

How the Toronto Catholic District School Board is creating STEM opportunities with Girls Who Game

The Toronto Catholic District School Board empowers its female students with a STEM-based program that has a global reach and a local impact, showing participants the true power of girl power.



Business needs

Women have historically been underrepresented in STEM fields. To address this issue and encourage girls to pursue STEM careers, the Toronto Catholic District School Board partnered with the Girls Who Game program from Dell Technologies.

Innovations



Encourages girls' interest in STEM.



Establishes a strong community for girls.



Provides authentic learning opportunities and global competencies while addressing world problems through a STEM lens.

Outcomes



Developed and refined students' technical skills.



Taught leadership skills and fostered self-efficacy.



Built a community of learners.



Girls Who Game opens up STEM opportunities for girls."

Trina,
Participant in the Girls Who Game program

Science, technology, engineering and math (STEM) fields are changing the world, but women are historically underrepresented in them. Women constitute 51% of the workforce, yet only 28% are in STEM-related fields.¹ And only 11% of STEM jobs are held by female minorities.²

To tackle this issue, Dell Technologies launched Girls Who Game (GWG) in 2019 in collaboration with Microsoft and Intel. The extracurricular program encourages girls to improve their leadership and tech skills through real-world gaming simulations in Minecraft: Education Edition. GWG provides mentors to help students progress through the program's three levels—The Challenge, Leadership and STEM Esports—according to their readiness.

Two years ago, Canada's Toronto Catholic District School Board (TCDSB) partnered with GWG. Its goals were to build a girl-centric ecosystem that develops and refines students' STEM and leadership skills through solving authentic problems and mentorship.

Empowering girls through gaming

One of the first ways that GWG had an impact at TCDSB was by challenging assumptions and creating new opportunities for girls in STEM. "There's a stereotype that only guys game," shares Trina, a GWG participant at TCDSB. The program breaks this misconception and shows that gaming can be a powerful educational tool for everyone. By combining gaming and learning, GWG makes STEM more exciting and accessible.

Real-world simulations in Minecraft: Education Edition have a profound impact by making learning fun while helping girls develop critical thinking and problem-solving skills. "This program helped me realize that I like STEM, and I can't wait to learn more," shares Sing Gabi, a program participant. Expanding on the program's impact, Trina says, "Girls Who Game opens up STEM opportunities for girls."

Building a positive community

Through GWG, the girls learned more than STEM; they discovered how to lead. "We're leaders, in our own ways," asserts Medba, emphasizing how the program empowers each participant to find and embrace their unique strengths. Reflecting on the diverse ways GWG impacted her group, Shileese adds, "Girls Who Game taught us about environmental topics, leadership and how to help our classmates."

Mentorship is a cornerstone of GWG: the program gave the girls a connection to women with careers in STEM and the opportunity



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Lori DiMarco,
Superintendent of Education, TCDSB

to mentor other GWG participants. "It was really nice to have a mentor and be a mentor," reflects Olivia. Karen Beutler, a dedicated program advocate, explains why mentorship is so important: "The guidance helps girls envision their own potential in STEM fields. I believe it's changing their thinking of who they can be in the future."

Celebrating every participant's success

At the end of the program, the district gathered 100 GWG members to celebrate, giving students the opportunity to present their projects to peers from across the district.

"The energy at the celebration was palpable," recalls Lori DiMarco, Superintendent of Education at Toronto Catholic District School Board. "Students couldn't wait to share their learning." The sense of pride among the participants was evident. "I felt so proud of what I did," shares Carmela.

Shaping a brighter future filled with limitless possibilities

Beyond the immediate benefits that participants realize, the true significance of GWG lies in its lasting impact. By fostering a passion for STEM, GWG is shaping the career interests of many young girls. Trina says, "Learning these little things might turn into big careers in the future."

As TCDSB enters its third year with the program, the district will have students at all three levels. "We're so grateful to Dell Technologies for the support and leadership," says Superintendent DiMarco. "We've seen girls' engagement in STEM grow exponentially. We can't wait to see what the future holds for them."

[Learn More About Girls Who Game.](#)

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1. National Center for Science and Engineering Statistics, "Diversity and STEM: Women, Minorities, and Persons with Disabilities," National Science Foundation, 2023.

2. National Science Foundation, "Women, Minorities, and Persons with Disabilities in Science and Engineering," 2017.