Australian Journal of Teacher Education

Volume 46 | Issue 8 Article 5

2021

Australian Gifted and Talented Education: An Analysis of Government Policies

Jennifer L. Jolly
University of New South Wales; University of Alabama

Jennifer H. Robins
Baylor University

Australian Gifted and Talented Education: An Analysis of Government Policies

Jennifer L Jolly
University of New South Wales
University of Alabama
Jennifer H Robins
Baylor University

Abstract: Education policy signals the level of support or importance for high-performing or gifted and talented students to school leaders, educators, parents, and other stakeholders. These policies communicate the value or goals of departments of education. Given the importance of education policy, there remains a void in the analysis of gifted and talented education policy, which accounts for less than 1% of the empirical literature. We sought to understand how publicly available individual state and territory departments of education's gifted and talented education policies and guidance documents coalesce with the NAGC (2019) Pre-K–Grade 12 Gifted Education Programming Standards. Although not developed for the Australian context, they provide a common index from which to gauge alignment. Results indicated an uneven approach in both policy and guidance and this imbalance exposes opportunity gaps to address the specific learning needs of this student population.

Background

The educational needs of gifted and talented students[1] have been recognized in Australian states and territories since the late 1970s with the development of policies and guidance for educators, school leaders, and parents. Approximately four decades have elapsed without an analysis of any iteration of these policies in totality. The aim of this paper is to (a) discuss educational policy and Australian gifted and talented education and (b) conduct the first systematic analysis of current gifted and talented education policies, using the National Association for Gifted Children's (NAGC, 2019) Pre-K–Grade 12 Gifted Education Programming Standards (Standards) as a framework for examination.

[1] The terms gifted and talented students, gifted students, high-performing students, and high-potential students are used interchangeably in this paper, reflecting terminology found in the research literature and education policy.

Educational Policy Defined

Easton's (1953) formative definition of policy noted that it "consists of a web of decisions and actions" (p. 13). His definition originally was developed for political systems, centered on a structure that included inputs (demands and supports), outputs (decisions and policies), and feedback loops nested in a particular environment instructed by those in power or authority (Easton, 1957) or illustrated in contemporary policy cycles—analysis, planning, implementation, and evaluation. In many respects, educational systems and policy development continue to reflect the needs and values of those who hold influence and are in power. UNESCO (2013) described education policy as a reflection of a government's goals and priorities as they relate to education. Policy should provide a direction, reflecting the research evidence, gauging the human, physical, and financial resources required, and understanding the political landscape's will to enact the policy. Education policies are also intended to guide and inform educational practice and can "include laws as well as processes and policies that educational organizations, [school sectors], states, and nations put in place and follow to achieve academic goals" (RAND, n.d., para. 1).

Gifted education scholars describe policy as the norms around which finite resources are apportioned based on predetermined purposes and responsibilities (Forster, 1993, 2005; Plucker et al., 2017; Watters & Diezmann, 2008) and the presence or absence of gifted education policy indicates the level of support for high-performing and gifted learners (Kronborg, 2018; Plucker et al., 2015; Slater, 2018). Policy is also used to frame specific learning needs and interventions for gifted and talented and high-performing students (Long et al., 2015). For example, without codifying acceleration in policy, educators have fewer tools to implement accelerative options. In addition, parents and other stakeholders have less rigorous means to advocate for their children's learning needs (Assouline et al., 2015; Rinn et al., 2020). Australian scholars led by Miraca Gross have played an important role in acceleration research, particularly radical acceleration (Colangelo et al., 2004; Gross, 1993, 1999, 2006). With more than 50 years of research findings to support accelerative options[2], and their correlation to positive academic and affective student outcomes (Gross et al., 2011; Saiying et al., 2016), policies supporting acceleration remain irregular across Australian school systems and their implementation even less so (Kronborg, 2018; Kronborg, & Cornejo, 2018).

As an extension of UNESCO's (2013) discussion of policy priority, Gallagher (2008) described *hot* and *cool* policies. Hot policies are direct countermeasures to an immediate real or perceived problem, whereas cool policies respond to a recognized issue that can be deferred and thus do not garner the resources or attention to properly address the deficiencies (Gallagher, 2008). Educational policy is also a social policy, which communicates and embodies the public needs that are valued and contextually dependent (Gallagher, 2015). For the purposes of this analysis, gifted education policy embodies the goals and objectives valued (e.g., cultural, social, institutional) by those in power at a particular point in time with resource allocation distributed on the perceived value or need.

Finally, Bell and Stevenson (2006) argued that the state is the central actor in educational policy development, which as outlined in the Australian Constitution, gives states and territories the responsibility for school registration and regulation (Australian Government Department of Education, Skills & Development, n.d.). Despite the decentralised approach to education as

[2] Vasilevska and Merrotsy (2011) assembled an annotated bibliography focused on Australian acceleration research that includes a range of publications (i.e., honours thesis, dissertations, book chapters, journal articles).

indicated by the Constitution, the federal government has moved to greater centralisation and standardisation of educational policies and approaches (Savage, 2021). The movement to centralisation does not explicitly include gifted and talented learners, thus state-focused responsibility for this student population underscores the importance of Australian state and territory gifted education policies in this study.

Prevalence of Gifted Education Policy Research

Analyses or evaluation of gifted education policy is necessary, as these policies provide the framework and guidance to schools and school leaders, eventually impacting the services and programming students receive (Plucker et al., 2017). Despite the importance of policy research and the integral role educational policy plays in communicating the priorities of federal, state, and local systems that guide and alter educational practice, few scholarly investigations have been undertaken by gifted education scholars (Gallagher, 2002; Plucker et al., 2017). Dai et al. (2011) found that between 1998 and 2010, only 18 of 1,234 (i.e., .01%) of empirical studies focused on public policy. Systematic analyses of gifted education policies in the Australian context are essentially missing from the research literature. Lubric and Jolly (2019) found that between 1982 and 2017, only two published empirical investigations (i.e., Forster, 1993; Long et al., 2015) focused on policy issues but neither included all Australian state and territories in their analyses. Long et al.'s (2015) study explored the impact of New South Wales' (NSW) gifted and talented policies on practices in 10 secondary government schools. Their qualitative study revealed that the existence of state- and school-level policies provided greater programmatic opportunities for gifted students. The most recent policy analyses in this context focused on the gifted education policies of New South Wales and Victoria (Phillipson & Ziegler, 2020), and the policy and guidance for identifying gifted and talented students (Slater, 2018). Policy overviews are greater in number (see Chessman, 2005; Forster, 2005; Kronborg & Cornejo-Araya, 2018; Larson, 1986; Robinson, 1992), but empirically based policy research remains obscure and negligible.

Australian Gifted and Talented Education

Approximately 260,000 gifted and talented students attend government schools, which is 10% of the 2.6 million students enrolled (Australian Bureau of Statistics, 2020). Only an estimate is available as no federal, state, or territory's department of education provides an accounting of this student population. The inexact estimation is largely based on Gagné's Differentiated Model of Giftedness and Talent (DMGT; see Gagné, 2015, for a more detailed discussion), which is referenced in the majority of Australian gifted and talented policies and designates giftedness to the top 10% of students when compared to their peers (Phillipson & Ziegler, 2020; Walsh & Jolly, 2017).

