THAMES VALLEY DISTRICT SCHOOL BOARD
PROGRAM AND SCHOOL SERVICES ADVISORY COMMITTEE AGENDA

November 6, 2018, 6:00 p.m.
Board Room, Education Centre

Pages

1. Approval of the Agenda

2. Conflicts of Interest

3. Minutes of the Previous Meeting 2

   The minutes of the 2018 October 2 meeting are provided for information.

   a. Business Arising from the Previous Meeting

4. Elementary Guidance Lead Initiative

5. Chromebook Outcomes/Learning 4

6. Cursive Writing Curriculum Expectations 36

7. Other Business

8. Questions and Comments by Members

9. Future Agenda Items

   - School Messenger

10. Date and Time of Next Meeting

    The next meeting is scheduled for 2019 January 8.

REPORT OF THE PROGRAM & SCHOOL SERVICES ADVISORY COMMITTEE

2018 October 2
6:08 p.m. –7:00 p.m.

Members: Trustees J. Bennett, R. Campbell, P. Jaffe, B. McKinnon, S. Polhill, M. Reid, P. Schuyler, R. Tisdale; Student Trustee S. Chan

Regrets: Trustees G. Hart, A. Morell, J. Todd, J. Skinner, C. Goodall; Student Trustees N. Bajaj, I. Frick

Administration: L. Elliott (Director), R. Culhane (Associate Director), P. McKenzie (Superintendent), D. Macpherson (Superintendent), M. Deman (Superintendent), S. Builder (Superintendent), J. Pratt (Associate Director)(+6:42), B. Nielsen (Learning Supervisor), A. Hansen (Learning Coordinator), C. Henriquez (Manager, Capital Projects) (+6:45), B. Williams (Corporate Services), S. Smith (Corporate Services)

Chair Bennett called the meeting to order at 6:08 p.m. in the Board room of the Education Center.

1. **APPROVAL OF AGENDA –** The agenda was approved on motion.

2. **CONFLICTS OF INTEREST –** None declared.

3. **MINUTES OF PREVIOUS MEETING**
   The minutes of the 2018 June 5 meeting were provided for information.

4. **BUSINESS ARISING –** None declared.

5. **TVDSB AND THE FUNDAMENTALS OF MATHEMATICS**
   S. Builder shared an overview on the Ministry of Education's focus on New Fundamentals of Mathematics and the work in TVDSB. Information on how the professional Learning Series in 2017-18 aligns with the Fundamental of Mathematics was provided.

   S. Builder reported the Professional Activity Day will take place for Elementary staff on 2018 October 26 and for Secondary staff on 2018 November 16.

   Questions of clarification regarding the gap between public perception and curriculum expectations were addressed by S. Builder.

6. **DRAFT HPE PARENT AND STAFF COMMUNICATION**
   P. McKenzie, B. Nielson and A. Hansen presented information on the material prepared for school staff and parent communities about the revised interim Health and Physical Education (HPE) curriculum for 2018. P. McKenzie reported the material is being shared with parents 2018 October 5.

   B. Nielsen noted a question and answer section has been included to support administration with parent/guardian questions. In response to a question regarding accommodation, administration provided examples of how they may be done.

   In response to a Trustee question regarding the letter to parents/guardians, B. Nielsen and A. Hansen described the support materials for schools and how support materials are being provided to teachers. It was confirmed changes in the curriculum affected only the Growth and Development portion.

   P. McKenzie outlined next steps, noting feedback will be gathered from educators to determine where additional supports/resources may be needed.

In response to a Trustee question B. Nielsen acknowledged teachers may enhance topic areas to meet student learning needs.

7. COMMUNITY ADVISORY COMMITTEE UPDATES (STANDING ITEM)

J. Bennett reported on the City of London Safety and Crime Prevention Advisory Committee reminding Trustees of the decision by the London Fire Department to teach only students attending London Schools at the Safety Village. She further reported on a similar decision by the London Police. Efforts to engage fire prevention officers in the counties of Middlesex, Elgin and Oxford were described. Currently there are no officers available from the counties to teach at the Safety Village. The lack of student attendance at the Safety Village in September was noted.

B. McKinnon provided an update on meetings in Woodstock noting the new bylaw regarding speed limits and stopping in front of schools has been well received.

8. OTHER BUSINESS-None.

9. QUESTIONS AND COMMENTS OF MEMBERS (STANDING ITEM)-None.

10. DATE AND TIME OF NEXT MEETING

The next meeting was scheduled for Tuesday, November 6, 2018 at 6:00 p.m. in the Board Room.

11. ADJOURNMENT

Meeting adjourned on motion at 7:00 p.m.

RECOMMENDATIONS: None.

JOYCE BENNETT
Chairperson

Date of Meeting:2018 November 06

Item #: 5.0

REPORT TO:	☐ **Administrative Council**	☒ **Program and School Services Advisory Committee**	
	☐ **Policy Working Committee**	☐ **Planning and Priorities Advisory Committee**	
	☐ **Board**	☐ **Other:**	
	☐ **PUBLIC**	☐ **IN-CAMERA**	
TITLE OF REPORT:	Technology to Support Rethink Secondary Learning: Chromebook Pilot Project Update		
PRESENTED BY:	Sheila Builder, Superintendent of Student Achievement Mary Roes, Learning Supervisor, Information Technology Services Christine Stager, Manager, Research & Assessment Lori Kirkpatrick, Research Associate, Research & Assessment		
PRESENTED FOR:	☐ **Approval**	☒ **Information**	☒ **Advice**
Recommendation(s):			
Purpose:	To provide an update to Program and School Services Advisory Committee on the Chromebook Pilot Project		
Content:	We are currently in Year Two of a two-year Chromebook pilot project. The seven participating schools now have Chromebooks for students in grade nine and ten. Research & Assessment has conducted focus groups and surveyed staff and students at participating schools; the findings have been positive and will be reviewed with the Board of Trustees as an update.		
Cost/Savings:	There are no costs/ savings, as this is an update on the pilot project.		
Timeline:	Pilot to continue in Year Two (2018-19)		
Communications:	Administrative Council Program and School Services Advisory Committee		
Appendices:	Technology to Support Rethink Secondary Learning Presentation Technology to Support Rethink Secondary Learning Research and Assessment Reports		

Strategic Priority Area(s):	
Relationships:	☒ Students, families and staff are welcomed, respected and valued as partners. ☒ Promote and build connections to foster mutually respectful communication among students, families, staff and the broader community. ☒ Create opportunities for collaboration and partnerships.
Equity and Diversity:	☒ Create opportunities for equitable access to programs and services for students. ☒ Students and all partners feel heard, valued and supported. ☒ Programs and services embrace the culture and diversity of students and all partners.
Achievement and Well-Being:	☒ More students demonstrate growth and achieve student learning outcomes with a specific focus on numeracy and literacy. ☒ Staff will demonstrate excellence in instructional practices. ☒ Enhance the safety and well-being of students and staff.

