

Ignite Your Passion Programs



Big Bad Bot Builders FOR Grades 4 – 6
AND
Great Bots of Fire FOR Grades 7 – 8

2021 - 2022 Open House Information

Acknowledgement

We would like to acknowledge and thank the Squamish Nation upon whose traditional territory West Vancouver Schools reside.

We would like to express our gratitude to this Nation as we value the opportunity to learn and share educational experiences on this traditional territory.





Welcome & Introductions

Dr. Mahesh Chugani

West Vancouver Schools Teacher

Qualifications:

- Diploma in Electronics & Radio Engineering
- Bachelor of Engineering in Electronics & Telecommunications Engineering
- M.S. and Ph.D. in Electrical Engineering

Experience:

- Teacher - Sentinel, Rockridge, WVSS
- Certified VEX IQ Robotics Educator
- Certified VEX IQ Head Referee
- Certified VEX IQ Judge
- Certified Amateur Radio Operator (VA7 MCU)
- Member, Project Advisory Committee, Canada's ICTC (Information & Communications Technology Council)



Mr. Todd Ablett

West Vancouver Schools Teacher



Hardware
(Botsmith)

Qualifications:

- Journeyman Red Seal Electrician
- Bachelor of Science UBC
- Trained Technology Education Teacher

Robotics Experience:

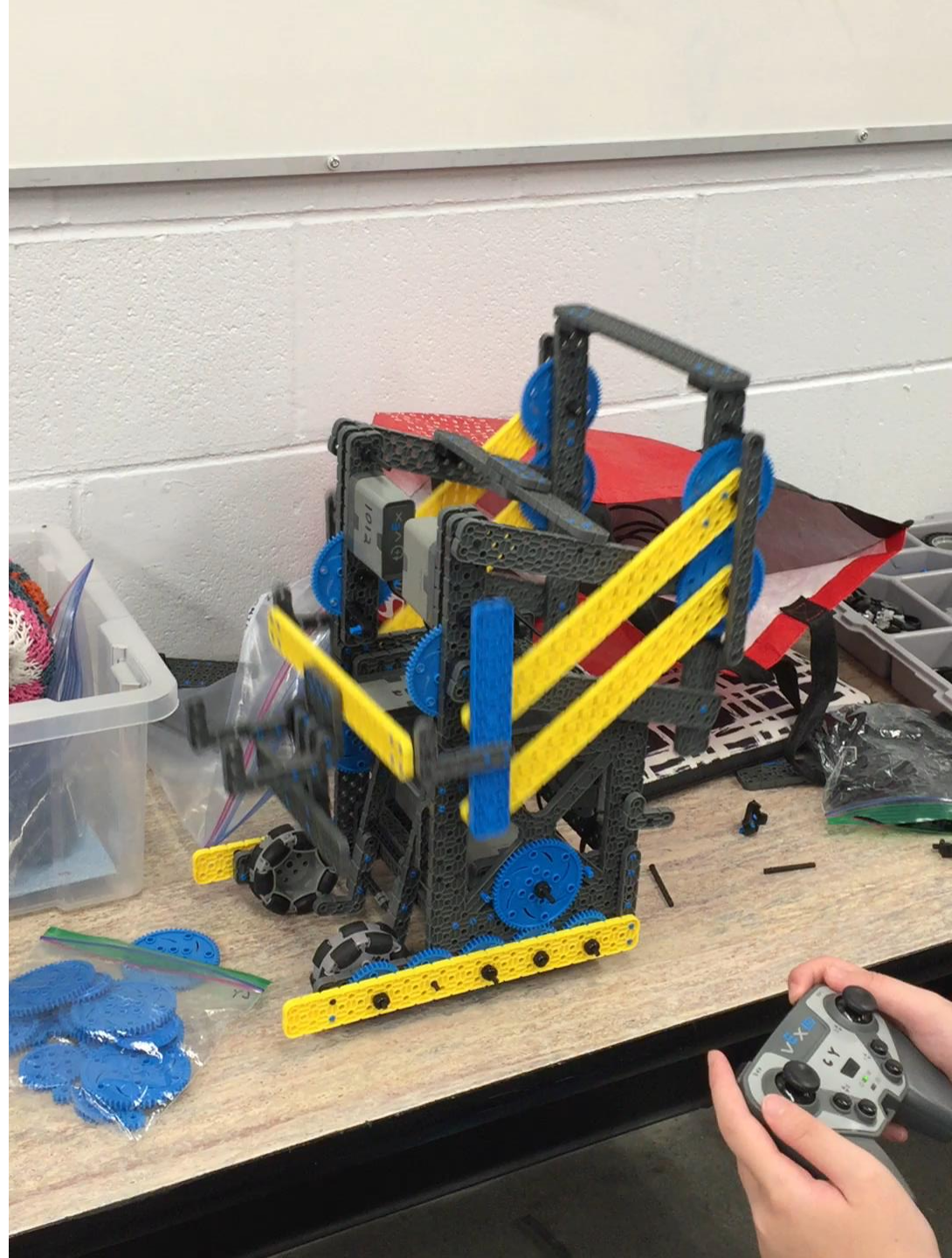
- 2000 – 2020: Taught robotics
- 2007 to present: Qualified and attended the VEX Robotics World Championships.
- 2011: Awarded Prime Minister's Teaching Excellence Award
- 2012: Won the VEX Robotics World Championships
- 2014: VEX Robotics Teacher of the year & VEX STEM Hall of Fame recipient
- 2016: Started Robotics Academy at WVS