Provisions for high-performing students have been available for nearly 100 years, beginning in 1932 when New South Wales first offered Opportunity "C" (OC) for Years 5 and 6. First established in just four schools, these classes expanded throughout the state to more than 70 classrooms (Kronborg, 2002; Walsh & Jolly, 2018). Other states have followed suit, offering programming and services for gifted and talented students that include self-contained classrooms similar to the OC classes, selective schools, online gifted programming for rural and remote

students, and—for the majority of Australian children who perform above the norm—differentiated instruction in heterogeneously grouped classrooms (also referred to as high-potential, high-performance; Henderson & Jarvis, 2016). Few Australian universities offer preservice teachers' instruction in the needs of high-ability and gifted students (Fraser-Seeto et al., 2013; Walsh & Jolly, 2018), and in-service or professional learning opportunities are inconsistent throughout the states and territories (Peters & Jolly, 2018). In addition, the wide range of student abilities in heterogeneous grouped classrooms provide a challenging environment for effective differentiation to occur. When teachers do differentiate, they tend to concentrate their efforts on those students who have yet to meet minimum standards or benchmarks, wrongly believing that gifted students will get by on their own (Freedberg et al., 2019; Jarvis & Henderson, 2014; Jolly, 2015; Walsh & Jolly, 2018; Westberg et al., 1993).

The field of gifted education in Australia is still quite young in comparison to its North American and United Kingdom counterparts (Moltzen et al., 2018). Formal policies addressing the needs of gifted and talented students only emerged in the last several decades of the 20th century. South Australia introduced the first policy for gifted and talented students in 1979, with the remaining states and territories having some measure of policy or guidance in place by 1983. These policies and guidance have been updated periodically, some reflecting radically different approaches (for an illustrative example, see the 2016 and 2020 iterations of South Australian gifted education policy; Jolly & Chessman, 2017; Jolly & Jarvis, 2018; Larsson, 1986).

With the recognition of gifted and talented students' needs by states and territories, the federal government also began to investigate the needs of gifted students and resources available. Two federal parliamentary inquiries regarding gifted education (1988 and 2001) and a 2012 state parliamentary inquiry (i.e., Victoria) highlighted significant and continued deficiencies in meeting the educational needs of this student population with no appreciable changes resulting from the federal and state government inquiries (Commonwealth of Australia, 1988; Education and Training Committee, 2012; Senate References Committee, 2001). Despite nearly universal agreement in each of these separate inquiries among politicians and government officials, a federal mandate for gifted and talented education still remains nonexistent in Australia.

Australian education institutions, advocacy groups, stakeholders, and individuals that work with gifted students and their families rely on an amalgam of policies and recommendations to justify and necessitate gifted and talented education provisions. These include the UN Rights of Child (Article 29), the Melbourne Declaration on Education Goals for Young Australians (Goal 1), and Gonski 2.0 Review (Recommendations 1, 6, and 10). Building on the Melbourne Declaration, educational ministers signed onto the Alice Springs (Mparntwe) Education Declaration in 2019, an educational framework for Australian students in the 21st century (Education Council, 2019). For example, Goal 1 of the Melbourne Declaration highlights the need to "ensure that young Australians of all backgrounds are supported to achieve their full potential" (p. 5). High-performing and gifted students rely on the inclusive language of "all students" in many of these documents, providing a rationale or point of entry for school sectors to offer appropriate programming and services. Thus, state and territory policy and guidance documents are integral in bringing a cohesive and systematic approach to the education of gifted and talented students to school personnel and administrators, parents, and other stakeholders. Policy reflects a state or territory's rules and laws governing gifted and talented education, while guidance provides advice and direction to either support the policy or stands in as pseudo-policy but lacking the authority of actual policy.

No department of education has a stand-alone unit responsible for gifted and talented education, and these documents reveal a wide-range of programming and services in order to meet students' academic and affective needs in a variety of environments (Jarvis & Henderson, 2012; Kronborg, 2018; Walsh & Jolly, 2018; Wood & Zundans-Fraser, 2013). The availability and quality of these provisions is also exceedingly capricious due to a host of variables including robustness of policy and guidance content, lack of accountability, local school leadership, teacher knowledge and pedagogical practices, funding, and other types of resource allocation (Kronborg, 2002, 2018; Moltzen et al., 2018). There is also a predictability in the unpredictable intensification and decline in the interest and response to gifted students and their educational needs in Australia[3]. This variance and inequity can lead to uneven identification, disparate programming and services, and inconsistent or a lack of transparency in information offered to families or carers and most often disproportionately impact students from underserved or vulnerable backgrounds (Brown & Chaffey, 1999; Chaffey, 2008; Plucker et al., 2017).

In 1985, the Australian Association for the Education of the Gifted and Talented (AAEGT) was established, representing a broad range of individuals and interests involved in the education of gifted and talented students who seek to promote and advocate for appropriate educational experiences. For example, AAEGT members often participate in the consultation process for federal gifted education inquiries and individual state policy development. The AAEGT also publishes a scholarly peer-reviewed journal, the *Australasian Journal of Gifted Education* and aids in the dissemination of appropriate programming, services, and practices (AAEGT, n.d.; Kronborg & Cornejo-Araya, 2018).

Programming and Service Opportunities for Gifted and Talented Students

Gifted education's inclusion in wider educational policy development is opaque. An increasing level of funding from the federal government to schools based on need and tied to national reforms and performance indicators joins a federal/state focus on "high quality and equitable education for all students" (Australian Government Department of Education, Skills & Development, n.d., para. 19). For example, the first outcome of national measures of the National Education Reform Agreement (Council of Australian Governments, 2018) relies on evidence from top-performing students on international indicators (e.g., Programme for International Student Assessment [PISA], Trends in International Mathematics and Science Study [TIMMS]). This presents an opportunity to extend advanced learning opportunities to those students who have the potential or already evidence ability in a specific domain (e.g., math, science, music).

The Australian Curriculum, Accountability, and Reporting Authority Act passed in 2008 established ACARA, and its portfolio includes the Australian Curriculum, the National Assessment Program—Numeracy and Literacy (NAPLAN), and MySchool Reporting, strengthening the link among federal and state and territories educational departments and school sectors (Savage & O'Connor, 2015; Wyn et al., 2014). However, these bodies provide sparse presentation of key gifted education strategies and approaches, emphasising the need for a stronger policies and guidance from states and territories.

A review of ACARA's resources revealed cursory descriptions of the learning needs of gifted and talented students, overviews of personalized learning, and a general discussion about

[3] This pattern is not unique to Australia and is often observed in the United States and United Kingdom.

gifted and talented students (ACARA, n.d.). Curricular examples regarding differentiation offered in Illustrative of Practices[4] reflect contrasting approaches to differentiation. *Through Growth to Achievement: The Report of The Review to Achieve Educational Excellence in Australian Schools* or better known as *Gonski 2.0* spotlighted individual student growth (Department of Education and Training, 2018). ACARA's Learning Progressions illustrate the learning skills progression in math and reading, providing a developmental sequence as to how knowledge and skills should develop in order to show a student's growth. The effectiveness of Learning Progressions' use in planning for high-performing students has not been determined. The Progressions have also received a mixed reception from educators (ACARA, 2018).