Form Revised October 2018

Technology to Support Rethink Secondary Learning

Please find attached 5 Research and Assessment Documents, related to the evaluation of the Chromebook Pilot Project.

- Documents 1-3 present student and parent perspectives at the time of the initial Chromebook rollout (Fall, 2017)
- Document 4 presents Educator perspectives at the time of the initial Chromebook rollout (Fall, 2017)
- Document 5 presents student and educator perspectives from the end of the first year of the pilot (Spring, 2018).

1:1 Pilot at College Avenue Secondary School: Initial Feedback from Students and Parents

Fall, 2017

Chromebook Rollout

Chromebooks were initially distributed at an afterschool session on November 16, 2017 at College Avenue Secondary School. Students and their parents/guardians were able to provide feedback about the pilot.

Community Feedback

Parents/guardians and students provided feedback on the 1:1 pilot using a half-page paper form called, "We Want to Hear from You". Forms were completed in the 'Blue Room' where 2 student ambassadors were leading a session about Digital Citizenship.

In total, 87 participants provided feedback about the 1:1 pilot, 43 of these identified as parents or guardians, 42 identified as students, 2 did not identify a role. Data was collected and analyzed by Research and Assessment Services.

An advantage described by parents was, "the kids having a head start when it comes to technology, no matter financial circumstances…"

Technology at Home

Parents/guardians and students are excited about the ability to access and transfer their learning between school and home environments. A few adults expressed concerns about the amount of time students spend online/in front of a screen.

One parent identified that the Chromebook is "a new tool for learning, increased communication between faculty and students."

Technology at School

Students were overwhelmingly positive about the Chromebook and they could see advantages for *"anywhere and anytime"* learning. Students felt they would have better access to their teachers and information for learning.

"I'm excited that I don't have to write every note out, I can just type it. That I can also search things up at any point and have my homework saved for the classroom." A Student.

RESEARCH and ASSESSMENT

Parents/guardians and students are most excited about…

- Access provided with 1:1
- New ways of learning
- Storing all their work in the same place and having it available and organized
- The ability to work outside of school

"I am excited about "all the new opportunities and the new ease of access and ability for every student to have the same access not dependent on social status." A Parent.

- Touch screens
- Working online
- Using less paper

Parents/guardians and students are most concerned about…

- Breaking the device and costs to repair
- The impact on teaching and learning (e.g. devices being used to their fullest capacity)
- Losing skills and motivation to work on handwriting or note taking
- Misplacing saved worked

"Issues with the computer – who fixes, how fast will it be fixed and what happens if there is damage to the computer?" A Parent.

- Taking online safety seriously
- Other students stealing the device or log in ID

One question or idea that students would like the district to consider…

- Making sure that district continues to seek input from students, educators and staff
- Increased safety by blocking some sites and social media
- Plans for the Chromebooks over the summer, next year and beyond

RESEARCH and ASSESSMENT

1:1 Chromebook Pilot at Glencoe: Initial Feedback from Students (Fall, 2017)

Chromebook Rollout

Chromebooks were distributed on November 22, 2017 at Glencoe District High School. The devices were handed out to one classroom at a time, to all Grade 9 students with consent from their families.

Student Feedback

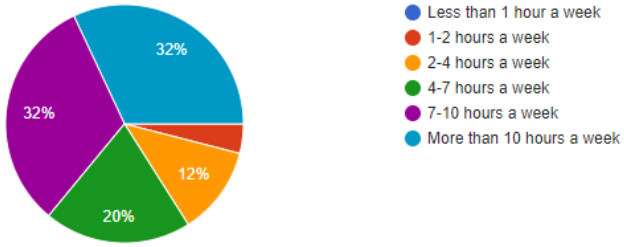
Students were given the opportunity to provide feedback on the 1:1 pilot via a Google form. Students completed the form immediately after receiving their Chromebook. Of the 29 students who received a Chromebook, 26 students provided feedback.

Data Analysis

Student feedback was collected in collaboration with GDHS Staff and Learning Technologies Coordinators. Data was analyzed and presented by Research and Assessment Services.

Technology at Home

Students already spend a lot of time on technology at home. Most students spend at least 7 hours / week on technology at home.



Technology at School

At least a few times a week, students use technology to:

- Take notes
- Work on assignments
- Submit assignments

Less than once a week, students use technology to:

- Take tests
- Present to the class
- Play games

RESEARCH and ASSESSMENT

With the 1:1 Pilot, Students are Most Excited About…

- Learning in new ways
- Using technology in class
- Having a personal device
- Storing all their work in the same place and having it available and organized
- Working outside of school

"I have a computer that is integrated with the school services that I can bring home and still have the same work experience".

- Having touch screens
- Working online
- Using less paper

With the 1:1 Pilot, Students are Most Concerned About…

- Breaking the device
- Losing their work
- Losing the choice of using paper
- Losing skills and motivation to work in hard copy

"Everything ending up digital or my teachers forcing me to use it when I'd feel more comfortable with paper".

- Not having the Internet at home
- Having to bring books and a Chromebook
- Having poor Wifi

Considerations raised by students included:

- Providing a case
- Offering a mouse
- Considering students who do not have internet at home
- Communicating plans for next year

"It's all pretty good".

RESEARCH and ASSESSMENT

1:1 Chromebook Pilot at Saunders: Initial Feedback from Students (Fall, 2017)

Chromebook Rollout

Chromebooks were distributed on November 21, 2017 at Saunders Secondary School. The devices were handed out in homeroom classes to Grade 9 students with consent from their families, by students in the Leadership Program.

Student Feedback

Immediately after receiving the Chromebook, students were given the opportunity to provide feedback on the 1:1 pilot via a Google or hard copy form.

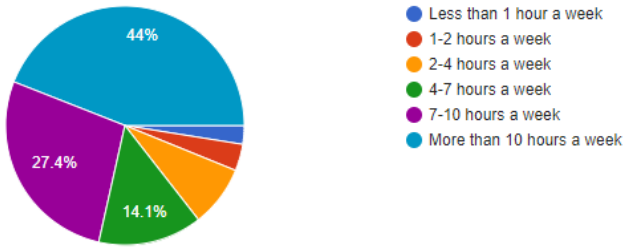
Of the 375 students who received a Chromebook, 284 students provided feedback.

Data Analysis

Student feedback was collected in collaboration with Saunders Staff and Learning Technologies Coordinators. Data was analyzed and presented by Research and Assessment Services.

Technology at Home

Students already spend a lot of time on technology at home. Most students spend at least 7 hours / week on technology at home.



Technology at School

At least a few times a week, students use technology to:

- Work on assignments on their own
- Submit assignments

Less than once a week, students use technology to:

- Take notes
- Work on assignments with others
- Present to the class
- Play games
- Take tests
- Send messages to their teacher

RESEARCH and ASSESSMENT

With the 1:1 Pilot, Students are Most Excited About…

- Improving learning
- Using technology in class
- Accessing and completing school work from anywhere, at any time

"I am excited about how the school system is slowly getting more integrated with technology, which makes life much easier for us students".

