

#### OCDSB Interest Academy Pilot: Final Program Evaluation Report

#### **Executive Summary**

In Spring 2021, the OCDSB Interest Academy (IA) pilot was implemented in seven different Ottawa-Carleton Virtual (OCV) classrooms. The IA pilot was formally evaluated using a participatory approach with the main purpose of exploring the experience of stakeholders involved in the pilot (i.e., students, parents/caregivers and teachers). Informed consent letters containing an online survey link were distributed to all parents/guardians of students involved in the pilot (see Annex I). A total of sixty parents/caregivers responded to the online survey. All students involved in the IA pilot also completed a self-reflective assessment at the completion of the project resulting in nearly one hundred and fifty student respondents. The resulting sample represented gifted and non-gifted learners from Grades 4 to 8 located in Regular or French Immersion OCV classrooms. Six of the seven teachers involved in the IA pilot responded to the educator survey.

Results from the stakeholder surveys demonstrated a vast diversity in research topics explored by students. The majority of students, parents/caregivers and teachers involved with the IA pilot were in agreement that they would participate in the Interest Academy again or recommend it to others. Stakeholders also generally agreed that participation in the IA pilot had a significant impact on students' desire to learn (motivation); commitment to learning, belonging and participation (engagement); and on connectivity with school. These findings provide strong evidence for the inquiry-based learning approach as represented by the OCDSB Interest Academy.

Parents/caregivers also provided rich insight into the ways that the IA pilot met their child's specific learning needs, including those of students who were identified with the gifted exceptionality. Students, parents/caregivers and teachers alike reported several benefits of the IA pilot in terms of impacting the learning skills and/or work habits specified in the Ontario Elementary Report Card. In fact, teachers identified several changes to their instructional practice resulting from their experience with the IA pilot, and were in general agreement that it had a significant impact on their student's critical thinking, creativity, communication, collaboration and metacognitive skills. Teachers also reinforced that, through the IA pilot, they were able to address several areas of the Ontario Curriculum.

Finally, stakeholders put forward several organizational conditions which affected the implementation of the IA pilot. These centered on the delivery of the IA in a virtual environment, particularly during the COVID-19 pandemic. Full expositions of the findings as well as the implications for the District are discussed below.

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#### PART 1: INTRODUCTION

#### Inquiry-Based Teaching and Learning

Inquiry-based teaching and learning involves investigation through dialog, asking questions, and proposing explanations based on evidence (Shore, et al., 2009; National Research Council, 1996). Inquiry involves developing a plan based on student interest, collecting data, examining evidence, drawing conclusions, reflecting, and engaging in next steps (Aulls & Shore, 2008). Aulls and Shore (2008) identified two main characteristics of inquiry including how the interest of learners guide curricular decision making and that there are exchanges in roles between teachers and students (e.g., responsibility for decisions around curricular choices, evaluation, and communication in the classroom). Inquiry-based tasks are meaningful and relevant to the learner and students engage in authentic collaboration (Walker, Shore, & Tabatabai, 2021).

#### **OCDSB Interest Academy Program Description**

The OCDSB Interest Academy (IA) was developed as an inquiry-based learning experience in which students are given class time to explore a student-selected topic of interest. Students and educators co-create project learning goals and success criteria and contribute to a learning portfolio that will serve to document and reflect on their learning. Upon completion of the IA project, students share their learning in a creative manner. Inquiry-based learning is widely accepted as an effective approach to teaching which research has empirically supported in facilitating curiosity, motivation and engagement in students.

The OCDSB Interest Academy is an authentic learning experience that provides students with the opportunity to complete a self-determinant research, experimental, or experiential task that focuses on the development of the students' critical thinking, creativity, communication, collaboration and metacognitive habits of mind. The learning is centered on an inquiry question related to a student interest or passion and findings are creatively shared using a medium of the students choice. Regular class time is allocated for students to research, experiment, or experience and connect with their peers and teacher for mentoring and collaboration.

#### Purpose of the IA Pilot Evaluation

As demonstrated above, inquiry-based teaching and learning is based on a rich cadre of academic research and grounded in sound instructional practice. One of the goals of the IA pilot evaluation was to explore the efficacy of this particular strategy in the context of the unique organizational conditions of our District. For example, the pedagogical nature of the recently established Ottawa-Carleton Virtual School (OCV) presented a unique set of circumstances considered ideal for creating new relationships and connections for all students, including those with giftedness, within a larger online school community. It was hypothesized that this new virtual learning space, where students, parents, school staff and local community members could connect with each other in novel ways, could help support students in developing and sharing the knowledge gained from an inquiry-based learning project. Thus, the purpose of the OCDSB Interest Academy pilot evaluation was to explore the impact of this initiative in supporting all students, including learners with giftedness, engaged in an online inquiry-based learning project.

## PART 2: METHODOLOGY

#### Formative Evaluation Approach

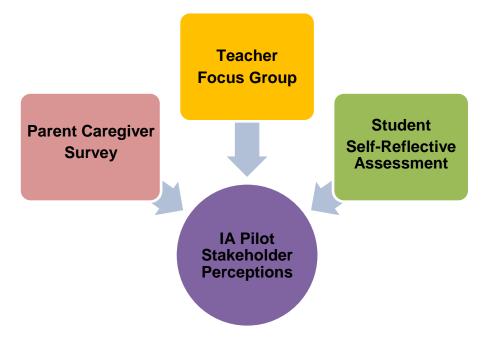
In line with the participatory evaluation approach (Patton, 2012) key stakeholders were involved at every stage of the IA pilot evaluation. To that end, an evaluation project team was struck composed of evaluation staff, program staff and administrators from both the Learning Support Services and the Program and Learning departments (i.e., program evaluator; psychologist; learning support consultant; instructional coach and system principals). This evaluation project team developed the IA program logic model which served as a framework to guide the evaluation (see Annex 1). The program logic model describes the key stakeholders involved with the IA pilot (i.e., students, parents, teachers), and features the program activity architecture and outcome indicators, as well as the main and secondary evaluation questions outlined below.

#### Interest Academy Pilot Evaluation Questions:

- 1) How does Interest Academy meet the needs of all learners, including students identified with giftedness, in a virtual environment?
  - i. Did the Interest Academy pilot promote motivation, curiosity, or engagement with online learning for all students?;
- ii. Did the Interest Academy pilot promote motivation, curiosity, or engagement with online learning specifically for students identified with giftedness?; and
- iii. Did involvement in the Interest Academy pilot promote connectedness with likeminded peers in all students, including learners with giftedness?
- 2) What organizational conditions impacted the implementation of the Interest Academy pilot at the OCV sites?
  - i. What benefits and/or challenges did teachers experience with the implementation of Interest Academy?
- ii. What benefits and/or challenges did students experience through participation in the inquiry-based learning project?

iii. What benefits and/or challenges did parents/guardians observe through their child's participation in the Interest Academy pilot?

Given the early stages of program implementation of the Interest Academy pilot, the program evaluation approach was exploratory in nature and included mainly formative evaluation activities (Patton, 2012; Creswell, 2009). Formative evaluation approaches seek to explore key dimensions of interest by engaging with stakeholders and diving deeply into their perspectives and experiences with the program (see Figure 1)<sup>1</sup>. The data obtained from the IA pilot stakeholders served to address the overarching evaluation questions specifically related to the key dimensions of interest identified by the evaluation project team.



