

# The Places You Could Go

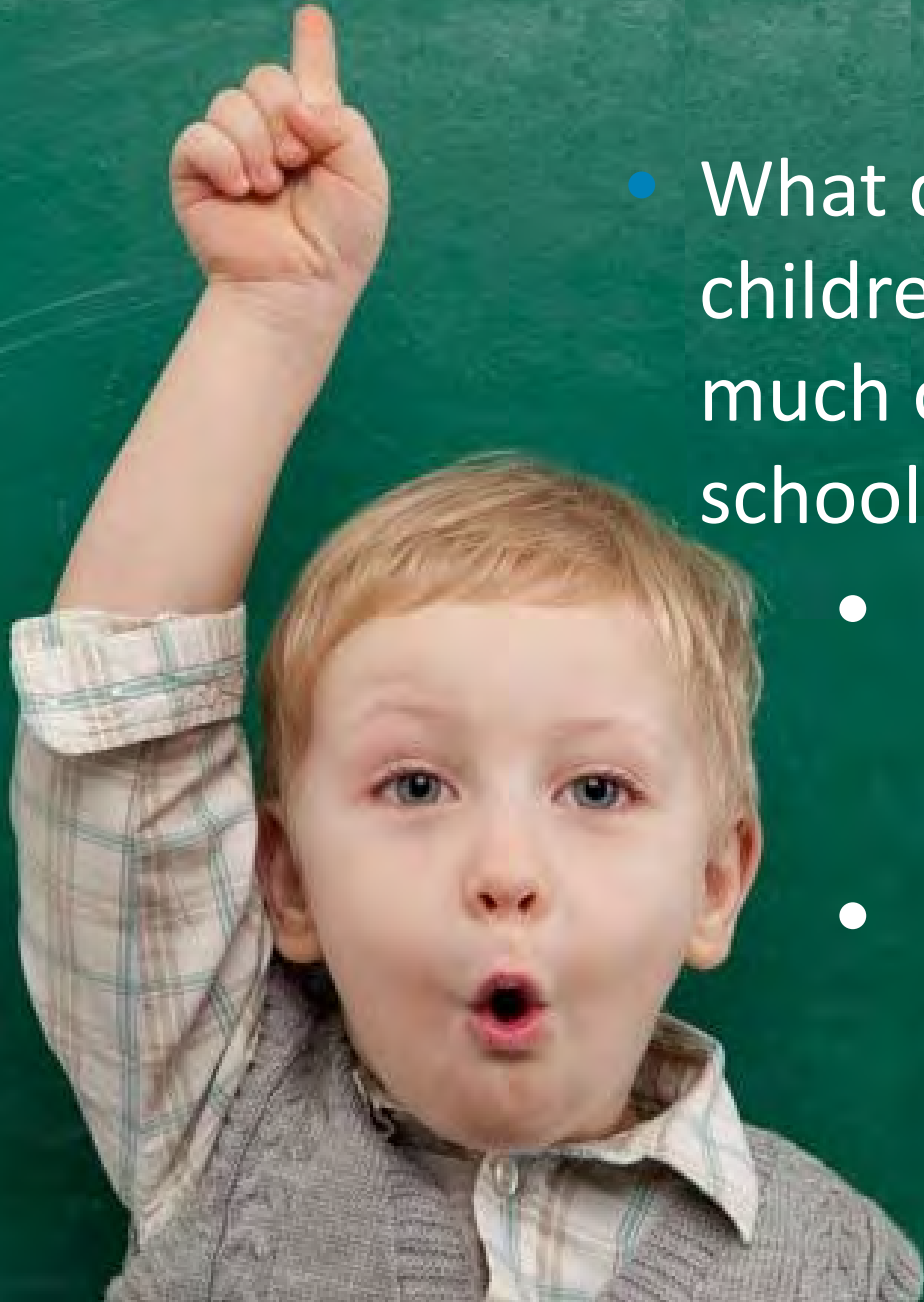
Ron Gorman  
**Deputy Director**





# Current Agendas

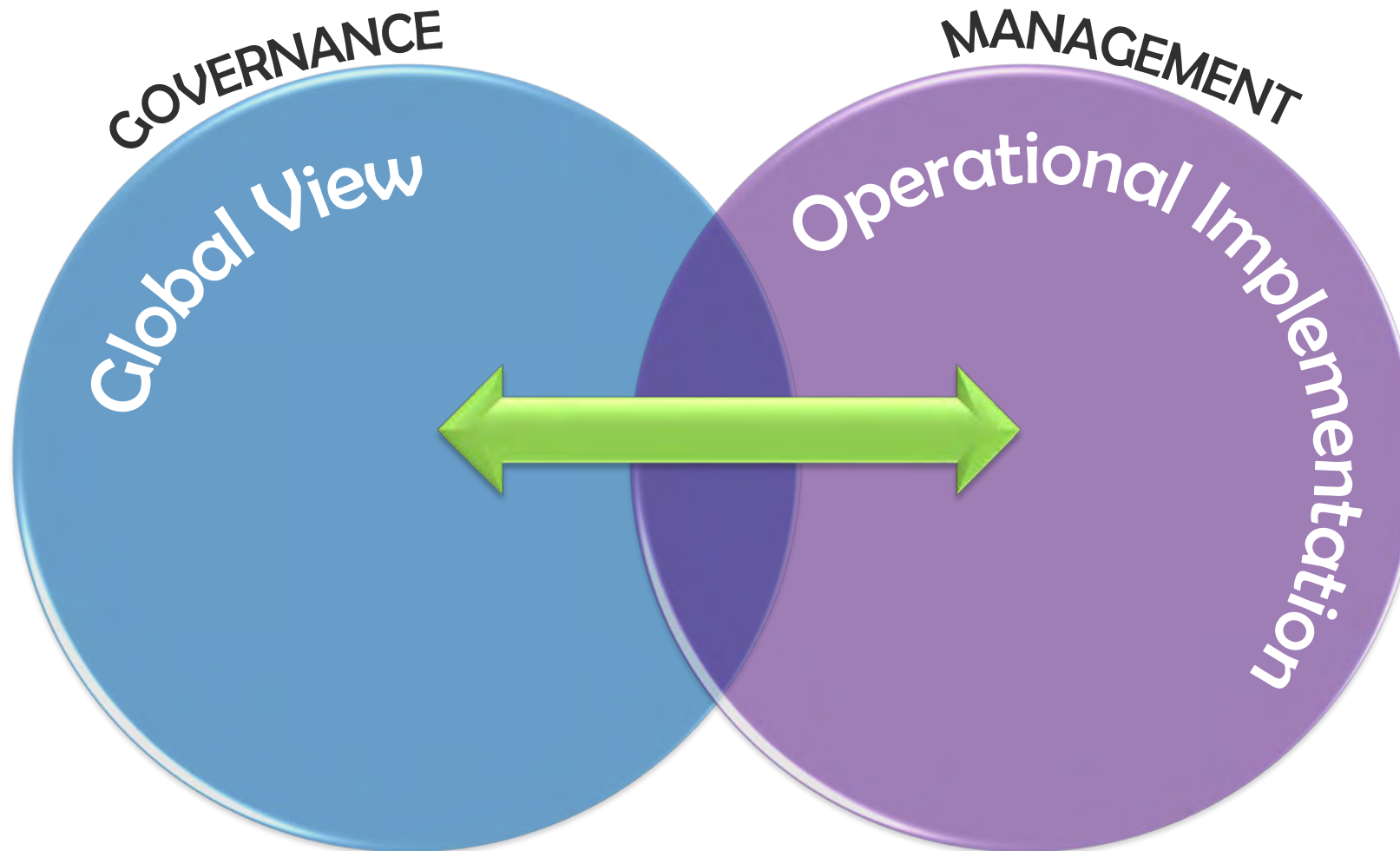
- Strategic Planning
- Current Trends
- New Media Consortium
- Centre for Curriculum Redesign
- Creativity