- Having their own personal device
- Learning more about technology
- Accessing the technical features and applications
- Having work be easier and more organized
- Working with their classmates

"I am most excited about getting to type whenever I want … I believe I am more fluent as a typer… and it is easier to erase mistakes… Plus there's spell check and Grammarly".

- Using less paper
- Using their phone less
- Showing the devices to their families
- Playing games

"Learning about new things, but using the Chromebooks makes it interesting".

With the 1:1 Pilot, Students are Most Concerned About…

- Breaking or losing the device
- Having the device stolen
- Other students' inappropriate use of the device
- Losing the choice of using paper and hard copy materials

"That our tests and notes we take will be on the Chromebook and not on a piece of paper anymore".

- Restrictions
- Technical issues (Wifi, charging, viruses)
- Losing teacher support

"The teacher won't help me now because we have technology to help us".

- Decreased social interactions
- Monitoring of student activity

Considerations raised by students include:

- Sharing vision and rationale for the project with students
- Communicating plans for future years
- Providing supplementary items (cases, mice, ear buds, etc.)

RESEARCH and ASSESSMENT

RESEARCH and ASSESSMENT

Initial Educator Perspectives on the 1:1 Pilot Initiative:

Findings from the September, 2017 professional learning sessions conducted with 259 educators involved in the 1:1 pilot.

Educators are optimistic about the impact of the 1:1 pilot. They anticipate significant benefits in a range of areas.	Some educators expressed **appreciation for the opportunity** to participate in the pilot. The **majority of educators anticipate moderate or major improvement** in **student engagement, understanding of course content, achievement, attitudes, behaviours, digital citizenship, and digital literacy skills**. Educators believe there will be **increased equity for students, in terms of SES, exceptionality, and ELL statuses**: Educators believe that the **1:1 pilot will help prepare students for post-secondary education and the workforce.** Educators see the potential for technology to support **communication and collaboration**.
Educators are considering the intersection of technology and pedagogy.	Educators recognize that technology alone is not enough; rather, it will be the **use of technology to support pedagogical and learning goals** that will determine success. Educators are **balancing** the **desire for open learning environments** with the desire to **control device usage.**
Educators are envisioning the technology in their classrooms.	Educators are contemplating **how best to use the technology within their subject areas.** Educators want to know how to use the **technology to support daily tasks**. Some educators aim to be **paper-free** while others aim to use the **technology alongside hard-copy materials**. Educators anticipate that their students will need **explicit teaching around digital citizenship and digital literacy**.
Educators described the supports needed to further their learning.	Educators would like: **Professional development** with subject-area specialists and with IT specialists regarding both pedagogy and technology. **Examples and samples of instruction and assessment** in subject-area classrooms. **Time to collaborate** on teaching and assessment with subject-area educators and other Grade 9 educators. **In-school technology support** from IT specialists, TSAs, lead teachers, mentors, or champions. **Professional learning formats** such as lunch and learns, PLCs, Learning Forwards, and observations of classrooms.

Educators identified the infrastructure needed to support the initiative.	The necessary infrastructure includes: **Wi-Fi, charging stations, extra devices for those who forget, printing and projection options, access to paid applications, shared online space, email compatibility, and reliable accounts.**
Educators recognize the potential pitfalls.	**Distraction:** 70% of educators believe that technology can be distracting at school. **Social Skills:** Educators worry about face-to-face and oral communication skills. **Appropriate Use:** Educators anticipate some inappropriate use of devices (gaming, inappropriate content or applications). **Health and Development:** Educators wonder about the effects. **Learning:** A few educators noted concerns about the impact of extensive classroom technology use on learning.
Educators anticipate the questions of families and students.	**Involvement:** Educators think that families will hope to use the technology to see what students are learning. **Safety and Security:** Educators think that families will wonder about online safety, safety while carrying the valuable devices, and monitoring of online activity. **Device maintenance:** Educators think that families and students will wonder about breakage, lost and stolen items, and financial and legal responsibility.
Educators are contemplating success criteria.	**Learning and thinking:** Students would deepen their learning and become better problem solvers and critical thinkers. **Achievement:** There would be increased grades, credit accumulation, and post-secondary opportunities. **Equity and inclusion:** Success would mean more equitable opportunities and outcomes for students. **21st Century Vision:** Students are engaged and technologically adept; classrooms reflect and contribute to the 21st century. **Communication and Collaboration:** Technology would be used to support communication and collaboration within the school and between the school and community.
Educators articulate a strong interest in research on the initiative.	Educators want to know what the **existing research** reveals about technology use. Educators want to know **how success will be measured**. Educators want to understand **their role in the research**.
Educators are curious about the long-term vision for the project.	Educators wonder about the board's **goals for the pilot**. Educators want to know whether **all students and schools will be enrolled in this initiative**. Educators want to know whether **success of the pilot will determine future technology initiatives in the board**.

"I think this is such a positive program. I have seen so much improvement in the way our students use technology. It is right on time for the shift to Global Competencies.... It is shifting the way we teach and the way we learn"
A teacher

"We are able to expand our knowledge and understanding."
A student

Technology to Support Rethink Secondary Learning: Chromebook Pilot Project

Report showcasing survey and focus group data representing perspectives from teachers and students

October, 2018

An Introduction to the Chromebook Pilot Project

Project Overview

Throughout the Rethink Secondary Learning consultations, TVDSB stakeholders identified technology as a resource to support student learning. In response to this, in June 2016, the Trustees requested an exploration of one-to-one computing devices for Grade 9 students in TVDSB. After considering several options, a decision was made to move forward with a pilot of the Chromebook devices for all students enrolled in grade 9 courses and their respective teachers at select schools - Central Elgin Collegiate Institute, College Avenue Secondary School, Glencoe District High School, Saunders Secondary School, Sir Frederick Banting Secondary School, West Elgin Secondary School, and Westminster Secondary School - in the fall of 2017.

Chromebooks are viewed as a viable educational tool for teaching and reaching the students in today's classroom (Janitschke, 2014). This pilot investigates if the Chromebooks provide an avenue for processing information and engaging students in learning and in the learning environment.

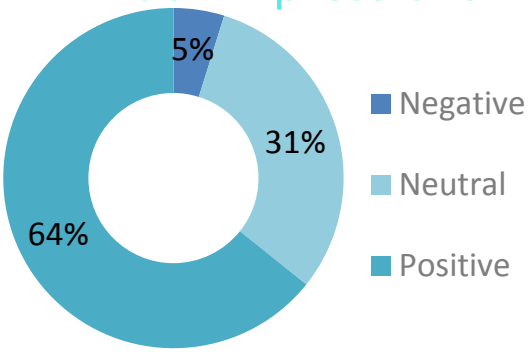
There are many factors considered when planning for a pilot project of this magnitude and identifying what successful implementation could look like. Student engagement with technology is not happenstance, rather, it is a result of careful planning and purposeful pedagogy (Marzano & Pickering, 2011). This report provides data about student and teacher experiences with the Chromebook Pilot Project during the 2017-2018 school year.

