



# STEAM

## IN KINDERGARTEN -16 AND BEYOND

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**retired Assistant Superintendent**  
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**S**CIENCE

**T**ECHNOLOGY

**E**NGINEERING

**A**RTS

**M**ATHEMATICS

**STEAMK-16**



# PROGRESS INNOVATION

STEAMK-16



汽

**PROSPERITY**

**STEAMK-16**



蒸



**PROGRESS  
INNOVATION  
PROSPERITY**

**STEAM K-16**

**SCIENCE**

**TECHNOLOGY**

**ENGINEERING**

**ARTS**

**MATHEMATICS**



Idle Wheel, p. 1068.



**WHY**

**KINDERGARTEN -16?**

**W. F. GOODWIN.  
TOY HORSE.**



**STEAMK-16**





**SCHOOL DISTRICT #73 (KAMLOOPS/THOMPSON) K-12**  
**PARTNERSHIPS WITH**  
**THOMPSON RIVERS UNIVERSITY**  
**UNDERGRADUATE (13-16)+**



**STEAM K-16**



# SCIENCE

## KINDERGARTEN - 16

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**GRADES K-7**

**BERT EDWARDS  
SCIENCE & TECHNOLOGY  
SCHOOL**

**STEAM K-16**



**GRADES K-7**

**EUREKA!**

**BIG LITTLE SCIENCE  
CENTRE**

**STEAM K-16**





**GRADES K-12**

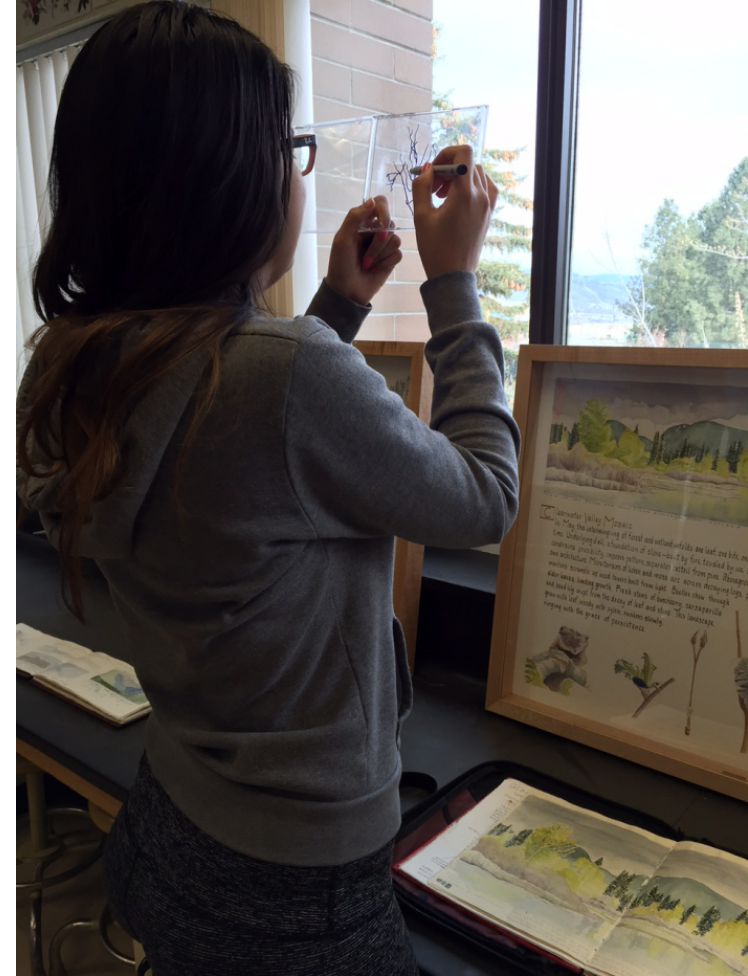
**INQUIRY BASED  
LEARNING**

**STEAM K-16**

# GRADES 8 - UNIVERSITY

## INTERNATIONAL BACCALAUREATE

### REMOTE CHEMISTRY LAB



STEAMK-16





