

### BOARD OF EDUCATION OF SCHOOL DISTRICT NO. 46 (SUNSHINE COAST)

### EDUCATION COMMITTEE AGENDA

Wednesday, May 25, 2016 from 1:00-2:30 p.m. School Board Office – Gibsons, BC

1) Strategic Plan: 3.f. – Sechelt Indian Band and Squamish Nation

2) Strategic Plan: Goal 1.j. – Indigenous and Other Cultures

3) Strategic Plan: Goal 1.h. – Experiential Learning/Inquiry

4) Strategic Plan: 1.e. – Physical Health

5) Parent Engagement (standing item)



# MAKER DAY CONCEPT

#### Presenter:

Susan Crichton, Director, Innovative Learning Centre (ILC)

Director, Faculty of Education

**UBC's Okanagan Campus** 





## TWO PARTS TO MAKING

- a pedagogical orientation AND
- an intentional mindset





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# PEDAGOGICAL ORIENTATION

- Supporting personalized, constructionist learning
- By applying content and skill sets to 'real world' design challenges
- While integrating curricular competencies (i.e., ADST or STEM<sub>x</sub> frameworks)

## SUPPORTING PERSONALIZED CONSTRUCTIONIST LEARNING

Simple Prototyping



Introduction to Fabrication





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## SIMPLE PROTOTYPING

- Cardboard
- Pantry: Recycled Consumables
- Tool Station:
   Simple Hand Tools



#### INTRODUCTION **TO FABRICATION**

Adds more robust consumables/tools

- Pantry: PVC pipe and Doweling
- Tool Crib: Power **Tools**



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## **APPLYING CONTENT AND SKILL SETS**

A well-crafted Design **Challenge** fosters

- Heads-in (content)
- Hands-on (skill sets)
- Demonstrations of how we know things



#### **APPROACHES TO CHALLENGES**



Inquiry Question encourages exploration of and engagement with the curriculum



Problem Solving
introduces
five types
of knowledge:
facts, concepts,
strategies,
procedures and
beliefs



Scenarios
helps
visualize context:
environment,
social, technical,
political and
economic concerns

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#### **INTEGRATING**

## CURRICULAR COMPETENCIES

Integrated framework examples:

- ADST: Applied Design, Skills and Technologies
- STEM<sub>x</sub>: Science, Technologies, Engineering, Mathematics — User Experiences





# INTENTIONAL MINDSET

- Nurturing a flow of innovative and creative thinking
- Fueled by curiosity
- Supported by 'thinkering' a nimble, lateral and connected thinking
- Gained through personal empowerment and agency
- Building confidence for risk-taking and exploration

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# WHAT IS DESIGN THINKING?

A way of thinking through a series of discussions and negotiations informing the collaborative development of a solution





## **DESIGN IS OPTIMISM**









### "MAKER MOVEMENT"

We've come a long way...



### MAKER DAY PLANNING

"Getmakered" meets SD46 Staff

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## REAL AUDIENCE

Owyn Cramer presenting at the Open Source Convention Austin, TX



## **ACE IT**

Students designing, building, testing, proving







## **ACE IT**

Personalized - Mastery - Praxis