Rationale for Educational Technology

Educational decision makers know that:

- Using computers in the classroom leads to positive student perceptions (Fouts, 2000);
- A link between student engagement and academic achievement has been established (eMINTS, 2005; Kebritchi, 2010; Lawrger et al., 2007)
- Technology can amplify student learning in the classroom when used in combination with strong pedagogical practices; and
- Chromebooks are viewed as a viable educational tool for teaching and reaching the students in today's classroom (Janitschke, 2014).

Initial Impressions



Educators have overall **positive perceptions** about the use of Chromebooks

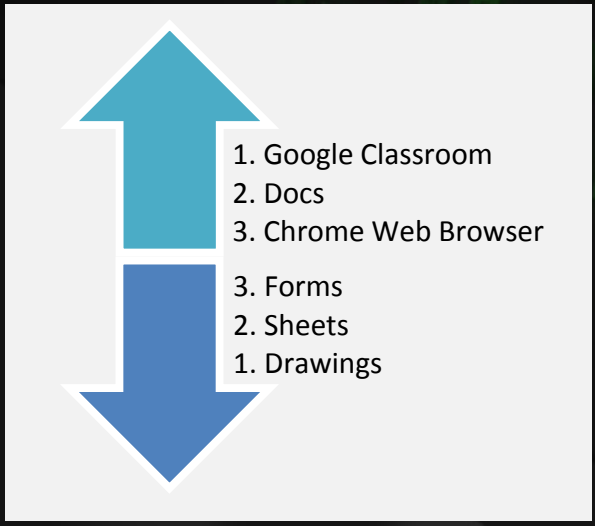
"The use of Google Classroom within lessons has been very effective for student engagement."
A teacher

Summary of Learning from Teachers and Students

The objective of the Chromebook Pilot Project is to provide technology resources to support engagement, learning and pedagogy. Throughout the first year of the pilot, we discovered that the resources and supports offered as part of this initiative have transformative potential within TVDSB. A transformative potential refers to the ability of this initiative to alter the shape and form of learning. With technology available to all students and their teachers, at the participating schools, there are now different kinds of access and opportunities for learning. Many teachers and students feel that ubiquitous technology has made learning easier and more engaging. Not surprisingly, in classes and schools where students are invited or expected to bring and use their technology, there were more elaborate comments about the contributions to learning.

Teachers described planning their lessons around big questions where the use of images, videos or other content from the Internet provokes student interest. Numerous examples were provided of how students move from whole class investigations, to small group activities where they are invited to use their technology to explore a topic more deeply. Teachers detailed extensive use of online applications and software when they talked about how students co-construct and produce knowledge. Furthermore, the technology also has a role to play in allowing teachers to craft and provide students with efficient feedback, which can be used to shape further learning.

Overall both students and teachers held positive beliefs and perceptions about the contributions of technology to learning. The arrow graphics detail the most and least used G Suite tools. Additional data collected from both groups, and represented in this report, speaks to student engagement in research processes, opportunities for collaborating using multiple forms and tools as well as ultimately, creating differentiated products to demonstrate learning and growth. As the Chromebook Pilot Project unfolds during its second year, data collected through surveys and focus groups with teachers and students offers insight for continued growth.



5 ideas for continued growth in the Chromebook pilot project:

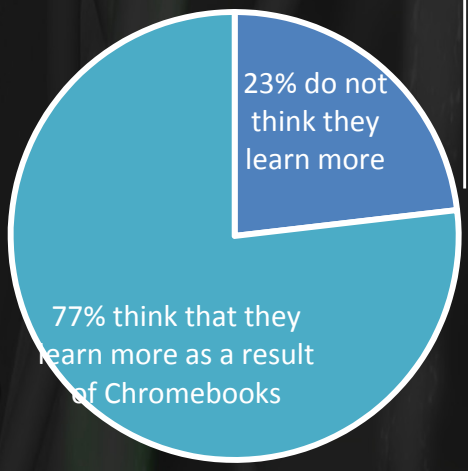
- ❑ Shorten time of device delivery at start of year
- ❑ Actively monitor and manage for distractions
- ❑ Provide education for students and teachers to maximize functionality of the Chromebook (e.g. mini lessons on new apps, typing, and research skills)
- ❑ Wi-Fi is central to Chromebook use – increase connectivity at school and in community
- ❑ Provide safe storage and charging stations at school – encourage responsibility and ownership

Student Survey & Focus Group Responses

There were 635 students from five schools who completed surveys about the Chromebook pilot project and over 70 students from three schools who participated in focus groups about its implementation. Overall, students had overwhelmingly positive remarks about their participation in the pilot. Students described the Chromebook as a "great tool" that "makes it a lot easier to access information" as a "nice compact piece of technology in your hands that can be used or that is accessible at anytime, anywhere." Many students commented on the **ease** and **efficiency** provided as a result of **ubiquitous** access to the devices. A student explained, "Learning is different because when you are working with peers on a presentation, everyone can work on the same document, even when we are not with each other. It is easy to communicate. It is also easier to research information."

"Opening up new ways of doing things… new sites and ideas for tasks" A student

Chromebook Impact on Learning

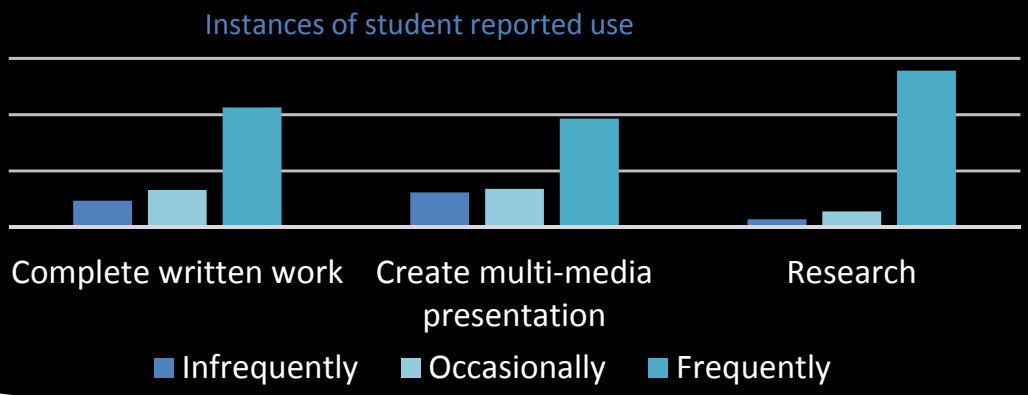


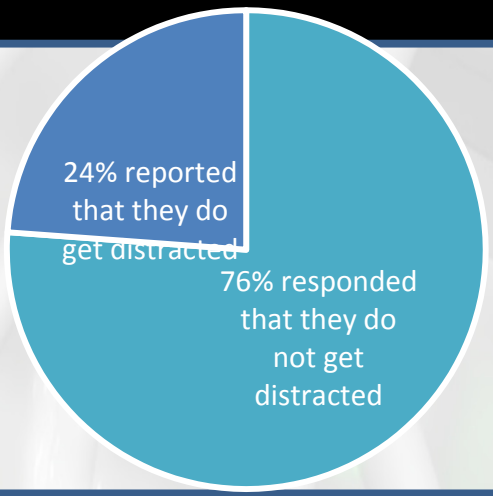
When focusing on their **learning**, students described enhanced **organization** and **responsibility**. Some students spoke of the **fluidity** between working in class at school or carrying on at home. For example, one student described, " A lot of us have better study habits because it is easy to write notes down and you'll have them at home and at school…"

Students emphasized that Chromebooks **positively** influenced research, writing, homework and assignments. One student claimed, "it allows me to easily access a wealth of information which I can then effectively distribute into any possible projects and research papers…" With regards to assignments, a student explained, "we have more freedom of ways to complete tasks" and "getting in assignments is a lot easier because you can hand in assignments at anytime… it is easier to keep track."