Lifting Mechanism

Example:

Double Reverse 4-Bar





The Concept & Programs

General Concept

- IYP programs are district programs designed to provide unique opportunities for our students
- For students registered full time in the West Vancouver School District
- The programs are taught by WVS teachers
- IYP programs are choice programs with fees associated with them
- Specifically, for these IYP program, they are for students Grades 4 – 8:
 - Big Bad Bot Builders: Grades 4-6
 - Great Bots of Fire: Grades 7-8
- We focus on developing a fun, yet challenging environment for the students



Big Bad Bot Builders: Grades 4 – 6

Great Bots of Fire: Grades 7 – 8

Hands-On Project Based Learning Environment:

Students design, build, program various types of robots

Hardware:

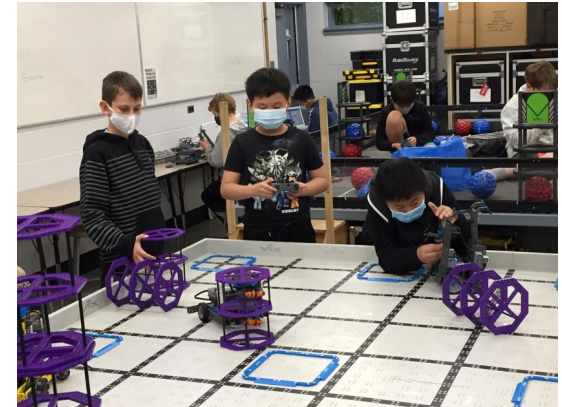
Explore various elements of **mechatronics and robotics**: structures, gears, lifting mechanisms

Software:

Learn fundamentals of computational thinking, coding, & programming

Tournaments:

Learn “soft” skills – teamwork, organization skills, time management, and learning from mistakes is encouraged



The Rationale

Students “learn by doing”

I **hear** and I **forget**
I **see** and I **remember**
I **do** and I **understand**



Students can follow several different paths, depending upon their interests:

1. Building robots (with instructions)
2. Building robots (using imagination)
3. Programming
4. Games
5. Tournaments
6. Leadership opportunities