The Australian Institute for Teaching and School Leadership (AITSL) provides several tools and foci to address the learning needs of gifted students. These include particular Australian Professional Standards for Teachers (APST) includes Standard 1.5 "differentiate teaching to meet the specific learning needs of students across the full range of abilities" (AITSL, 2011, p. 11), which instructs that pedagogy and curriculum be adjusted to meet the needs of all learners, including those students with advanced abilities. In addition, Standard 5.4 "demonstrate the capacity to interpret student assessment data to evaluate student learning and modify teaching practices" (AITSL, 2011, p. 19), requires teachers' instructional decisions be based on students' academic needs as evidenced through data assessment. However, no direct or explicit reference to gifted students learning needs are made in the Standards, so differentiating for this student population is left to the discretion of the classroom teacher (Henderson & Jarvis, 2016).

These national institutions both implicitly and explicitly convey educational priorities, content, knowledge, and skills that inform education policies across states and territories, including those related to gifted and talented education. Still, the absence of a clear federal articulation and mandate for gifted and talented education and students is essential. States and territories' policies and guidance for implementation become the anchor for gifted and talented programming and services in government schools throughout Australia.

Gifted Programming Standards

Field standards offer greater transparency and direction in the collective knowing of what is understood about gifted and talented students and how this translates to school settings (Adams, 2020; Rao & Meo, 2016). Evidence for the use of content standards suggested that these standards influence instruction, including instructional alignment to the standards (Polikoff, 2012), teachers' capacity to implement standards (Cobb & Jackson, 2011), and the standards' relationship to assessments and the quality of the assessment (Schmidt & Houang, 2012). Research findings on U.S. state and national teaching standards are mixed in regard to student outcomes and achievement. Factors such as teaching context, subject area (particularly mathematics), and grade level are prevalent in shifting student outcomes (Burroughs et al., 2019; Goe, 2007). These results provide some insight as to how the NAGC (2019) Standards can impact instruction (Corwith & Johnsen, 2020).

The only gifted education standards worldwide are NAGC's (2019) Pre-K–Grade 12 Gifted Education Programming Standards. Originally developed in 1998, they were revised in

[4] Illustrative Practices example can be found at https://www.australiancurriculum.edu.au/resources/student-diversity/illustrations-of-practice/.

2010 and 2019 (used for the purposes of this study) to bring rigor, cohesiveness, professionalism, and/or alignment to educational practice and provisions to an educational landscape, often characterized by inequities and disparities for gifted and talented students. The Standards "are grounded in theory, research, and practice paradigms, [and] they provide an important base for all efforts on behalf of gifted learners at all stages of development" (NAGC, 2019, p. 1). In addition, the Standards offer a common index and framework from which policies, rules, and procedures can be created (Corwith & Johnsen, 2020).

The most recent revision of the Standards incorporates new research findings and best practices as well as a greater alignment to principles of psychology of teaching and learning. Also central to the revision is the focus on diversity, equity, and dynamism of giftedness by building relationships outside of gifted education (Corwith & Johnsen, 2020; Cotabish et al., 2020). The included student outcomes are intended to guide policy makers and school personnel to reflect on how they implement evidence-based practices in response to student need (NAGC, 2019). The standards contain six categories supported by corresponding student outcomes and appropriate evidence-based practices. The standards are (1) learning and development, (2) assessment, (3) curriculum planning and instruction, (4) learning environments, (5) programing, and (6) professional learning.

The Standards also serve as a guide to advance, analyze, and evaluate gifted education policies and inform policy development and evaluation in the United States and throughout the world. As they are the only gifted programming standards in existence, their application to additional contexts and content areas in relation to evaluate best practices in gifted education is evidenced in the literature (see Alghawi, 2017; Alodat & Aloumani, 2019; Brown et al., 2006; Callahan et al., 2017; Periathiravadi & Rinn, 2012; Reid, 2015; Watters & Diezmann, 2008). Given the diversity of context and content to which the Standards have been previously applied, their use in the Australian context is not unwarranted. In each of the Standards, the language of talent development is also included, which reflects Gagné's (2015) DMGT, recognized as a talent development model throughout much of Australia (Henderson & Jarvis, 2016; Walsh & Jolly, 2017).

The appropriateness of these standards to evaluate Australian policy and guidance documents is also based on Australia's continuing reliance and educational borrowing of research findings and best practices from the United States to inform its own research, policy, and practices used in schools (Burdett & O'Donnell, 2016; Jolly & Jarvis, 2018; Lubric & Jolly, 2018; Spreen, 2004; Walsh & Jolly, 2017). This is a symptom of a larger issue concerning the Australian gifted education research community, which lacks a critical capacity (not to be confused with lack of ability) of gifted education researchers and a "deliberate coordination or reference to a coherent research agenda" (Jarvis & Jolly, 2018, p. 2).

Research-based practices that have origins outside of Australia are also evidenced throughout state and territory policies and supporting documents identified for this study. One of the most illustrative examples of this is the NSW Department of Education's Centre for Education and Statistics and Evaluation's guidance document, *Revisiting Gifted Education,* prepared for the High Performance unit (which includes gifted and talented students). North and Griffiths' (2019) 32-page review of gifted education literature includes a 15-page review and 11 pages of references, which is characterized as "the best available research evidence on the education of gifted and high potential students" (p. 4). Of the 376 included references, 68% (*n* =

256) are from the United States, 19% (n = 71) are from Australia, and 13% (n = 49) represent a handful of countries throughout the rest of the world, particularly those from European contexts[5]

Purpose of the Study

Nearly four decades after the implementation of the first gifted and talented education state and territory policies, a collective and comprehensive analysis of Australian gifted and talented education policies is absent. The following research question guided this analysis:

- How do publicly available individual state and territory departments of education's gifted and talented education policies and guidance documents align with the NAGC (2019) Pre-K–Grade 12 Gifted Education Programming Standards?

Method

Researchers' Background

The researchers for this study have more than 40 years of combined experience in gifted education in the United States and Australia. This includes being in gifted and talented programs as students while in primary and secondary school, teaching in primary and secondary classrooms, and researching and teaching in university gifted education programs.

Data Identification and Collection

The main units of data for this study included the publicly available gifted education policies and guidance documents found on state and territory departments of education websites (i.e., Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia). Publicly available documents are the outward facing policies and guidance available to parents, educators, and stakeholders, which provide democratic access and do not require "insider" knowledge or access (Ailwood et al., 2011; Evans & Radina, 2014). A search of each department's website for policies and guiding documents as they were related to gifted and talented education occurred from March 1 to April 1, 2020 (see the Appendix for a document inventory). Researchers separately conducted the search to aid in the limitation of missing relevant webpages, policies, and supporting guidance documents. Researchers convened to compare the types of information found. Items were most often located on the landing page for gifted education within a department's website. Other links were provided to specific programs, schools, or identification procedures offered by the state or territory. We followed these links until the connection to gifted education ended or duplicated. Document and policy finding also was triangulated by using the search engine for each department of education. The key words were "differentiation," "gifted education policy," "gifted education," "gifted identification," "gifted services," "selective schools," "high ability," "high performance [ing]," "inclusion," "special education," and "gifted education support."