Students highlighted the **frequent use** of their Chromebooks for purposes such as completing written work, creating multi-media presentations, and researching various topics. A student shared, "I try to find extra information on a certain topic that we are learning…" Students provided many examples of research tasks, such as, looking up information, finding sources, and answering homework/class questions.

"My Chromebook helps improve my learning when reading and writing. It helps because it makes my notes much clearer when I need to look back on them. Also, it has features that will read out loud to me…"
A student





"It keeps me a lot more organized, especially when using Google docs, Google slides and especially, Google Drive."
A student

"I am most excited about having my own responsibility and having access to my homework… Chromebooks are super helpful"
A student

Global Competencies. Although the Global Competencies were new for many students, they were able to relate these concepts to the Chromebooks. For example, a student indicated that "I have a wider reach to more information…" This information and accessibility positively impacts communication and collaboration." Students described, "you can make and share a document with others.." and "you can all work on one project…" Another student explained, "The Chromebooks really hit every one of these categories (the Competencies), but in different ways." **The work of the global competencies is beginning**.

Concerns. While feedback about the pilot was predominantly positive, some students had concerns about the Chromebook. Many of these concerns were focused on the potential **distractibility**, changing expectations about teaching and learning and access or stability of Wi-Fi. For example, a student recognized, "I get distracted with my music…", "Netflix", or "games" and "the temptation builds up inside of me." Other students noted the discipline required to stay focused and on-task. For example, "you can get distracted… but teachers will address the issue and get you back to work."

Teacher Survey Responses

"This is a great learning experience for me as a teacher and I am enjoying being stretched out of my comfort zone"

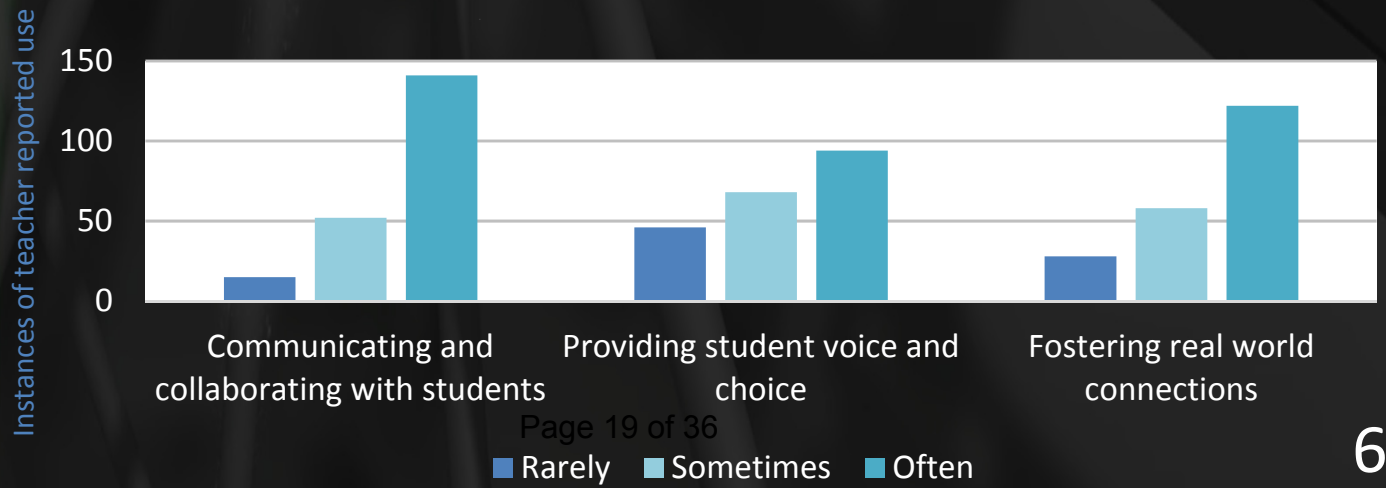
"Access to Chromebooks has been critical in providing a starting base from which to rethink education and how to inspire learning. This has been a tool. We are making great strides"

Of 208 teacher descriptions of interweaving curriculum, technology, pedagogy and assessment, the following themes arose:

- Extensive use of **G Suite** (all apps & hyper docs)
- Research that involves locating resources and analyzing data
- Chromebook as an electronic notebook or portfolio that encourages exchange and sharing
- Promoting research and documentation of learning
- Promoting engagement through apps (e.g., Desmos; Kahoot; Padlet; Webquests)
- Collaborating on assignments towards a shared goal
- Creation of products to communicate understanding (e.g., Infographics)
- Integrated and problem-based learning (e.g., Water quality project; Biotech)
- Promoting learning beyond the classroom by exploring real world connections (e.g., news)
- Checking for understanding and providing rapid feedback (e.g., Mentimeter; Google Forms)

Many teachers noted that **interweaving** the Chromebooks into curriculum is commonplace saying: "Every unit has this combination" and "it is an ever-evolving process that alters with each assignment." One teacher described, "the students are teaching me as much as I am teaching them, which is a really lovely environment with everyone feeling like they have something of worth to contribute."

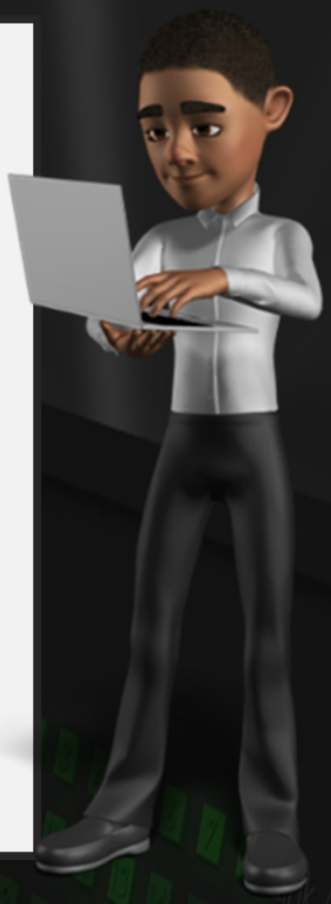
Overall, teachers are very **positive** about the increased accessibility for all students and the possibilities for learning. Teachers commented on the **depth of exploration**, opportunities for new forms of **pedagogy** and ongoing communication.