# TECHNOLOGY

## KINDERGARTEN - 16

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**PORTABLE  
LABS**

**IPADS  
CHROMEBOOKS**

**STEAM K-16**





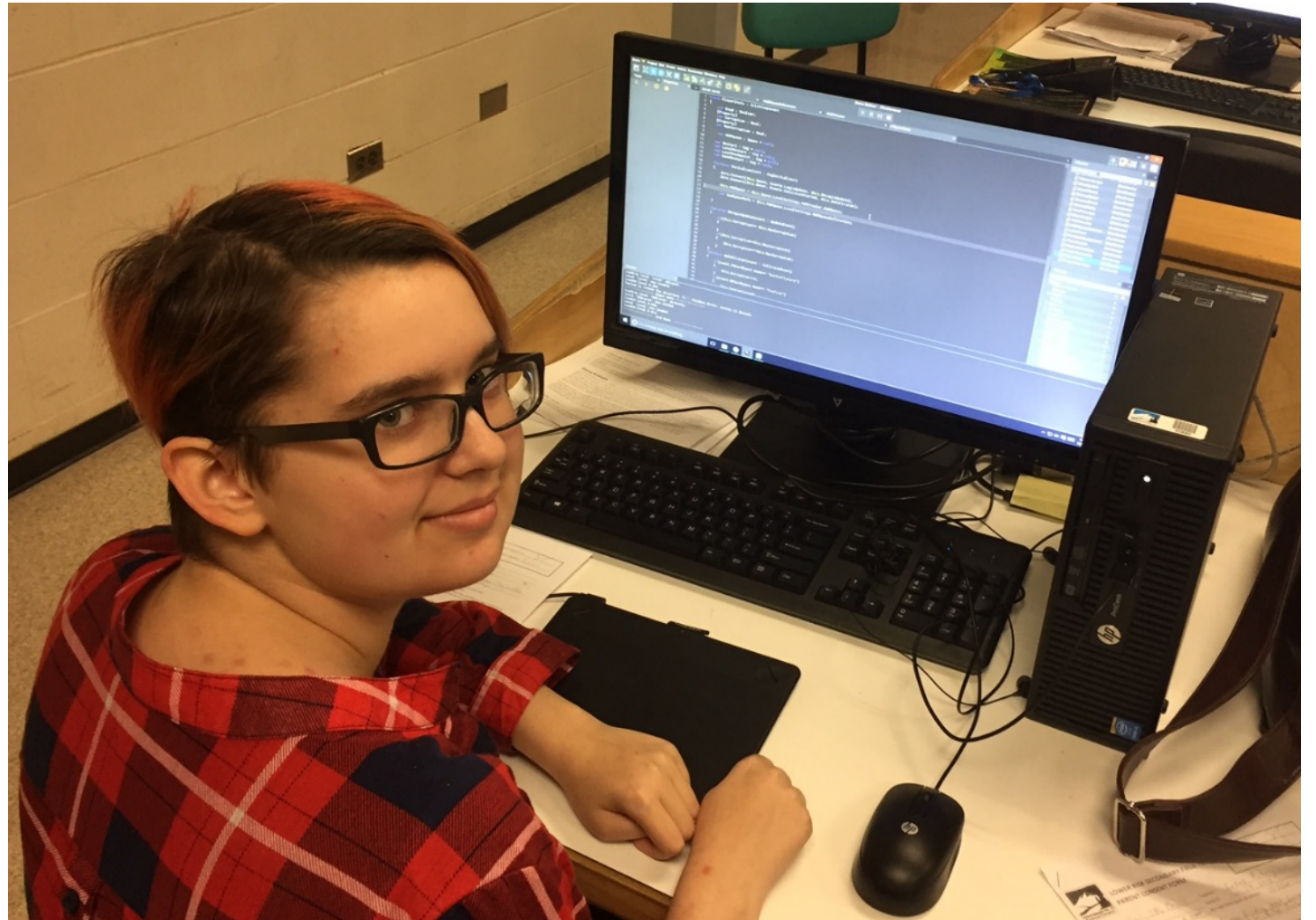
**B.Y.O.D.**



**STEAMK-16**

# DIGIPEN ACADEMY

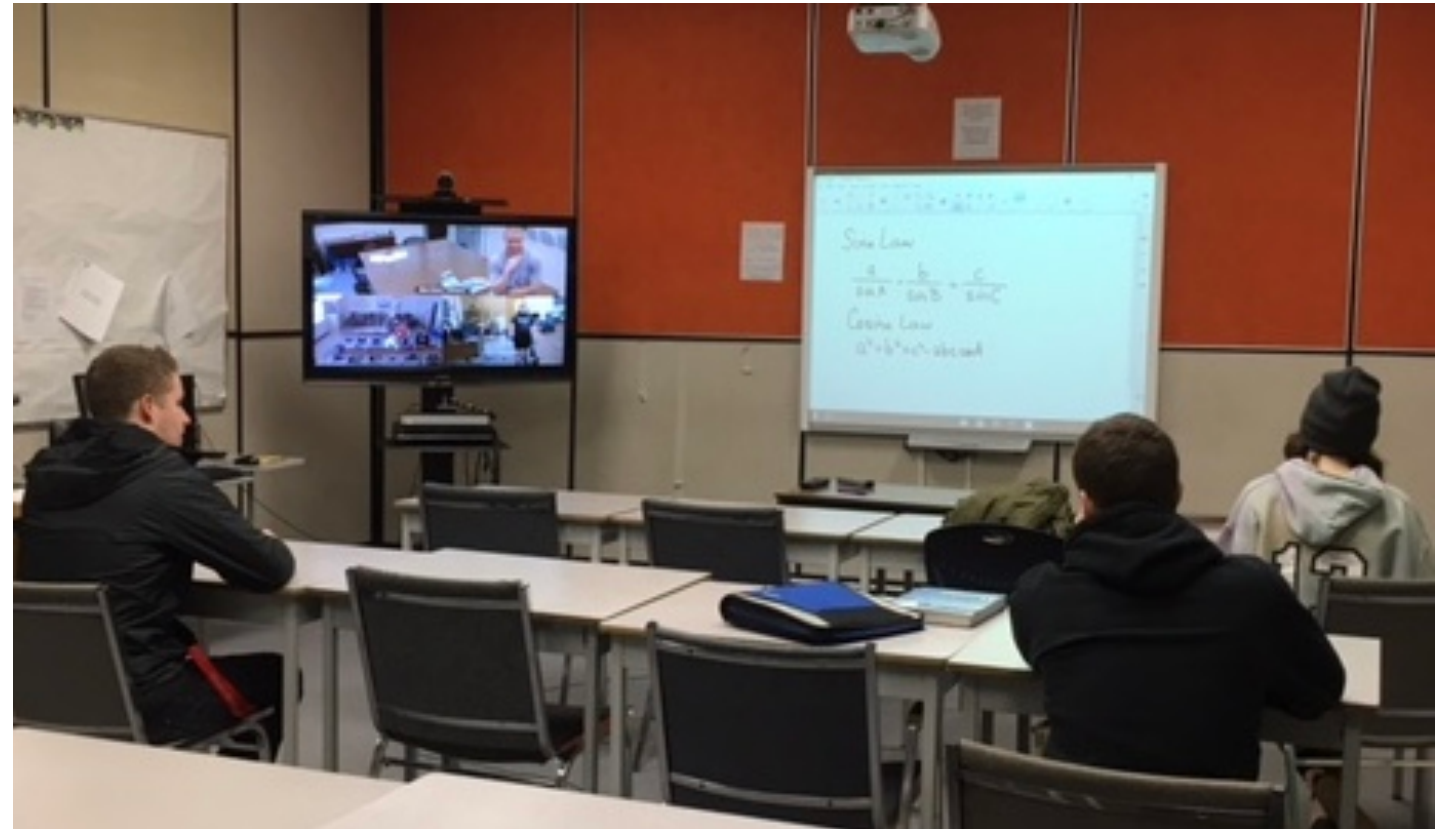
- CODING
- VIDEO GAMES
- ANIMATION



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# VIDEO CONFERENCE CLASSES



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# LEARNING COMMONS

- PROJECT STATIONS
- VIDEO GREEN  
SCREEN