1. Building – Follow Instructions



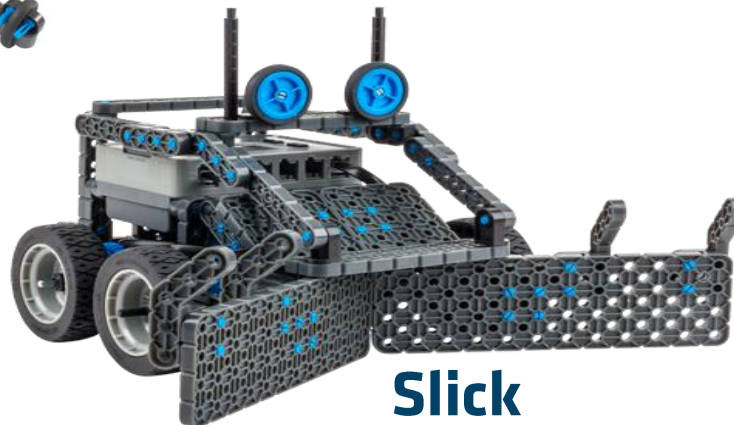
Ike



ClawBot



V-Rex

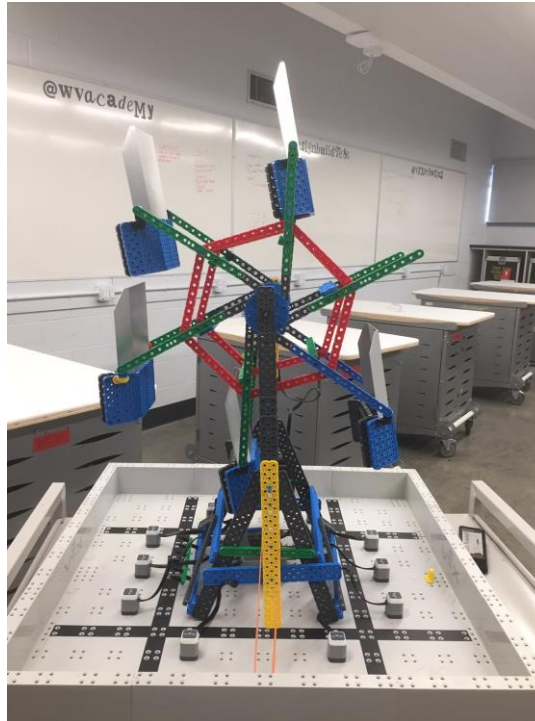


Slick

2. Building – Using your Imagination



Simpleton



Ferris Wheel with Trophies



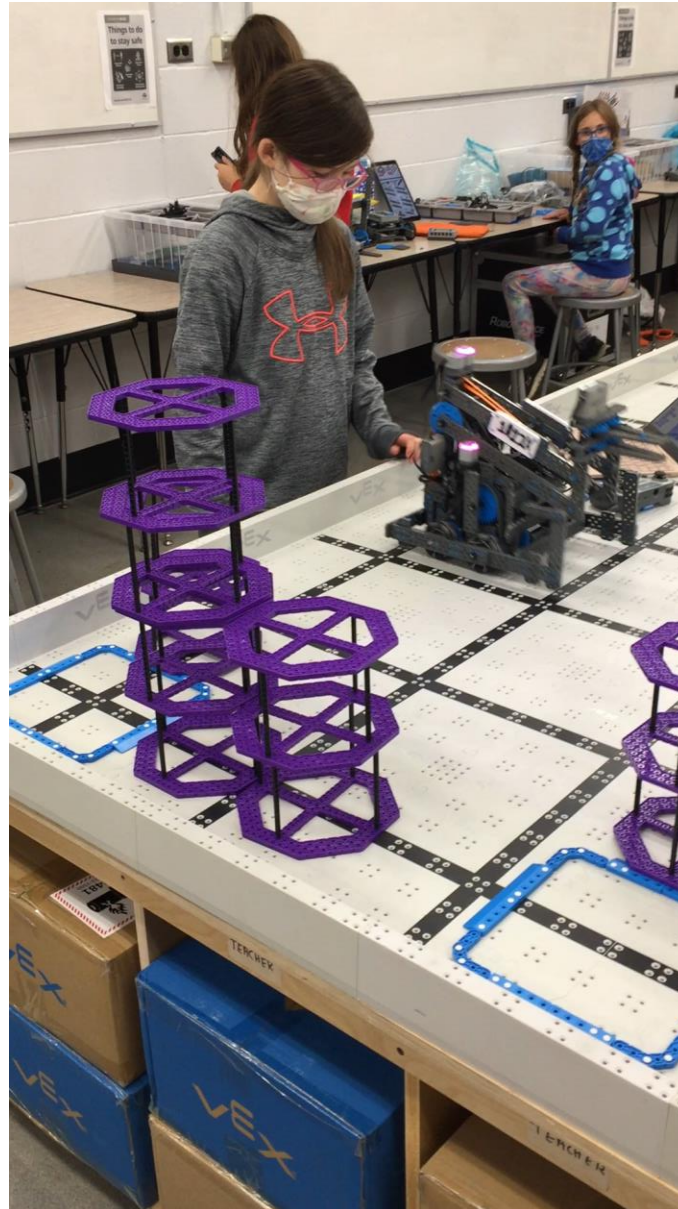
Hole Digger

