Transversal competencies in the Australian Curriculum

By Leonie McIlvenny

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Biography

Leonie McIlvenny has been an educator for over 35 years. Initially a primary school teacher, then teacher librarian, Leonie has taught in primary and secondary schools in the public and private sectors in Western Australia. During her career, she has been a curriculum consultant, online course developer, library consultant and ICT project manager for the Western Australian Education Department. Leonie was a project officer for the Teaching Teachers for the Future project at Curtin University and also lectured in digital literacy and inquiry learning for pre-service teachers. Her interest in information and digital literacies and digital badges was the driver behind such projects as **Studyvibe***, the* **Research Safari***,* **My Digital Passport** *and the* **UN SDG Digital Passport Challenge***.*

Abstract

The term transversal competencies is gaining traction as a way of describing that hard-to-define cluster of skills, often referred to as 'soft skills' or '21st century skills'. So, what are these skills, where can we find them in the curriculum and why is it important that we teach them? This article discusses the importance of these skills, not only within an educational context but also within the changing world of work. It also highlights the importance and imperative of, and responsibility for, ensuring these skills continue to be strategically and systematically embedded in the Australian Curriculum.

Introduction

'Skills have become the global currency of 21st century economies' (UNESCO, 2015). 'The globalisation and internationalisation of the economy along with the rapid development of information and communication technologies (ICT) are continuously transforming the way in which we live, work, and learn' (Voogt, 2012). According to McKinsey (2017), workers of the future will spend more time on activities that machines are less capable of, such as managing people, applying expertise and communicating with others and less time on predictable physical activities and collecting and processing data. The skills and abilities required will also shift to more social and emotional skills and more advanced cognitive abilities such as logical reasoning and creativity.

Various terminologies are currently used to 'capture, compartmentalise and name' this shifting cluster of competences (Gonski, 2018) including '21st century skills', 'key competencies', 'soft skills', 'employability skills' and 'entrepreneurial skills'. The term, transversal competencies (TvCs), while not new, is re-emerging as a popular way of describing these broad-based skills, knowledge and understandings.

'Every student needs to be equipped with the skills and knowledge to navigate a rapidly changing world' (Gonski, 2018).

As the recognition that this hybrid skill set is becoming essential (Redecker *et al.*, 2011), so too is the pressure placed on educational institutions to respond accordingly. UNESCO's *Transversal Competencies in Education Policy and Practice Report* (2015) suggests that education policies and curricula must aim to incorporate a broad range of skills and competencies necessary for learners to successfully navigate the changing global landscape and the curriculum needs to ensure that students develop attributes and skills necessary for a rapidly changing society and workplace (UNESCO, 2015, p.1).

To establish the extent to which school systems are already doing this, UNESCO examined how 10 different countries in the region, including Australia, define and apply 'non-academic' skills in their education policies, practices, and curriculum frameworks (UNESCO, 2015 p.

1) and all but one used an **analytic** approach to the development of TvCs, which was facilitated through a cluster of learning areas or learning experiences, that is, the learning of TvCs runs across, infiltrates and/or underpins all 'vertical subjects' or traditional school subjects.

TvCs in the Australian Curriculum?

'The Australian Curriculum identifies seven capabilities that play a significant role in equipping young Australians to live and work successfully in the twenty-first century' (ACARA 2017c).

With regard to the Australian context, there is significant evidence to suggest that within the Australian Curriculum the *General Capabilities* provide the main mechanisms and structure for developing TvCs:

1. UNESCO's report on TvCs states that they are referred to as *'general capabilities'*, which are *'embedded in the content of different learning areas'* (2015, p. 21) and that *'the Australian Curriculum implicitly and explicitly includes transversal competencies in every educational activity. To this end, the Australian Curriculum provides detailed information on each capability and how it can be adopted across each subject'* (UNESCO, 2015. p. 1) (Table 1).

2. Gonski in the *Report of the Review to Achieve Educational Excellence in Australian Schools (2018)* uses the term 'general capabilities', as they refer to a '*clear list that has been nationally agreed and established as part of the Australian Curriculum*' (Gonski, 2018, p. 74).

3. Voogt's (2012) comparative analysis of skills frameworks made a number of recommendations for ensuring transversal or 21st century competencies were included in the Australian Curriculum.

Table 1 identifies how the General Capabilities from the Australian Curriculum support and reflect these recommendations.

Table 2 compares the UNESCO *Transversal Competencies* and the General Capabilities to see where the commonalities lie. While the category name may be slightly different, there is no doubt about the overlap of the various skills and competences. The numbers next to each skill indicate the frequency with which the skill is referred to within the Australian Curriculum.

Challenges to the integration of TvCs in the Australian Curriculum

There appears no doubt from the evidence provided, that the Australian Curriculum addresses many, if not all of UNESCO's TvCs. ***Having them articulated in the curriculum and actually implementing them, however, are two very different things***.

The UNESCO Report identified three major challenges facing educational institutions in their efforts to address Transversal Competencies: Definitional, Operational and Systemic (Table 3).

A major challenge associated with the implementation of 21st century competencies or TvCs concerns their assessment. Gonski (2018, p. 77) suggests that one reason for the lack of support surrounding the general capabilities is that there is no consistent method of assessment, apart from literacy and numeracy. Many scholars also agree that there are few research-based tools or assessment models for use in education settings that facilitate the assessment of 21st century/transversal competencies. Institutions tend to focus on the measurement of discrete knowledge rather than the more complex competencies of problem solving, critical thinking and communication, which require students to complete complex tasks applied to real-world situations. Moreover, learners need to be given the opportunity to practise and demonstrate these competences across multiple settings and diverse situations (Hipkins *et al.*, 2005) which, in most educational settings, is difficult to achieve

Table 1

Table 2: Key skills and competencies from the UNESCO Transverse Competencies Framework and General Capabilities from the Australian Curriculum
Note: Brackets indicate how many times the term is cited on the Australian Curriculum

given the current timetable structure and subject-siloed learning that occurs in schools.