- What do you want children to experience much of the time at school?
- What do you want children to experience as a result of schooling?
- What are the standards of experience you want for all students?



# Strategic Planning





## So what is it?

- **Strategic planning** is an organisation's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. In order to determine the direction of the organization, it is necessary to understand its current position and the possible avenues through which it can pursue a particular course of action.



- What do we want/need?
- How do we do it (get there)?



# Drivers

- May be driven by the context of the school.
- May be driven by the circumstances a school finds itself in.
- May be driven by an external stakeholder, most typically government(s).
- May be driven by global trends and initiatives.
- May be driven by other stakeholders such as universities or employer groups.

Figure 1.1. Globalisation trends: A visual overview

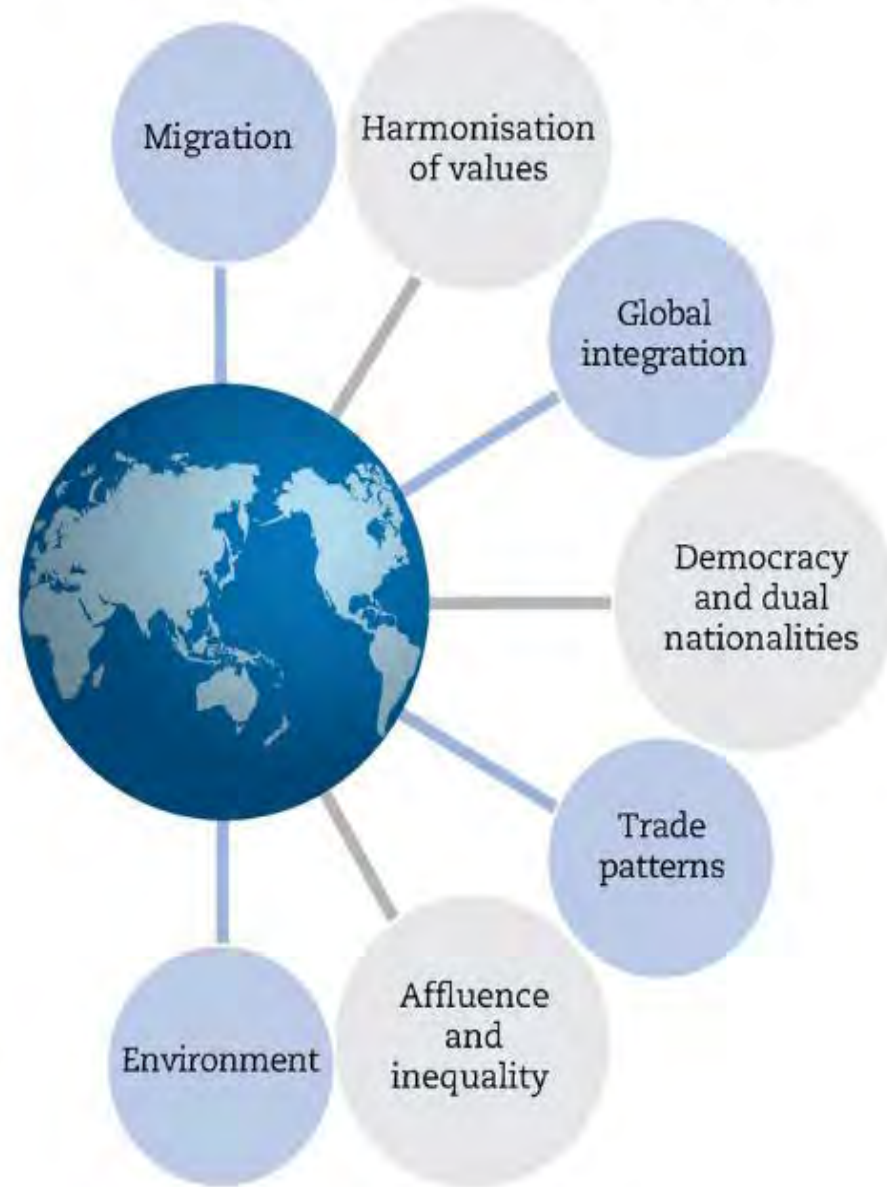
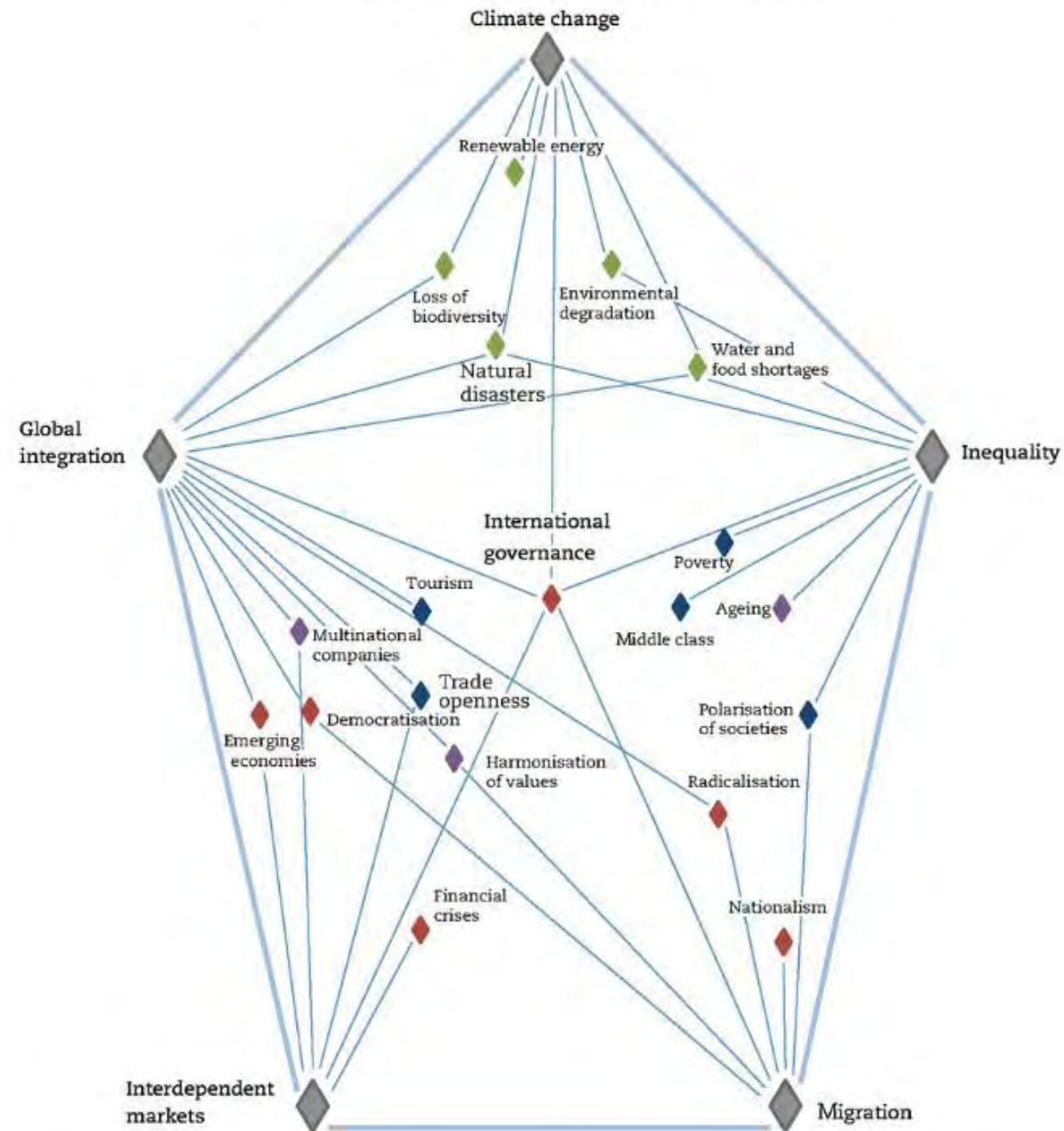