#### Figure 1: Interest Academy Formative Evaluation Model

#### IA Pilot Key Dimensions of Interest

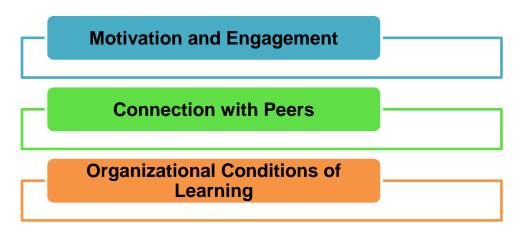
Program stakeholders identified several key dimensions of interest considered important for exploring the impact of the Interest Academy pilot on all students, including learners with giftedness. Foremost among these key dimensions of interest, the evaluation included several perceptual measures of student connectedness, engagement and motivation which have been identified in the research literature as critical indicators of learning for all students, including learners with giftedness (Martin & Bolliger, 2018). Operational definitions for the constructs of engagement, motivation and

<sup>&</sup>lt;sup>1</sup> Due primarily to methodological constraints posed by the COVID-19 pandemic, the final IA pilot evaluation sought stakeholder feedback through quantitative, rather than qualitative, data gathering procedures (see methodological note p. 7).

connection were reviewed from the academic literature, and in each case, the original definitions were modified by the evaluation project team in order to better suit the context of the OCDSB IA pilot.

Specifically, the theoretical construct of 'Academic Engagement' espoused by Christenson et al., (2008) was modified on the parent survey to: *"My child's investment in, and commitment to, learning, belonging and participation in Interest Academy activities"*. The construct of 'Motivation' has itself been operationally defined in numerous research studies (Mallick et al., 2017). However, the evaluation team deemed a modified definition by Mutweleli (2014) as most suitable for the purposes of the evaluation: *"My child's desire to learn activities related to the Interest Academy"*. With respect to the operational definition for 'Connection to School', the evaluation team considered a modification of the term by the CDC (2021) most satisfactory: *"My child believes that their teacher and peers in the class care about their learning"*. Slight modifications to each of these operational definitions were made to reflect the responding stakeholder group in the OCDSB context (students, parents and teachers). Finally, the IA pilot evaluation sought to explore what organizational conditions impacted the implementation of the Interest Academy pilot at the OCV sites (see Figure 2).

#### Figure 2: Interest Academy Pilot Evaluation Key Dimensions of Interest



#### **Methodological Note**

The planned exploratory methodology of the IA pilot evaluation was constrained by important logistical considerations caused by the COVID-19 pandemic. As such, sensitivity to the stress and pressures which the health crisis presented for families as well as staff in schools was required in carrying out the evaluation plan (e.g., teachers delivering the IA strategy online for the first time; release time for teachers unavailable; scheduling for parent focus groups unfeasible). Therefore, a survey vs. focus group method was selected for data collection, despite the limitations of this procedure to achieve the evaluation purpose. Exploring participant perceptions and digging deeper

into respondents' experience was very challenging via survey methodology. Indeed, important demographic characteristics about the pilot stakeholders personal background were unknown. For instance, income or identity factors about the parents/caregivers, which may have emerged during focus group discussions, were not explored. Similarly, the number of English Language learners in the pilot classrooms, and how this information affected their experience with the IA pilot, was not known. In short, there were limits to using empiricist data collection methods for an exploratory purpose. To mitigate this methodological constraint, the surveys were constructed using a mixed-methods approach (i.e., qualitative and quantitative survey items) with both open-ended and closed-ended response questions for each stakeholder group were used in the question items (e.g., please explain vs. please rate).

#### **Data Collection Procedures**

As noted above, the final IA pilot evaluation sought stakeholder feedback through quantitative, rather than qualitative, data gathering procedures. As such, a parent/caregiver online survey was developed in order to explore participants' observations related to their child's experience at school specifically concerning the IA pilot. A online survey was also developed for students to reflect on their experience with the Interest Academy, focusing on such factors as engagement, motivation and connection with peers in an online learning environment. Finally, feedback was sought from OCDSB educators involved with the IA pilot via a google form which examined the organizational conditions of the pilot and/or other key dimensions of interest for implementation (e.g., barriers/facilitators). All three data collection instruments were administered in the Spring of 2021.

#### Summary

Evaluation of the IA pilot took a participatory approach with key stakeholders collaborating on different aspects of the evaluation process wherever possible/feasible (i.e., developing evaluation purpose, program logic model, methodological approach, data collection tools, data analysis and report-writing). The evaluation design was exploratory, not confirmatory; therefore, no claims can be made about the representativeness of the sample to the general OCDSB population. The purpose of the evaluation was to explore participant experience with the IA pilot. A program logic model was developed collaboratively by program stakeholders which specified key evaluation questions, as well as data collection methods and major program components (i.e., program activity architecture; outcomes and outcome indicators). Alignment was intentionally constructed between outcome indicators specified in the logic model (e.g., engagement; motivation; connection); thus, the key dimensions of interest have common parallel structure across data collection tools (parent, teacher, student surveys). The data collection procedure was constrained due to the COVID 19

pandemic. Nevertheless, findings of the integrated qualitative and quantitative data analysis (mixed methods) below discuss the links between stakeholder groups on key dimensions of interest and address the two main evaluation questions.

#### PART 3: FINDINGS

The findings from the IA pilot evaluation are structured into five main sections below, where each section represents a major theme from the findings. Each section in turn features either quantitative data from the online surveys, or supporting quotes drawn directly from the data (but without individual identifiers to protect anonymity). These supporting quotes provide rich context around the themes emerging from the data. The first section describes the demographic characteristics of the sample, providing detailed information about the student and parent survey respondents, including grade, program and exceptionality background information (i.e., gifted). The second section highlights participants' general experience with the Interest Academy pilot, including a brief discussion of the topics which students explored and stakeholder perceptions about participating in the IA pilot. The third section dives more deeply into the key dimensions of interest identified in the program logic model (i.e., engagement, motivation and connectivity), and the role these three important constructs played in the IA pilot.

The fourth section addresses two key questions identified in the program logic model. Specifically: i) how the IA pilot met the learning needs of all learners, including learners with giftedness, particularly in terms of its impact on critical thinking, creativity, communication collaboration and metacognitive skills; ii) any changes in teacher instruction/assessment practices, as well as the overall curriculum expectations that were addressed by teachers through the IA pilot; and iii) the impact of the IA pilot on participants' learning skills and work habits, as outlined in the Provincial Elementary Report Card. The final section reports the organizational conditions either supporting or impeding the IA pilot including several challenges put forward by stakeholders.

#### I. Sample Demographics

The following section provides demographic details concerning the Interest Academy pilot parent/caregiver survey (herein referred to as 'parent survey'), and the student self-reflective assessment. Via these surveys, information on the following three main demographic variables respecting the students was collected: i) Grade; ii) Program; and iii) Gifted Exceptionality. Notably, there was not a 1:1 relationship between the respondent groups on the stakeholder surveys. For example, a parent may not necessarily not have reported on their child who did submit a response to the student reflective assessment (or vice versa).

		Grade	Program		Gifted	
Respondents	Junior (G4-6)	Intermediate (G7-8)	French Immersion	Regular English	Yes	No
Parents/Guardians (N = 60)	41	8	42	5	4	37
Students (N= 145)	73	54	85	44	7	75

Table 1: Demographic Descriptors Interest Academy Pilot

\*Note: Totals do not necessarily tally for each demographic factor due to non-response in that category.

Demographic results showed that there was accordance across both respondent groups on the three main descriptors (see Table 1). In general, there were more respondents in the non-gifted, Junior and French Immersion categories. However, the differences within each demographic factor across both respondent groups must be considered when reviewing the results in the next section. For example there were: i) more student respondents than parents; ii) student respondents were more balanced respecting program registration than parents (i.e., French Immersion vs. English); and iii) according to both respondent groups most students were not formally identified as gifted.

<u>Grade</u> - The majority of parent respondents reported that their children were registered in the Junior panel vs. the Intermediate panel. In fact, two thirds of parents stated that their child was in Grade 4 (61%), and another 16% reported that their child was in Grade 8. No parents indicated that their child was in either Grade 5 or Grade 7. Student respondents were also more balanced between the Junior and Intermediate panels (i.e., 58% vs. 42%, respectively). Similar to parents, the majority of student respondents were in Grade 4 (39%), Grade 6 (19%) or Grade 8 (42%). There were no students reporting that they were registered in Grade 5, and only one student in Grade 7.

<u>Program</u> - The majority of parents (i.e., 84%) reported that their child was registered in the French Immersion program. By contrast, two-thirds of students (n = 85) reported being registered in the French Immersion program while 35% (n = 44) said they were registered in the Regular program.

