

TORONTO CATHOLIC DISTRICT SCHOOL BOARD

Participants

- Associate Director of Academic Affairs
- 2 Central Superintendents (Student Success, 21st Century Learning/ICT)
- 2 Secondary School Principals

Participants were joined by Canadian Representatives from the School's Industry Partners from IBM, Apple and Microsoft at the respective sites.

The Canadian Industry Partner Representatives that joined us were also there to learn about the programs, alongside our staff.

Schools Visited:

3 Schools in New York City Area

A. Pathways in Technology Early College High School (P-Tech), NYC Department of Education, 150 Albany Avenue, Brooklyn NY in partnership with IBM <http://ptechnyc.org>

B. Early College for Health & Information Technologies (P-Tech), NYC Department of Education, 650 Academy Street, NY in partnership with Microsoft <http://schools.nyc.gov/SchoolPortals/06/M211/default.htm>

C. Avenues: The World School, Private School, 259 Tenth Avenue, NY in partnership with Apple <http://www.avenues.org/en/nyc/>

Learning:

A&B. P-Tech & Inwood

- Operate under similar models
- They are based on a 6 year program in which the student receives a high school diploma and a two year college diploma upon completion
- NY State funding allows for free College courses within the high school, as long as the high school diploma has not been completed
- Students have a mentor from the Industry Partner. At P-Tech the industry partner is IBM, and at Inwood the partner is Microsoft
- Students complete an internship with the industry partner
- There is a partnership with the City University of New York (CUNY), with a full-time liaison on site at the high school
- Upon completion students are able to apply directly into an Associate's Degree Program or some may receive preferential consideration for

employment with the Industry Partner

- This program was created in NY to address a number of needs:
 - o Accessibility to college programming in priority neighbourhoods
 - o Accessibility to colleges, where no institution was geographically proximate
 - o Mitigating financial challenges associated with accruing debt during college tenure, and additionally, where students were required to complete remedial courses at their own expense
 - o Sector-specific, industry needs for skilled employees in the technology and health sectors

C. Avenues

- Private school in New York, with the goal to expand to schools across the world - with the idea that students can easily transfer among the schools
- School curriculum and structures based on research and continual review of their data. A quote from the Director: “if we are doing the same thing three years from now, get yourself a new Director”
- Tiger team approach to problem solving is used among the administration when reviewing the program, structures and curriculum
- School curriculum developed around STEM and Global Education (World Course: history, geography, world issues)
- Based on mastery learning, with an aim for graduates to be trilingual
- 10 storey building, in the heart of New York City, that houses early childhood to Gr 12
- Each floor shares a center “learning commons” space
- Up to Grade 6 they use Singapore math, after Gr 7 they use Exeter math
- Students all have devices: K to Grade 6: 1-to-1 iPad; Grade 7&8: 1-to-1 MacBook Air; Grade 9-12: 1 plus 1 MacBook Air and an iPad
- Invests heavily in teacher preparation time - one week of preparation, one week of curriculum delivery, alternating weeks of STEM and World Course program.
- The notion of continual improvement was captured in their description of their first school site: “this will be the worst school we will ever build”.
- Emphasis on communication while remaining “green” (i.e. how do we use less paper?)

Application to the TCDSB

A&B. P-Tech & Inwood

- In order to consider the P-Tech model in the Ontario context, some larger

questions of funding, curriculum (secondary and college), articulation requirements, and sector-specific industry needs

- The sector-specific need also exists in the TCDSB
- Differences between the NY needs vs. Greater Toronto Area context:
 - o geographic accessibility to college and university is not as much of a concern in the GTA
 - o Graduation rates are higher in the GTA
 - o Ontario offers a variety of pathways to graduation and modes of curriculum delivery (e.g., dual credit programs, School within a College, Specialist High Skills Major, Advanced Placement, e-Learning, International Baccalaureate, Ontario Youth Apprenticeship Program, co-operative education, alternative programs, etc)
- With adaptation to the Ontario Education context, the P-Tech model could be viable. Much consultation and collaboration would be required among the following groups to implement a P-Tech program:
 - o At the macro level: School Boards, Ontario Colleges, Ministry of Education, Ministry of Colleges and Universities, Teacher Federation
 - o At the micro level: Superintendents, Principals and school staff, parents/guardians, students
- As a board, we would like to pursue discussions about the possibility of adapting a P-Tech model in our secondary schools

C. *Avenues*

- Excellent use of technology throughout of the school in terms of integration into coursework and it was the main medium for communication
- Environmental impact was evident in decision-making
- Investment in teacher prep time results in a very effective and engaging curriculum and assessment for learning
- The continuum from K to Gr 12 was effective for goal achievement
- A global minded curriculum has been incorporated into the school, to be forward thinking with the 21st century graduate in mind
- The importance of the learning environment (Third Teacher) in enhancing student engagement and achievement through the use of a variety of learning spaces (learning commons, classroom design with no separate teacher space, varied seating configurations and seat types, adaptable table configuration)
- Collaboration is encouraged through intentional design of the learning environment (Third Teacher)
- Community approach to professional development and learning through guest speaker series after hours for all stakeholders to participate

- Importance of time to reflect on practices through data driven conversations to ensure that there is a constant cycle of renewal (observe, plan, reflect)