Coding Procedures

[5] Eleven percent of the articles cited from the United States overlap with the literature used to develop the NAGC Standards.

Using a deductive coding procedure, the already established codes included each of the six NAGC (2019) Standards and 35 corresponding student outcomes (Patton, 2014). First, starting alphabetically with the Australian Capital Territory and ending with Western Australia, researchers independently read all information and documents included in the Appendix, recording their initial notes. Second, each researcher categorized information presented as either policy or guidance (as this was not immediately evident at particular data points). The researchers met to compare their respective categorization of each document. Where differences occurred, researchers discussed the rationale for their categorization and consulted the document or URL until consensus was achieved. Third, policies and guidance documents were then coded using each of the six NAGC Standards and corresponding 35 student outcomes as predetermined codes. Each researcher independently and systematically coded each state's and territory's available information, documents, and policies. Beginning with Standard 1 and its corresponding 6 student outcomes, each document/URL was examined (Standards 6.1 and 6.2 were eliminated from review due to the dependence on U.S. education legislation, policy, and practice). Lastly, researchers met to discuss their coding results and rationale for coding decisions. States and territories were credited with covering a key component of a Standard if language was included that addressed the spirit and intent of the Standard. To establish trustworthiness, at each step we used the process described by Miles and Huberman's (1994) formula to determine reliability (reliability = agreement/agreement + disagreement). An average 93% reconciliation rate was obtained across the coding procedures.

Results

We analyzed the gifted education policies and guidance documents of Australia's six states and two territories (i.e., Australian Capital Territory [ACT], New South Wales [NSW], Northern Territory [NT], Queensland [QLD], South Australia [SA], Tasmania [TAS], Victoria [VIC], Western Australia [WA]). Patterns emerged among the states and territories in terms of how they aligned with the NAGC Standards in both policy and guidance documents; however, these patterns also revealed large voids, highlighting the discrepancies in the gifted education policies and guidance documents throughout Australia.

After gathering the data, we synthesized our findings in two ways. First, we looked at the number of NAGC Standards that were represented in the policy and guidance documents. The six states and two territories were assigned an alignment total for the standards found in the policy documents and an alignment total for the standards found in guidance documents. They were given credit in this count if there was language included that pertained to the Student Outcome under review. For our purposes, credit was given even if the language in the document was not detailed or clearly stated; a state or territory received either full credit or no credit based on whether its document addressed the Student Outcome being examined (see Table 1).

Standard	Australian Capital Territory		New South Wales		Northern Territory		Queensland		South Australia		Tasmania		Victoria		Western Australia	
	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G
1.1	X (1c)	X (1a; 1l)	X(3a)	X(3g)	X (2a)	X (2b)	X(4b)	X(4h; 4i)		X (5a)		X(6a; 6b; 6c		X(7a)	X (8a/b)	
1.2			X(3a)	X(3d)		X (2b				X (5a)		X(6a; 6b				
1.3	X (1c)	X (1k)	X(3a)	X(3g)		X				X (5a)		X(6a; 6b; 6c)		X(7a)		
1.4	X (1c)	X (1l)	X(3a)	X(3g)		X (2b				X (5a)		X(6a; 6b		X(7f)	X (8a/b)	X(8f)
1.5	X (1c)	X (1g;1k)	X(3a)	X(3g; 3i)		X(2b		X(4h; 4i)				X(6a; 6b		X(7a)	X (8a/b)	
1.6		X (1q)				X	X(4b)			X (5a)						
2.1	X (1c)	X (1a)	X(3a)	X(3j)		X (2b; 2f; 2m; 2n)	X (4b)	X(4h; 4i)				X(6b)		X(7c; 7d)	X (8a/b)	
2.2	X (1c)	X (1f)	X(3a)	X(3i)		X (2b; 2m)		X(4h; 4i)				X(6b)		X(7d)	X (8a/b)	
2.3	X (1c)	X (1f;1j)		X(3i; 3s)		X (2b; 2f; 2h; 2g)	X(4b)							X(7d)	X (8a/b)	X
2.4			X(3a)	X(3i)		X (2b)	X(4b)	X(4h; 4i)						X(7a)	X (8a/b)	
2.5								X(4h; 4i)								X(8i)
3.1	X (1c)	X (1j)	X(3a)	X(3d; 3i; 3j)		X (2b; 2m; 2o)	X(4b)					X(6c)		X(7a; 7b; 7e)	X (8a/b)	X(8c; 8f; 8i)
3.2	X (1c)	X (1g;1j)	X(3a)	X(3j)		X (2b)		X(4d)								
3.3			X(3a)	X(3i)	X(2a)	X (2b)	X(4b)	X(4h; 4i)							X (8a/b)	
3.4	X (1c)	X (1l; 1m;1n)	X(3a)	X(3i; 3j; 3s)		X (2b; 2o)	X(4b)	X(4e)		X (5a)		X(6c)		X(7c; 7e)		
3.5				X(3i;n 3j)				X(4e;4h						X(7e)		
3.6			X(3a)	X(3g)		X (2b)		X(4e; 4h;4i)				X(6b; 6c)		X(7a; 7e)		X(8c; 8f
4.1		X (1g;1l)		X(3j)	X (2a)											

4.2		X (1g)		X(3i; 3j; 3n; 3s)							X (6b; 6c; 6d)			X (8a/b)	X(8f; 8i)
4.3			X(3a)	X(3i; 3j)											X(8i)
4.4						X (2b)							X(7c)		
4.5															X(8g)
5.1	X(1c)	X (1b; 1k; 1l; 1m; 1n)	X(3a)	X(3j; 3n; 3s)		X (2b; 2i; 2m; 2n)	X(4b)	X(4h; 4i)			X(6b; 6c)		X(7a; 7b)	X (8a/b)	X(8c; 8f)
5.2				X(3d; 3g; 3j)			X(4b)	X(4h; 4i)		X (5a)	X(6b				
5.3	X(1c)	X (1q)								X (5a)					
5.4	X(1c)	X (1l; 1m; 1n: 1o;	X(3a; 3g)	X(3g; 3l)		X(2b)					X(6b)		X(7b; 7f)		X(8f)
5.5						X(2b)	X(4b)								
5.6	X (1c)	X (1b; 1k; 1m, 1n)	X(3a)			X(2b; 2i)	X(4b)	X(4h; 4i)					X(7b)		
5.7				X(3d)			X(4c)	X(4d)							
5.8			X(3a)	X(3g; 3s)			X(4c)	X(4d)						X (8a/b)	
6.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6.3				X(3d; 3g; 3h; 3m)		X(2b)	X(4c)	X(4d)					X(7c		
6.4	X(1c)		X(3a)	X(3g; 3h; 3m)			X(4c)				X(6b)				
6.5			X(3a)			X(2b)	X(4b; 4c)				X				

Note. P = policy; G = guidance documents.