2. Building – Using your Imagination (Video)

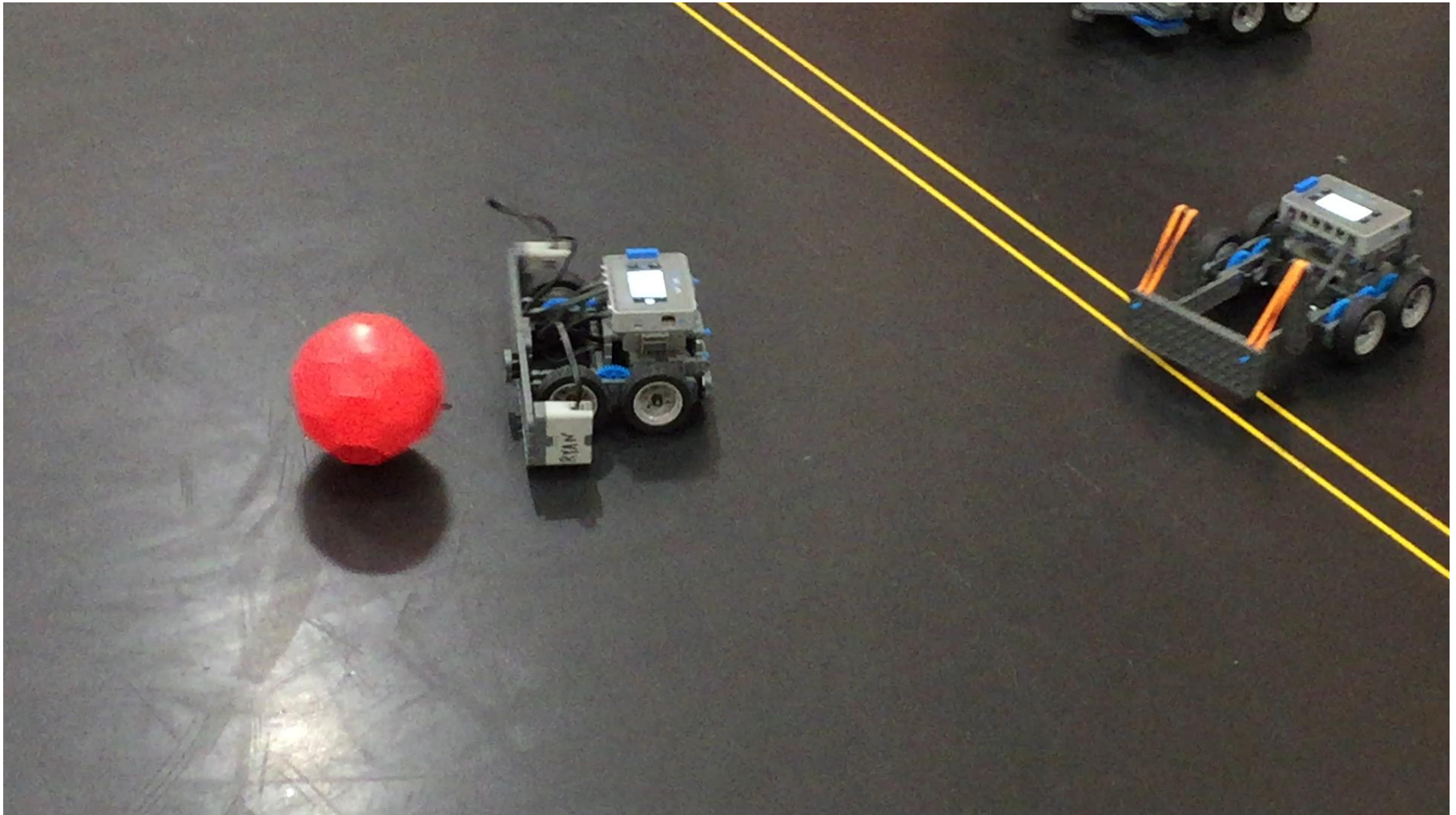
Simpleton



3. Programming



4. Games - RoboSoccer



4. Games - RoboRace



5. Tournaments



You never fail. You either **Succeed**, or you **Learn**
(improve the robot, and return better prepared for the next tournament)

