Capabilities in context

A snapshot of historic and global approaches

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Bill Lucas

mitchell INSTITUTE

Education systems are responsible for more than developing knowledge and skills – they also need to equip young people to become capable all-rounders. This is not new or unique to Australia. Capabilities appear in education designs all over the world, and have done so for centuries.

Calls to embed capabilities in schools are gaining prominence in Australia. Education policy discussions are increasingly focusing on how capabilities can unlock potential in young people – preparing very young children for school, improving assessment scores at school, supporting transitions through education and preparing young adults for work.

There has been some resistance to the idea however, with capabilities considered as 'novel' or even a fad. This isn't the case – capabilities have been recognised by a variety of names in many places for hundreds of years. A better understanding of their importance globally and historically could help inform decisions for improving current systems.

Beginnings of curriculum and character in education

Many education systems worldwide were established with both knowledge and character as central concerns.

For example, education was viewed as a moral pursuit to promote trustworthiness, social harmony and empathy across Asia. In Europe, early attempts to organise what was taught in schools and universities focused on seven aspects of the liberal arts - grammar, logic, rhetoric, arithmetic, geometry, music and astronomy.

Today's Australian curriculum is shaped by both approaches. It includes moral pursuits like integrity, ethical understanding and empathy as well as eight subject-based learning areas.

1800s – The public school system

Australia shifted to a centralised system of public schooling in the mid nineteenth century. The school curriculum was relatively static, essentially based on the 3Rs – reading, writing and arithmetic – plus a smattering of other subjects such as geography and religion or trades and crafts for vocational options.

As societies worldwide expanded schooling to all children, it became clear that schools contributed something beyond academic knowledge and practical skills: the development of character. And character had both a moral sense and a role in improving performance at school and in life.

Perseverance, persistence, concentration, grit, self-control, self-confidence and **adaptability** were all published as capabilities at the end of the nineteenth century.

1900s – Rethinking schooling

Universal education systems expanded throughout the twentieth century. Social change, economic shifts, technological advances and political imperatives prompted school systems to rethink how they could best build the knowledge and skills of populations.

This led to debate about what schools should teach. Should they focus on academic knowledge or practical skill, prepare students for life or for work? And what wider purposes might education serve?

In practical terms this debate was often answered by separating students in their teenage years to follow either an academic or a vocational route.

2000s – Global connectivity

The Melbourne Declaration in 2008 marked a significant moment in global education history for capabilities. Policy makers agreed that education should develop capabilities, committing to an explicit goal for all young Australians to become successful learners, confident and creative individuals and active and informed citizens.

In 2015 the OECD boosted the status of capabilities by staging the first Programme for International Student Assessment (PISA) test of collaborative problem-solving. In 2021 their focus will be on creative thinking. Capabilities now sit side by side with English, maths and science in the eyes of the world's most influential education body.

> The growing influence of the Internet spawned an outpouring of concern that schools were no longer fit for purpose. Some people wondered if schools were needed at all, given the availability of resources online.

Capabilities around the world

While in Australia today there may be debates about how much school should be about knowledge and skill or capabilities and dispositions, we're realising that it isn't possible to reduce education to such binary alternatives.

A growing number of organisations across the world have begun explicitly promoting a need to teach something broader than knowledge and skills, describing what Australia calls 'capabilities' using many different terms.

Following is a sample of the broad range of international frameworks addressing capabilities in education. These fifteen, shown in order of when they were created, are founded on evidence and in use in at least one state and/or country beyond the place where they were established.

While at first glance each framework is different in terms of language and focus, on closer analysis they share many common features.

Habits of Mind

Sixteen habits of mind:
1. Persisting
2. Thinking and communicating with clarity and precision
3. Managing impulsivity
4. Gathering data through all senses
5. Listening with understanding and empathy
6. Creating, imagining, innovating
7. Thinking flexibly
8. Responding with wonderment and awe
9. Thinking about thinking
10. Taking responsible risks
11. Striving for accuracy
12. Finding humour
13. Questioning and posing problems
14. Thinking interdependently
15. Applying past knowledge to new situations
16. Remaining open to continuous learning

Learning Power

Four dispositions:
1. Resilience
2. Resourcefulness
3. Reflectiveness
4. Reciprocity