Figure 1.2. Interactions between globalisation trends





# OECD Trends shaping education

- Globalisation trends: our world is becoming more and more connected
- Globalisation raises questions about the ways in which education equips young people for their future
- Despite recent efforts towards clear energy, the world is still not on track to limit the threat of climate change
- Family configurations are changing: aging societies and smaller families are more common
- More than half of the world's population lives in cities
- Move towards greater opportunities for women: one of the greatest transformations in society in the past half century



- Education systems are certainly influenced by these trends, but they also have the power to affect them. For example, schools are called to help children develop the types of skills and competencies required of a 21st century global labour market, but they should also help prepare the new generations for creating the jobs of the future, those that do not exist yet. What these recent trends mean for each education system is a pressing and open-ended question for policy makers, teachers, parents, and students who are ultimately responsible for the future of education in a world characterized by uncertainty, diversity, and rapid changes.



# National Reforms

- Support teachers to deliver, and assess growth, against general capabilities, including consideration of a national framework to assess 21st century skills such as collaboration, problem solving, critical thinking, creativity and innovation.



# What do we get?

- Highly capable
- The best that parents have got

(Hekia Parata, Minister of Education NZ, 2015)



## How much time?

- Enter the 48 month old child - schooling takes the next nine years (primary) or fifteen years (PK – 12).
- *It takes fourteen years, or thereabouts, for young people to progress from pre-school to Year 12 in Australia. What happens to them in that time ought to concern us all.*

Dr Alan Finkel AO Australia's Chief Scientist



- *We don't want them to leave confident they know all there is to know. On the contrary, they ought to know that there is much they don't know, because the knowledge is yet to be discovered, and they will have to seek it out for themselves.*
- *We do want them to leave with the passion to be a seeker, the skills to do it effectively, and the imagination to make a wonderful life and career.* Dr Alan Finkel AO Australia's Chief Scientist

HOW THE QUEST FOR SUCCESS  
IS HARMING OUR KIDS



# BEAUTIFUL FAILURES

LUCY CLARK

*'Achingly honest and stunningly beautiful words for every parent struggling to help their kids navigate through today's pressure-cooker world.'*

LISA WILKINSON

## Beautiful Failures:

*How the quest for success is harming our kids*

Lucy Clark





Oh well? The more I thought about it, the more this seemed like a pathetic surrender to a questionable idea that deserved more scrutiny:

- *Shouldn't* school be for everyone?
- Why are so many kids alienated and made to feel wrong at school?
- Why are so many stressed out of their minds from pressure, and shutting down?
- Why are others bored and just going through the motions?



# I want a school...

- Run by people who believe that every child has the ability to succeed in their own individual way, whatever that might be, and who believe that conformity is one of the least prized traits in a learner.