<u>Gifted Exceptionality</u> - A total of n = 4 parents reported that their child was formally identified as gifted through the IPRC process, while n = 7 students reported that they had been identified with the gifted exceptionally. Interestingly, 37% of student respondents (i.e., n = 47) said they did not know if they were formally identified with giftedness. Thus, the majority of student respondents were not formally identified (i.e., 58%). This figure was similar for parent respondents (i.e., 77%).

<u>Teachers</u> - The IA pilot initially began with N = 19 OCV teachers expressing interest in having their class participate in the initiative. Of the teachers who attended the

introductory session to learn about the objectives and structure of the IA pilot, N = 7 teachers completed the IA pilot itself. Several teachers who had initially expressed interest declined participation before the introductory session because they did not: i) have any students identified with a gifted exceptionality in their class; or, ii) feel that they had the capacity to take on something new. Teachers who attended the introductory session but later declined participation indicated that mitigating factors had made it difficult for them to complete the task such as the volume of curriculum required to 'get through', which precluded their participation.

#### **II.** General Experience with the Interest Academy Pilot

Results from all three stakeholder groups exploring their general experience with the Interest Academy pilot can be characterized as generally positive. For instance, qualitative data from the student self-reflective assessment highlights the sheer range in diversity of research topics explored by students who participated in the IA pilot, including those with the gifted exceptionality. Testimony from parents/caregivers of both gifted and non-gifted learners regarding their child's experience with the pilot also brings to fore the main rationale for implementing inquiry-based learning. These elements are explored more deeply later in this report.

#### Parents/Caregivers

- This project was amazing, because for once, he was intrinsically motivated to do the work. It wasn't just a "make work" project.
- My daughter explored story writing. She likes to write stories herself and her notebooks and she thought it was a good opportunity to look at and share the process of story writing with her classmates. It was also nice for her to be able to learn something about a topic she's interested in and how people "in real life" go about the process of writing a story or a book.
- Given the scope of the project there were many ways for her to express herself creatively, learn new skills, and challenge herself mentally. Each part of this project provided her with an opportunity to experience success and a sense of personal accomplishment. The beautiful feedback she received from her classmates for her presentation will encourage her to explore other areas of personal interest and to build the self confidence needed to share this with others. Thank you.

#### Students

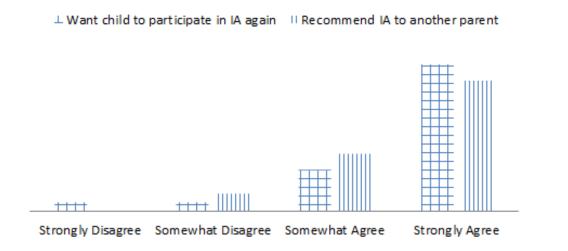
• I chose four common health issues in dogs. I chose it because a lot of people get dogs without being aware of these things and I feel it is

important to know the signs of having them, what is the issue, and how you can treat it.

- I picked chocolate history because I love to eat chocolates. I wanted to explore chocolates and learn where it was made, how it was made and who invented them.
- I explored the wonders of piano. I chose piano because it helps me be calm,I like music, and I don't know...it is sweet!
- A time lapse video of me drawing a realistic rabbit, I chose it because I love drawing and I love animals, so I combined them together, and I never drew a rabbit so it was a great experience to learn how.
- My topic was about improving sleep quality by creating a bed. I chose this because I thought it would be an interesting topic and I love sleeping. Sleeping is my passion.
- I chose to try a new thing each day for 30 days. I chose it to push myself out of my comfort zone.
- What causes us to forget? I chose it because I forget a lot and I've wondered how and why that happens.

Figure 3 below shows that the vast majority of parent/caregiver respondents strongly agreed that they would: i) want their child to participate in the Interest Academy again; and/or; ii) recommend the Interest Academy to another parent/caregiver. Students also expressed extremely positive feedback respecting their experience with the IA pilot. In fact, nearly 91% of all student respondents reported they at least might want to participate in another Interest Academy next year.

### Figure 3. Parent Perceptions of IA Pilot

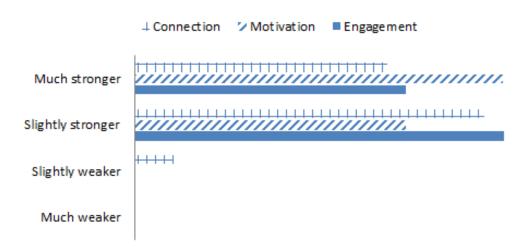


Finally, based on their experience with the pilot, all teachers involved with the pilot indicated that they would either participate in the Interest Academy again, or recommend it to another teacher. Although some teachers had previous experience with an inquiry-based learning approach, none of the IA pilot participants had previously implemented this particular inquiry-based strategy in their classrooms.

#### III. Engagement, Motivation & Connectivity

#### **Parents/Caregivers**

Figure 4 shows that, according to parents/caregivers, participation in the pilot had the strongest impact on their child's desire to learn (motivation). In fact, several parents/caregivers commented that because the IA projects were chosen by the students themselves, and from their own personal interest, their children were more self-motivated to work hard, practice for results and/or complete the project. Other parents/caregivers observed increases in their child's overall enthusiasm with the learning process, and noted how the pilot motivated their child to complete the project's sub-tasks (i.e., research; preparing; and presenting).



#### Figure 4. IA Pilot Impact: Parents

Results from Figure 4 also demonstrate that parents/caregivers rated favorably the extent to which participation in the Interest Academy impacted their child's commitment to learning, belonging and participation (engagement). In expanding on their child's experience in terms of engagement, several parents/caregivers noted improved interest, enjoyment and excitement in their child's learning. As a consequence, parents/caregivers perceived that their children were more confident and spent more time on school work.

- The passion project infused life and enthusiasm into the learning process, encouraged motivation for greater detail of learning, and resulted in more connectedness with the classroom peers during the presentation phase because the student was excited and engaged to present the material.
- It was by far the work they have been the most excited about and selfmotivated to do all year

In addition, parents/caregivers of both gifted and non-gifted learners emphasized that the pilot had a significant impact on their child's connectivity with school. These parents noted that participating in the pilot was an excellent opportunity for their child to share work with their classmates and receive enjoyment in presenting their passion projects. Some parents/caregivers observed that their child had opportunities to lead the class, taking turns with other students to teach and learn about their projects. Other parents/guardians noted that the IA pilot presented opportunities for 'a lot of fun', particularly in learning about other students' projects and interests. Finally, parents/caregivers observed a sense of connectivity with the class in their child's feelings of accomplishment and pride in their achievement, particularly sharing their passion projects with their classmates and/or family.

- She had the opportunity to collaborate with peers she would not have otherwise been able to outside of class.
- The final output made him really proud to showcase it to friends and teachers and family.
- He was eager to teach and learn about the topic since it was one of his interests. His teacher has also gone above and beyond to encourage him to lead the class through coding groups.

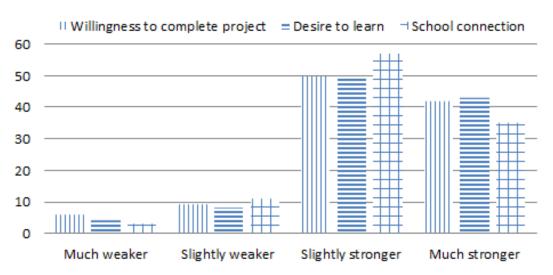
### Teachers

Teachers reported reasonably favorable ratings on these three key dimensions of interest, with generally higher ratings on engagement compared with connectivity and motivation. However, given the small sample size (n = 6), caution should be exercised in interpreting these ratings. Nevertheless, teacher qualitative feedback regarding the favorable impact of the IA pilot on their students' motivation, engagement and connectivity to school echoed those of parent/guardian perspectives.

- Students were excited to be given so much time to explore their topic of choice. They were even more excited to share it with their classmates.
- Most of the class was excited to be learning about a passion.
- Students were completely engaged in their learning journey. They selfselected their topics. So, it was something of deep interest to them. That is always a motivating factor.

