

# 21st century skills for senior curriculum

## A position paper

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### Purpose

Acquiring a broad set of skills during senior schooling is critical to students' success in further education and in life. This is because '[t]he world is changing in ways that require education to ensure that students achieve a range of generic learning outcomes as well as discipline-specific learning outcomes' (Bowman 2010). Research suggests that to meet the demands of the 21st century, students need more than core subject knowledge (Bruniges 2012); in order to be successful, they need to become lifelong learners and global citizens who create opportunities and are confident in pursuing their passions (Department of Education and Training 2016). To assist students with achieving these outcomes, education needs to meet these demands.

The Queensland Curriculum and Assessment Authority (QCAA) has identified and defined a set of 21st century skills based on national and international research about the skills students need in the 21st century. Along with literacy and numeracy, these 21st century skills are the underpinning factors that shape the development of the General senior syllabuses.

These 21st century skills will help prepare Queensland students by giving them the knowledge, skills and confidence they need to be equipped for the demands of higher education, work and life, and to participate effectively in the community and the economy in a complex and rapidly changing world.

Syllabus development must respond to the learning needs of all young people, and facilitate effective transitions to further education, training and employment. This is achieved by including the underpinning factors in syllabus development. The underpinning factors are derived from current education, industry and community expectations; they overlap, interact and build on the general capabilities taught in the Years P–10 Australian Curriculum, and include literacy, numeracy and the 21st century skills.

The 21st century skills include critical thinking, creative thinking, communication, collaboration and teamwork, personal and social skills, and information and communication technologies (ICT) skills. These are supported by associated skills that elaborate on the 21st century skills.

# 21st century skills

## 21st century skills and associated skills

| 21st century skills        | Associated skills  | 21st century skills                                   | Associated skills   |
|----------------------------|--|---|---|
| critical thinking          | <ul style="list-style-type: none"> <li>• analytical thinking</li> <li>• problem-solving</li> <li>• decision-making</li> <li>• reasoning</li> <li>• reflecting and evaluating</li> <li>• intellectual flexibility</li> </ul>  | creative thinking                                     | <ul style="list-style-type: none"> <li>• innovation</li> <li>• initiative and enterprise</li> <li>• curiosity and imagination</li> <li>• creativity</li> <li>• generating and applying new ideas</li> <li>• identifying alternatives</li> <li>• seeing or making new links</li> </ul> |
| communication              | <ul style="list-style-type: none"> <li>• effective oral and written communication</li> <li>• using language, symbols and texts</li> <li>• communicating ideas effectively with diverse audiences</li> </ul>  | collaboration and teamwork                            | <ul style="list-style-type: none"> <li>• relating to others (interacting with others)</li> <li>• recognising and using diverse perspectives</li> <li>• participating and contributing</li> <li>• community connections</li> </ul>   |
| personal and social skills | <ul style="list-style-type: none"> <li>• adaptability/flexibility</li> <li>• management (self, career, time, planning and organising)</li> <li>• character (resilience, mindfulness, open- and fair-mindedness, self-awareness)</li> <li>• leadership</li> <li>• citizenship</li> <li>• cultural awareness</li> <li>• ethical (and moral) understanding</li> </ul> | information & communication technologies (ICT) skills | <ul style="list-style-type: none"> <li>• operations and concepts</li> <li>• accessing and analysing information</li> <li>• being productive users of technology</li> <li>• digital citizenship (being safe, positive and responsible online)</li> </ul>                               |

# How are the 21st century skills to be used?

## Syllabuses

Each syllabus identifies the relevant 21st century skills that can be developed through teaching and learning strategies. When developing General senior syllabuses, Expert Writing Teams (EWTs) identified which 21st century skills were most relevant to each syllabus. The degree to which these skills are embedded is determined by the distinctive nature of the subject. Though coverage of each skill may vary from syllabus to syllabus, students are provided with a variety of opportunities to learn through and about the 21st century skills across the four-unit course of study.

The 21st century skills may be embedded in a number of sections within General senior syllabuses including:

- rationale
- objectives
- subject matter
- pedagogical and conceptual frameworks
- assessment.

## Planning

Teachers are encouraged to:

- model the 21st century skills
- make explicit the connections between the subject and the 21st century skills
- provide a variety of learning activities that support the development of the 21st century skills
- provide opportunities for students to practise the 21st century skills as authentic elements of the subject
- provide feedback to students on the 21st century skills.

## References

Bowman, K 2010, *Background Paper for the AQF Council on Generic Skills*, South Australian Department of Further Education, Employment, Science and Technology on behalf of the Australian Qualifications Framework Council, Adelaide SA.

Bruniges, M 2012, *21st Century Skills for Australian Students*, report from 21st Century Skills Forum, Tokyo, Japan, 14 November, NSW Education and Communities, Sydney NSW, [www.dec.nsw.gov.au/documents/15060385/15385042/21C\\_skills\\_for\\_Australian\\_students\\_141112.pdf](http://www.dec.nsw.gov.au/documents/15060385/15385042/21C_skills_for_Australian_students_141112.pdf).

Department of Education and Training 2016, *Advancing Education: An action plan for education in Queensland*, [www.advancingeducation.qld.gov.au](http://www.advancingeducation.qld.gov.au).