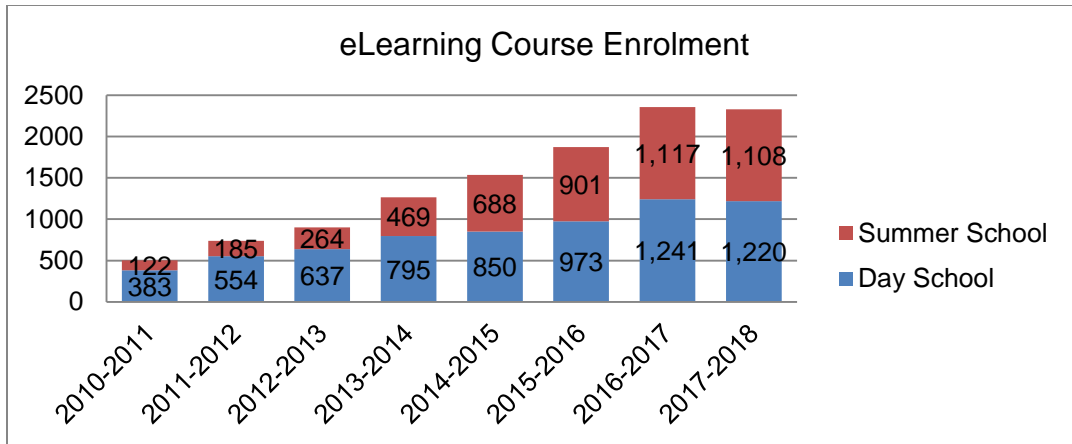


Figure 10. Enrolment statistics for eLearning course over time.

*Specialist High Skills Major (SHSM);*

The SHSM program was launched in 2006, with Ministry approval, to support student learning and the development of skills, interests, and talents that align with their desired career path. Students take part in rich experiential learning through work experiences, job shadowing, and reach ahead opportunities, while earning their Ontario Secondary School Diploma. Over the years, there has been growth in both the number of programs and number of students enrolled. In 2014-2015, just prior to the start of this strategic plan, the OCDSB offered 23 SHSM programs and had 520 students enrolled. This year, 2018-2019, there are 42 programs with a projected enrolment of 759 students. This represents an increase of 19 programs and over 200 students over the course of this strategic plan, both of which have been factors in increased funding from the Ministry of Education for SHSM programming at the OCDSB.

The enrolment trends over time are presented in the figure below. The substantial increase in recent years is credited to a combination of factors, including the addition of new programs and strategic support from the instructional coach. Although there has been great progress in growing the program, completion rates continue to be an area for future work. Completion rates for 2017-2018 are not yet available, but data from 2016-2017 shows a completion rate of 48% for the OCDSB and 53% for the province.

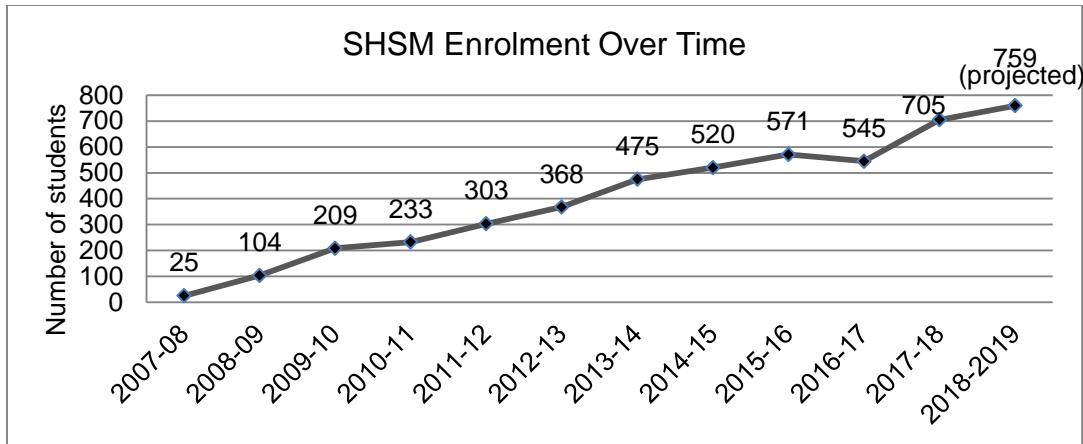


Figure 11. SHSM Enrolment over time.  
*Note.* Between 2015-16 and 2016-17 student tracking in Trillium underwent improvements, leading to increased data accuracy. This is an important consideration when interpreting what appears to be a decline over that same time period.