Table 1: Australian States and Territories Alignment with the NAGC Standards

Second, we designated four categories for states' and territories' policy and guidance documents based on their level of alignment to the NAGC Standards: (a) very strong alignment, (b) moderate alignment, (c) minimal alignment, and (d) no alignment. Because each NAGC Standard has a different number of Student Outcomes (i.e., five, six, or eight), we developed a scale for each, ranging from no alignment to very strong alignment[6] (see Table 2).

Alignment level	Number of Student Outcomes in the NAGC Standard			
	Three Student Outcomes NAGC Standard 6[a]	Five Student Outcomes NAGC Standards 2, 4	Six Student Outcomes NAGC Standards 1, 3	Eight Student Outcomes NAGC Standard 5
Very strong alignment	3	4–5	5–6	7–8
Moderate alignment	2	2–3	3–4	4–6
Minimal alignment	1	1	1–2	1–3
No alignment	0	0	0	0

[a] Standard 6 has a total of five student outcomes; however, we removed Standards 6.1 and 6.2 from review due to the dependence on U.S. education legislation, policy, and practices. Therefore, we only looked at Standards 6.3, 6.4, and 6.5 so states and territories were not unfairly penalized.

Table 2 Alignment Level Based on Student Outcomes

Gifted Education Programming Standard 1: Learning and Development

Standard 1 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on learning and development. Table 1 shows how each Australian state's and territory's policy and guidance documents address Student Outcomes 1.1–1.6 under Standard 1.

For Standard 1, we reviewed each state's and territory's policy documents. Within the policy documents, NSW very strongly aligned, ACT and WA had moderate alignment, NT and QLD were minimally aligned, and SA, TAS, and VIC had no alignment with the NAGC Standards. Within the guidance documents, there was more alignment with the NAGC Standards: ACT, NSW, NT, SA, TAS, and VIC were very strongly aligned; WA had moderate alignment; and QLD and WA had minimal alignment.

[6] For example, very strong alignment could range from 80% to 100% (Standards 2, 4, and 6), 83.3% to 100% (Standards 1 and 3), and 87.5% to 100% (Standard 5), depending on the number of Student Outcomes met.

Gifted Education Programming Standard 2: Assessment

Standard 2 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on assessment. Table 1 shows how each Australian state's and territory's policy and guidance documents address Student Outcomes 2.1–2.5 under Standard 2.

For Standard 2, within the policy documents, WA very strongly aligned; ACT, NSW, and QLD had moderate alignment; NT, SA, TAS, and VIC had no alignment with the NAGC Standards. Within the guidance documents, again there was more alignment with the NAGC Standards: NSW, NT, QLD, and VIC were very strongly aligned; ACT, TAS, and WA had moderate alignment; and SA had no alignment.

Gifted Education Programming Standard 3: Curriculum Planning and Instruction

Standard 3 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on curriculum planning and instruction for each Australian state's and territory's policy and guidance documents addressed in Student Outcomes 3.1–3.6 under Standard 3 (see Table 1).

Within the policy documents, NSW very strongly aligned, ACT and QLD had moderate alignment, NT and WA had minimal alignment, and SA, TAS, and VIC had no alignment with the NAGC Standards. Within the guidance documents, states and territories showed a range of alignment: NSW, NT, and QLD were very strongly aligned; ACT, TAS, and VIC had moderate alignment; and SA and WA had minimal alignment.

Gifted Education Programming Standard 4: Learning Environments

Standard 4 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on learning environments. Table 1 shows how each Australian state's and territory's policy and guidance documents address Student Outcomes 4.1–4.5 under Standard 4.

Focusing on Standard 4, within the policy documents, the states and territories either minimally aligned or had no alignment: NSW, NT, and NA had minimal alignment, and ACT, QLD, SA, TAS, and VIC were not aligned with the NAGC Standards. Within the guidance documents, there was a larger range of alignment with the NAGC Standards: ACT, NSW, and NA were moderately aligned; NT, TAS, and VIC had minimal alignment; and QLD and SA had no alignment.

Gifted Education Programming Standard 5: Programming

Standard 5 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on programming. Table 1 shows how each Australian state's and territory's policy and guidance documents address Student Outcomes 5.1–5.8 under Standard 5.

Looking at Standard 5, within the policy documents, none of the states and territories were very aligned with the NAGC Standards, and half had no alignment. ACT, NSW, and QLD had moderate alignment; WA had minimal alignment; and NT, SA, TAS, and VIC were not aligned with the NAGC Standards. Within the guidance documents, the states and territories had

either moderate or minimal alignment with the NAGC Standards: ACT, NSW, NT, and QLD were moderately aligned; SA, TAS, VIC, and WA had minimal alignment.

Gifted Education Programming Standard 6: Professional Learning

Standard 6 of the 2019 NAGC Pre-K–Grade 12 Gifted Education Programming Standards focuses on professional learning. Table 1 shows how each Australian state's and territory's policy and guidance documents address Student Outcomes 6.1–6.5 under Standard 6.

Focusing on Standard 6, within the policy documents, NSW, and QLD had moderate alignment, ACT minimally aligned, and NT, SA, TAS, VIC, and WT had no alignment with the NAGC Standards. Within the guidance documents, NSW and NT were moderately aligned; QLD, TAS, and VIC had minimal alignment; and ACT, SA, and WT had no alignment with the NAGC Standards.

Discussion

Policies help to create the infrastructure or frame from which the needs of students can be addressed (Brown & Garland, 2015). Policies also inform programming and services for students and can outline the types of educational experiences for gifted and talented students who have been historically disregarded or denied appropriate educational opportunities (Commonwealth of Australia, 1988; Education and Training Committee, 2012; Senate References Committee, 2001). NAGC's (2019) Pre-K–Grade 12 Gifted Education Programming Standards, built on empirical findings from both the field of education and psychological science, have been translated to student outcomes for gifted and talented students. Although not developed for the Australian context, they have provided a common index from which to gauge the alignment of current Australian policies and guidance as reflected by states' and territories' departments of education. These policies communicate the value or priority gifted education holds in each state or territory with a through line to individual schools.

To use Gallagher's (2008) language, are policies analysed for this study hot or cool? Collectively, these policies and guidance communicate a *cool* response to the learning needs of gifted and high-performing learners. Policy makers and other stakeholders recognise the learning needs of top performing students, particularly related in their contribution to Australia's performance on international measures such as PISA and TIMMS (Council of Australian Governments, 2018), however, a national response (e.g., lack of national mandate for gifted education) and state and territorial policies do not provide the immediate measures to respond to these identified issues. Only two 2019 Bilateral Agreement Progress Reports (NSW and ACT) in response to the National Education Reform Agreement include language to address the needs of top performing students (NSW and ACT's policies and guidance were also moderately and strongly aligned to the Standards) (Council of Australian Governments, 2019a, 2019b). However, these are not new or novel issues. Since 1988, national and state bodies have conducted inquiries and issued subsequent reports highlighting the educational needs and deficiencies of this particular student population with few appreciable differences in programming and services.