5. Tournaments



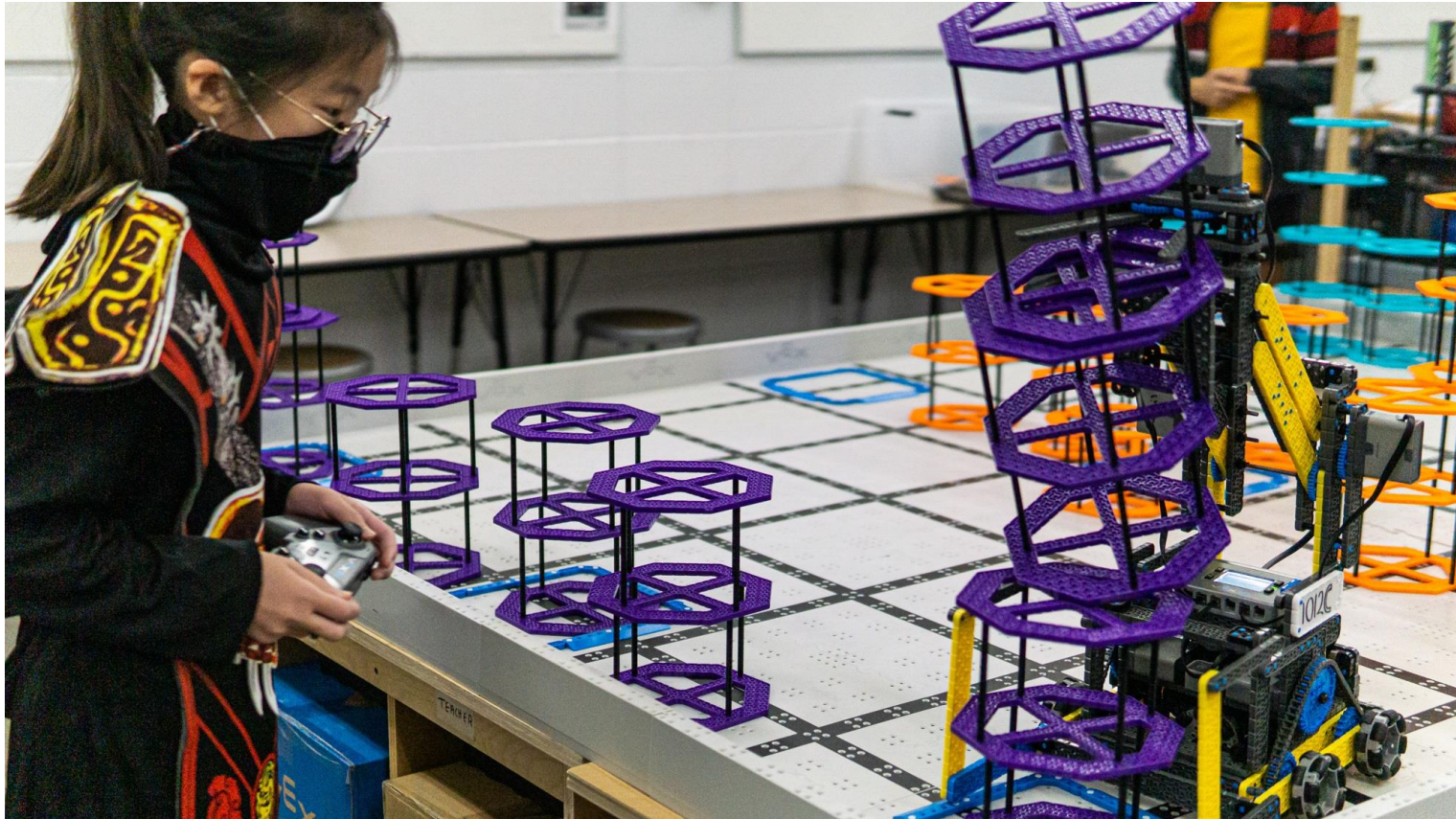
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(improve the robot, and return better prepared for the next tournament)

5. Tournaments: Sample Photo



The student on the left is driving his robot to stack the risers in the goal zone