STEAM K-16





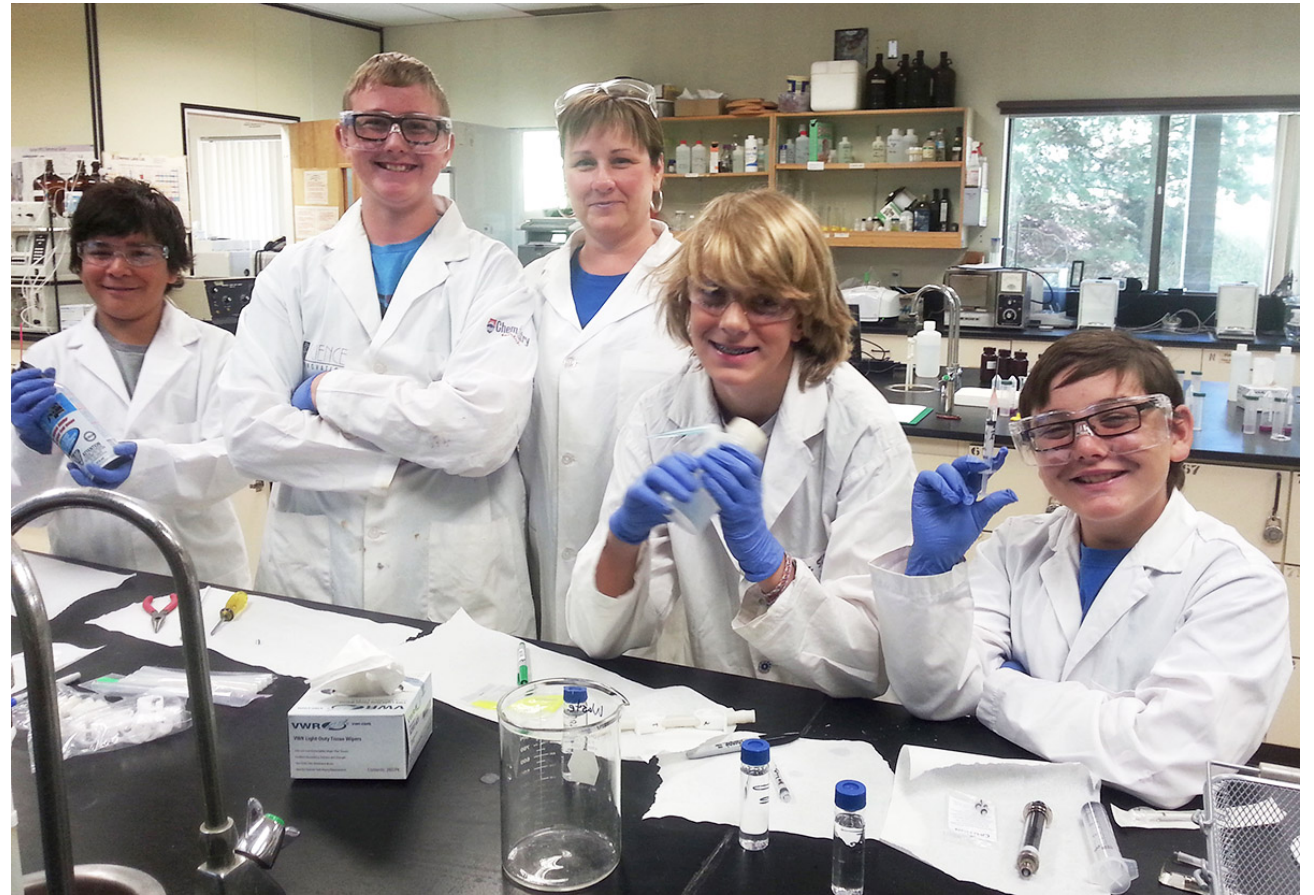
# ENGINEERING

## KINDERGARTEN -16

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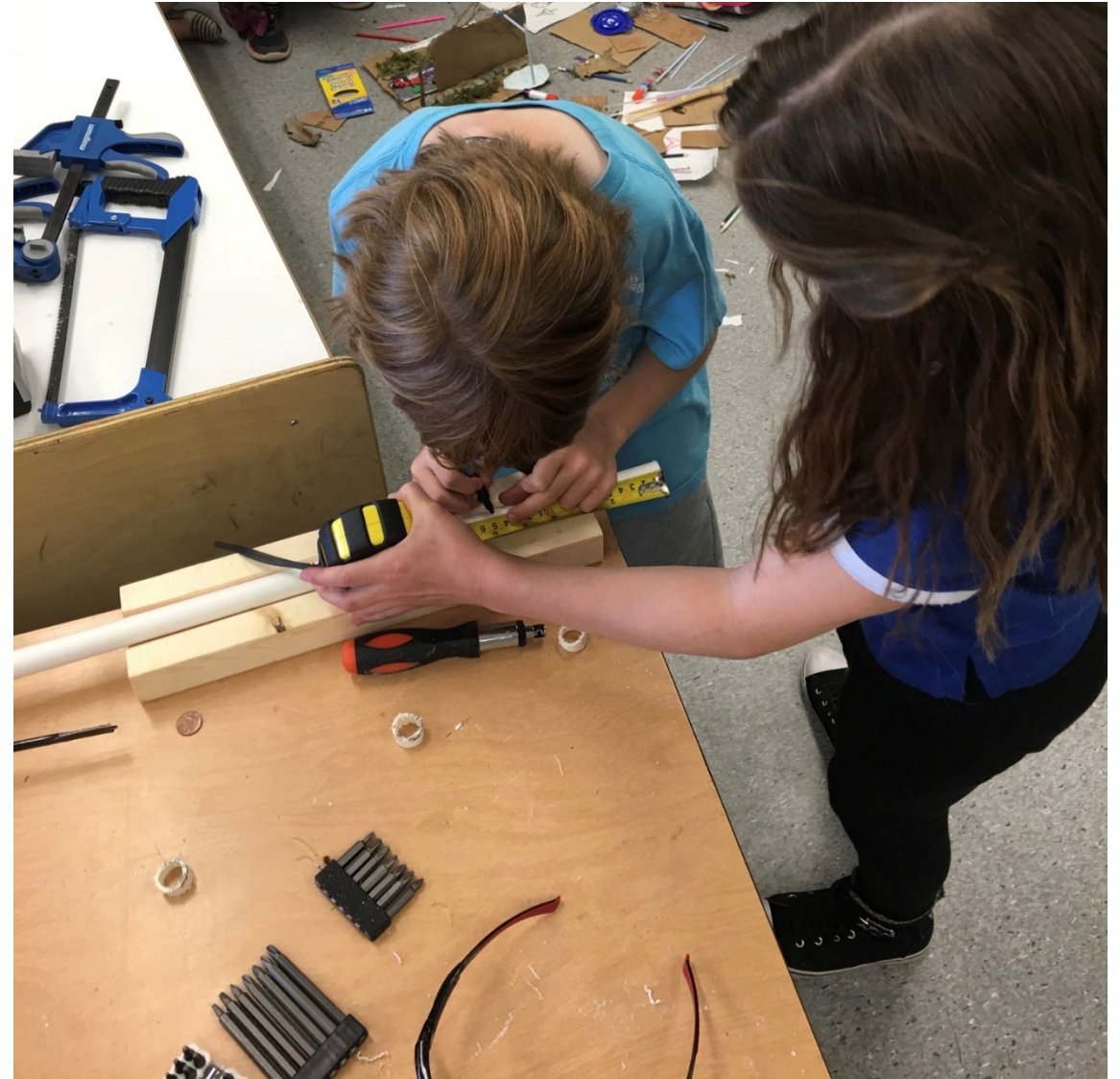
# STUDENT SPACEFLIGHT EXPERIMENTS PROGRAM



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# MAKER DAYS



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**“HEAVY METAL ROCKS”**

**STEAMK-16**





**“HEAVY METAL ROCKS”**

**STEAMK-16**







The background is a collage of historical technical drawings. At the top center, there are three gears labeled A, C, and B, with the text 'Idle Wheel, p. 1068.' below them. To the right of the gears are several pulley systems with weights, labeled with letters like P, W, and numbers like 1, 2, 3, 4, 5, 6. On the left, there is a circular diagram with a needle and a compass. Below the gears, there is a drawing of a toy horse with the text 'W. F. GOODWIN. TOY HORSE.' and 'Patented Jan 22 1837'. In the center, there is a detailed drawing of a steam engine with the text 'Mill' above it. At the bottom right, there is a large drawing of a blimp or airship. The entire collage is rendered in a sepia tone.