By using the Standards in the coding process, policies and guidance documents revealed a continuum of intensity alignment in relation to the six Standards. The lack of alignment

exposed an incongruous set of policies and guidance across states and territories (see Tables 3 and 4). The ACT, NSW, and QLD provided strong alignment to the Standards in both policy and guidance. WA evidences moderate alignment in policy and guidance. Overall, the NT, TAS, and VIC lacked policy but provided moderate to strong alignment with Standards by the way of guidance documents. SA is the great outlier in this study. Policy is nonexistent, and almost no guidance is provided, thus showing a very weak to no alignment to any of the Standards. Prior to 2018, SA offered a more robust policy and greater guidance (to access the former policy, see https://silo.tips/download/gifted-and-talented-children-and-students). This unevenness is not entirely unexpected as Jarvis and Henderson (2014) observed that although the majority of states and territories agreed upon the top 10% as the cut-off score for identification, but little attention was given to "a cohesive and coordinated approach to gifted education throughout Australia" (Moltzen et al., 2018, p. 9).

	NAGC Standards and Number of Student Outcomes					
	NAGC Standard 1	NAGC Standard 2	NAGC Standard 3	NAGC Standard 4	NAGC Standard 5	NAGC Standard 6[a]
Alignment level	Six Student Outcomes	Five Student Outcomes	Six Student Outcomes	Five Student Outcomes	Eight Student Outcomes	Three Student Outcomes
Very strong alignment	5–6 New South Wales	4–5 Western Australia	5–6 New South Wales	4–5	7–8	3 Queensland
Moderate alignment	3–4 Australian Capital Territory Western Australia	2–3 Australian Capital Territory New South Wales Queensland	3–4 Australian Capital Territory Queensland	2–3	4–6 Australian Capital Territory New South Wales Queensland	2 New South Wales
Minimal alignment	1–2 Northern Territory Queensland	1	1–2 Northern Territory Western Australia	1 New South Wales Northern Territory Western Australia	1–3 Western Australia	1 Australian Capital Territory
No alignment	0 South Australia Tasmania Victoria	0 Northern Territory South Australia Tasmania Victoria	0 South Australia Tasmania Victoria	0 Australian Capital Territory Queensland South Australia Tasmania Victoria	0 Northern Territory South Australia Tasmania Victoria	0 Northern Territory South Australia Tasmania Victoria Western Australia

[a] Standard 6 has a total of five student outcomes; however, we removed Standards 6.1 and 6.2 from review due to the dependence on U.S. education legislation, policy, and practices. Therefore, we only looked at Standards 6.3, 6.4, and 6.5 so states and territories were not unfairly penalized

Table 3: States' and Territories' Policy Documents' Alignment Level Based on NAGC Standard

	NAGC Standards and Number of Student Outcomes					
	NAGC Standard 1	NAGC Standard 2	NAGC Standard 3	NAGC Standard 4	NAGC Standard 5	NAGC Standard 6[a]
Alignment level	Six Student Outcomes	Five Student Outcomes	Six Student Outcomes	Five Student Outcomes	Eight Student Outcomes	Three Student Outcomes
Very strong alignment	5–6 Australian Capital Territory New South Wales Northern Territory South Australia Tasmania	4–5 New South Wales Northern Territory Queensland Victoria	5–6 New South Wales Northern Territory Queensland	4–5	7–8	3
Moderate alignment	3–4 Victoria	2–3 Australian Capital Territory Tasmania Western Australia	3–4 Australian Capital Territory Tasmania Victoria	2–3 Australian Capital Territory New South Wales Western Australia	4–6 Australian Capital Territory New South Wales Northern Territory Queensland	2 New South Wales Northern Territory Tasmania
Minimal alignment	1–2 Queensland Western Australia	1	1–2 South Australia Western Australia	1 Northern Territory Tasmania Victoria	1–3 South Australia Tasmania Western Australia Victoria	1 Queensland Victoria
No alignment	0	0 South Australia	0	0 Queensland South Australia	0	0 Australian Capital Territory South Australia Western Australia

[a] Standard 6 has a total of five student outcomes; however, we removed Standards 6.1 and 6.2 from review due to the dependence on U.S. education legislation, policy, and practices. Therefore, we only looked at Standards 6.3, 6.4, and 6.5 so states and territories were not unfairly penalized.

Table 4: States' and Territories' Guidance Documents' Alignment Level Based on NAGC Standard

Differentiation is promoted as an instructional strategy to address the learning needs of all students in Australia and applied in general, gifted, and special education settings (Mills et al., 2014). Predictably, the majority of policy and guidance reflected this mainstream adoption of differentiation[7] and illustrated strong to moderate alignment for Standards 1, 2, and 3 by the majority of states in policy and guidance. These Standards contain elements related to differentiation, supported by the gifted education research literature, and reflected in AITSL Standard 1.5 and ACARA's curriculum documents (ACARA, n.d.; AITSL, 2011; Handa, 2019; Kaplan, 2019; VanTassel-Baska, 2019).

However, limited evidence was provided for the alignment to Standard 4: Learning Environments and Standard 6: Professional Learning. Standard 4 focuses on cognitive, psychosocial, and social-emotional issues as related to ability (e.g., growth of personal competencies) and social justice (e.g., self and others) and important components in the trajectory of talent development (Gagné, 2015; Subotnik et al., 2011). For example, self-advocacy is noted as personal competence in Standard 4 and Queensland recognises self-advocacy as an integral skill but for students with disability, by engaging an outside partner to provide support to parents and their children (Queensland Department of Education, 2021), but similar language is absent from guidance for gifted and talented students. This is tangential to the lack of alignment to Standard 6. If educators responsible for setting policy and guidance are unknowledgeable of any particular student need, there is not an expectation to see this reflected in policy or practice. As the needs of high-performing and gifted learners are included in so few preservice education programs, professional learning is key for teachers and school leaders. Required professional learning hours to maintain accreditation ranges from 20 to 100 hours (determined per state) and teachers often select professional learning based on experiences that better informs and supports their work in the classroom (Ping et al., 2018). In heterogeneously grouped classrooms, the needs of gifted students are regularly deprioritized (Kronborg, 2018; Long et al., 2015), so the priority for professional learning focused on gifted students is often analogous.

All policies and guidance documents reviewed offered few evaluative mechanisms for programming accountability (Standard 5). This supports previous findings from a study of SA practices in gifted education where few evaluative practices were used (Jarvis & Henderson, 2012). This lack of evaluative policy or guidance communicates to schools that school-level accountability holds little value to those in departments of education in regard to carrying out gifted and talented policy, programming, and services (Plucker et al., 2017). In addition, this evaluative deficit creates a near devoid understanding of how programming policy and guidance impact student outcomes. Extending this argument, with no data from program evaluation, little evidence exists to support the continuation of resource allocation for gifted and talented students.