# I want a school...

- That understands that a letter or a number cannot describe a child, and that comparing children is not just meaningless, but harmful.



# I want a school...

- That understands creativity is central to human wellbeing, and that music lifts us all, with or without talent.



# I want a school...

- That has teachers who believe in all children, and understands that the ones who are challenging need help and compassion, not punishment.



# NMC Horizon Report 2015 K-12 Edition

The *NMC Horizon Report: 2015 K-12 Edition* examines emerging technologies for their potential impact on and use in teaching, learning, and creative inquiry in schools.

<https://www.nmc.org/publication/nmc-horizon-report-2015-k-12-edition/>



# Two Trends / Eighteen Topics

- The experts agreed on two long-term trends: rethinking how schools work in order to bolster student engagement and drive more innovation, as well as shifting to deeper learning approaches, such as project and challenge-based learning.

# 6 Key Trends



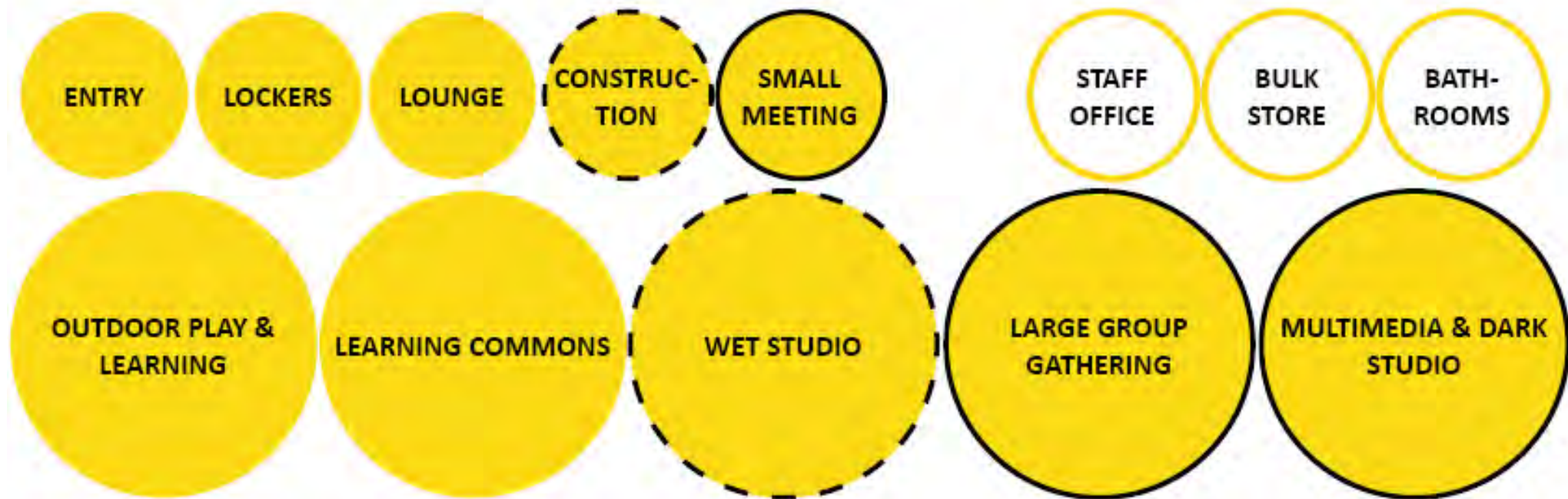


1. Rethinking how school works
2. Shift to deeper learning approaches
3. Increasing use of collaborative learning approaches
4. Shift from students as consumers to creators
5. Increasing use of blended learning
6. Rise of STEM/STEAM Learning

