



#### **GMEC 2018**

- **Challenge**: Longest marble run (in time) created in 5 mins.
- Tools: Per team, 2 Pairs of scissors, 1 roll tape, X sheets of card, 1 marble to test.
- Off you go!













Context

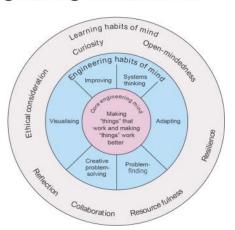
Teaching

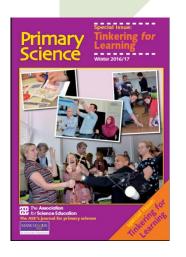
Learning



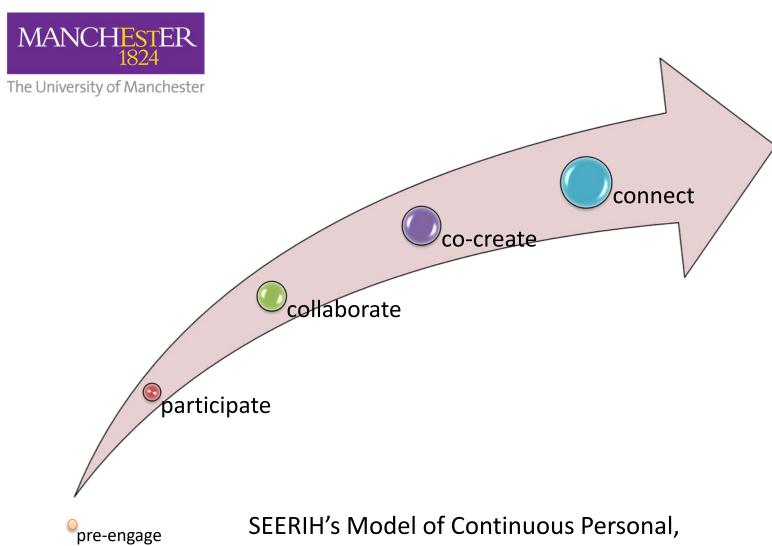
#### **Engineering habits of mind**











SEERIH's Model of Continuous Personal,
Professional and Partnership
Development



# tinkering learning

Exploring through fiddling, toying, messing, pottering, dabbling and fooling about with a diverse range in things that happen to be available in a creative and productive pursuit to make, mend and adapt.



### www.seerih-innovations.org

#### tinkering:learning

start tinkering >





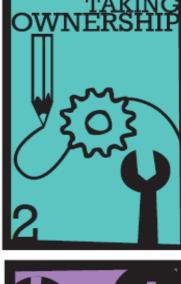




The University of Manchester

Principles of Primary Engineering Education

















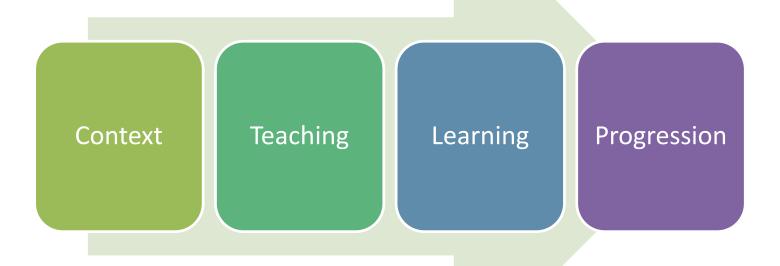




Engineering Challenge









What's the balance between skills, knowledge and attitudes that should be aimed for within engineering education in the primary years?

33:33:33



## How can engineering-learning be made visible to others?

Recording for purpose, enhancing without harming





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