The unevenness across states and territories in terms of the Standards becomes more problematic when the alignment is considered in terms of policy versus guidance. Three states, ACT, NSW, and QLD, consistently illustrated very strong to moderate alignment across the majority of Standards with policy and guidance. Generally, guidance issued by states and territories aligned at greater rates to the Standards when compared to policy, however, these documents lack the authority of policy and can be easier to dismantle or dismiss altogether. For example, families and carers might have difficulty securing appropriate educational provisions for their gifted and talented or high performing children without policy and only guidance

[7] Differentiation for gifted students was originally introduced by Virgil Ward (1961) in *Educating the Gifted: An Axiomatic Approach*.

documents to use as part of their advocacy efforts. As self-advocates, students would also be aided by policy (Kronborg, 2018; Robinson & Moon, 2003). Ideally, all states and territories would have equally strong policy and guidance addressing all students with specific learning needs.

Limitations and Future Research

There are several limitations associated with this study. We acknowledge that relevant documents could have been missed or were added or deleted outside the data collection period. Departments of Education also hold documents that are not publicly available, which could fill in gaps revealed by this analysis.

This study focused on the *analysis* of state and territory gifted education policy and guidance documents in relation to the NAGC (2019) Pre-K–Grade 12 Gifted Education Programming Standards. We did not investigate policy implementation. A greater consideration of how these policies and guidance are understood, interpreted, and implemented by school leaders and teachers would be the next logical steps. Policy's translation to practice is often dependent on factors that are impacted by various actors along this trajectory that can intentionally (or unintentionally) enhance, contravene, or skew the policy's original intent—what Lingard and Garrick (1997) referred to as *policy refraction*. For example, school personnel's understanding of policy and guidance does not necessarily guarantee appropriate implementation of programming and services or an adequate allocation of resources. As the NAGC Standards are expressed in student outcomes, this could provide data to better understand the impact of the policy and guidance.

NAGC's gifted education programming standards are unique by definition, as they are the only standards in existence worldwide. Gifted education in the Australian context has long been criticized for relying too heavily on North American research to inform policy and practice (Jolly & Jarvis, 2018). The AAEGT could take greater agency and develop and promote a set of standards to better incorporate Australian research and contextual considerations with which to inform policy and practice throughout the country and across all three school sectors (e.g., government, Catholic and Independent). Independent and Catholic school documents were not included in this data collection and analysis. Given that more than a third of students attend Independent and Catholics schools, an investigation of policy, guidance, and implementation in these sectors offer additional lines of inquiry to inform researchers and practitioners.

Results also exposed gaps in policy in particular states and territories and across the board in terms of evaluative levers and responsive learning environments. Gifted and talented education is often impacted by forces outside of its control and there exists little understanding of gifted and talented education's place as legislators, policy makers, and other government officials craft policy to address the needs of all Australian students. Collaborating with policy researchers outside the field provides this alternate and instructive perspective, while being able to maintain the background knowledge and expertise that only those in gifted and talented education provide (Plucker et al., 2017).

Conclusion

This research provides a baseline from which to guide future research in Australian gifted education policy. Well- articulated policies and guidance aligned to research-based practices provide the foundation from which to build opportunities to support students from any background with gifts and talents to leverage their potential to excel. As Brown et al. (2006) noted in their analysis of gifted education policy, "The ultimate test of any educational policy is the extent to which it improves the lives of [all] students, and the effectiveness and efficiency of schooling" (p. 11).

References

Adams, C. M. (2020). The gifted programming standards and their relationship to content standards. In J. H. Robins, J. L. Jolly, F. A. Karnes, & S. M. Bean (Eds.), *Methods and materials for teaching the gifted* (5th ed., pp. 103–126). Prufrock Academic Press. https://doi.org/10.4324/9781003236610-10

Ailwood, J., Brownlee, J., Johansson, E., Cobb-Moore, C., Walker, S., & Boulton-Lewis, G. (2011). Educational policy for citizenship in the early years in Australia. *Journal of Educational Policy, 26*(5), 641–653. https://doi.org/10.1080/02680939.2011.587538

AlGhawi, M. A. (2017). Gifted education in the United Arab Emirates. *Cogen Education, 4*(1), 1–18. https://doi.org/10.1080/2331186X.2017.1368891

Alodat, A., & Alomani, F. (2019). Evaluating educational services offered for Syrian gifted refugee students in Jordanian schools. *Journal for the Education of Gifted Young Scientists, 7*(2), 253–271. https://doi.org/10.17478/jegys.552789

Assouline, S. G., Colangelo, N., VanTassel-Baska, J., & Lupkowski-Shoplik, A. (2015). *A nation empowered: Evidence trumps the excuses holding back America's brightest students* (Vol. 2). Belin-Blank Center, College of Education, University of Iowa.

Australian Association for the Education of the Gifted and Talented. (n.d.). *About AAEGT*. http://www.aaegt.net.au/?page_id=724

Australian Bureau of Statistics. (2020). *Schools. https://www.abs.gov.au/statistics/people/education/schools/2019*

Australian Curriculum, Assessment and Reporting Authority. (2018). *Monitoring the effectiveness of the foundation—Year 10 Australian curriculum.* https://www.acara.edu.au/docs/default-source/curriculum/2018-monitoring-the-effectiveness-of-f-y10-australian-curriculum-report.pdf?sfvrsn=2

Australian Government Department of Education, Skills and Employment. (2020). *What is the Quality Schools package and what does it mean for my schools*? https://www.education.gov.au/what-quality-schools-package-and-what-does-it-mean-my-school

Australian Institute for Teaching and School Leadership. (2011). *Australian professional standards for teachers.* https://www.aitsl.edu.au/docs/default-source/national-policy-framework/australian-professional-standards-for-teachers.pdf?sfvrsn=5800f33c_64

Bell., L., & Stevenson, H. (2006). *Education policy: Process, themes and impact.* Routledge. https://doi.org/10.4324/9780203088579

Blackburn, A. M., Cornish, L., & Smith, S. (2016). Gifted English language learners: Global understandings and Australian perspectives. *Journal for the Education of the Gifted, 39*(4), 338–360. https://doi.org/10.1177/0162353216671834

Brown, E. F, Avery, L., VanTassel-Baska, J., Worley, B. B., II, & Stambaugh, T. (2006). A five-state analysis of gifted education policies. *Roeper Review, 29*(1), 11–23. https://doi.org/10.1080/02783190609554379

Brown, D., & Chaffey, G. (1999). Developing potential in aboriginal children. *Education in Rural Australia, 9*(2), 57–63. https://search.informit.org/doi/10.3316/ielapa.200005535

Brown, E. F., & Garland, R. B. (2015). Reflections on policy in gifted education: James J. Gallagher. *Journal for the Education of the Gifted, 38*(1), 90–96. https://doi.org/10.1177/0162353214565558

Burdett, N., & O'Donnell, S. (2016). Lost in translation? The challenges of educational policy borrowing. *Educational Research, 58*(2), 113–120. https://doi.org/10.1080/00131881.2016.1168678

Burroughs, N., Gardner, J., Lee, Y., Guo, S., Touitou, I., Jansen, K., & Schmidt, W. (2019). *Teaching for excellence and equity*. Springer. https://doi.org/10.1007/978-3-030-16151-4

Callahan, C. M., Moon, T. R., & Oh, S. (2017). Describing the status of programs for the gifted: A call for action. *Journal for the Education of the Gifted, 40*(1), 20–49. https://doi.org/10.1177/0162353216686215

Chaffey, G. (2008). Is gifted education a necessary ingredient in creating a level playing field for indigenous children in education? *Australasian Journal of Gifted Education, 17*(1), 38–39. https://search.informit.org/doi/10.3316/ielapa.720530719111964

Chessman, A. (2005). Policy development and practice: The New South Wales experience. *International Education Journal, 6*(2), 156–163.

