



Grade 6 Dufferin Design Challenge

Grade 7 Orfus Prototype Challenge



Maximum City & The Sterling Hall School
May 2018 Report

Principal's Message from Rick Parsons

At The Sterling Hall School, community plays a seminal role in helping us to foster leadership. One of our three core values is *Sterling Community*. We define this by stating: "we value an engaged, supportive community that nurtures a sense of belonging and fosters lifelong relationships." We hope to inspire our students to engage with their communities, contribute in meaningful ways, foster agency and embrace responsibility for the communities in which they play, work, learn and live.

Working with Maximum City has provided our boys with authentic opportunities to consider their own relationships with our neighbours, explore and analyze problems besetting the community, and collaboratively work to imagine solutions. Providing our students with responsibility for research within the community has naturally cultivated relationships and reinforced the students' sense of empowerment in support of others.

We have always held the expectation that our students are part of a school community, but the expansion of these boundaries beyond campus is a lesson in civic pride and action that we hope will grow beyond the borders of the neighbourhood, the city, the province and the country. We strive to engender an internal motivation for boys to see themselves as part of a larger community, whose strength and success is reliant on the care and action of individuals to foster collective growth. This project has allowed the boys to look beyond themselves and to see community challenges as opportunities for personal growth and leadership – but the enthusiasm is all theirs!

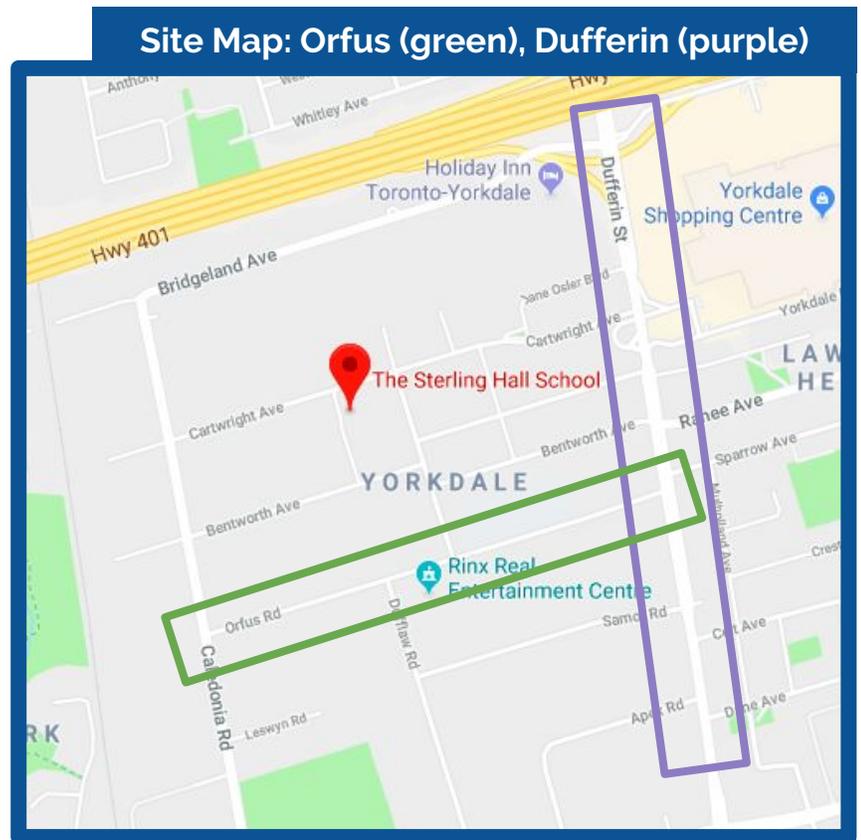


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CONTEXT

In April 2018, Maximum City returned to The Sterling Hall School for two design challenges with **Grade 6 and 7** students and faculty. The goals were for students and teachers to use the school neighbourhood as a classroom, develop a strong sense of place, be given skills, agency, and support to co-create solutions for authentic local problems, and present solutions to City staff for consideration of implementation.



The site for the **Grade 6 Dufferin Street Design Challenge** was the area of Dufferin Street between Bridgeland Avenue and Dane Avenue (purple on above map). Students redesigned a more vibrant and sustainable Dufferin Street using: lessons on Complete Streets and active transportation; role-playing activities; SWOT analyses; large-scale aerial maps; digital design tools; and hands-on building & drawing materials.