PISA (OECD) has developed a test for collaborative problem-solving, (Griffin & Care, 2015), and information and communications technologies skills are addressed by ECDL (ECDL, 2016; Claro *et al.*, 2012; Fraillon *et al.*, 2014); however, there is no current mechanism in place to use these on a wide scale in Australian schools or to address the other hard-to-measure competencies. The challenge, then, involves the development of new assessment procedures and instruments that:

a) create opportunities to apply these competences in authentic contexts, and

b) facilitate the collection of evidence across multiples contexts about the learner's application of the competence (Pepper, 2011).

Teacher expertise and proficiency

Another challenge related to the teaching of TvCs is teacher expertise and proficiency. According to the P21 and the EU frameworks, the acquisition of 21st century competences requires specific pedagogic techniques, such as problem-based learning, co-operative learning, experiential learning, and formative assessment as well as a comprehensive application of ICT (cf. Dede, 2000). Gonski supports this by suggesting that teaching and assessing the general capabilities, particularly in an embedded form, is a highly complex task requiring teachers to have a sound understanding of how to teach these capabilities and to interweave their teaching into different learning areas. (2015, p. 40). Therefore, significant changes need to be made in the curriculum, not only to accommodate 21st century competences, but also the new pedagogical practices and assessment procedures required as a result of their inclusion.

Table 3: Challenges to the implementation of Transverse Competencies into the Australian Curriculum

Solutions

Around the world, a number of education systems are offering project and problem-based 'real-world' learning experiences that go beyond the classroom environment, including working with local businesses or facilitating arts and film projects in local communities. These learning experiences are designed to develop enterprising and career management skills that are portable in the future of work and instil in young people the enthusiasm for ongoing learning that will be critical for the future success (OECD, 2014).

For example, Assessment of Transversal Skills 2020 (ATS2020), a project of the European Union, was designed to provide a comprehensive learning model for the enhancement of student transversal skills within curricula and introduce new approaches and innovative tools for the development and assessment of these skills. The project consortium consisted of 17 partners from 11 EU countries, and involved over 1000 teachers.

The project was designed to develop a validated model for student learning and transversal skills assessment based on:

- Age-suitable transversal competences;
- National curricula;
- Student-centred approaches for learning;
- Scaffolding tools for innovative instruction and assessment;
- Use of ePortfolios as an assessment tool to capture evidence of student achievement of TVCs and innovative teaching/learning approaches; and
- Digital environments and tools to tap technology affordances (for example,

ePortfolio, learning analytics, social networks, assessment rubrics).

The project culminated in a final conference in February 2018. There are extensive materials available for review on their website for those interested in the ATS2020 approach (www.ats2020.eu).

So, here is a question for you …

'Why, in a time where there is mounting evidence and pressure to develop these TvCs, are schools removing or not replacing their teacher librarians and resources teachers who are ideally placed to help schools ensure this imperative is addressed?'

Consider this …

- Information literacy is one of the five TvCs identified by UNESCO;
- Teacher librarians (TLs) and resource teachers have been delivering inquiry-based learning programs for decades;
- Formative assessment is an essential part of any information literacy skills program due to the developmental nature of inquiry learning;
- The very nature of the work of TLs requires a collaborative, integrated approach to curriculum, across different learning areas and contexts;
- TLs have extensive knowledge of the curriculum content across all learning areas;
- Inquiry-based learning lends itself to the development of critical and creative thinking skills, use of digital technologies, collaborative learning and many of the other TvCs; and
- The library's physical and virtual learning environments encourage and nurture independent and collaborative learning,

creative thinking, entrepreneurial skills (through Makerspaces, robotics et cetera) and much more.

The TvCs have been identified as reflecting, in particular the *General Capabilities* from the Australian Curriculum, and many TLs have mapped their library programs to these very skills and competencies. The knowledge and experience TLs bring to the table in this challenge should not be ignored but harnessed and the library program could actually become the platform from which a strategic initiative to address these competencies could be launched. The library program could further be harnessed as an incubator for programs that more strategically address the competencies described in this paper.

A call to action

As always, these papers do not have a conclusion, but more offer a call to action. Might I suggest the following:

- The school library community develop its own position paper on TvCs and where we as a profession can support or even champion their development. This must begin with a common understanding of what these competencies are and where they sit within the curriculum and the teaching and learning program;

- Identifying those TvCs we have a natural relationship/affinity with;

- The development of a strategy that shows how the library program can and does support the development of TvCs;

- The development of a curated list of support documents, resources, initiatives and programs to assist in this endeavour, for example, ATS, 2020; and

- The development of a plan for how TLs can engage with their school

communities to begin a dialogue in this area.

A final quote …

'Inquiry approaches are highly dependent on the knowledge and skills of the teachers engaged in trying to implement them. Teachers need time and a community to support their capacity to organise sustained project work. It takes significant pedagogical sophistication to manage extended projects in classrooms so as to maintain a focus on doing with understanding rather than doing for the sake of doing.' Barron and Darling-Hammond (2010).

I would suggest that as information specialists, TLs are well placed to address these challenges which can be extrapolated to include all of the TvCs discussed in this paper — if not as a leader, then most definitely as a catalyst for change. The question is, who will pick up the gauntlet?

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