

Workshop Agenda:

ADST ProD: Robotics / Coding in the Classroom

1. Workshop overview, introductions, coding and the Makerspace philosophy
 - Applied Design, Skill and Technology curriculum, computational thinking
2. Overview of the instructional process
 - Unit plan, process and mat designs
 - Scaffolding of skills, formative/summative assessments, engineering logbook, the design process methodology (iterative design)
 - Adaptations for a diversified classroom
3. Basic movement, turns and the square challenge
 - Hands-on demonstration of the instructional process / student activities
4. Using the Carnegie Mellon's curricular support materials
 - (video based training - for both NXT/EV3 and RototC programming language)
5. How to design a "celebration of learning" event (PBL - summative assessment)
 - Skills Canada Scope document with sample assessment and layout

Internet Resources:

Carnegie Mellon University – Robomatter

<http://robomatter.com>

Damien Kee

<http://www.damienkee.com>

Dr. Graeme

<http://www.drgraeme.org>

Mindstorms Blog

<http://www.thenxtstep.com>

Vernier Engineering Mindstorms [NXT/EV3] STEM resources

<http://www.vernier.com/engineering/lego-ev3>

GearBots Educational Resources – High quality double-sided vinyl mats for testing robotics devices

<http://bit.ly/2dE9UWK>



GEARBOTS Educational Resources

www.gearbots.org | info@gearbots.org | 604.308.2241