The **Grade 7 Orfus Road Prototype Challenge** built on the Orfus Road Design Challenge completed by the same group of students the previous year. Last year, students used digital and physical materials to reimagine Orfus Road between Caledonia Road and Dufferin Street (green on map), and their engagement and advocacy helped lead to the reduction of the speed limit on Orfus Road from 50 to 40km/hour. This year, they were challenged to design and prototype a specific, actionable intervention to improve the street, building on their knowledge and skills from last year.

PROCESS

EMPATHIZE >>> DEFINE >>> BRAINSTORM >>> PROTOTYPE >>> TEST >>> REFINE >>> PITCH



Students were encouraged to follow the design process, starting with **empathy**. The Grade 7 students, who had gone through the Maximum City Design Challenge process last year, were specifically challenged to focus on **prototyping** an actionable intervention to improve Orfus Road. Grade 6 students focused on making Dufferin Street more **youth-friendly** and complete.

DUFFERIN DESIGN CHALLENGE

GRADE 6

Dufferin St. is a major arterial road that begins at Lake Ontario and extends into Vaughan. The City of Toronto has initiated plans to redevelop Dufferin St. between Highway 401 and Lawrence Ave. This area of Dufferin St. is lined with several commercial and retail businesses set back from the street, and is prone to congestion chiefly due to the street's proximity to the highway system, the subway line and Yorkdale Mall. The Dufferin 29 bus carries over 40,000 passengers daily.



Can Dufferin be a more complete street?

37 Grade 6 students from the Sterling Hall School redesigned Dufferin Street, learning and applying the concept of Complete Streets and improving the street according to three themes:

**1. MOBILITY &
TRANSPORTATION**

**2. AESTHETICS &
GREENSPACE**

3. PUBLIC SPACE

Essential Questions for Themes

1. How can you improve how **all** people travel on the street?
2. Can the street be more beautiful and greener?
3. How can space be used differently and what amenities and activities can be added?

DUFFERIN DESIGN CHALLENGE - OUTCOMES

GRADE 6

Grade 6 Students identified strengths, weaknesses, threats & opportunities for Dufferin, highlighting the need for **safer**, more **enjoyable**, more **sustainable**, and more **functional** spaces & infrastructure.



Building a prototype



Bike lanes and rooftop green space



New green space with benches and trees



A more complete street showing rapid bus lanes, improved retail

Students considered a variety of users & stakeholders on Dufferin Street, travelling by transit, car, bike or on foot. Student designs called for:

- Add **trees and green space** to Yorkdale parking lots
- **Park with playground** on the roof of the Yorkdale parking building
- **Rapid bus lanes**
- **Bike lanes** & bike racks
- Beautify McAdam Loop with **flowers & plantings**
- Better street **lighting**
- New **kid- and family-friendly amenities** (e.g. petting zoo in parking lot, grocery store, restaurants)
- New **residential development** on current Honda dealership
- **Solar panels** on flat roofs
- More **crosswalks** for pedestrian safety
- Improved & widened **sidewalks**
- Improved retail closer to street

Orfus Road is a non-arterial interior road situated in North York, in the Yorkdale-Glen Park neighbourhood near Eglinton-Lawrence. The street has an industrial past that has transformed into a busy retail and recreation corridor with a mix of competing uses and modes, and is a destination retail and recreation street at particular times of the week.



How will Orfus meet the needs of future users?

36 Grade 7 students from the Sterling Hall School prototyped design interventions to make Orfus Road more youth-friendly and complete. In addition to the three themes from the Design Challenge, they thought about **actionable** interventions.

Essential Questions for Actionable Design

1. What interventions can improve the Youth-Friendliness & Completeness of the street, and are likely to be supported by the community & taken up by City staff?
2. Why is your prototype or design element needed on Orfus Road?
3. How could it be implemented? Is it for temporary or permanent installation?
4. Does your intervention interfere with or complement any existing uses?

ORFUS PROTOTYPE CHALLENGE - OUTCOMES

GRADE 7

Grade 7 Students identified strengths, weaknesses, threats & opportunities for Orfus Road, presenting ideas to make the street **safer**, more **enjoyable**, and more **sustainable**, with a focus on pedestrian safety and comfort.