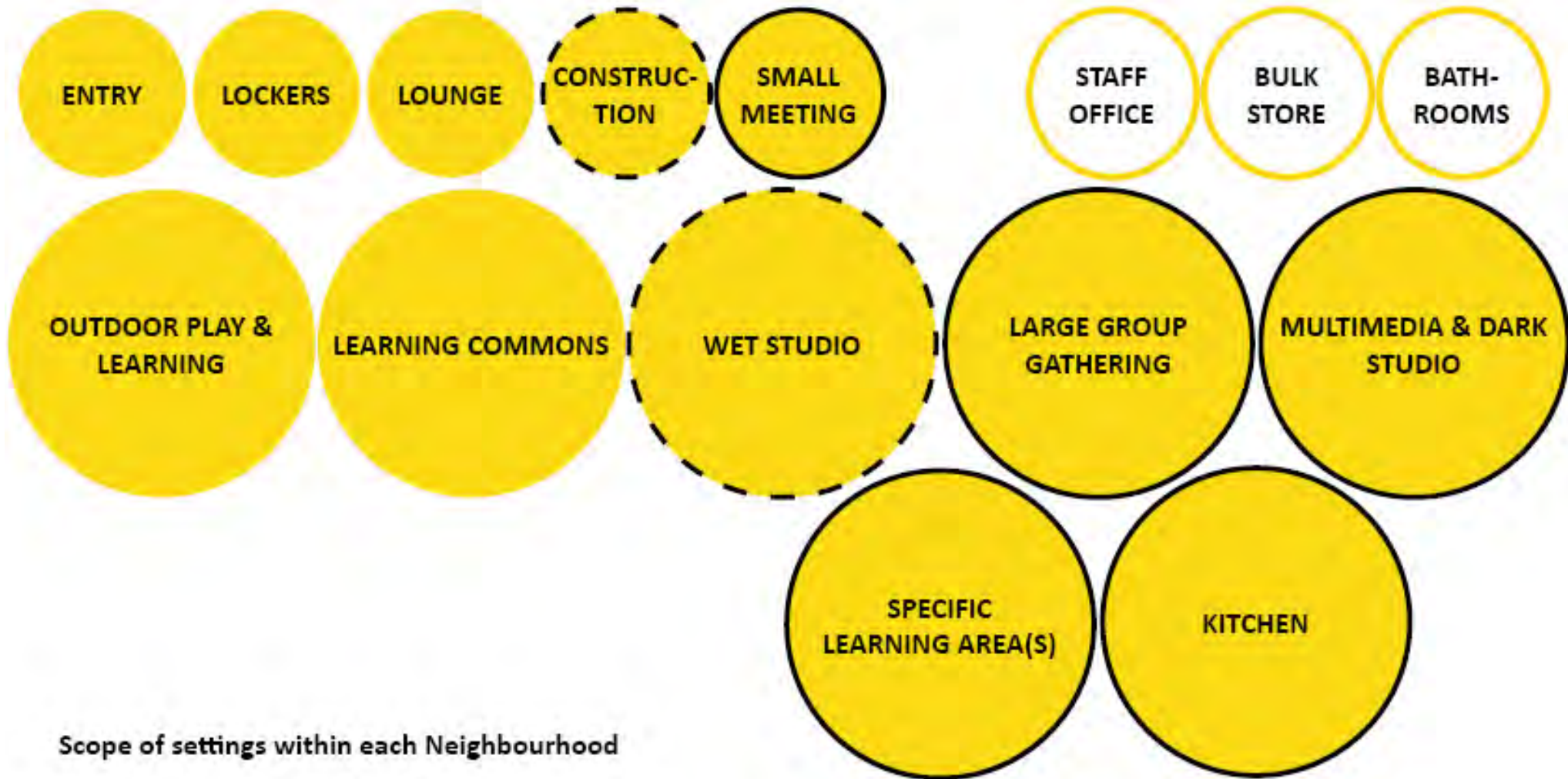


# Rethinking How Schools Work

- There is a focused movement to reinvent the traditional classroom paradigm and rearrange the entire school experience — a trend that is largely being driven by the influence of innovative learning approaches.
- Changing how learning takes place in classrooms is also requiring shifts in the business models of schools.



Scope of settings within each Neighbourhood



Scope of settings within each Neighbourhood



INDIVIDUAL CHILD  
STUDY/TIME OFF



CHILD AND TEACHER  
CONFERENCING



TEACHER DISCUSSION  
AND PLANNING



2 CHILD  
GAME PLAY



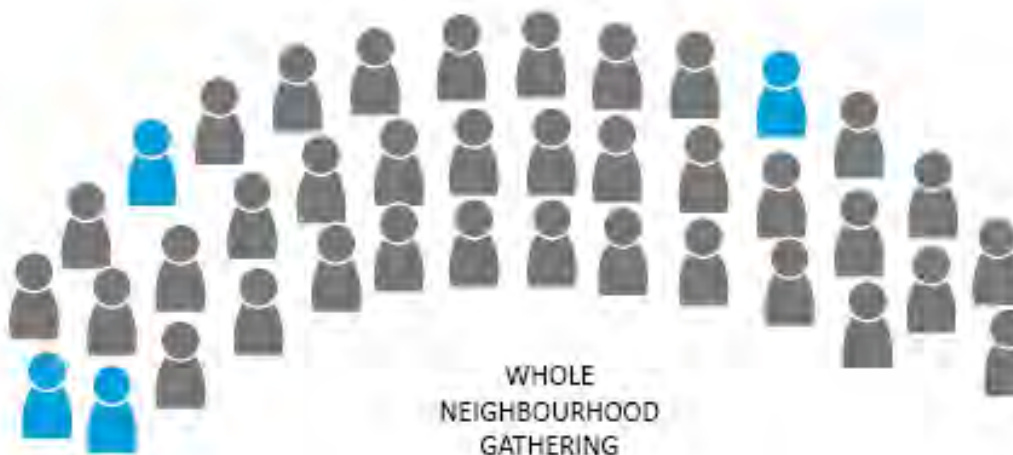
SMALL GROUP  
DISCUSSION/WORKSHOP



SMALL GROUP  
COLLABORATING,  
CHATTING/RELAXING



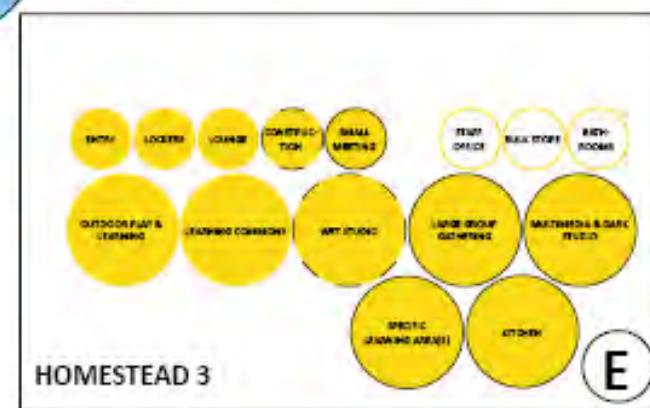
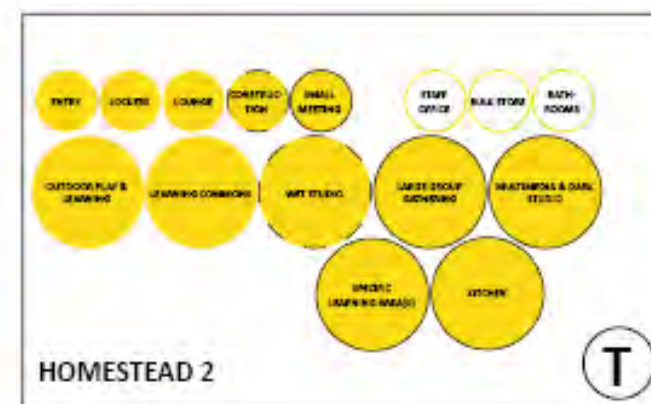
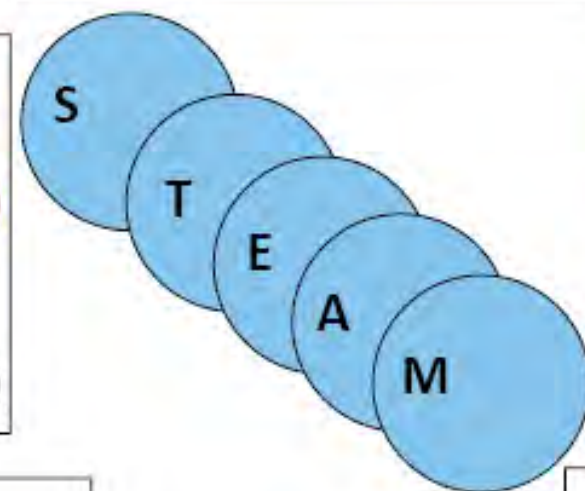
HOME  
GROUP  
MEETING



WHOLE  
NEIGHBOURHOOD  
GATHERING

POTENTIAL SOCIAL/LEARNING GROUPS WITHIN EACH NEIGHBOURHOOD





### Graph Of Disciplines Using Links In Wikipedia

This graph shows the interconnections between knowledge disciplines contained within the links of Wikipedia. Similarly colored nodes belong to similar communities calculated within the entire network. The edge thickness indicates the weight of the connection or how strongly connected the disciplines are connected to one another. Click below for more information.