5. Tournaments: Sample Photo



5. Tournaments: Sample Photos

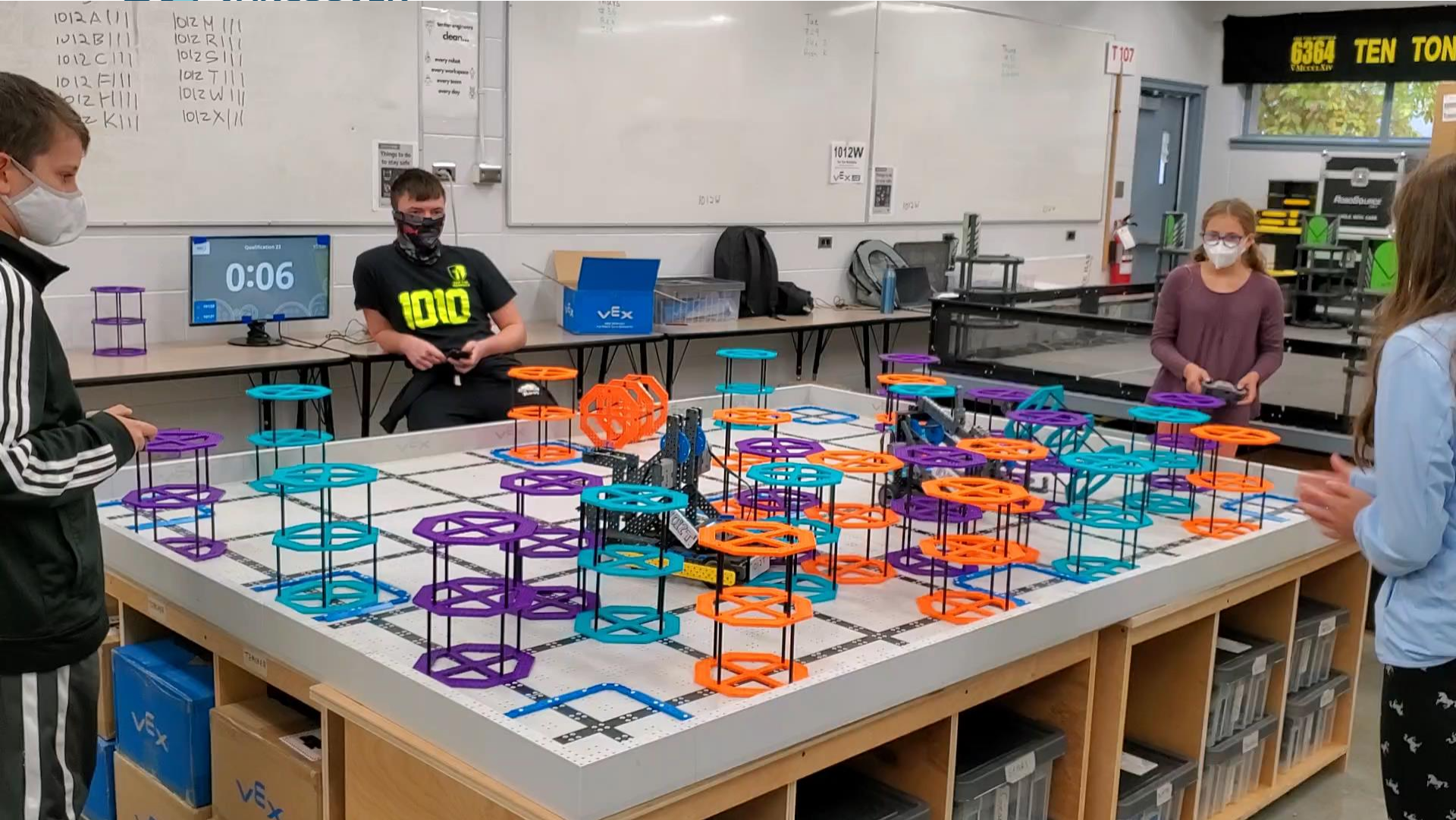


1012X



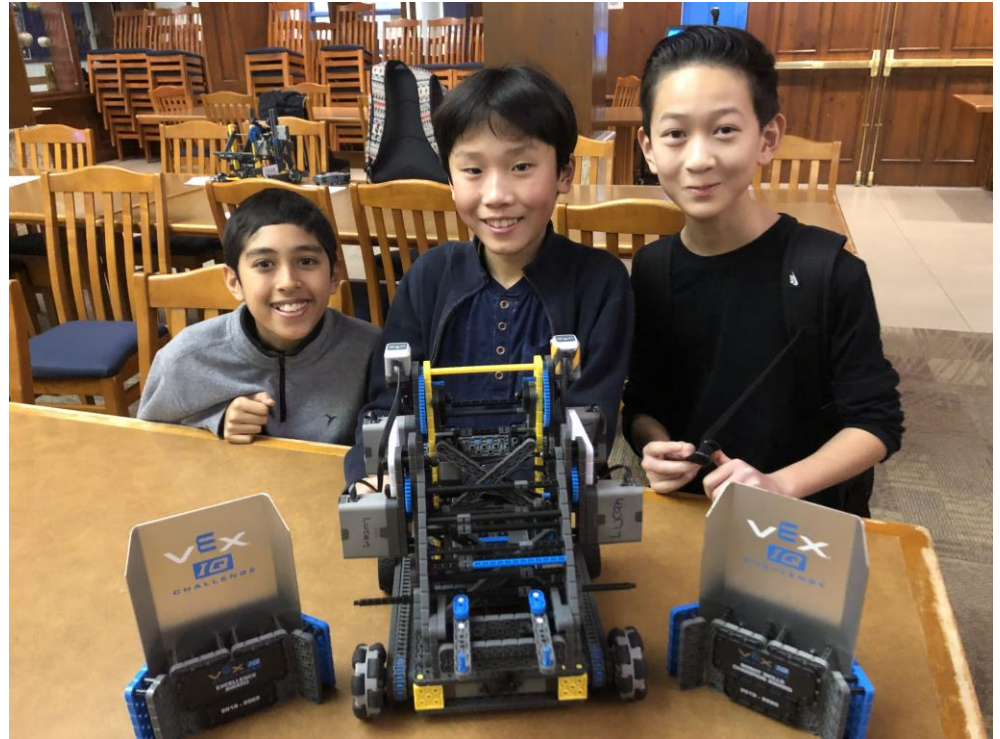
**Trophy from
Oahu, Hawaii**

5. Tournaments – Sample Videos



6. Leadership Opportunities

1. Robot Inspector
2. Referee
3. Judge
4. Queuer
5. Tournament Manager
6. Tournament Director



Student Feedback

The freedom to create.

You get to work with your hands and work in teams to develop and construct ideas.

We have the chance to build whatever we like without limits.

Learning a new skill set that will help me in the very fast changing world.