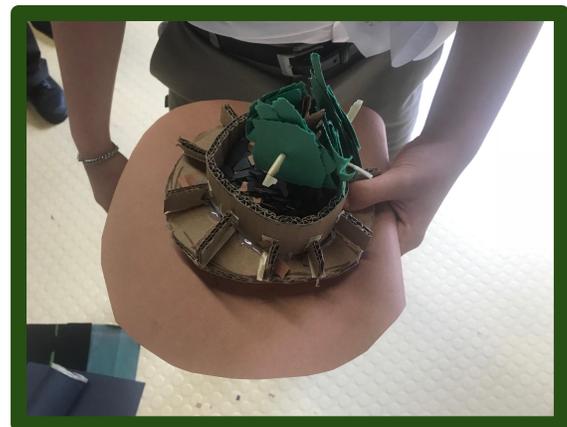
Brainstorming ideas for a climbing wall



Beginning the pitch



Idea for a frozen yogurt machine



Benches to provide more seating and light

Students considered a variety of users & stakeholders on Orfus Road. Presentations were video recorded and interventions included:

- A **park** (with basketball court and playground) at Yorkdale Learning Centre
- A frozen yogurt/hot chocolate **vending machine**
- A circular **bench** around tree planters that also holds lights for the street
- **Interlocking brick** or coloured pavers to create raised (tabled) intersections
- Painted **murals** on road to slow traffic at intersections
- New **crosswalk** for better access from the Yorkdale Learning Centre

AUTHENTIC ROLE OF CITY STAFF & COUNCILLOR'S OFFICE

Andrew Au, Senior Transportation Planner at the City of Toronto, visited the school twice during the process, first to give a presentation on the role of City Planning, and then to give feedback on the student presentations.



City of Toronto's Andrew Au presents to Grades 6 & 7



Councillor Colle visits in 2017

Last year, **Councillor Josh Colle** visited the school on the student presentation day. The Councillor's office committed this year to consider the student ideas and share them with City staff for review. Presentations were video recorded for sharing.

ONGOING IMPACT

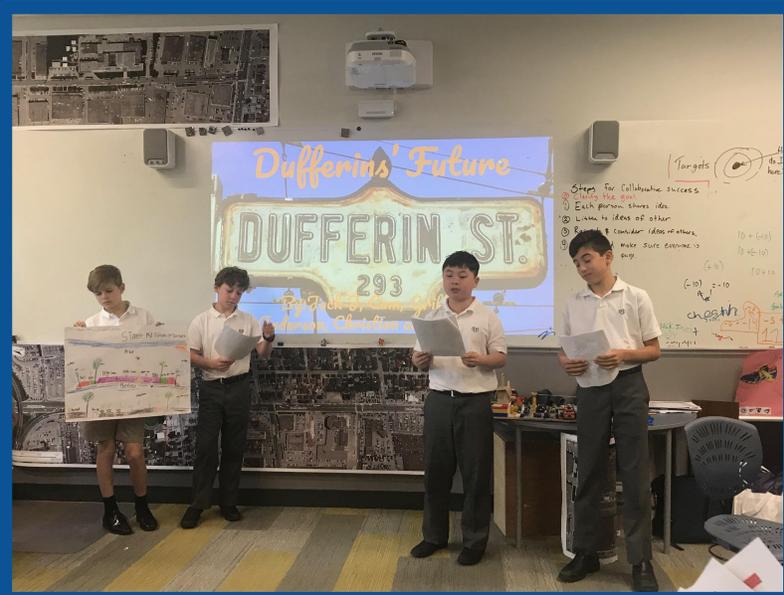
ON STUDENTS, FACULTY AND CITY

- Students feel empowered by the difference their civic engagement has made in the local neighbourhood
- Students are engaged in the classroom & extend learning to be active in the community
- Students gain stronger knowledge of and connection to school community
- Students empathize with other stakeholders in school community and build on character strengths
- Students feel more stewardship for their local environment, and have organized clean-up days
- Students build on data and design skills, learn how to navigate municipal processes
- Teachers build on real-world application of learning, authentic problem solving and giving students voice
- School strengthens its commitment to and role in community
- City staff and Councillor's office assist with next steps for possible implementation of student ideas



NEXT STEPS

- ✓ Share report with Councillor Colle's office
- ✓ Share report with Andrew Au, Senior Transportation Planner
- Plan for meeting between students and City staff
- Leverage learning into civic action
- Promote school's commitment to giving back to community
- Share [YouthScore](#) & other resources with Sterling Hall faculty for ongoing skill building and continuous learning



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