[More about this visualisation](#)

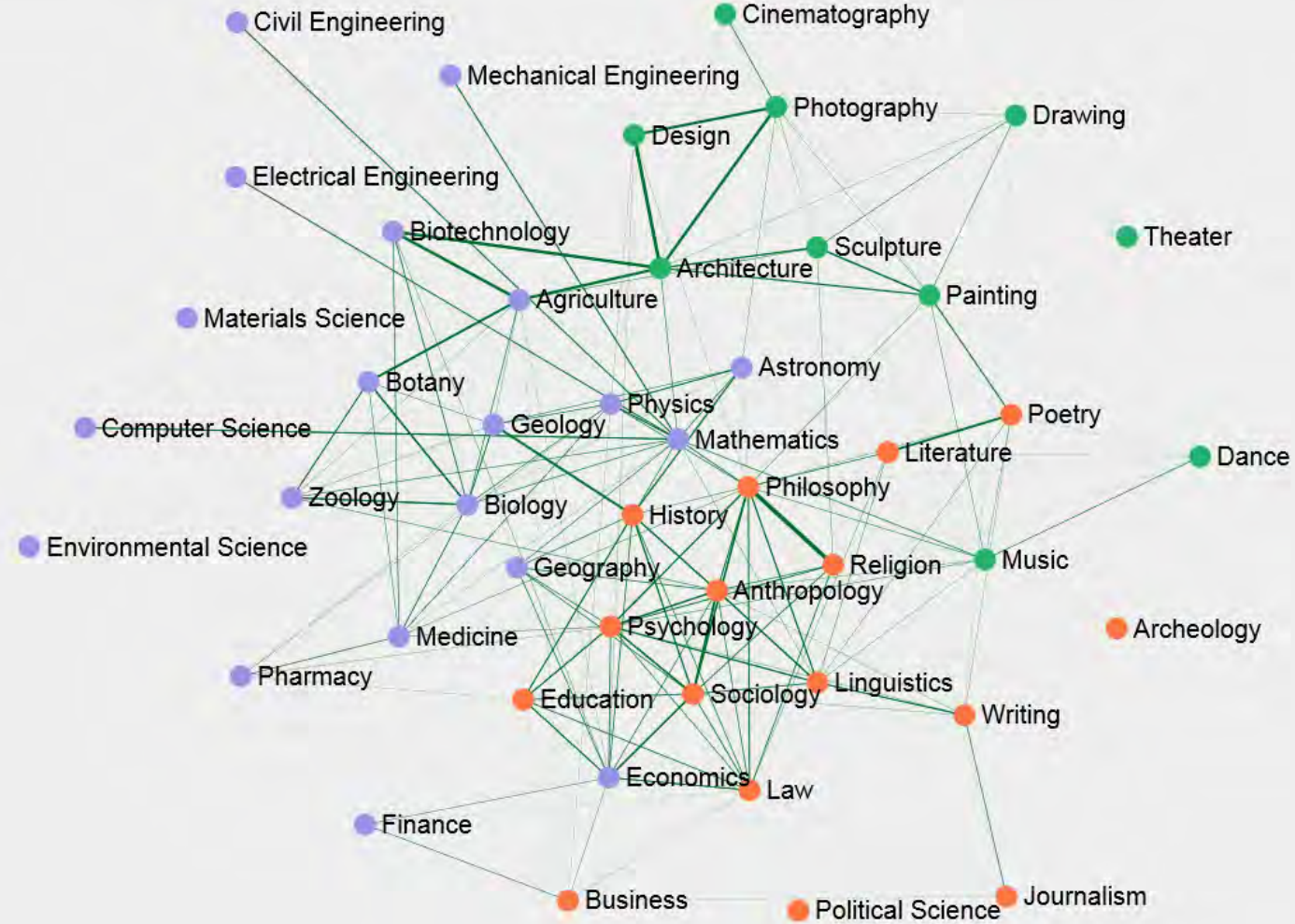
#### Legend:

- Discipline
- Relationship
- Group

Select Discipline Grouping\*

\*Social Science is the scientific study of human topics. According to its methods it is a science (and science defines itself by its methods), according to its content it is a humanities subject (and the humanities define themselves by their content). In this visualization it has been characterized by its content, and therefore as part of the humanities.

CCR is grateful to NMEF for its support





# Shift to Deeper Learning Approaches

- Project based learning, problem-based learning, inquiry based learning, and similar methods foster more active learning experiences, both inside and outside the classroom.
- As technologies such as tablets and smartphones are more readily accepted in schools, educators are leveraging these tools to connect the curriculum with real life applications.



- Neuroscientific studies have shown that playful activity leads to synaptic growth, particularly in the frontal cortex, the part of the brain responsible for all the uniquely human higher mental functions.



# Pretence Play

- Pretence play supports children's early development of symbolic representational skills, including those of literacy, more powerfully than direct instruction.



# Physical, Constructional and Social Play

- Physical, constructional and social play supports children in developing their skills of intellectual and emotional 'self-regulation', skills which have been shown to be crucial in early learning and development.



# Increasing Use of Collaborative Learning Approaches

- Collaborative learning, which refers to students or teachers working together in peer-to-peer or group activities, is based on the perspective that learning is a social construct.
- The approach involves activities that are generally focused around four principles: placing the learner at the center, emphasizing interaction and doing, working in groups, and developing solutions to real world problems.



# Shift from Students as Consumers to Creators

- Learners explore subject matter through the act of creation rather than the consumption of content.
- Emerging instructional frameworks are encouraging teachers to use digital tools that foster creativity along with production skills.