Being able to create and improve my ideas in a physical way.

Summary

There is a lot to learn in the program.

Students can learn every year that they participate.

1. Building robots (with instructions)
2. Building robots (using imagination)
3. Programming
4. Games
5. Tournaments
6. Leadership opportunities



Depending on student interests....plenty of opportunity for creativity.

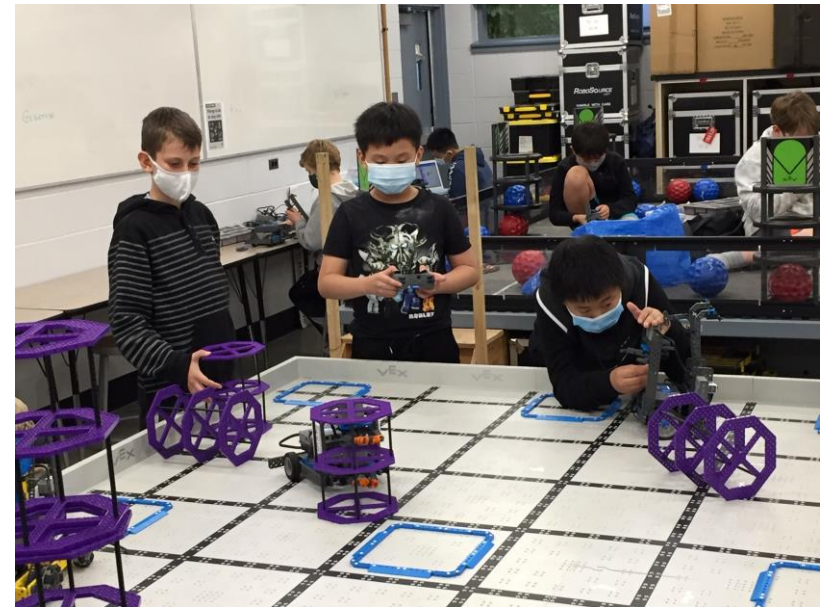
The Schedule & Location

September – June
All Year Long

Big Bad Bot Builders (Grades 4-6)
Monday OR Wednesday
3:30 – 5:00 p.m.

Great Bots of Fire (Grades 7-8)
Tuesday OR Thursday
4:00 – 5:30 p.m.

