Bialik. Cultures of Thinking

IN PARTNERSHIP WITH PROJECT ZERO, HARVARD UNIVERSITY

THINKING FOR THE FUTURE

FIONA GORDON & ROXANNE CIDDOR

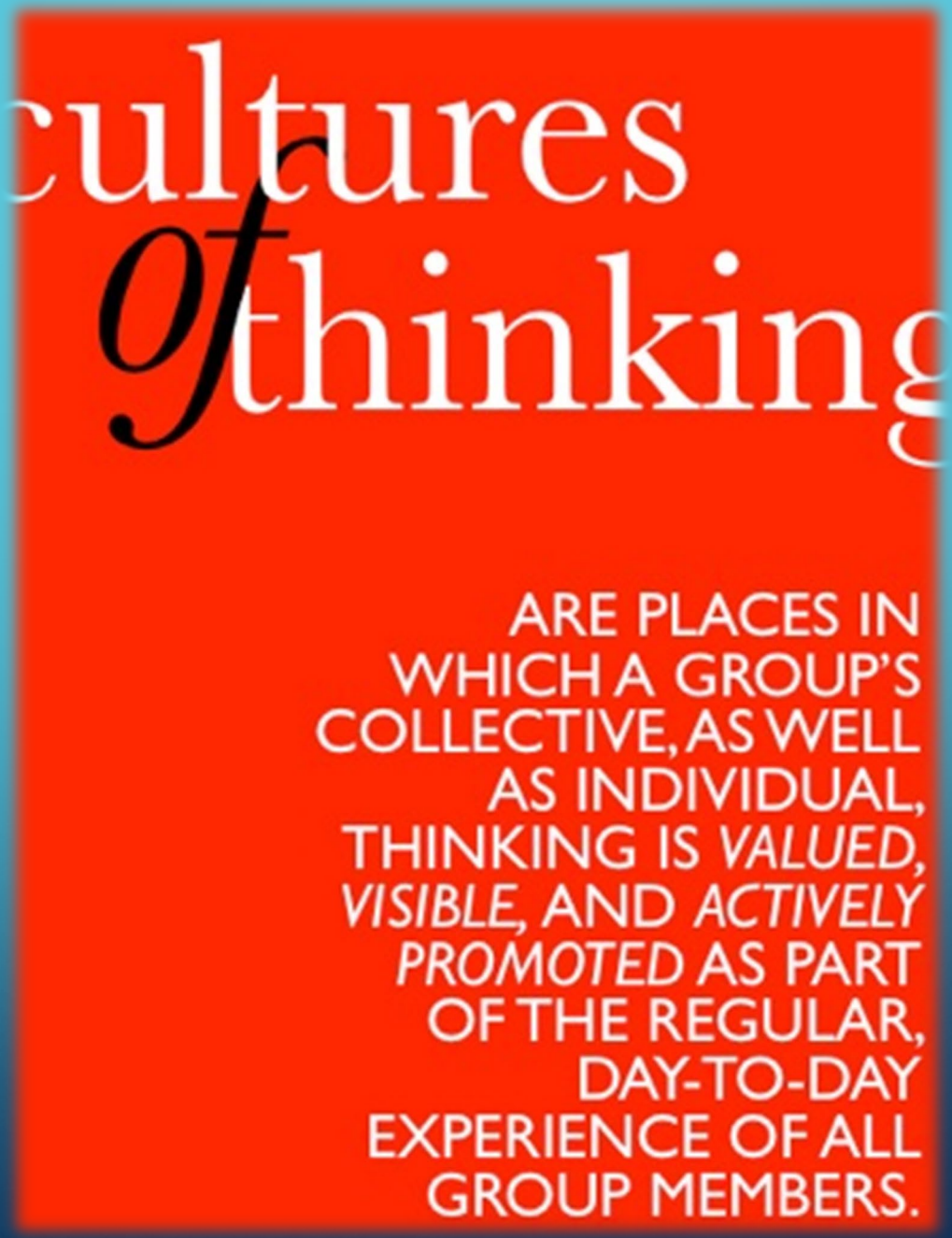
BIALIK COLLEGE

WITH

RON RITCHHART

AND

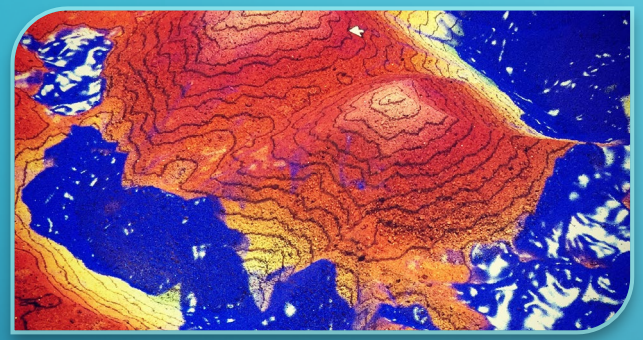
MARK CHURCH

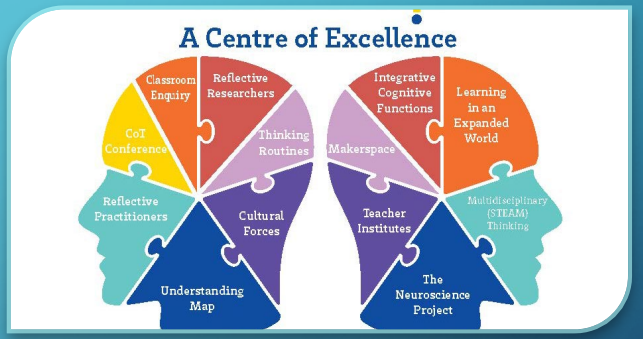



GEARS

WHY IS OUR THINKING CURRICULUM A PRIORITY?

EMBRACING CHANGE….





CHANGING WORLD

Move to information pushed to you

Xenophiles – can we cultivate them?

DECENTRALISING

Increased feedback cycles via digital data

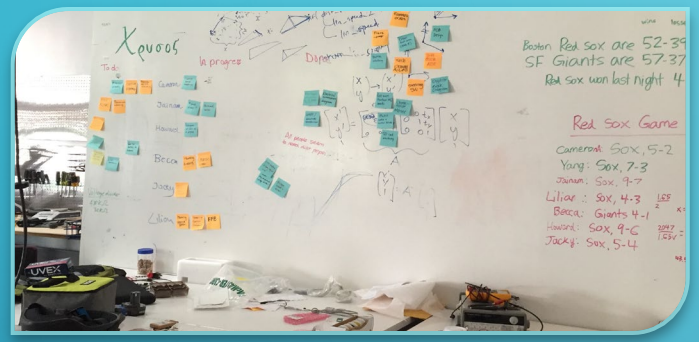
Homophily – match like with like, self sort, narrowing of scope

LIVING LOCAL, COMMUNICATING GLOBALLY

Self documenting world

Children need to learn to become curators of media

CULTURES OF THINKING – PROFESSIONAL LEARNING



LEARNING & CONSOLIDATING…

- Understanding Map
- Cultural Forces
- Thinking Routines

OBSERVATIONAL ROUNDS

- Department / Year Level focus
- Teams of three to plan together
- Multiple chances to share practice

CLASSROOM INQUIRY RESEARCH

- Research puzzles in practice
- Sharing at Biennial conference

TAKING THE PULSE OF THE WORLD OUTSIDE AND MAKING A THREAD INTO OUR CLASSROOMS

RESPECT THE IDEAS

Contextualise learning

Whose lives will we influence?

Why do we care?