# Increasing Use of Blended Learning

- Drawing from best practices in online and face-to-face methods, hybrid learning is on the rise in K-12 schools.
- When designed and implemented effectively, hybrid models allow students to practice and achieve mastery of content at their own pace via online learning modules and adaptive software.
- Teachers are then freed up to focus on small groups of students who need more support to succeed.



# Rise of STEM Learning

- In recent years, there has been a growing emphasis on developing stronger science, technology, engineering, and mathematics (STEM) curriculum and programs, as these disciplines are widely viewed as the means to boost innovation and bolster national economies.



# steam

science - technology - engineering - arts - mathematics





### **SOLVABLE**

- > Creating Authentic Learning Opportunities
- > Integrating Technology in Teacher Education

### **DIFFICULT**

- > Personalizing Learning
- > Rethinking the Roles of Teachers

### **WICKED**

- > Scaling Teaching Innovations
- > Teaching Complex Thinking

### **SHORT-TERM IMPACT**

- > Increasing Use of Blended Learning
- > Rise of STEAM Learning

### **MID-TERM IMPACT**

- > Increasing Use of Collaborative Learning Approaches
- > Shift from Students as Consumers to Creators

### **LONG-TERM IMPACT**

- > Rethinking How Schools Work
- > Shift to Deeper Learning Approaches

2016

2017

2018

2019

2020

#### **NEAR-TERM** 1 year or less

- > Bring Your Own Device
- > Makerspaces

#### **MID-TERM** 2-3 years

- > 3D Printing
- > Adaptive Learning Technologies

#### **FAR-TERM** 4-5 years

- > Digital Badges
- > Wearable Technology



# Wales

A curriculum that support children and young people to be:

- Ambitious, capable learners ready to learn throughout their lives;
- Enterprising, creative contributors, ready to play a full part in life and work;
- Ethical, informed citizens of Wales and the world; and
- Healthy, confident individuals, ready to lead fulfilling lives as valued members of society



# How...

- Recognising that digital literacy, or digital competence, is as important in the twenty-first century as literacy and numeracy.
- Putting arts and creativity at the heart of the curriculum by providing opportunities to explore thinking, refine and communicate ideas, engaging thinking, imagination and senses creatively.
- Building mental and emotional well-being by developing confidence, resilience and empathy



# Finland – Rethinking Education

- Making changes in education that are necessary for industry and modern society.
- Students need more integrated knowledge and skills about real world issues.
- The Finnish Government is taking a cross-disciplinary, holistic approach by implementing ‘phenomenon-based’ teaching and learning – moving away from subjects and towards teaching by topic.



- Collaborative approach to learning, with pupils working in smaller groups to solve problems while improving their communication skills.
- Students are involved in the planning of phenomenon-based (topic-based) study periods and they also have a voice in assessing what they have learned.



- <http://cdn.nmc.org/media/2015-nmc-horizon-report-k12-EN.pdf>
- <http://www.hightechhigh.org/projects/>



- Australia's education system needs comprehensive reform to tackle widespread student disengagement in the classroom.
- As many as 40 per cent of school students are unproductive in a given year. Unproductive students are on average one to two years behind their peers, and their disengagement also damages their classmates and teachers
- <https://grattan.edu.au/report/engaging-students-creating-classrooms-that-improve-learning/>



## Why is engagement so important?

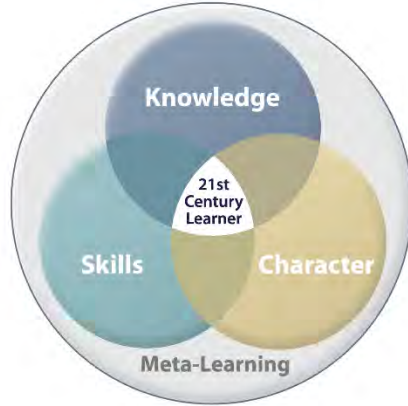


Research has established  
**that student engagement**  
**is a robust predictor**  
**of student achievement in schools**  
and  
**occupational success many years later,**  
**regardless of socioeconomic status.\***

\*Finn, 1993; American National Research Council, 2003; Fredericks et al, 20014; Dunleavy et al, 2012).



From the authors\* of best-seller *21st Century Skills*  
CHARLES FADEL\*, MAYA BIALIK, AND BERNIE TRILLING\*



