

## Video links

Future Flight

<https://www.youtube.com/watch?v=qMQ83jtkQxs>

VEX robotics

<https://www.youtube.com/watch?v=9shA1fdX18w>

<https://www.youtube.com/watch?v=AntqBAgiwJU>

Career Changers: Pan Pacific Championship, Hawaii Convention Center

<https://www.youtube.com/watch?v=4CkE9DPy0dI>

VEX World Championship

<https://www.youtube.com/watch?v=OtE2t9XeLA4>

## Why Engineering?

Engineering motivation

[https://www.youtube.com/watch?v=OuUh\\_2vhTeQ&sns=em](https://www.youtube.com/watch?v=OuUh_2vhTeQ&sns=em)

Education for the Human Made World

[https://www.youtube.com/watch?v=4B-g1\\_6QCWU](https://www.youtube.com/watch?v=4B-g1_6QCWU)

Engineering Design Process

<http://www.nasa.gov/audience/foreducators/best/edp.html>

Why study engineering?

<https://www.youtube.com/watch?v=zoHm5AXeYYQ>

A Brief History of Robots

<https://www.youtube.com/watch?v=uoC2ZGRI8a8>

## STEM resources

VEX robotics: VEX VRC (grades 6-12), VEX IQ (grades 3-8)

VEX Robotics: <https://www.vexrobotics.com/>

iDesign Solutions: <http://idesignsol.com/>

Robotmatter: <https://www.robomatter.com/category/vex/>

Brushbot robotics:

Kalani Bristlebots: <https://www.bristlebots.org/>

Easybotics: <http://www.easybotics.com/?v=7516fd43adaa>

Space Explorers BrushBot FESTivals: Family science night flyer [pdf]:

<http://spacegrant.hawaii.edu/FESTbrushbot.pdf>

Science supplies:

Educational Innovations: <https://www.teachersource.com/>

Steve Spangler Science: <https://www.stevespanglerscience.com/>

Rainbow Symphony: <https://www.rainbowsymphony.com/>

Genius Factory: <http://www.geniusfactoryco.com/>

Camps

Elemental Minds: <http://elementalminds.org/>

Hawaii Science and Technology Museum: <http://www.hawaii sciencemuseum.org/>

Kalani Robotics Academies: <http://www.magmarobotics.com/kra>

Hilo High Camp Eureka: <http://www.hilovikingrobotics.com/camp-eureka-general-information/>

## **Other Educational Links**

Cosmochemistry Illustrated slide sets

<http://www.higp.hawaii.edu/cosmoeye/>

Exploring Planets in the Classroom

[http://spacegrant.hawaii.edu/class\\_acts/](http://spacegrant.hawaii.edu/class_acts/)

Hawai'i to Mars: Culturally Relevant Lessons

<http://sites.google.com/site/mikalabradley/>

Notes about ultraviolet detecting beads

<http://spacegrant.hawaii.edu/UVbeads.html>

Space Science Activities Hawaiian Style

<http://spacegrant.hawaii.edu/hi-nsta2001.html>

Tour Through the Solar System: Lesson plans, hands-on experiments, and teacher tutorials for high school. The curriculum was developed for a six-week summer session of Upward Bound by our colleagues Jeffrey Gillis-Davis and Sarah Sherman (Hawai'i Institute of Geophysics and Planetology) and Joe Ciotti (HSGC and Windward Community College).

<http://www.higp.hawaii.edu/~gillis/TourThroughTheSolarSystem/>