Learning as a citizen of the future

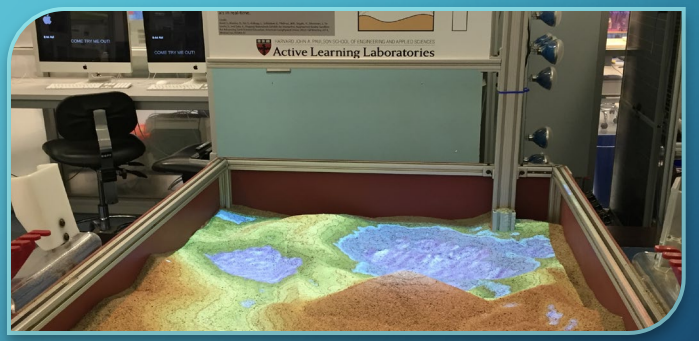
EMBODY THE IDEA

How might we rethink?

Systems can be redesigned, or hacked

Use provocations to embed inquiry

New relational connections



ARCS OF LEARNING

Framing – Angles of Attention

Deep Dive into Complexity

Highlight Ethical Elements

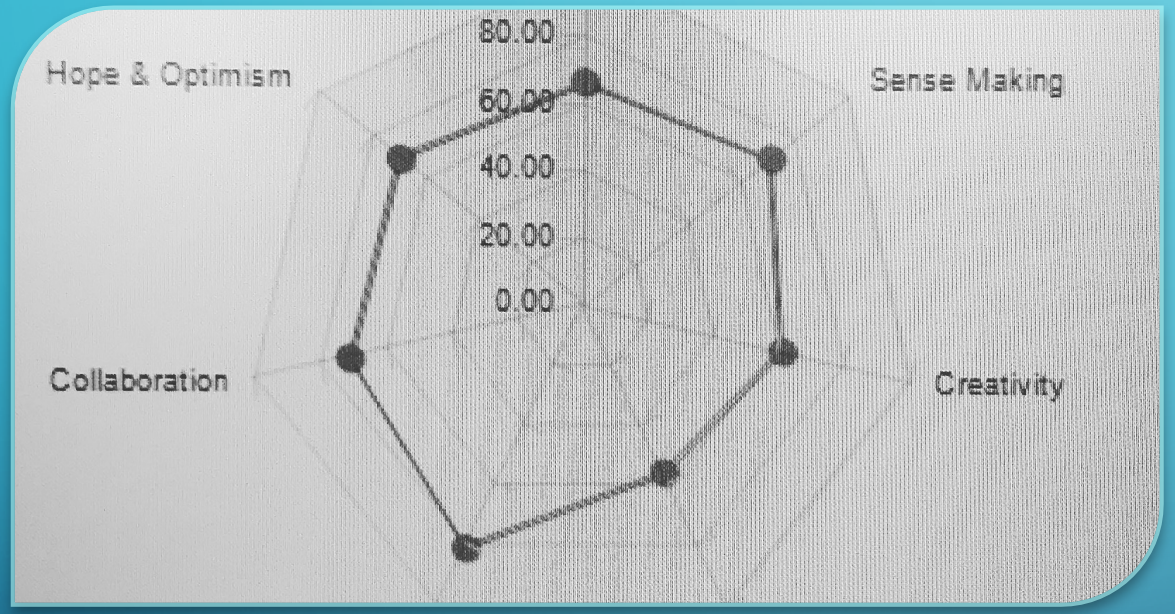
Cases of Powerful Action

BIALIK NEUROSCIENCE PROJECT 2016 & 2017

Scientific Ideas we worked with Jared Cooney Horvath to unpack:

- Meaningful learning always involves emotions
- Emotions that rely on abstract inferences recruit a brain network whose activation is incompatible with external attention
- Internal reflection is crucial for learning but incompatible with external focus

NURTURING IDENTITY – TEACHING NEUROSCIENCE TO YEAR 5



VALUES WE PRIORITISE AT BIALIK:

Thoughtful actions

Respectful interactions

Responsible choices

HOW WE STRUCTURED THE EXPERIENCE

1. Workshop Series with Dr Jared Cooney Horvath, Neuroscientist
2. Gathering data – Clara Survey
3. Brain Training - Cognizance
4. Play Performance for parents

I HAVE LEARNT THAT YOU HAVE TO BE PREPARED AND ORGANISED OTHERWISE YOU MIGHT FORGET WHAT MESSAGES YOU WANT TO DELIVER. I WILL CONTINUE TO DEVELOP WHENEVER I HAVE TO LEARN SOMETHING. I WILL ALSO BE MORE CONFIDENT AND SPEAK MY THOUGHTS.