#### Students

Perhaps the most compelling evidence of the impact from participating in the IA pilot on engagement, motivation and connectivity came from the students themselves. Figure 5 shows that most students rated their desire to learn and willingness to complete the project as stronger as a result of their experience with the IA pilot. Many students also indicated positive changes in their beliefs that their teachers or classmates care about their learning, or connectivity to school.



#### Figure 5. IA Pilot Impact: Students

In fact, students expressed strong connections to school resulting from their experience with the pilot in that most students indicated that they shared and received feedback at least a few times from their peers when completing their project. Finally, perceptual data from both gifted and non-gifted learners bears-out the positive overall experience and impact of the IA pilot on these three key dimensions of interest.

- I chose the topic I chose with a desire to learn more. As well once I started my project I wanted to see the finished project and that strengthened my willingness to complete the project. As well, my classmates and teacher were there at all times if I had any questions for them.
- Interest Academy changed my willingness and desire to learn because it was the biggest project I ever did and I completed it. So, that told me "Wow. That means you can do anything in between that and the smallest thing I did!"
- Before I had started my Interest Academy project my main problem was procrastination and lack of motivation, but once I started the project all I wanted to do was work on the different skills and techniques I could learn.
- I think it changed my belief in my teacher and classmates' perspective on learning it because instead of everyone listening to a similar presentation

about something the whole class was assigned, they got to listen to something people were interested in and cared about.

• Well a lot of classmates gave me help by doing this project. It also helped me be more motivated to do my other school work.

#### IV. Learning Needs and Pedagogy

#### i) Understanding the Learning Needs of All Students

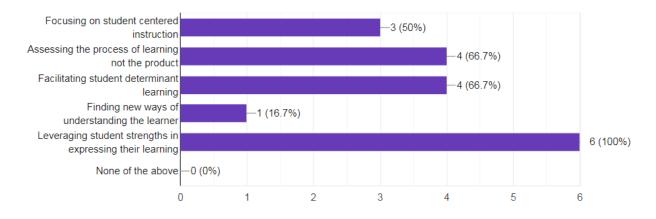
#### **Parents/Caregivers**

Parents/caregivers identified several ways in which participating in the IA met the specific learning needs of their children, including children identified with giftedness. For example, they noted enhanced learning skills in a particular area of interest, as well as increased opportunities for hands-on practice and application of acquired skills. Many parents, including those whose children have special education needs other than the gifted exceptionality, also noted improved presentation skills in their children as a result of participation in the pilot. According to parents/caregivers of both gifted and non-gifted learners, other specific learning needs were addressed by the pilot such as the ability to navigate a new topic as well as critical and creative thinking skills, like finding appropriate resources and organizing thoughts and information. Several parents/caregivers also noted improved capacity in their child to take-on challenges, where participation in the pilot helped to build confidence in their learning. Finally, parents/guardians noticed improvement in their children's cooperation and collaboration skills, particularly in the sharing with classmates during the presenting aspect of the project.

- [The IA Pilot] helped him in enhancing the skills in his area of interest, improve presentation skills, and improvement of application of skill acquired.
- These kinds of presentations are good for my daughter as she finds it challenging communicating in large groups. She has language delays. She has difficulty participating in class discussions as a result. These kinds of projects give her plenty of practice with this and boost her self confidence in this area.
- More cooperation or collaboration with classmates or teachers for the research project, like sharing what the student found and what they thought, or ideas they have. How to present their works to people who know nothing about projects.

#### Teachers

Teacher perceptions were mixed with respect to the impact of the IA pilot on their instructional practices. Figure 6 shows that finding new ways of understanding the learner was the least likely instructional practice to remain changed after participating in the pilot. Nevertheless, teachers also indicated positive changes to their assessment practices as a result of participating in the IA pilot. For example, teachers reported that leveraging student strengths in expressing their learning was most likely to remain changed, followed by facilitating student determinant learning and assessing the process of learning not the product. However, the small number of overall teacher respondents requires consideration in interpreting the results.

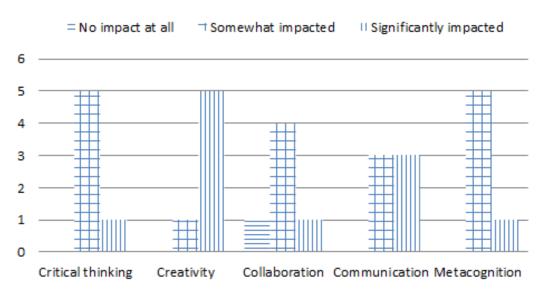


#### Figure 6. IA Impact on Teacher Instructional Practices

Teachers were also in general agreement that the pilot had a positive impact on their student's critical thinking, creativity, collaboration, communication and metacognitive skills (4 C's and M skills). In fact, Figure 7 (next page) shows that student creativity was rated as significantly impacted, whereas critical thinking, metacognition and communication skills were also favorably impacted. Teachers perceived the least impact in their student's collaboration skills; however, collaboration may have simply occurred more often outside of the virtual classroom. Again, the small number of teacher participants requires caution in the interpretation of the quantitative data from the teacher survey.

When asked to describe the specific changes in instructional or assessment practices attributed to their participation in the pilot, teachers noted how allowing students to choose their topic and style of presentation served as a natural motivator for engagement. As a result of their participation in the pilot, teachers also better understood how to properly assess project-based learning through open-ended products or assess the progression of learning. Nevertheless, the challenge of

implementing the pilot in the virtual environment was also noted as a constraint by some teachers.



#### Figure 7. IA Impact on Students' Skills: Teachers

- [The IA pilot] made it clear that not all students learn with the same model. That, as educators, we need to provide some flexibility and opportunities for individual students to excel in their own driven way.
- It's way more of an investment to assess work this way, but when a project has a long timeline, it gives you the necessary time to do it, and I think it can be worth it when done correctly.
- Would need to do this project again under less stressful circumstances to determine this [understanding of the learning needs of all students, including learners with giftedness].

### ii) Learning Skills, Work Habits & Curriculum

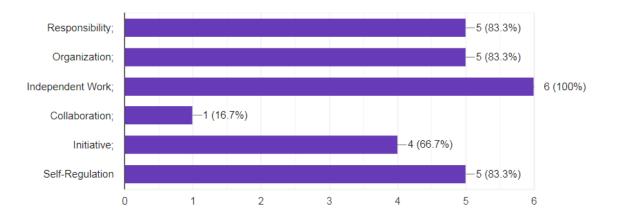
#### **Parents/Caregivers**

Parents/caregivers were in general agreement regarding the benefits of the IA pilot in terms of impacting their child's learning skills and/or work habits. In fact, many parents/caregivers observed significant improvement in their child's independent work abilities showing, for example, initiative in order to define the project and decide on its elements independently. Parents/caregivers also noted increases in their children's organization and self-regulation skills, as evidenced by working outside of school hours, or self-directed discipline and perseverance to work on their IA projects. Finally, parents/caregivers of both gifted and non-gifted learners highlighted the flexibility in curriculum and learning skills opportunities which participation in the IA pilot provided to their child.

- ... there were many ways for her to express herself creatively, learn new skills, and challenge herself mentally.. The beautiful feedback she received from her classmates for her presentation will encourage her to explore other areas of personal interest and to build the self-confidence needed to share this with others. Thank you.
- My daughter is very independent learner and is largely self-directed. With a multi-phase project, she showed her creativity and more initiative to define the project and decide on its elements by herself.
- Increase in independent work, responsibility and self-regulation she worked outside of school hours on her project for interest academy.

#### Teachers

Notably, teachers reinforced the curricular flexibility of the IA pilot, stating that they were able to address several areas of the Ontario Curriculum, in addition to the Learning Skills and Work Habits contained on the Elementary Provincial Report Card. Figure 8 shows that teachers were most able to assess independent work through delivering the IA pilot, followed by: i) responsibility and organization; ii) self-regulation; and ii) initiative. Collaboration was the lowest rated learning skill/work-habit assessed by teachers; however, this was likely due to the online nature of the delivery platform which makes assessing collaboration less straight-forward. These particular findings should aso be interpreted with caution due to the small teacher sample size.