# ARTS

## KINDERGARTEN -16

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# INTEGRATED ARTS CURRICULUM



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# DEMONSTRATING STEM LEARNING THROUGH THE ARTS



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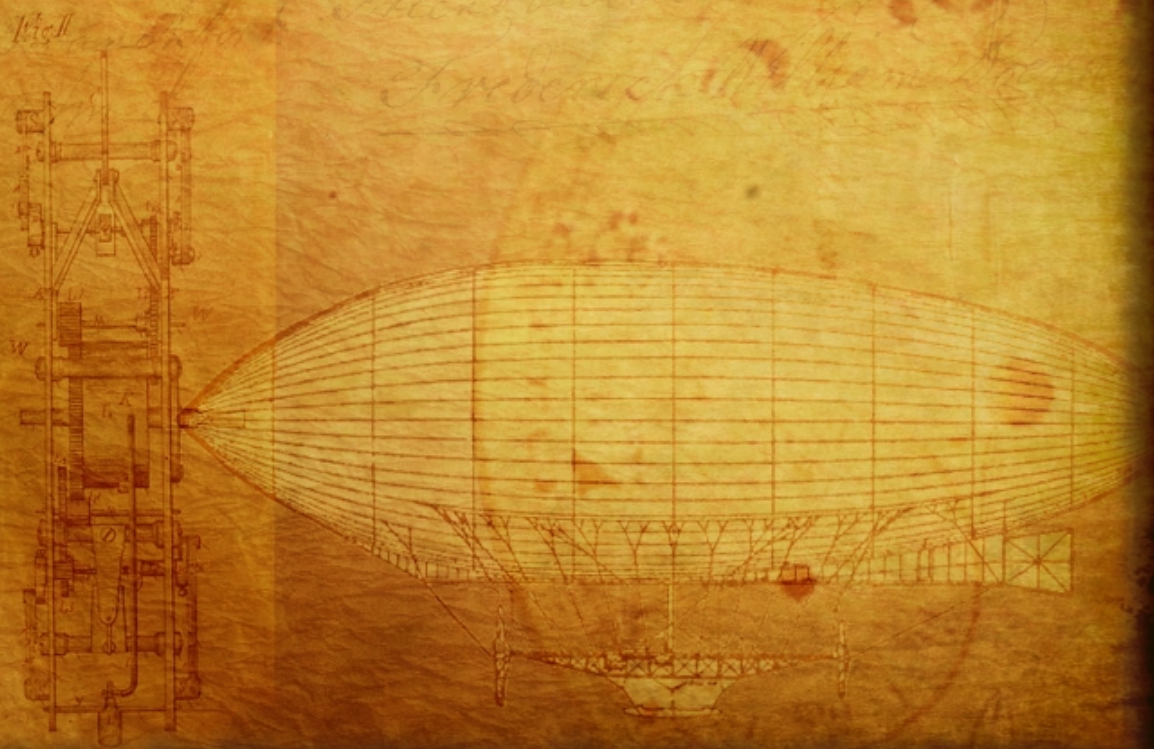


# MATHEMATICS

KINDERGARTEN - 16



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# FAMILY MATH NIGHTS



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# FAMILY OF SCHOOLS INNOVATIONS



