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# Capabilities in context

A snapshot of historic and global approaches

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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 21st Century 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 21<sup>st</sup> 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 21<sup>st</sup> 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

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**2002, Learning Power:** [https://en.wikipedia.org/wiki/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/5k4dp59msdww.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://elearning.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>