#### Figure 8. Teacher Ratings on Learning Skills/Work Habits.

- I addressed learning skills more than any other curriculum expectation. Since I am a French Immersion teacher, I also assessed their reading, writing, and oral communication.
- Many of the subject areas were reached depending on the topic of choice. We had science, math, coding, visual arts to name a few that were represented.

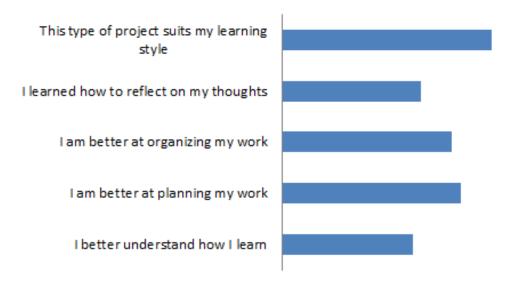
#### Students

A tremendous variety of curriculum areas was evident in the student responses from both gifted and non-gifted learners when asked about which topics they explored during the IA pilot. For example, students explored many topics directly specified in the Ontario Curriculum areas such as Science & Technology; The Arts; and/or Physical and Health Education.

- I picked the topic bears because bears are really interesting and I thought it would be fun and it was!
- I explored the history of basketball for the Interest Academy. I chose it because I really enjoy playing basketball, but because of the virus I cannot play it anymore and I wanted to find out about the history.
- I decided to explore the history and cultural impact of rap music, I also created my own rap song and music video.
- I thought it would be cool to make a bass attractant and learn more about them since I love fishing so much. It would also give me like a special weapon for when I'm fishing that no one else has.

Students also observed several benefits of the pilot in terms of impacting their learning skills and/or work habits directly related to the Elementary Provincial Report Card. According to Figure 9, most students indicated that the IA pilot was not only well-suited to their learning style, but also changed the way they learned in terms of better understanding how they learn; planning and organizing their work; and even reflecting on their thoughts.

#### Figure 9. IA Impact Student Learning Skills/Work Habits



Perhaps more importantly, students reported acquiring several other learning skills or even 'life lessons' from their participation in the IA pilot -- beyond those specified in the Elementary Provincial Report Card. In fact, many essential learning lessons were highlighted by students such as how to research efficiently or to manage time effectively, staying focused and not doing their work last-minute. Important lessons in being attentive to others' interests were also learned, such as the value of listening to their classmates or relying on other students for support. Notably, many students reported learning lessons in perseverance, patience and project planning, particularly dealing with disappointment when things do not work out the first time. Finally, students reported learning valuable metacognitive strategies to cope with presentation fears or recognizing the value of trying new things.

- I learned that things won't always work out the first time, and that doesn't mean that it won't work at all, it just means that you have to try again.
- I learnt a lot about how to research efficiently. Because of all the problems I faced during my project I was forced to research and learn how to research in the best way possible.
- that you can't do it alone without my class it would have been bad but my class told me things that I could never think of but they helped so much
- I learnt a lot about my classmates' interests besides my own. I was happy to show the class what kind of crafts I enjoy doing, and I was happy to see that everyone liked my art.
- I learned not to do things last minute. I like art so I didn't do this project last minute and it turned out much better than how some of my other projects turned out.
- To try exploring new things sometimes, doing past things isn't always the best way.
- I learned that planning and patience both play key roles in big projects such as this one based on my personal experience.
- I learned how to manage my time and that lots of ambition is great for this sort of project when you're passionate about the topic.
- I learned that listening to other people's advice is helpful and making your project creative is also very fun.
- I learned to stay focused and persevere while making the project because there were a few times that I had made a mistake...But, I stayed focused and I persevered through the process and my video ended up being something I'm really proud of.

#### V. Organizational Conditions

#### i) IA Pilot Challenges

#### **Parents/Caregivers**

Parents/caregivers identified several challenges which their children experienced with the IA pilot. Some challenges were associated with the virtual delivery platform, such as access to technology where students were using older laptops, or slow internet connections, or finding creative ways to present their topics in a virtual environment. Other challenges were characteristic of an inquiry-based learning task, irrespective of the virtual delivery mode, such as: i) researching materials and screening information relevant for their topic; ii) organizing thoughts and completing tasks without supervision; and iii) synthesizing information and preparing written composition for presentation. Notably, parents/caregivers saw these particular challenges as important learning experiences for their children.

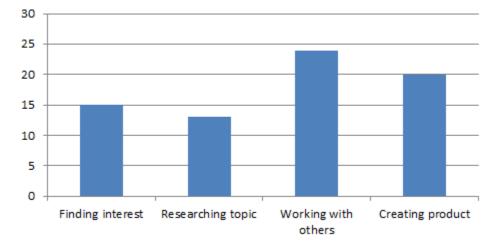
- Excessive online exploring is not good for eyes or thumbs for kids. Especially when technology and resources exist where they can research from books and write their funding and later scan /upload it online review by teachers and peers.
- Due to the virtual learning fact, my kid found it is hard to find a creative way to present the work.
- In the zeal to achieve the target, there was interest in skipping some steps. Still a great experience for a kid his age to experience the whole build process and to understand it takes time to finish a project successfully.
- My daughter had some difficulty organizing what information she would need to begin with on her topic of choice but this practice provided a necessary road map that she can use in the future with other topics of interest.

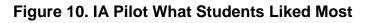
#### Students

Student ratings on the challenges associated with the pilot are very interesting juxtaposed against their parents' feedback. For example, when asked to rank the parts of the IA project they liked from most to least, the majority of students indicated that they liked working with others most (i.e., collaboration). Notably, this was followed by creating the final product. Students reported liking least researching, experimenting, or experiencing their topic, and/or finding their passion/interest (see Figure 10 next page).

Student qualitative feedback on the challenges they faced during the pilot echoed that of their parents/caregivers where creativity in presenting their projects may have been

impeded by the virtual delivery platform for some students. Other students experienced the usual challenges associated with an inquiry-based learning task such as choosing and researching their topic, or organizational challenges in synthesizing and presenting information. These challenges were not necessarily related to the virtual classroom environment but might just as well be expected to emerge in a regular classroom context.





- The hardest part of the Interest Academy for me was finding what I was interested in. I really had to reflect on what I liked to do and what interested me. But once I found what I wanted to do, it was really fun and I really enjoyed doing it.
- Because of virtual school, I couldn't present my project in an interesting, exciting, new way so I had to try to find a way to present it in an interesting way on google slides.
- The hardest what I would say is researching since I would need to find reliable sources and need to dig deep into learning key things. Like a challenge would include learning new words so that I don't get confused later on the research.
- The hardest part of the IA for me was remembering to document my day's work. Sometimes I would forget to write what I did that day on the Google Slide because I was having too much fun coding my project.
- The hardest part of the Interest Academy project was to find a way to express creativity inside it. I wanted to give an idea and a base of what I feel when I'm doing my passion, it took me some time to get ideas but it ended up great!

#### Teachers

Teacher experience with the challenges of implementing the pilot were similar to those of parents and students, but with important nuances specific to their instructional perspective. These challenges can be summarized into: i) timing and scheduling of the IA within the school year; ii) impact of the online mode of delivery on student motivation, engagement and collaboration; and iii) organizational challenges associated with managing the IA strategy in a virtual environment.

- Teaching virtually the biggest challenge was trying to fit everything in our schedule. Also not having all of the necessary means of presenting student projects was tricky as well. They were left to slides, websites, etc over a live in person poster board style presentation.
- I implemented it during a very stressful time of the semester. This meant most students were checked out and didn't get as excited as I would have hoped. Also, I probably came short in making sure the research part was done properly first. Students rushed through research and went straight to the creation part.
- Difficult to engage students who are non-responsive over the virtual environment.
- Some students focused on research instead of some of the higher order critical thinking skills.