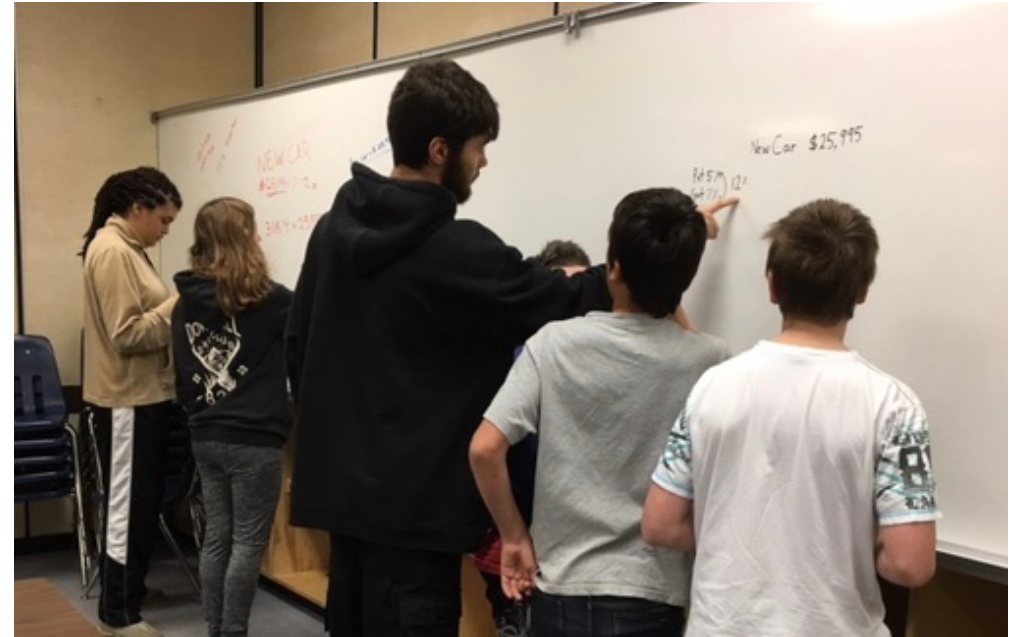
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# NON-PERMANENT VERTICAL SURFACES

# VISIBLY RANDOM COLLABORATIVE GROUPS

[HTTP://WWW.PETERLILJEDAHL.COM](http://www.peterliljedahl.com)

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# STEAM

## KINDERGARTEN -16

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# INTERDISCIPLINARY AND INTERINSTITUTIONAL



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# A PERSONAL STORY



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**S**CIENCE  
**T**ECHNOLOGY  
**E**NGINEERING  
**A**RTS  
**M**ATHEMATICS

