

Free

# POWER OF CODING CAMP

ST. MARY'S SCHOOL/SUMMER 2016/FIRST CODING CAMP

## Coding, Robots and Movies

“That was a lot of fun looking into the future of technology” **Student Quote** Camp Survey

“WE SHOULD DO THIS AGAIN...”

Our **24 campers** ranged in age from 12-14 years. They came from a variety of schools (both Public and Catholic) and from as far away as Ajax.

The commitment of the students was reflected in **100% attendance** for a week long camp that started the first week of summer vacation.

They embraced our theme days -- Geek Day, Water Day, Super Hero Day and our Learning Expo for parents that featured **The Dash Olympics** and **iMovie Academy Awards**.

Having an IT expert like Greg, gave us the extensions we needed for our advanced students. As a result the continued on page 2



## The Language of Fun

A remarkable outcome of our week together was the cross groupings and new friendships that developed spontaneously and naturally through this shared learning experience. Experienced coders who had participated in St. Mary's Coding Club for the past two years, took on the role of mentor.

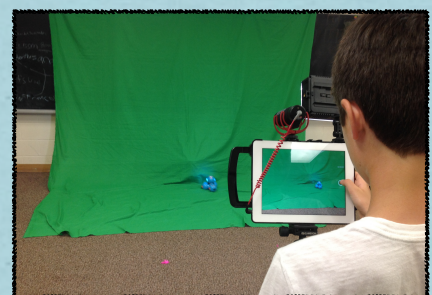
Students without any experience were supported and guided as they created their first coding projects. The laughter and perseverance that filled our days was contagious. Students willingly shared their work with the group and accepted suggestions and observations from their coding peers.



CODING WITH SCRATCH



PROGRAMMING ROBOTS



SPECIAL EFFECTS WITH IMOVIE



**“This was an amazing camp and you should totally do it again.”**

**Student Quote**

*Camp Survey*

...



needs of all learners could be met. The combined experience of a math enthusiast, and a special education teacher along with their passion for technology provided a learning environment that fostered learning success for all.

On our final day of camp we invited parents/guardians to attend a 'learning expo'. The students entered the gym with their robots in a parade of nations to open the Coding Olympics.

The robots competed in 5 events. The teams earned points for their skills in programming the robots and maneuvering them. The final event featured the crowd cheering for a jousting match in the centre of the gym. The robots had balloons and skewers attached to them and the goal was to pop the balloon of your opponent. Medals were awarded to the winning country.

## CODING CAMP

\* 4 Dash Robots were used during the camp.



*Campers learned to code using a web-based tool called Scratch.*

The 12 student created movie trailers were then shared with the audience at the Academy Awards. The movie trailers featured the skills of the Dash robots. The students had created an outline and chosen a theme to represent their story. They demonstrated creativity as they explored green screen technology and robots that they enthusiastically

brought to camp to include in their projects. The parent audience and campers voted on the top two movies and Academy Awards were presented.

The end of the day featured the presentation of certificates to the campers.

## **A FUN-FILLED PROGRAM: ENGAGING THE BRAIN AND THE BODY**



Campers **wrote** and **filmed** their robot stories. They used **special effects** such as the green screen to highlight the skills of their robots.



The camp included **daily physical activity**. On the WATER THEME DAY outdoor coding in teams was followed by water themed activities.



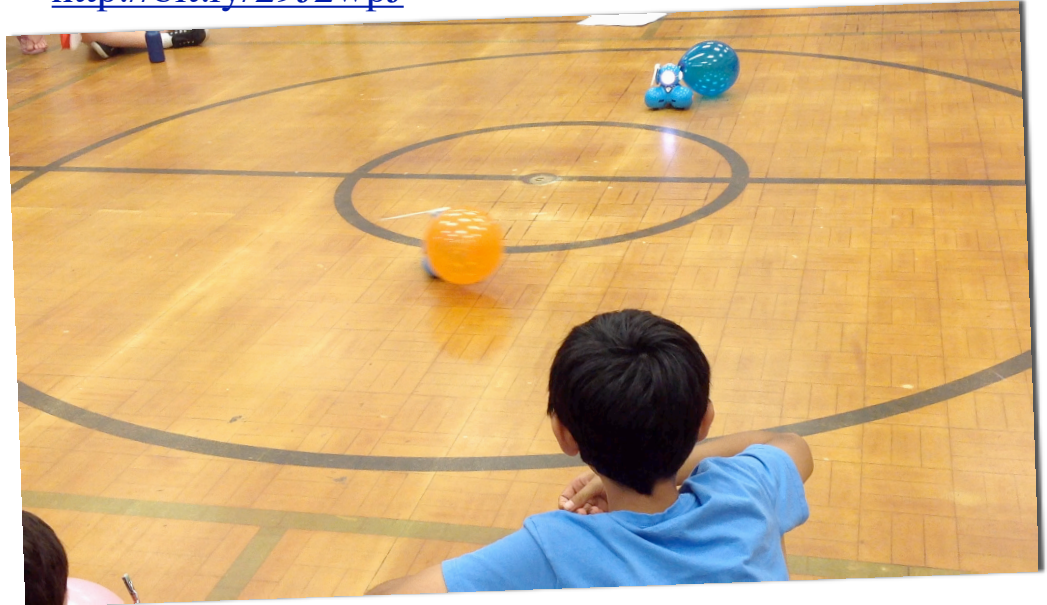
**Expert instruction** in coding was provided by Greg Moneyppenny, information technology specialist.



# Olympic Jousting Match

Click Link to View Video

<http://bit.ly/29J2wpJ>



## THOUGHTS AND REFLECTIONS

-3 adults with the 24 students was a minimum for the amount of instruction and the experiences the students received

-two rooms were booked out however we required the gym on the final day, two hallways and another classroom for most of the week

-camp leaders need to know the budget in advance

-camp leaders require information about students with special needs, IEPs and health concerns in advance

-having email contact information for the students/parents would have made reminders possible

-running a new program may require more supervisors especially for a program outside of Barrie

-our camp was not evaluated for its success

## NUMBERS

Number of Campers

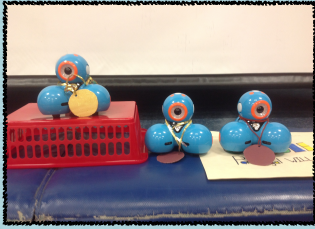
24

Days of Camp

5

Coding Projects

62







### Academy Awards

*Red Carpet*

...

-Coding will be a part of our curriculum therefore the camp results could be shared with other interested instructors

-a meeting of summer and year round program organizers would be beneficial to share ideas and offer trouble shooting ideas ie. All teachers who led summer and year round programs together with Tracy

-advertising and publicity guidelines would be helpful according to our survey almost all students found out about the camp from a teacher

- daily physical activity was an important part of our daily schedule,

-the phone number that was provided to parents to contact supervisors must be tested prior to camp

-because we were not located in Barrie, we did not receive the advertising that was necessary to



<http://bit.ly/29Pgb1e>

highlight this amazing opportunity for students.(hopefully we won't see a big announcement about a Barrie school starting the first coding and robotics program.)

-it would be helpful to be matched with a consultant/superintendent who is connected to the ministry curriculum since coding is expected to become part of our Ontario Curriculum. This would assist us in getting the up-to-date current information on where the province is headed with regard to coding.

-program expectations are required eg. to run a before and after school coding program, what are the requirements to qualify for funding?(hours per week, minimum number of students needed, age requirements of students). Also, when and how do we apply so that it can begin as soon as possible?