#### ii) Aspects of the IA to Change

Feedback from parents and students regarding aspects of the pilot that should be changed centered on: i) better timing of the IA within the context of the school year, but also in terms of amount of time spent on specific tasks (i.e., research vs. production of product); increased teacher guidance in terms of helping their children focus and set clear goals for different project stages; and iii) better presentation options specifically in the context of a virtual delivery environment.

#### **Parents/Caregivers**

- maybe more resources for the research topic, or patterns for the research work presentation, like videos or poems or songs.
- Slightly more focus for the students. The selection of broad topics can lead to frustration trying to come to a conclusion.
- It was nice to allow him to choose his own topic but I think further guidance on what should be accomplished is needed.
- Announce it much earlier so students (and parents) have plenty of time to gather materials and prepare. For example all library books needed to be

ordered and delivered during the lockdown which took longer...Perhaps even announcing it at the beginning of the year, or at least the term to allow ideas to brew.

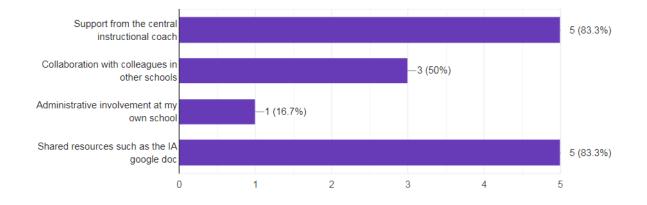
#### Students

- One aspect of the Interest Academy that I would change would probably be, giving students more check-ins with teachers. Just to make sure they are on the right track. And making sure that they are on the track to finish the project in time. Other than that, I thought it was a great project!
- That there was some sort of guide line or an expectation I could follow.
- I would change the amount of collaboration that we are expected to have. Especially because it was an online school it could be very difficult to collaborate with my classmates...
- The thing that I would change is the researching part. There should not be too much research or too little research.
- More class time and more time to work with other students. Also a longer due date as well as a better time frame provided.

#### Teachers

Teacher feedback on which aspect of the IA they would change reflected similar themes to those of parents and students, but again with an instructional nuance. Some teachers reported that the length of the time allocated for the IA pilot (i.e., 6 weeks) exceeded what was necessary to complete the project. Other teachers would change the amount of time spent on different aspects of the project. Teachers with less experience implementing this particular inquiry-based strategy indicated that they would have benefited from examples to show their students what was expected of them at each stage of the project.

Finally, teachers were also asked which organizational conditions positively impacted the implementation of the pilot in their classroom (see Figure 11 next page). Most teachers indicated that support from the central instructional coach and sharing online resources were the most important organizational conditions impacting the implementation of the IA pilot. Teachers rated administrative involvement as the least important organizational condition. Again, the small sample size needs to be considered when interpreting the teacher survey results.



#### Figure 11. Organizational Conditions Supporting IA Pilot: Teachers

#### **Summary of Findings**

Results from the stakeholder surveys provided strong evidence for the inquiry-based learning approach as represented by the IA pilot. Notably, the majority of students, parents/caregivers and teachers involved with the initiative were in agreement that they would participate in the Interest Academy again or recommend it to others. Three main themes emerged from the analysis of stakeholder experience. The most salient theme centered on the utility of the IA strategy to motivate and engage students in their learning, and ultimately to improve their connection to school. A second major theme was concerned with how the pilot addressed the specific learning needs of all students, including learners with giftedness, particularly the impact on learning skills and work habits contained in the Provincial Elementary Report Card. The third major theme which emerged surrounded the organizational conditions either supporting or impeding the implementation of the IA pilot delivered via a virtual platform.

Parents/caregivers provided rich insight into the ways that the pilot met their child's specific learning needs, including parents of students who were identified with the gifted exceptionality. In fact, parents/caregivers and students observed many benefits of the pilot in terms of impacting their learning skills beyond the Ontario Elementary Report Card. Teachers reinforced that, through the pilot, they were able to address several areas of the Ontario Curriculum and noted several aspects of their instructional practices which changed resulting from their experience with the pilot. Teachers were in general agreement that the IA pilot had a significant impact on their student's critical thinking, creativity, communication and metacognitive skills. Finally, stakeholders put forward several organizational conditions which affected the implementation of the IA pilot. These centered mainly on the delivery of the IA in a virtual environment, particularly during the COVID-19 pandemic. A full discussion of these findings are presented in the concluding section below.

#### Part 4: Discussion & Conclusion

#### **Timing Emphasis**

Findings from the evaluation with respect to challenges of the pilot suggest that too much or too little time spent on any one aspect of the IA strategy (by either a teacher or student) may have been detrimental to the overall success of the project. For example, stakeholders reported that over-emphasis on the research component or the final product presented difficulties for some students. Other students lacked the necessary time to develop good research questions, or meaningful inquiry topics. Add to this the virtual delivery platform, which limited interactions with teachers, insufficient time was spent by some students on that key area.

Indeed, the entire 1st week of instructional time for the IA strategy was meant to demonstrate to students how to ask meaningful inquiry questions, and to conduct research properly. During this time, teachers should have outlined the steps which need to be explored more deeply and ensure that every student relates to the research and focuses on their topic of choice. However, teachers noted that not being physically present (i.e., virtual environment) also played a role in that aspect of the project because it was difficult to engage and mentor students online for the questioning process. In this sense, the online platform and the focus of IA time were interrelated challenges due to the interdependence of these two factors.

#### **Virtual Delivery Platform**

The ability of teachers to support skills such as critical thinking may also have been impeded by the virtual delivery environment. Teachers noted that it was difficult to identify students who were struggling with an idea and/or other cognitive processes during an online session. By contrast, learning in a physical classroom is visible and audible, where teachers can practice 'listening at a distance'-- in effect hearing how their students are thinking. This type of observation is difficult to carry-out in a virtual classroom, particularly assessing meta-cognitive processes such as selecting a research topic. Further, upon entering the virtual classroom, a teacher's presence often changes the behaviour of students. When the teacher arrives in an online environment, they become almost 'too visible' causing the student to worry about being judged or assessed. Whereas in a physical classroom, students can lose track of the teacher's presence and so become unworried about judgement or assessment. Essentially, students need to be challenged sufficiently to create a need, and teachers must be present to address that need when it comes. In a virtual classroom this need is created; however, the teacher cannot be there physically to support metacognitive processing in the same way. This creates frustration in the student, and this frustration was evident in some stakeholder feedback.

#### **Teacher Online Presence**

Although it was very challenging for stakeholders to leverage technology for this aspect of the IA pilot, there are potential options for solutions, such as creating google classrooms which make the online learning platform more dynamic. For example, break out rooms could be created where students are working collaboratively, and the teacher can 'wander over' unnoticed. Still, a virtual environment may not be ideal for capturing some of the IA metacognitive processes. Many teachers suggested that it was difficult to make observations and have conversations with students as their learning journey was happening. Parents also reinforced this challenge in their expectations of the teachers' role, noting that there was no teacher there to guide their children during the process of learning. The problem here is really one of connectivity between teacher and the individual student, and the challenge of relationship building in a virtual environment. In short, online learning may not be as conducive for the IA when compared to a physical classroom space. Nevertheless, it should be recalled that there was overall satisfaction with the IA pilot in the evaluation findings, particularly respecting the motivation, engagement and connectivity key dimensions of interest.

#### Motivation, Engagement & Connectivity

Results from the IA pilot evaluation clearly reinforce the concept that motivation, engagement and connectivity are linear. Testimony from stakeholders shows that an increase in a student's motivation will entice them into deeper participation in their learning, which itself leads to greater engagement in the learning process. In turn, this engagement in the learning process leads to greater collaboration with teachers and peers which results in greater connectivity to school. These three interrelated processes all support self-determinant learning (a philosophical pillar of inquiry-based learning), by giving students the opportunity to follow their own learning path. In contrast to teacherdetermined learning, knowledge is in the hands of the student. In other words, rather than determining learning for the student in some prescribed or pre-determined fashion, the teacher supports student engagement and ownership of knowledge. Moreover, teachers facilitate the thinking journey of the student by conferencing with and coaching the students, rather than guiding students down a predetermined path. In this way, teachers provide students with the tools to overcome challenges in their individual learning journey. Feedback from all three stakeholder groups strongly reinforced this notion in their experience with the IA pilot.