**L**EADERSHIP  
**A**RTS  
**S**PORTS

**STEAM K-16**



Westsyde Secondary School  
School District #73  
Kamloops/Thompson



**THOMPSON  
RIVERS  
UNIVERSITY**



University  
of Victoria



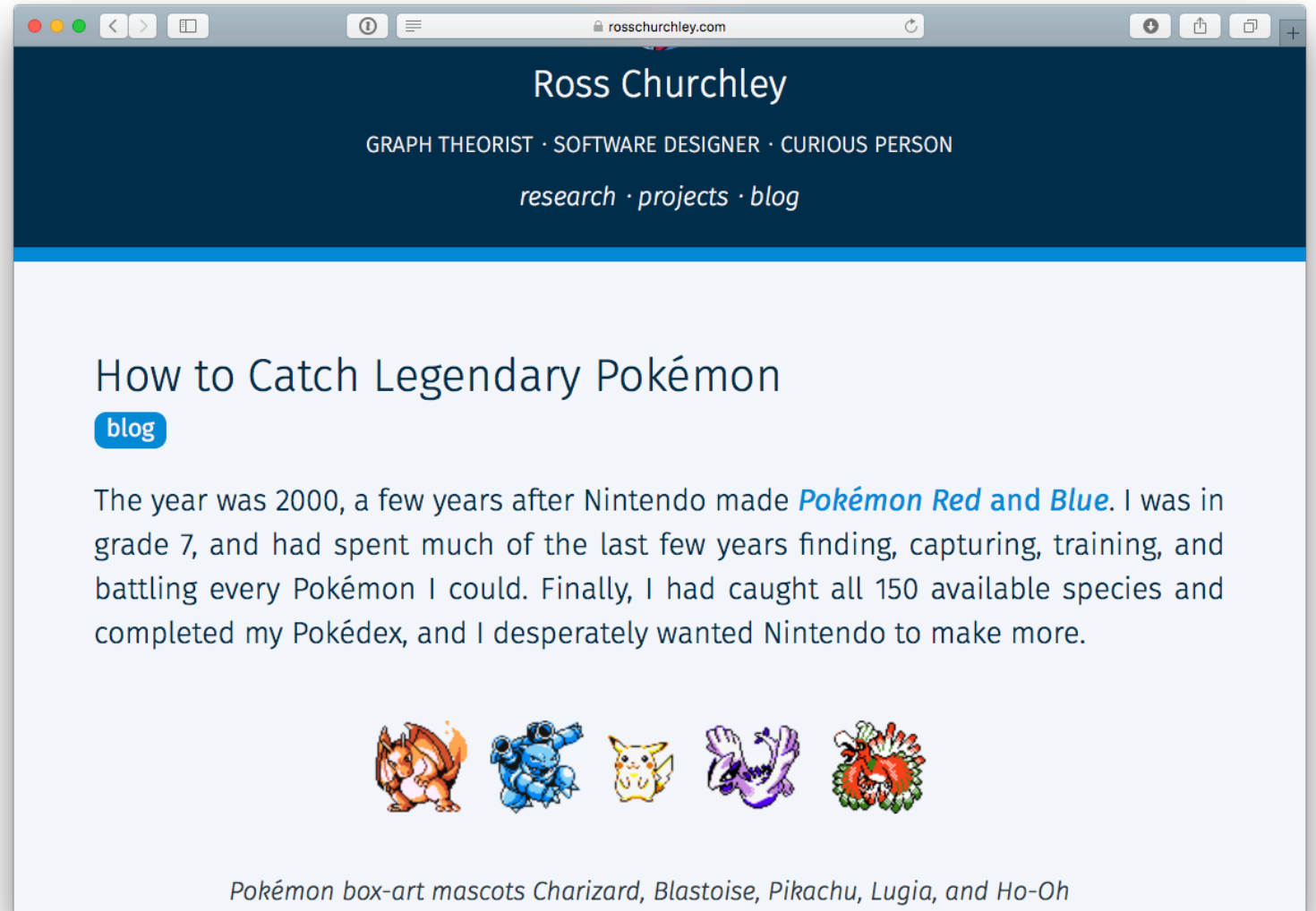
SIMON FRASER  
UNIVERSITY



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**T**ECHNOLOGY  
**E**NGINEERING  
**A**RTS  
**M**ATHEMATICS

**LEADERSHIP**  
**ARTS**  
**SPORTS**

**STEAM K-16**



**SCIENCE  
TECHNOLOGY  
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MATHEMATICS**

**LEADERSHIP  
ARTS  
SPORTS**

**STEAM K-16**



**THUNDERBOTS – ROBOCUP 2015, HEFEI, PRC**



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**T**ECHNOLOGY  
**E**NGINEERING  
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**M**ATHEMATICS

**LEADERSHIP**  
**ARTS**  
**SPORTS**



University  
of Victoria



SIMON FRASER  
UNIVERSITY

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Idle Wheel, p. 1068.



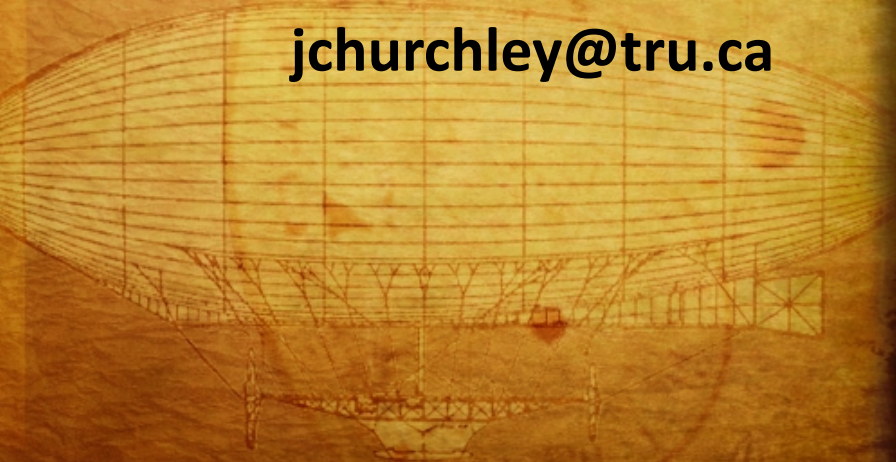
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**TOY HORSE.**







Presentation slides

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Title slide design by Valeriana Solaris  
<http://valerianasolaris.deviantart.com/art/Steampunk-Wallpaper-153456161>