- MADDY YEAR 5

MY LEADERSHIP SKILLS HAVE REALLY INCREASED. WHEN PLANNING THE RUNNING OF AN ASSEMBLY, LEARNING LINES FOR A PLAY, OR MAKING CHANGES DURING AN ASSESSMENT, I CAN FEEL CALMER EVEN IN UNFORESEEN CIRCUMSTANCES. PRESSURED OR URGENT SITUATIONS CAN ARISE AT ANY POINT, THUS I HAVE GAINED THE ABILITY TO BETTER RESOLVE THESE SITUATIONS ACCORDINGLY AND EFFICIENTLY.

–HARRY YEAR 5

ONE OF THE LEADERSHIP SKILLS I HAVE LEARNT ON THIS AMAZING JOURNEY IS TO BE A KIND AND GENEROUS PERSON. I WILL CONTINUE THESE SKILLS IN MY EVERYDAY LIFE BY BEING THE PERSON I'VE LEARNT TO BE FROM OUR NEUROSCIENCE PROJECT.

– MIA YEAR 5

STUDENT THINKING @ BIALIK MAKERSPACE

- part of the STEM curriculum & programs
- a space that facilitates **creativity, invention** and **making**
- focused on the intersection of **technology** with **physical making**
- where makers continually engage in a cycle of **think** > **make** > **improve**
- for **informal** and shared **social learning**