OECD's DeSeCo Framework

Three competencies:
1. Using tools interactively
2. Interacting in heterogeneous groups
3. Acting autonomously

Partnership for 21Century Learning

Three categories of skills:
1. Information, media and technology
2. Learning and innovation
3. Life and career

Asia Society Global Competence

Understanding the world through disciplinary and interdisciplinary study focusing on four areas:
1. Investigate the world
2. Recognise perspectives
3. Communicate ideas
4. Take action

Assessment and teaching of 21st Century Skills Project

Three clusters of social skills associated with collaborative problem solving:
1. Participation
2. Perspective taking
3. Social regulation

US Committee on Defining Deeper Learning and 21st Century Skills

Three domains:
1. Cognitive
2. Intrapersonal
3. Interpersonal

Centre for Real-World Learning's five dimensional model of creativity

Five dimensions:
1. Inquisitive
2. Persistent
3. Collaborative
4. Disciplined
5. Imaginative

International Baccalaureate (IB)

The IB Profile seeks learners who are:
1. Inquirers
2. Knowledgeable
3. Thinkers
4. Communicators
5. Principled
6. Open-minded
7. Caring
8. Risk-takers
9. Balanced
10. Reflective

New Pedagogies for Deeper Learning

Six deep learning goals, always leveraging digital opportunities:
1. Collaboration
2. Critical thinking
3. Creativity
4. Citizenship
5. Character
6. Communication

Expeditionary Learning Network

Three dimensions:
1. Mastery of knowledge and skills
2. Character
3. High-quality student work

Ruby's 7 Cs

Seven aspects of character:
1. Curiosity
2. Confidence
3. Collaboration
4. Creativity
5. Communication
6. Commitment
7. Craftsmanship

University of Chicago School CSSR Framework

Key factors and foundational elements leading to action-reflection:
1. Key factors
2. Foundational elements

Creative Schools

Eight core competencies:
1. Curiosity
2. Creativity
3. Criticism
4. Communication
5. Collaboration
6. Compassion
7. Composure
8. Citizenship

UNESCO's transversal Competencies

Five competencies:
1. Critical and innovative thinking
2. Interpersonal skills
3. Intrapersonal skills
4. Media & information literacy
5. Global citizenship

The existence of these cross-border frameworks is, perhaps, the most powerful argument of all for an increasingly capability-focused world. For innovation does not respect geographic or, indeed, historic boundaries.

USEFUL LINKS AND FURTHER READING

1996, Habits of mind: http://www.habitsofmindinstitute.org/about-us/

2002, Learning Power: https://en.wikipedia.org/wiki/Learning_power

2003, OECD's DeSeCo Framework: Rychen D. and Salganik L. (2003) Key competencies for a successful life and a well-functioning society. Göttingen: Hogrefe & Huber Publishers

2010, Partnership for 21Century Learning: http://www.p21.org/our-work/4cs-research-series

2011, Asia Society Competencies: https://asiasociety.org/education/what-global-competence

2012, Assessment and Teaching of 21st Century Skills Project: Assessment and Binkley M. et al. (2012) Defining Twenty-First Century Skills. In: Griffin P., McGaw B., Care E. (eds) Assessment and Teaching of 21st Century Skills. Springer, Dordrecht

2012, US Committee on Defining Deeper Learning: http://www.leg.state.vt.us/WorkGroups/EdOp/Education%20for%20Life%20and%20Work-%20National%20Academy%20of%20Sciences.pdf

2013, Centre for Real World Learning: http://www.oecd.org/education/ceri/5k4dp59msdwk.pdf

2013, International Baccalaureate: http://www.ibo.org/contentassets/fd82f70643ef4086b7d3f292cc214962/learner-profile-en.pdf

2014, New Pedagogies for Deeper Learning: http://npdl.global/

2014, Expeditionary Learning Network: https://eleducation.org/who-we-are/our-approach

2015, Ruby's 7Cs: http://www.educatingruby.org/

2015, University of Chicago School CSSR Framework: http://www.wallacefoundation.org/knowledge-center/Documents/Foundations-for-Young-Adult-Success.pdf

2016, Creative Schools: Robinson, K (2016) Creative Schools: Revolutionizing Education from the Ground Up. London: Penguin

2016, UNESCO's Transversal Competencies: http://unesdoc.unesco.org/images/0024/002465/246590E.pdf