# FOUR-DIMENSIONAL EDUCATION

THE COMPETENCIES LEARNERS NEED TO SUCCEED

Prologue by **Andreas Schleicher, OECD**

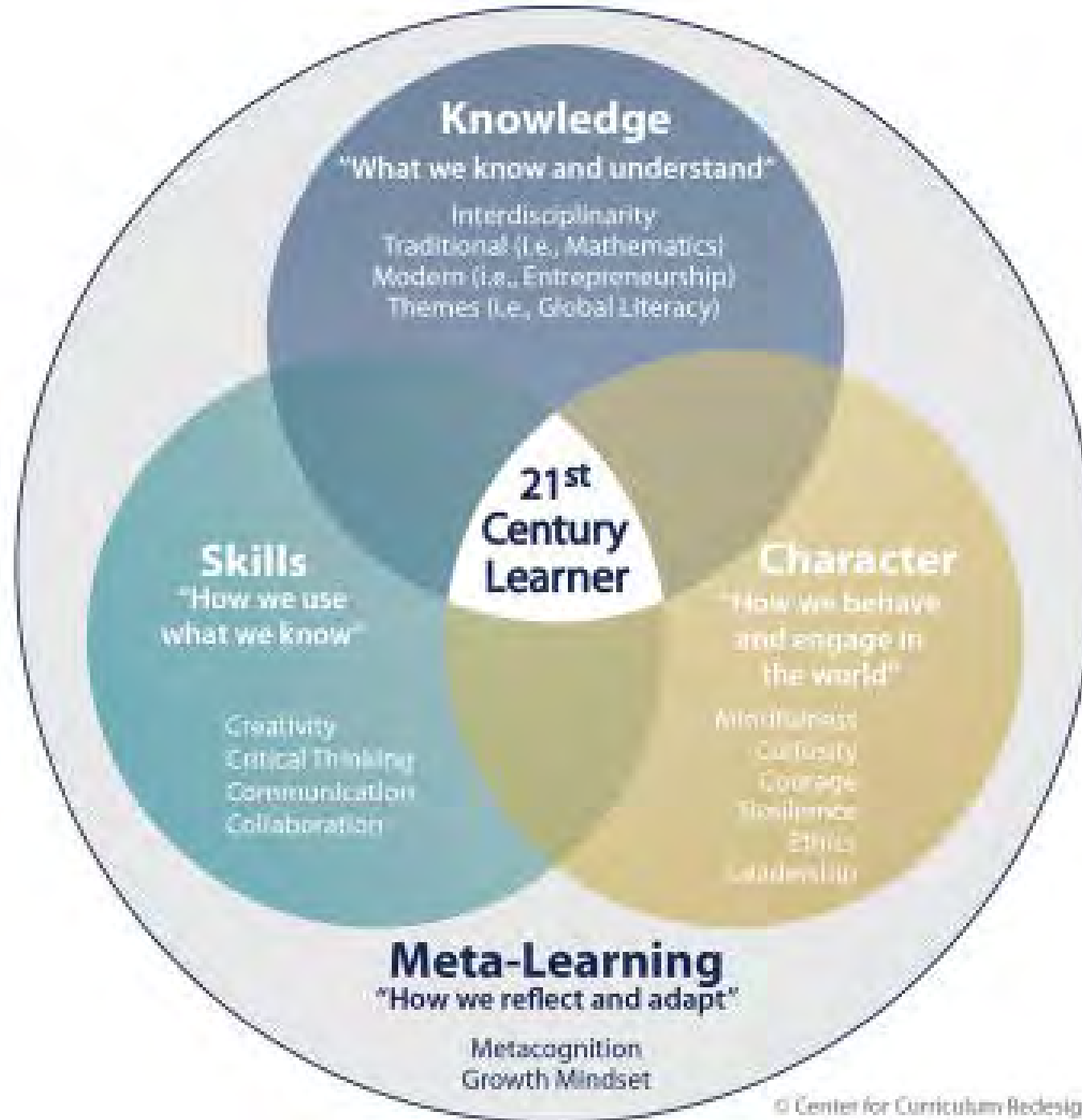
"A very thoughtful treatment of the competencies our students need to thrive in today's (and tomorrow's) world. This book will help educators understand and navigate the critical choices we are facing."

-Carol Dweck, **Stanford University**

# Four-Dimensional Education

## *The Competencies Learners Need to Succeed*

Charles Fadel, Maya Bialik & Bernie Trilling



© Center for Curriculum Redesign



- Character education is about the acquisition and strengthening of virtues (qualities), values (beliefs and ideals). And the capacity to make wise choices for a well-rounded life and a thriving society.



# Essential Qualities of Character

- Mindfulness
- Curiosity
- Courage
- Resilience
- Ethics
- Leadership



# Mindfulness

- Self-awareness, self-actualisation, observation, reflection, consciousness, compassion, gratitude, empathy, growth, vision, insight, happiness, presence, authenticity, listening, sharing, interconnectedness, interdependence, oneness, acceptance, beauty, sensibility, patience, tranquillity, cultural awareness, etc.



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# Curiosity

- Open-mindedness, exploration, passion, self-direction, motivation, initiative, innovation, enthusiasm, wonder, appreciation, spontaneity, etc.



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- **Open-mindedness**, exploration, passion, self-direction, motivation, initiative, **innovation**, enthusiasm, **wonder**, appreciation, spontaneity, etc.





# Courage

- Bravery, determination, fortitude, confidence, risk taking, persistence, toughness, zest, optimism, inspiration, energy, vigour, zeal, cheerfulness, humour, etc.



# Courage

- **Bravery, determination**, fortitude, confidence, risk taking, persistence, toughness, **zest**, optimism, inspiration, energy, vigour, zeal, cheerfulness, **humour**, etc.



# Resilience

- Perseverance, grit, tenacity, resourcefulness, spunk, self-discipline, effort, diligence, commitment, self-control, self-esteem, confidence, stability, adaptability, dealing with ambiguity, flexibility, feedback, etc.



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# Ethics

- Benevolence, humanness, integrity, respect, justice, equity, fairness, compassion, kindness, altruism, inclusiveness, tolerance, acceptance, loyalty, honesty, truthfulness, authenticity, genuineness, trustworthiness, decency, consideration, forgiveness, virtue, love, care, helpfulness, generosity, charity, devotion, belonging, etc.



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# Leadership

- Responsibility, accountability, dependability, reliability, conscientiousness, selflessness, humbleness, modesty, self-reflection, inspiration, organisation, delegation, mentorship, commitment, heroism, charisma, followership, engagement, leading by example, goal-orientation, focus, results orientation, precision, execution, efficiency, negotiation, consistency, socialisation, diversity, decorum, etc.



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I have no special talents.  
I am only passionately curious.  
-Albert Einstein



The greatest glory in living  
lies not in never falling, but in  
rising every time we fall.

Nelson Mandela



Thanks

- [rgorman@ais.wa.edu.au](mailto:rgorman@ais.wa.edu.au)



# THE AGE





# School dumps cut-throat VCE ranking

- Students at one Victorian school will become the envy of all teenagers, as they wave goodbye to the ATAR from next year.
- Under a proposed new model, students at Templestowe College will be given the option of applying for any course at Swinburne University without an ATAR.
- Entry into the university's courses - which will include the full gamut of undergraduate degrees - will be based on new measures of student ability: **grit, leadership and strong inter-personal skills.**

Read more: <http://www.theage.com.au/victoria/school-dumps-cutthroat-vce-ranking-20160226-gn4gk0.html#ixzz43DHZWgne>



# So, Character Matters

- Children who learn and can exhibit character strengths attain more years of education, earn more, and likely outperform other individuals in other areas of life.
- But as we learn more about the importance of character strengths, and disparities in their development, the need to move forward – if only through more research and evaluations of existing character-development programs – becomes more urgent, not least in terms of boosting social mobility.
- For greater mobility, we need not only to increase opportunities, but also to ensure that people are able to seize them.

Ref: *The Character Factor: Measures and Impact of Drive and Prudence*. Richard V. Reeves, Joanna Venator, and Kimberly Howard, October 22 2014