*International Certificate Program;*

The International Certificate Program gives high school students the opportunity to become informed, engaged, and active global citizens who learn about themselves by learning about the world. Students study an international language, take internationally-focused classes, learn to understand global issues, and participate in an internationally-focused project. The program, which was introduced in 2012-2013, is now in its 7<sup>th</sup> year at the OCDSB. Over that period, the program has grown substantially (as shown in the figure below). This year, the number of graduates is expected to exceed 80 students. Many students are participating in new reciprocal exchange programs, which in combination with student bursaries, has resulted in economically feasible options to study abroad.

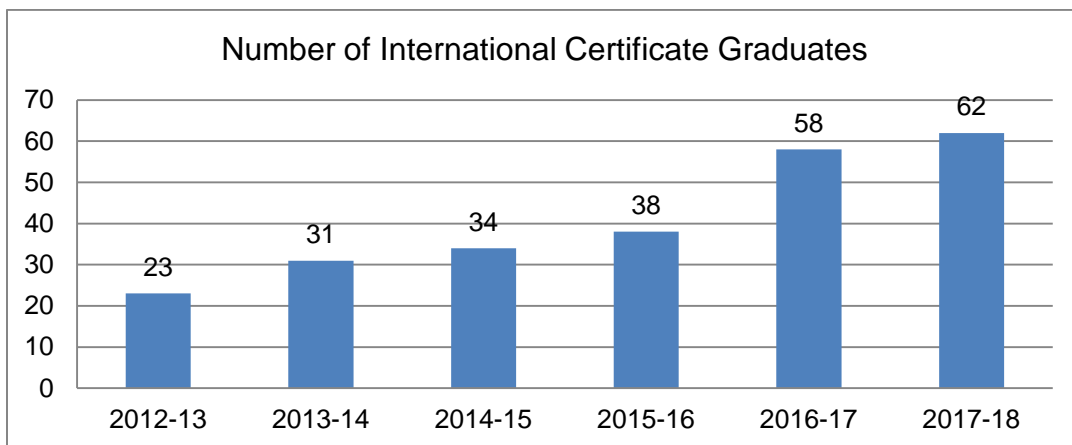


Figure 12. Number of International Certificate Graduates each year since introduction of the program.

### Strategy #3: Optimize School Learning Plans to develop strategies to support achievement in targeted areas (e.g. numeracy and literacy).

School Learning Plans (SLPs) engage school teams to develop strategies for supporting student learning and well-being. In doing so, they use the following process:

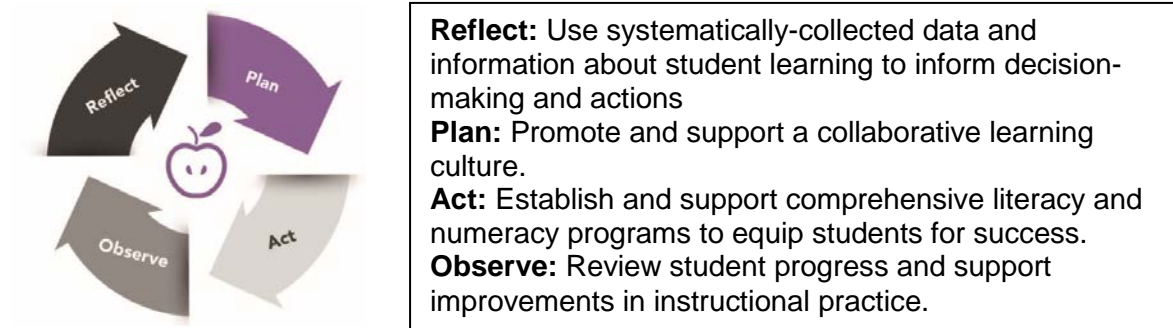


Figure 13. Professional Learning Cycle for School Learning Plans.

Through the SLP process, school staff set goals for student achievement and well-being. In addition, they make decisions about how and when these goals will be achieved. This involves schools within each superintendency working with a member of the central research team to build school teams' capacity for understanding and using data to inform practice. This data typically includes EQAO results, report cards, survey data, teacher observations, and classwork. Ultimately, the SLP is designed to support staff in focusing on the areas of greatest need for their students.