### Learning Outside the Curriculum

The evidence from the IA pilot also speaks to learning that is done outside of the formal curriculum, where opportunities for authentic learning are created for students to experience. For example, one of the topics chosen by a student participating in the pilot was different breads of the world. Indeed, this philosophy of education is the

cornerstone of culturally responsive and relevant pedagogy. The positive findings concerning this philosophy of learning also reinforces why it is currently being used in the OCDSB's Indiginenous Education program, as well as our Alternate secondary sites across the system.

#### **Flow States**

From a psychological perspective, the IA pilot evaluation findings concerning motivation, engagement and connectivity also bear discussion. For example, it is generally understood by school psychologists that student-driven learning is a catalyst for engagement and connectivity at school. Csikszentmihalyi first identified the concept of "Flow" in 1975 whereby a student experiences an energized focus and enjoyment and becomes so completely engrossed in an activity that his or her concept of time can shift. This is a sign of full engagement, where the student is tapping into key learning processes automatically and becomes more confident in their learning.

The inquiry-based approach also facilitates a growth mindset (Dweck, 2009), where the student believes their abilities can be developed through effort. In this sense, collaboration emerges in a different way with the IA strategy than one might expect in a traditional teacher-determined learning approach. For example, school connectivity in the IA context speaks to the networking that students can do with other students when the teacher may not necessarily possess knowledge of their research topic. Consequently, the student must engage in collaborative activities beyond the teacher-student relationship, asking questions from experts in the field, parents, or even outside community members. Moreover, self-determined inquiry in a virtual environment allows students to connect to the school in innovative ways, providing them with more opportunities to connect and share about themselves and their interests with their classmates. In this way, the online platform helps to define and build relationships with their peers in school, and to 'put yourself out there'. Student testimony clearly shows a strong positive impact from the IA pilot in terms of connection to school for both gifted and non-gifted learners.

### Self-Determined Learning

The findings from the evaluation surrounding confidence, or even empowerment, speak to the self determination that students experienced in participating in the IA pilot. In this sense, student empowerment/confidence increases when students are provided with opportunities to control their learning, and when they're not being judged on the rightness or wrongness of their knowledge. The inquiry-based approach removes the fear of being wrong for the student in their learning journey. Consequently, the student feels confident sharing what they have learned. This is why coaching, facilitation of learning, mentoring and peer-support to students is a central pillar of the IA strategy. By contrast, when there is a determined learning destination, students get focused on that

destination. The inquiry-based learning philosophy represented by the IA clearly allowed students to focus on their own learning journey, and acquire key learning skills such as critical thinking, creativity, communication, collaboration and metacognition.

#### Learning Journeys Vs Curriculum Outcomes

Many educators still espouse a philosophy of teaching based on outcomes and/or learning curriculum expectations (Hattie, 2012). Indeed, teachers are trained to focus on outcomes such as specific curriculum expectations in specific subject areas. To a certain degree, the emphasis of learning in traditional pedagogical approaches is preparing for a test, or a product at the end of a lesson rather than following the students' own learning journey and supporting their skill development. With the inquiry based approach, learning skills in areas like student conferencing or peer-peer interactions may be well developed but still difficult to assess with an outcomes-based assessment approach. In the IA type of approach, the teacher is always observing, in a constant assessment mode, looking for the strengths and needs of their students and what they can or cannot do.

This type of learning approach is underused at every level of education. Indeed, very little information from the type of experience where the teacher controls the path can be considered high-yield. This is why instructional strategies like the IA are excellent examples of 'visible learning', or high-yield instructional strategies (Hattie, 2011). Student self-efficacy, the facilitation of learning over direct instruction, and other meta-cognitive strategies such as feedback that students receive are all hallmarks of inquiry-based learning and so represent high-yield instructional strategies. In other words, through improvement of these high-yield instructional strategies, students who participated in the IA pilot learned more effectively overall.

#### Learning Paths

Results from the IA pilot evaluation demonstrated mixed results about whether or not teachers found new ways of understanding the learners, including students with giftedness, in their classroom. Indeed, several teachers acknowledged merit in the idea of allowing their students to explore their own learning path. There is a parallel here between the Elementary Report Card learning skills/work habits and effective pedagogy, where both constructs become an intertwined, complex mixture of good pedagogy and instruction. The main reason teachers found the IA valuable was that it provided an opportunity for their students to process learning skills more deeply than teacher-directed learning pathways. In short, it was messy.

The reason for these mixed results is likely that, with the IA, teachers do not have complete control of the learning path. Although teachers are still there to guide the learners and have a sense of the learning path or the assessment required, they cannot

determine entirely what these assessment items will be. This can create an uncomfortable situation for some teachers who may be more comfortable having students explore knowledge that they are familiar with. Particularly inexperienced teachers who may be overly concerned with addressing curriculum content and/or developing experiences which directly assess specific or overall curriculum expectations. On the other hand, when teachers enter into an inquiry based learning strategy, they can see how it connects to important learning competencies and work habits beyond the curriculum. When teachers engaged with this type of instruction, and recognized these important connections, they realized that students were learning skills through the IA that they might not otherwise have acquired as effectictively.

#### **Dimensions of Interest Connection**

Evaluation findings also showed a link between the key dimensions of interest, such as learning skills and work habits for students participating in the IA pilot, and their relationship with motivation, engagement and connectivity. In terms of initiative, for example, students were more likely to get started on work that they were passionate about (motivation link). This reinforced the student's confidence, and therefore, the task became easier for them to complete (engagement link). Likewise, the freedom to explore topics of their own interest was related to independent work insofar as students were 'coming out of their shells' to complete the IA project (connectivity link). In this way, motivation, engagement and connectivity were linked with important learning skills and work habits identified in the Ontario Elementary Report Card.

#### Summary

Findings from the IA pilot evaluation indicate that there was a strong relationship between motivation, engagement, and connectivity. An increase in motivation often led to increased engagement which supported connectivity between students, their peers, and their teachers through mentoring and collaboration. The pilot supported a selfdeterminant learning path where students were given opportunities to explore a personal interest while applying and developing skills related to the 4C's and M (critical thinking, creativity, communication, collaboration and metacognition). Through these types of experiences students were permitted to take ownership of the knowledge as their teacher and peers facilitated and supported their learning journey. This type of task allowed students to engage in authentic learning experiences that connected them with concepts and content not found in the formal curriculum. It also allowed students the opportunity to engage in learning through their personal culturally relevant lens. The IA pilot evaluation results also provided strong evidence that an inquiry-based learning approach reinforces important learning skills and work habits. Through a selfdetermined learning path, students take initiative and gain confidence in their learning, and as a result, become more independent learners. Good pedagogical practice

includes creating these types of learning opportunities for students. This knowledge is important for teachers across the District who may be reluctant to engage in an inquirybased learning approach, particularly teachers with less experience or those who may be more focused on assessing specific curriculum expectations.

#### **Concluding Remarks**

In Spring 2021, the OCDSB Interest Academy (IA) pilot was implemented in seven different OCV classrooms. The IA pilot was formally evaluated using a participatory approach with the main purpose of exploring the experience of stakeholders (i.e., students, parents/caregivers and teachers). In line with the participatory evaluation approach (Patton, 2012), key program stakeholders were involved at every stage of the IA pilot evaluation. An evaluation project team was struck composed of evaluation staff, program staff and administrators to inform the evaluation process. Two main evaluation questions were explored. The first question sought stakeholder feedback on their experience respecting the efficacy of the Interest Academy to meet the needs of all learners in a virtual environment, including learners with giftedness. The second question gathered feedback on the organizational conditions impacting the implementation of the IA pilot at the OCV sites. Notably, the planned exploratory methodology of the evaluation was constrained by logistical considerations caused by the COVID-19 pandemic. Consequently, the survey method was selected despite the philosophical limits to using empiricist data collection methods for an exploratory purpose. Nevertheless, the sample represented both students with giftedness and nongifted learners from Grades 4 to 8 located in Regular or French Immersion OCV classrooms as well as their parents. Six of the seven teachers involved in the pilot responded to the educator survey.