Technology and Learning

Teachers found the G Suite very **user friendly** and they agree it is important to prepare students' 21st century skills/global competencies. One teacher explained, "independent learning, metacognition, authentic tasks are more **accessible**. I can pack so much more punch into my every day lessons and activities." Some of this punch is delivered through group work and **collaborative approaches** to constructing knowledge. In fact, to date 70% of teachers who responded to the survey felt that collaboration was the dimension most positively impacted by the use of the Chromebook.

Teachers noticed that the impact of this project has many facets. Many teachers offered comments of thanks regarding the project's implementation – one teacher shared, "this project has given us both time and resources to feel comfortable with the technology, thus enabling us to better prepare our students with a smooth transition to this new digital world." Many teachers commented that the access to Chromebooks was a "**game changer**" for schools.



"The students now have access to an incredible database of knowledge that they can create their own knowledge from, and collaborate with others. Also, utilizing Google Classroom is eas[i]er now…"

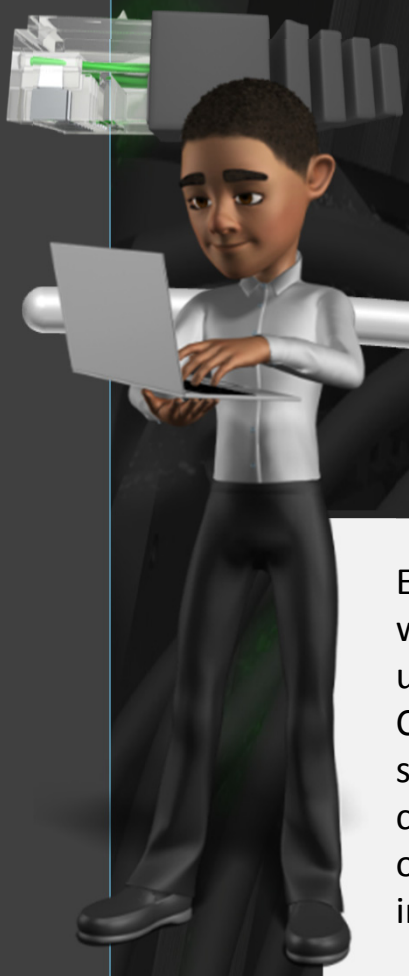
"Students carry their Chromebooks with pride, and use them regularly. Students are engaged learners, and committed to doing their best with the tools at hand… this initiative… has been a game-changer for my students, as well as my own professional practice…"

On one hand, there are **extreme positives** with the Chromebooks - these include opportunities to **deepen learning** and **inclusive practices**. For example, a teacher described, "for every student to have the technology in front of them takes away the stigma associated with those who NEED the assistive technology." Another teacher talked about how "students are more willing to read teacher feedback on written work and use" it.

Balanced Learning

Teachers are mindful of the ongoing possibility of students being **distracted** and the required **classroom management** to keep learning **focused**. As one teacher identified, "I believe it allows for equity across all students …however I also believe that this has become a massive burden to classroom management and proper use." A teacher suggested that "active class management strategies needed to be in place."

While there are many benefits to the students, the data from teachers also provides evidence that **technology is one of many tools** used in the classroom and there is need to balance its use with other modalities and "not sacrific[e] one for the other." Most teachers were delighted to receive and use the technology as part of their suite of **instructional tools**.



Teacher Reflections

Educators remain concerned about the **distractibility** of students when they are using Chromebooks in the classroom. There is an underlying question in the data, about the ways in which the Chromebook may interfere with student learning. We note that students also frequently commented on the impact that distraction can have on their learning. This is a serious concern that will require ongoing attention and support as the technology is fully integrated into all aspects of teaching and learning.

Teachers have also requested **ongoing** (subject specific) **professional learning** and **updates** on new apps. To enhance alignment between pedagogy, assessment and reporting, teachers identified a desire for new marking software that is compatible with the G Suite. There is a sense that many teachers recognize they are very much on the start of this journey; they will need supports as they continue to develop and utilize the devices to their fullest potential to maximize student learning

The data reflected concerns about being connected 24/7 and the potential shift in **expectations** that teachers will be available at all times. This challenge is uniquely related to the introduction of 1:1 technology that students can take home at the end of the day. Thoughts about how to set healthy boundaries while also harnessing the connectivity presented by the technology will be helpful to educators and students.

Technology to Support Rethink Secondary Learning

November, 2018

Presentation to Program and School Services Advisory Committee

Background

Rethink Secondary learning consultations identified technology as an important resource to support student learning (March, 2016)

TVDSB Trustees requested an exploration of one-to-one devices for Grade 9 students (June, 2016)

Two-year pilot of Chromebook devices for Grade 9 students and their teachers at 7 schools was launched (September, 2017)

Project Goal Statement

"The pilot project holds at its core a desire for staff and students to maximize the ***integration of technology*** *to promote the development of* ***lifelong learners*** *who are* ***globally connected****. We are committed to a vision for learning that includes technology as a* ***tool for innovation*** *through the discovery, generation, and communication of knowledge. We believe that students participating in the pilot project will have new opportunities for becoming* ***information creators and curators in ways that promote self-directed and collaborative learning****"* (Project Plan and Evaluation Outline, May, 2017*)*.

1:1 Pilot Project

Schools

- Central Elgin Collegiate Institute
- College Avenue Secondary School
- Glencoe District High School
- Saunders Secondary School
- Sir Frederick Banting Secondary School
- West Elgin Secondary School
- Westminster Secondary School

Timeline

Year 1:

- A Chromebook was provided to all students and teachers of Grade 9 courses
- 5 professional learning sessions for teachers
- Evaluation support from Research and Assessment

Year 2:

- A Chromebook has been provided to all students and teachers of Grade 9 courses, as well as to all new Grade 10 students and teachers
- Professional learning sessions for teachers new to the project
- Evaluation support from Research and Assessment

Research on Technology in Education

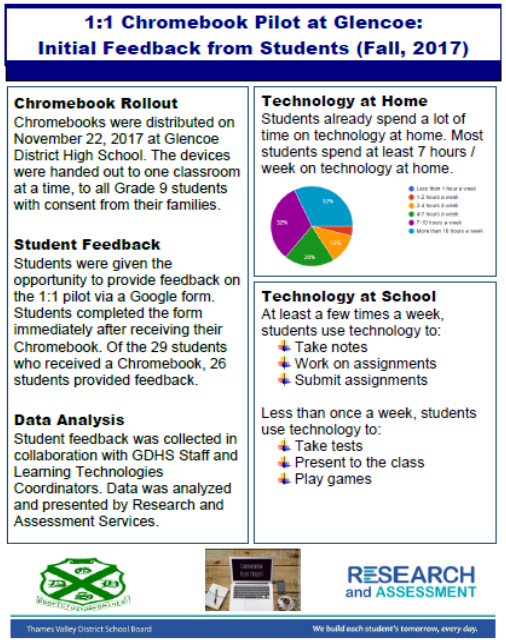
Technology can increase student engagement and support 21st century skills and global competencies

One-to-one programs can support equity and inclusion (e.g., access, differentiation) but have variable impacts on achievement

The impact of technology depends on the pedagogy in which it is embedded

Challenges include the need to build teacher capacity, the potential for distraction, and the infrastructure requirements

Research on TVDSB 1:1 Pilot Project



1:1 Chromebook Pilot at Glencoe: Initial Feedback from Students (Fall, 2017)

Chromebook Rollout
Chromebooks were distributed on November 22, 2017 at Glencoe District High School. The devices were handed out to one classroom at a time, to all Grade 9 students with consent from their families.