THE BIALIK MAKERSPACE

108

operational lunch times

117

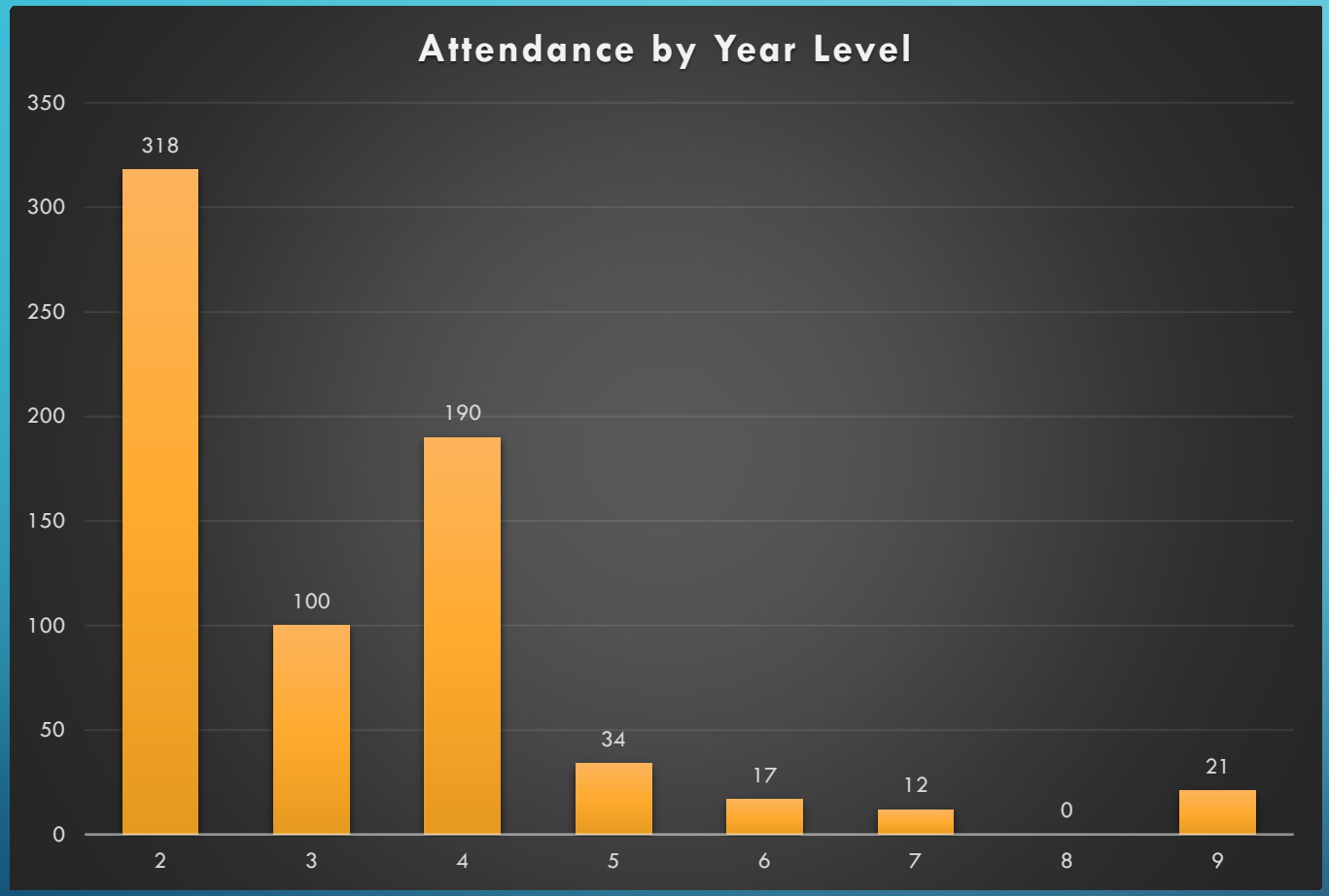
inducted members

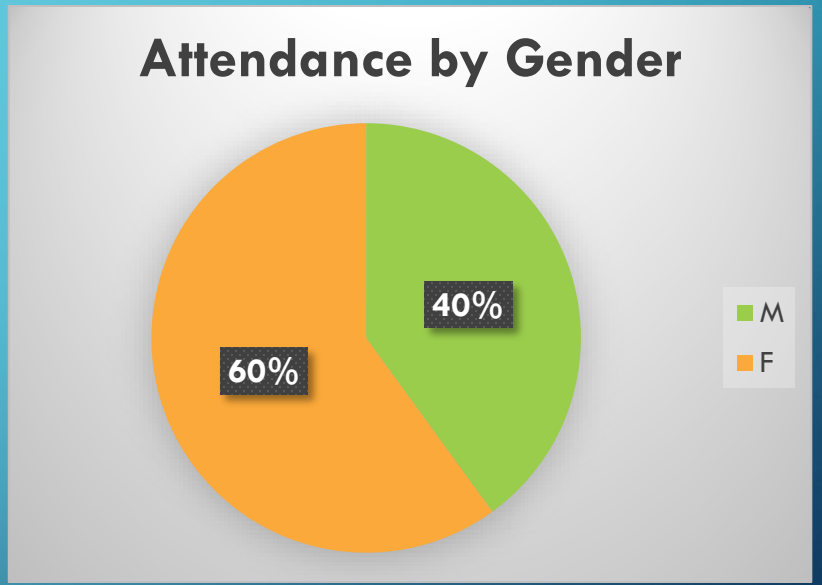
760

visits

data for period May 2016 – April 2017

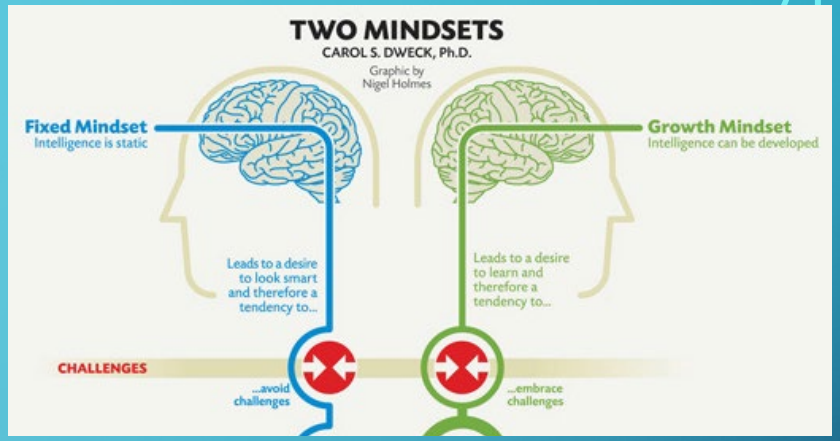
THE BIALIK MAKERSPACE





data for period May 2016 – April 2017

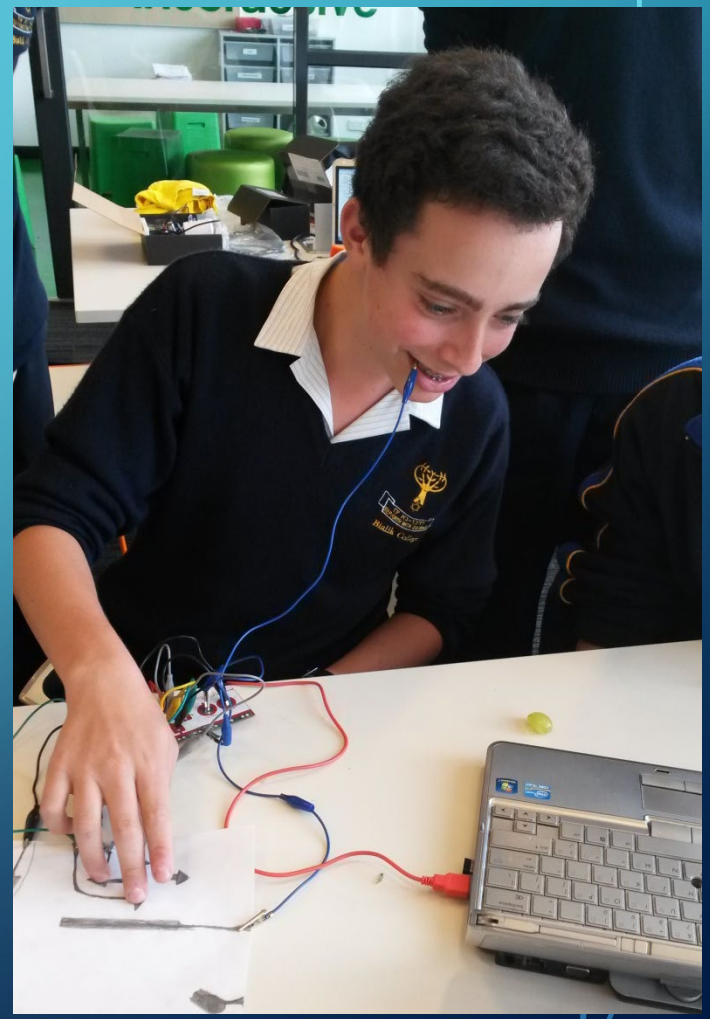
THE MAKER MOVEMENT:



- A response to the explosion in new technologies that are accessible to average people
- Aims to create interconnected communities, linked by interests and skills
- Aims to ignite an interest in how things work, how things can be improved and what things need to be created/invented – innovation (create vs. consume)
- Is 'open-source'; focus on ethical sharing
- Maker mindset = Dweck's "growth mindset"

VALUE/ROLE OF THE MAKERSPACE

- Prepares students for careers/technology that are yet to exist
- Promotes curiosity, creativity, independent learning, risk-taking, collaboration
- Making is intrinsically motivated. Students enjoy the journey as much as the end product
- Making is inter-disciplinary/ trans-literate
- Promotes technical education within a mainstream education – avoids distinction between ‘makers’ and ‘consumers’
- Provide access to shared technology and equipment
- Teacher as facilitator, not holders of knowledge



THANK YOU

Fiona Gordon

GORDOF@BIALIK.VIC.EDU.AU

Roxanne Ciddor

CIDDOR@BIALIK.VIC.EDU.AU

Bialik College

STEP FORTH WITH COURAGE

Celebrating 75 years of educational excellence