In 2017-2018, the District encouraged and supported all schools in having a target in mathematics in the achievement goal of their SLP. Across the SLP submissions received, a number of common themes emerged. Areas of focus frequently cited were:

- Number Sense;
- Problem Solving;
- Computational Strategies;
- Proportional Reasoning; and
- Operation Sense.

Furthermore, themes emerged in the instructional strategies identified by schools, including:

- Assessment Loop (feedback and success criteria);
- Number Talks and Accountable Talk;
- Self-Verbalization/Self-Questioning;
- Spaced and Mass Practice/Spiraling; and
- Demonstration and Modelling.

Schools are also encouraged to engage their community in their SLP. Schools were provided with a common template for their SLP, which they could use to share their SLP

with stakeholders via their website. For the most part, engaging parents in the SLP process consisted of schools sharing information (i.e., shared with School Council; newsletters; school website; email; social media; etc.). Some schools further involved parents by holding a math information night; providing tools/resources; having an information booth at school events; supporting parent-let activities; gathering feedback; and hosting focus groups/forums.

### **Next Steps**

Ultimately, the goal of the learning objective is to improve the achievement of students in all educational pathways. Through the identified strategies, the District has had many accomplishments in pursuit of this goal. Student learning, however, continues to be an area of need. Now in the final year of the 2015-2019 strategic plan, key work is needed to continue to support progress on this objective.

### **Strategy #1: Promote and encourage the personalization of learning and enhance instructional practice to meet the individual needs of learners.**

One of the ways in which we are working to personalize student learning this year is through a continued focus on the Exit Outcomes. To support the development of these skills and characteristics in OCDSB students, staff will be implementing a self-reflection tool that is designed to help students assess and understand the Exit Outcomes characteristics. Through this self-reflection, students will be encouraged to assess their personal strengths and think about areas in which they can promote self-growth.

Curriculum Services is also working to enhance instructional practice through professional learning models for staff. The Curriculum Services team is working to develop these models in a range of formats, which will allow for different levels of support for different purposes. For example, depending on staff needs, professional learning may take the form of building awareness and gaining access to resources; it may be webinars or self-directed learning using various information sources; or it may be small groups engaging in deep inquiry. By creating these models, we aim to engage staff in professional learning that will ultimately serve the needs of our students.

### **Strategy #2: Improve and increase access to the educational pathways for every student.**

As discussed in the Measurement Report on Equity (18-068), revisions to the Student Success Model, 7-12, were undertaken last year. This year, the OCDSB will implement these revisions. The revised model is designed to support multiple strategic objectives, including equity, stewardship, and well-being. Specific to the learning objective, the revised Student Success Model will support timely and effective strategies that serve to increase student success in grades 7 to 12, and to broaden staff instructional capacity. This will involve a focus on the Student Success Team, professional learning, resources, and monitoring and tracking.

Another important piece of work this year will be to maintain momentum on the growing SHSM program. As outlined above, this program provides students with experiential learning opportunities through work-related experience. This year, the OCDSB is working to develop and implement business partnerships in order to continue to support the SHSM program. These partnerships will increase opportunities for students and improve access to this pathway.

**Strategy #3: Optimize School Learning Plans to develop strategies to support achievement in targeted areas (e.g. numeracy and literacy).**

One of the ways in which the OCDSB will optimize SLPs this year is through identification of precise achievement and well-being goals. In support of student learning, each SLP will identify an achievement goal aligned with Fundamentals of Mathematics. This demonstrates our continued focus on math as a District, as we aim to further support our students in this area. Additionally, SLPs will be supported this year through community involvement. This will involve using a common SLP template and ensuring that SLPs are posted to all school websites. By engaging the community in the SLP process, we are promoting looking to not only share SLPs with our stakeholders but to also gather their insight on student learning and well-being needs.

**Guiding Questions**

The following questions are provided to support the discussion of this item by the Committee:

- What does the information provided tell us about the learning needs of our students?
- How does the information in this report and the Annual Student Achievement Report inform our work for this year?
- How will the goals and strategies of the BIPSAW support our progress during the final year of our 2015-2019 strategic plan?
- How will the identified next steps move us forward on this objective?

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