Student Feedback
Students were given the opportunity to provide feedback on the 1:1 pilot via a Google form. Students completed the form immediately after receiving their Chromebook. Of the 29 students who received a Chromebook, 26 students provided feedback.

Data Analysis
Student feedback was collected in collaboration with GDHS Staff and Learning Technologies Coordinators. Data was analyzed and presented by Research and Assessment Services.

Technology at Home
Students already spend a lot of time on technology at home. Most students spend at least 7 hours / week on technology at home.

Technology at School
At least a few times a week, students use technology to:
- Take notes
- Work on assignments
- Submit assignments

Less than once a week, students use technology to:
- Take tests
- Present to the class
- Play games

RESEARCH and ASSESSMENT

Thames Valley District School Board — We build each student's tomorrow, every day.

Student Perspectiv es

Rollout

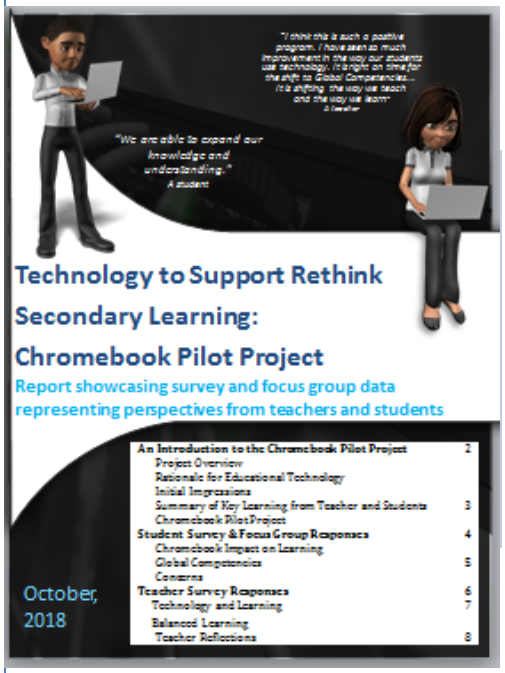
RESEARCH and ASSESSMENT

Initial Educator Perspectives on the 1:1 Pilot Initiative:
Findings from the September, 2017 professional learning sessions conducted with 259 educators involved in the 1:1 pilot.

Educators are optimistic about the impact of the 1:1 pilot. They anticipate significant benefits in a range of areas.	Some educators expressed **appreciation for the opportunity** to participate in the pilot. **The majority of educators anticipate moderate or major improvement in student engagement, understanding of course content, achievement, attitudes, behaviours, digital citizenship, and digital literacy skills.** Educators believe there will be **increased equity for students, in terms of SES, exceptionality, and ELL statuses.** Educators believe that the **1:1 pilot will help prepare students for post-secondary education and the workforce.** Educators see the potential for technology to support **communication and collaboration.**
Educators are considering the intersection of technology and pedagogy.	Educators recognize that technology alone is not enough; rather, it will be the **use of technology to support pedagogical and learning goals** that will determine success. Educators are **balancing the desire for open learning environments** with the desire to **control device usage.**
Educators are envisioning the technology in their classrooms.	Educators are contemplating **how best to use the technology within their subject areas.** Educators want to know how to use the **technology to support daily tasks.** Some educators aim to be **paper-free** while others aim to use **the technology alongside hard-copy materials.** Educators anticipate that their students will need **explicit teaching around digital citizenship and digital literacy.**
Educators described the supports needed to further their learning.	Educators would like: **Professional development** with subject-area specialists and with IT specialists regarding both pedagogy and technology. **Examples and samples of instruction and assessment** in subject-area classrooms. **Time to collaborate** on teaching and assessment with subject-area educators and other Grade 9 educators. **In-school technology support** from IT specialists, TSAs, lead teachers, mentors, or champions. **Professional learning formats** such as lunch and learns, PLCs, Learning Forwards, and observations of classrooms.

Educator Perspectives

Rollout & Early Implementation



Student & Educator Perspectives

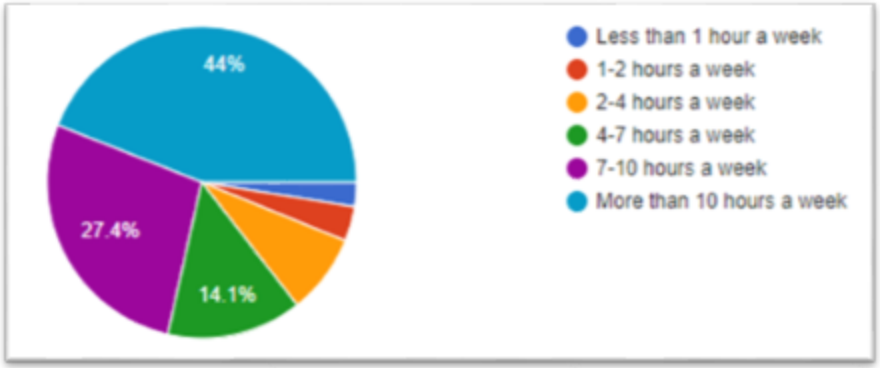
Reflections on Year 1

Rollout: Student Perspectives

400+ students (and 40 parents) completed brief surveys

Technology at Home

- Most students spend at least 7 hours per week on technology at home.



- Excitement about the ability to access and transfer their learning between school and home

Technology at School

- At least a few times a week, students use technology to work on and submit assignments
- Less than once a week, students use technology to:
  - Work on assignments with others
  - Present to the class
  - Play games
  - Take tests
  - Send messages to their teachers

Rollout: Student Perspectives

Students are Most Excited About

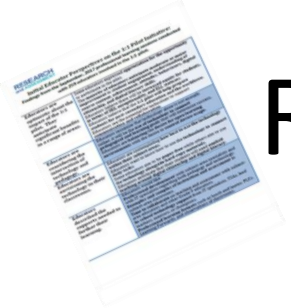
- ✓ New ways of learning
- ✓ Having their own device
- ✓ Accessing and completing school work from home
- ✓ Increased organization
- ✓ Increased collaboration
- ✓ Personal use of the device

Students are Most Concerned About

- Decreased teacher support
- Breaking or losing the device
- Not being able to work in hard copy
- Technical issues
- Decreased social interactions
- Inappropriate use of the device