Both located at
West Vancouver Secondary School
Technical Wing
Robotics Room T107





Supplies & Equipment

The Equipment or Supplies

VEX IQ Super Kit





Fees

Fees

September – June

\$130 per month x 10 months

Once a student is confirmed for the program, parents will be asked to provide a non-refundable deposit

All payments are completed through School Cash-Online

More information will be provided

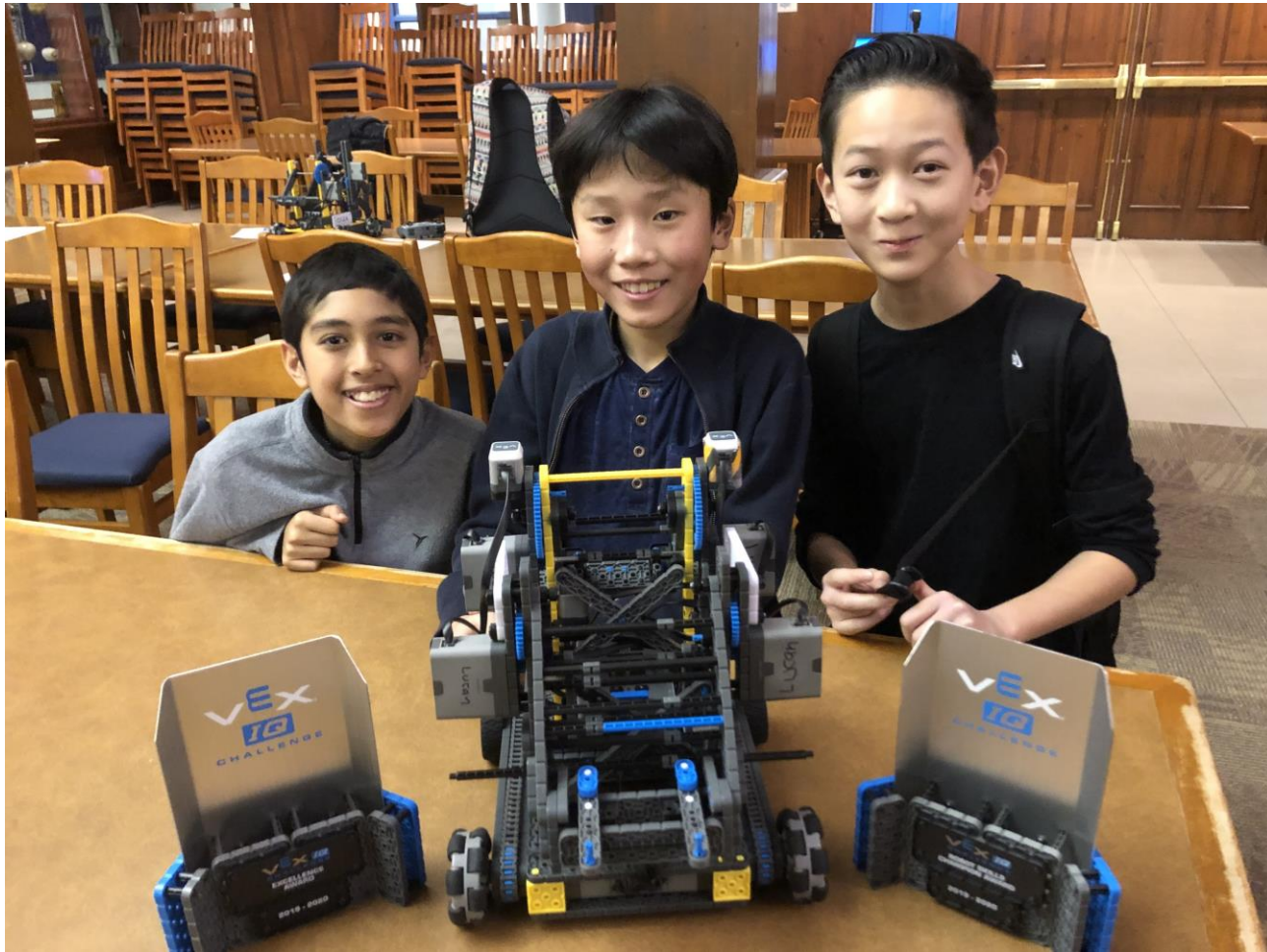




The Selection Process

Selection Process & Criteria

- ☐ Genuine interest or passion – sound reasons for applying
- ☐ Commitment to participate for the full school year
- ☐ Complete the on-line student information form for the specific Ignite Your Passion program (e.g., Big Bad Bot Builders OR Great Bots of Fire)
- ☐ Immediately following the submission of the online student information form, parents are to provide the student's most recent report card. Registration is not complete without the report card.
- ☐ Show evidence (report card) or answers within the completed registration form:
 - Ability to work well and making good progress in current classroom at school
 - Evidence of good character: being responsible & respectful
 - Ability to work well with others
 - Ability to follow the rules of a special program, as well as the mandatory health & safety protocols



Thank You for Your Time