## Manitoba High School Students Graduate with College Diploma



**Meeting IT Workforce Demands with IT Specialist Program** 



Pembina Trails Early College (PTEC) is a cutting-edge high school in Winnipeg that prepares students for careers in the Information Technology industry, which is patterned after the enormously successful Sarah E. Goode STEM Academy, a PTECH school in Chicago.

Students who have a passion for software development, cyber security and coding have an opportunity to graduate with a high school and post-secondary diploma at the end of their four years of high school. This unique school provides the students with an all-important head start in the fast-changing digital world.

Pembina Trails Superintendent Ted Fransen liked what he saw at the Goode Academy.

"I was immediately impressed with the vibrancy of the partnerships between the school and IBM and between the school and the junior college where the Sarah E. Goode graduates completed PTECH," says Fransen.

"These partnerships were indicative of the strength of broadening the students' learning experiences. In Pembina Trails, we have a similar strong alliance with TECH Manitoba and Manitoba Institute of Trades and Technology (MITT). The vivid image of the Venn diagram comes to mind. We are stronger together."

PTEC is located in the appropriately named Smart Park Innovation Hub on the University of Manitoba campus. In grades 9 and 10, students spend half their day at one of the four Pembina Trails high schools and the other half at PTEC in the Smart Park Innovation Hub where Pembina Trails' teachers deliver the high-tech accelerated programming. In grades 11 and 12, PTEC students attend classes at MITT where they receive a post-secondary education, professional mentorship and workplace experience. Thirty-two students enter the program each year for a total of 128 students in PTEC's grade 9 to 12 program.

"We deliver accelerated curriculum built on industry standards and information gathered from our MITT and TechMB partners," says Jane Bachart, PTEC's principal since its inception four years ago.

Aligning industry leaders with the students' passion, aptitude and engagement to content has had a remarkable effect on the success of the students.

"Families have told us stories about the change in attitude and behaviour when their child entered into PTEC," says Bachart. "When passion meets school, we find that the success and attendance increase exponentially."

"One of the tangible benefits of PTEC's close association with the tech industry in Winnipeg is that students are creating close connections with industry leaders and are able to network with CEOs, CIOs and other leaders that they would never have the opportunity to meet in a venue such as school."

"They realize they don't have to move to the western or eastern provinces to start their career in tech." says Bachart. "Because of the close connections they developed during their time at PTEC, that entices the kids to stay in Manitoba."

Another positive development from PTEC is the growing number of female students enrolling in PTEC.

"My dream was to have a 50-50 gender split. Typically, the IT sector has sometimes only 3% of the jobs held by women," says Bachart. "In our first year we only had four females at PTEC. This year I'm very happy to say that of the 32 new students we are bringing into the program, 15 are girls and 17 are boys."

Even though PTEC is only entering into its fourth year, it's popularity and success has grown every year. PTEC has caught the interest of other jurisdictions that want to replicate the exciting work that they are doing in Pembina Trails.

"The 2020-21 school year will bring forward our first graduating class. We have been contacted by other school divisions as well as Manitoba Education to seek ways to replicate and scale PTEC up in other settings," says Superintendent Fransen. "In Pembina Trails we will be hardpressed to stay with 120 students. There is already pressure within the school division to double the capacity."

PTEC may not equal the size of the Sarah E. Good Academy but both schools share the same goal: to create a culture of learning that ignites imagination, nurtures creativity and prepares students for a career in technology.



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