"I am excited about how the school system is slowly getting more integrated with technology, which makes life much easier for us students (TVDSB student)*"*

"The teacher won't help me now because we have technology to help us (TVDSB student)*"*



Rollout: Educator Perspectives

259 educators completed surveys

Optimism	Intersection of technology and pedagogy	Vision of technology in their classrooms
Identification of necessary supports for learning and infrastructure	Recognition of potential pitfalls	Anticipation of questions
Contemplation of success criteria	Strong interest in the research	Curiousity about long-term vision

Reflections on Year 1: Student and Educator Perspectives

Over 600 students from 5 schools completed surveys

Over 70 students from 3 schools participated in focus groups

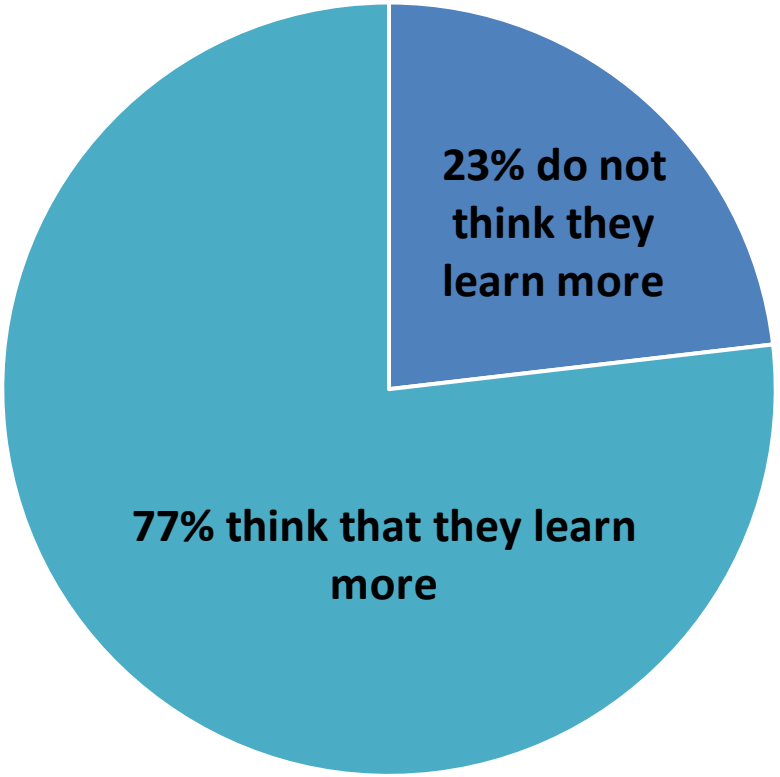
Over 200 teachers from 7 schools completed a survey

Reflections on Year 1: Student Perspectives

Students noted…

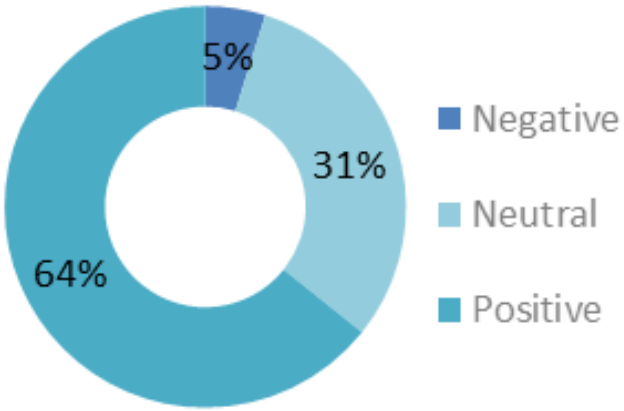
- Ease and efficiency of access to information and school work
- Increased organization and responsibility
- Increased and easier collaboration
- Working fluently between school and home
- The positive impact of Chromebooks on research, writing, homework, and assignments
- Some distraction with the Chromebooks
- A need for balance between technology and traditional activities (e.g., hard copies)

Student perspectives on learning



Reflections on Year 1: Educator Perspectives

Educators have positive perceptions of the pilot



Educators have been incorporating technology in their teaching

- Planning their lessons around big questions
- Moving from whole-group discussions to small-group work with technology
- Differentiating learning and assessment
- Making extensive use of G Suite tools
- Increasing engagement through apps
- Using electronic notebooks and portfolios
- Using technology to provide feedback to students

Educators appreciate and want ongoing and subject-specific professional learning

Summary of Learning from Educators and Students

Responses to the pilot have been largely positive

- Increased access to technology
- New opportunities for teaching and learning
- Learning is easier and more engaging
- Perceptions depend on use

Students and teachers are working towards a balance

- Between technology and hard-copy materials
- Between technology and time away from technology

Teachers are interested in professional learning about technology

- Ongoing
- Subject specific

"Learning is different because when you are working with peers on a presentation, everyone can work on the same document, even when we are not with each other. It is easy to communicate. It is also easier to research information"
(TVDSB Student)

" A lot of us have better study habits because it is easy to write notes down and you'll have them at home and at school…"
(TVDSB Student)

"Access to Chromebooks has been critical in providing a starting base from which to rethink education and how to inspire learning. This has been a tool. We are making great strides"
(TVDSB Teacher)

THANK YOU

NOTE: REFERENCES ARE AVAILABLE UPON REQUEST

Date of Meeting:2018 November 06

Item #: 6.0

REPORT TO:	☐ **Administrative Council**	☒ **Program and School Services Advisory Committee**
	☐ **Policy Working Committee**	☐ **Planning and Priorities Advisory Committee**
	☐ **Board**	☐ **Other:**
	☐ **PUBLIC**	☐ **IN-CAMERA**
TITLE OF REPORT:	Cursive Writing	
PRESENTED BY:	Sheila Builder, Superintendent of Student Achievement	
PRESENTED FOR:	☐ **Approval**	☒ **Information** ☐ **Advice**
Recommendation(s):		
Purpose:	To share with Program and School Services Advisory Committee information on cursive writing in the Ontario Language curriculum.	
Content:	In response to a request from Chairs' Committee, a verbal report will be provided outlining references to cursive writing in the Ontario Language curriculum.	
Cost/Savings:	N/A	
Timeline:	Administrative Council: October 22, 2018 Program & School Services Advisory Committee: November 6, 2018	
Communications:	Administrative Council Program & School Services Advisory Committee	
Appendices:	None	

Strategic Priority Area(s):

Relationships:	☒ Students, families and staff are welcomed, respected and valued as partners. ☐ Promote and build connections to foster mutually respectful communication among students, families, staff and the broader community. ☐ Create opportunities for collaboration and partnerships.
Equity and Diversity:	☐ Create opportunities for equitable access to programs and services for students. ☒ Students and all partners feel heard, valued and supported. ☐ Programs and services embrace the culture and diversity of students and all partners.
Achievement and Well-Being:	☒ More students demonstrate growth and achieve student learning outcomes with a specific focus on numeracy and literacy. ☒ Staff will demonstrate excellence in instructional practices. ☐ Enhance the safety and well-being of students and staff.

Form Revised October 2018