Results from the stakeholder surveys provide strong evidence for the inquiry-based learning approach represented by the OCDSB Interest Academy pilot. Notably, the majority of students, parents and teachers involved with the initiative were in agreement that they would participate in the Interest Academy again, or recommend it to others. Three main themes also emerged from the analysis of stakeholder experience. The most salient theme centered on the utility of the IA strategy to motivate and engage students in their learning, and ultimately to improve their connection to school. A second major theme was concerned with how the IA pilot addressed the specific learning needs of all students (including learners with giftedness), particularly the impact on learning skills and work habits contained in the Ontario Elementary Report Card. The third major theme which emerged surrounded the organizational conditions either supporting or impeding the implementation of the IA pilot delivered via a virtual platform. These

findings provide clear evidence that address the evaluation's two main questions, and lay the groundwork for actionable recommendations for the District's next steps.

#### **Next Steps**

The information gained from the OCDSB IA pilot evaluation will be useful for informing the ongoing work of both the Learning Support Services (LSS) and Program and Learning (PAL) departments. This work falls under four main areas. First, the results of this exploratory evaluation indicate that the OCDSB Interest Academy model is an ideal differentiated instruction strategy suitable for all students, regardless of whether or not they have been formally identified with giftedness. Thus, the District might consider an expanded field testing model of the IA strategy for all interested educators. Second, the results of the pilot evaluation align with the work undertaken by LSS to gather information related to the possible implementation of a universal screening tool. A third related area is an exploration of talent development framework for the District.

According to Renzulli (2005), the focus in a talent development approach is to provide every student with opportunities, resources, and encouragement in order to help all students reach their full potential. Renzulli also described how a talent development approach allows for enriched programming models that develop talents of students who traditionally tend to be excluded from gifted programming. To further explore a talent development framework, additional information and consultation will be required to better understand the implementation considerations of such an approach for the OCDSB. Finally, results of the IA pilot evaluation suggest that an inquiry-based learning approach is an impactful strategy to include in the Learning Support for Students with Special Education Needs (formerly Quality Program Indicators) online resource specifically for students with giftedness both in the specialized program classes or in the regular program.

## **Annex I: IA Parent Information Letter/Consent Form**



#### OCDSB Interest Academy Pilot Parent/Guardian Information Letter

19 March 2021

#### Dear Parent/Guardian:

We are pleased to announce that your child's class will be participating in an exciting pilot project this spring called the OCDSB Interest Academy. This inquiry-based learning project is designed to support all learners, including students identified with giftedness and/or talented students receiving instruction in a regular or specialized classroom setting. Your child's classroom is one of several classrooms chosen from three Ottawa-Carleton Virtual (OCV) campuses to take part in this important initiative. The goal of the OCDSB Interest Academy pilot is to implement this innovative, inquiry-based strategy in selected OCV classrooms and to explore/evaluate its impact on students.

An important component of the evaluation is to seek parent/guardian feedback on their child's experience with the Interest Academy through an online survey. Your participation in the survey is completely voluntary; however, your response is highly valued and encouraged so that results from the evaluation are representative of all students involved in this initiative. A link to the online survey will be forwarded to all parents/guardians later this spring. We are also seeking your approval to use the data collected from your child in the evaluation of the pilot, consisting of a self-reflective assessment measuring peer connection, engagement and motivation in the Interest Academy.

Information gathered from the evaluation of the OCDSB Interest Academy pilot will assist the District in our efforts to better understand the impact of an inquiry-based learning project on all students, including gifted and/or talented learners, placed in different classroom settings. Results from all evaluation components of the pilot (i.e., parent/guardian survey or student self-reflection) will be aggregated so that no individual names, or any other personal identifying information for you or your child will be included in public reports. Please note that the OCDSB Interest Academy forms part of your child's regular classroom instruction. Thus, you are receiving this letter for information purposes only; no further action on your part is required. However, should you wish to exclude your child's information for the purposes of the evaluation of the pilot please send an email directly to: steven.mckibbin@ocdsb.ca with the text, "exclude my child's results" in the subject line of your email.

Finally, this project has been approved by both the Learning Support Services and Program and Learning Departments of the OCDSB, as well as your child's OCV school principal. Please feel free to contact your OCV school principal with any questions, concerns or comments related to the OCDSB Interest Academy pilot, or either of us directly using the contact information below.

Sincerely,

Amy Hannah System Principal, Learning Support Services System Principal, Program and Learning amy.hannah@ocdsb.ca

Jennifer Offord jennifer.offord@ocdsb.ca

# Annex II: OCDSB IA Program Logic Model

DITTAWA-CARLETON		Evaluation Questions	Owearching Owearching  Did the multiplead learing intervention suport the needs of all learners in participanting IA classrooms. Including ginted learners?  Mart organizations conditors positively impacted the implementation of the A plug at the CCV sites?  Section:  What hemotypementation of the A plug at the CCV sites?  What hemotypementation of the A plug at the CCV sites?  What hemotypementation of the A plug at the CCV sites?  What hemotypementation of the A plug at the CCV sites?  What hemotypementation of the A plug at the CCV sites?  What hemotypementation of here A plug at the CCV sites?  What hemotypementation of here A plug at the CCV sites?  What hemotypementation of here A plug?  What hemotypementation of here A plug?  What hemotypements again? Recommend  What hemotypements are a better understanding of  What hemotypements are a better understanding the plug?  What hemotypements are a better understanding the plug?  What hemotypements are a better and understanding the marked are a countering intervention?  Where shorten are any change in tabuten learning intervention?  Where hemotypement useful to blackness?  Where any change in tabuten learning intervention?  Where hemotypement useful to blackness?  Where any change in tabutent learning intervention?  Brough the A plug from a plug fro
		Outcome Indicators	<ul> <li>Start focus group</li> <li>Nar tocus group</li> <li>Nar tazhers (ge and of imenvention) factors: (mailenges and barriers in implenges on barriers in cocvisities and barriers experiences in inquiry bars students</li> <li>Cocvisities and barriers</li> <li>BarantGaratian Surwey (of com identified students)</li> <li>BarantGaratian Surwey (of com ident selesement</li> <li>BarantGaratian and in lA classroom</li> <li>Barant assessment</li> <li>Cactors measuring trair engagement, motivation in la classroom</li> <li>Barantegagement, motivation is student voice</li> <li>Sharing tair/Showcase</li> </ul>
		Outcomes	<ul> <li>Teachorse In IA</li> <li>Teachorse Informed regarding students' needs, in particular needs</li> <li>Students with glassrooms are befter any understanding of hearners are learning gifted inastroets are more connected, modivated in their modivated in their modivated in their learning</li> </ul>
		Activities	Training/PO Training/PO Training/PO PD for backness on inquiny-based learning intervention (interest Academy intervention (interest Academy project on inquiny-based learning project on inquiny-based PALLSS PALLSS PALLSS Thereise remote support to cach and LSC Weisky prompts on Google classroom by central program staff (PAL and Program staff (PAL and Program staff condrafes remote visits with teachers as program staff condrafes remote visits with teachers as Program staff condrafes remote visits with teachers as Chine Bacher community and (B<) Students complete IA self- sessement and hybright student visits frough showcasel canning Fair.
	MODEL	<u>م</u>	n contraction of the contraction
Academy	LOGIC	Inputs	NI-X school phinologia phinologia nearchers randoms randoms roudems ro
OCD SB Interest Academy Pilot	PROGRAM LOGI	Stakeholders	The Interest Arademy (M) Imvolves n= Imvolves n= Communities Communities Communities Communities communities communities state Suberts Suberts Suberts Suberts Program staff Orderand ans Suberts Sube

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