Cobb, P., & Jackson, K. (2011). Assessing the quality of Common Core State Standards for mathematic. *Educational Researcher, 40*(4), 183–185. https://doi.org/10.3102/0013189X11409928

Colangelo, N., Assouline, S. G., & Gross M. U. M. (Eds.). (2004). *A nation deceived: How schools hold back America's brightest students* (Vol. 1). Belin Blank Center, University of Iowa.

Commonwealth of Australia. (1988). *The report of the Senate Select Committee on the education of gifted and talented children. Parliament of Australia*. http://www.aph.gov.au/senate/committee

Council of Australian Governments. (2018). *The National School Reform Agreement.* https://www.dese.gov.au/uncategorised/resources/national-school-reform-agreement

Corwith, S., & Johnsen, S. K. (2020). Gifted programming standards. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education* (3rd ed., pp. 229–247). Prufrock Academic Press. https://doi.org/10.4324/9781003233961-18

Cotabish, A., Dailey, D., Corwith, S., Johnsen, S., Lee, C.-W., & Guibault, K. (2020). Ushering in the 2019 Pre-K to Grade 12 Gifted Programming Standards. *Gifted Child Today, 43*(2), 134–140. https://doi.org/10.1177/1076217519898226

Department of Education, Skill and Employment. (n.d.). *How are schools funded in Australia?* https://www.education.gov.au/how-are-schools-funded-australia

Dai, D., Swanson, J. A., & Cheng, H. (2011). State of research on giftedness and gifted education: A survey of empirical studies published during 1998–2011 (April). *Gifted Child Quarterly, 55*(2), 126–138. https://doi.org/10.1177/0016986210397831

Department of Education and Training. (2018). *Through growth to achievement: The report of the review to achieve educational excellence in Australian schools*. Author.

Easton, D. (1953). *The political system: An inquiry into the state of political science.* Knopf.

Easton, D. (1957). The classification of political systems. *American Behavioral Scientist, 1*(2), 3–4. https://doi.org/10.1177/000276425700100201

Education Council. (2019). *Alice Springs (Mparntwe) Education Declaration*. Author. http://www.educationcouncil.edu.au/site/DefaultSite/filesystem/documents/Reports%20and%20publications/Alice%20Springs%20(Mparntwe)%20Education%20Declaration.pdf

Education and Training Committee. (2012). *Inquiry into the education of gifted and talented students.* Parliament of Victoria. https://www.parliament.vic.gov.au/images/stories/committees/etc/Past_Inquiries/EGTS_Inquiry/Final Report/Gifted_and_Talented_Final_Report.pdf

Evans, M. P., & Radina, R. (2014). Great expectations? Critical discourse analysis of Title I school-family compacts. *School Community Journal, 24*(2), 107–126.

Forster, J. (1993). The reality of opportunities for gifted and talented students. *Australasian Journal for Gifted Education, 2*(1), 26–33.

Forster, J. (2005). Policy and practice: A twenty year retrospective on gifted education in the Australian state of New South Wales. *Gifted Education International, 19*(2), 182–196. https://doi.org/10.1177/026142940501900211

Fraser-Seeto, K., Howard, S. J., & Woodcock, S. (2013). Preparation for teaching gifted students: An updated investigation into university offerings in New South Wales. *Australasian Journal of Gifted Education, 22*(2), 45–51.

Freedberg, S., Bondie, R., Zusho, A., & Allison, C. (2019). Challenging students with high abilities in inclusive math and science classrooms. *High Ability Studies, 30*(1–2), 237–254. https://doi.org/10.1080/13598139.2019.1568185

Gagné, F. (2015). Academic talent development programs: A best practices model. *Asia Pacific Education Review, 16*(2), 281–295. https://doi.org/10.1007/s12564-015-9366-9

Gallagher, J. J. (2002). *Society's role in educating gifted student: The role of public policy* (Report No. RM02162). National Research Center on the Gifted and Talented. https://nrcgt.uconn.edu/wp-content/uploads/sites/953/2015/04/rm02162.pdf

Gallagher, J. J. (2008). Psychology, psychologists, and gifted students. In S. Pfeiffer (Ed.), *Handbook of giftedness in children psychoeducational theory, research, and best practices* (pp. 1–12). Springer. https://doi.org/10.1007/978-0-387-74401-8_1

Gallagher, J. J. (2015). Political issues in gifted education. *Journal for the Education of the Gifted, 38*(1), 77–89. https://doi.org/10.1177/0162353214565546

Gallagher, J. J., & Coleman, M. R. (1994). *A Javits Project: Gifted education policy studies program: A final report.* (ED 303 086). https://files.eric.ed.gov/fulltext/ED371499.pdf

Goe, L. (2007). *The link between teacher quality and student outcomes: A research synthesis*. (ED521219). ERIC. https://files.eric.ed.gov/fulltext/ED521219.pdf

Gross, M. U. M. (1993). *Exceptionally gifted children.* Routledge. https://doi.org/10.4324/9780203315378

Gross, M. U. M. (1999). Small poppies: Highly gifted children in the early years. *Roeper Review, 21,* 207–214. https://doi.org/10.1080/02783199909553963

Gross, M. U. M. (2006). Exceptionally gifted children: Long-term outcomes of academic acceleration and nonacceleration. *Journal for the Education of the Gifted, 29*(4), 404–429. https://doi.org/10.4219/jeg-2006-247

Handa, M. C. (2019). Leading differentiated learning for the gifted. *Roeper Review, 41*(2), 102–118. https://doi.org/10.1080/02783193.2019.1585213

Henderson, L., & Jarvis, J. M. (2016). The gifted dimension of the Australian professional standards for teachers: implications for professional learning. *Australian Journal of Teacher Education, 41*(8), 60–83. https://doi.org/10.14221/ajte.2016v41n8.4

Jarvis, J. M., & Henderson, L. (2012). Current practices in the education of gifted and advanced learners in South Australian schools. *Australasian Journal of Gifted Education, 21*(1), 5–22.

Jarvis, J. M., & Henderson, L. (2014). Defining a coordinated approach to gifted education. *Australasian Journal of Gifted Education, 23*(1), 5–14. https://search.informit.org/doi/10.3316/informit.666511198511679.

Jarvis, J. M., & Jolly, J. L. (2018). Introduction. In J. L. Jolly & J. A. Jarvis (Eds.), *Exploring gifted education: Australian and New Zealand perspectives* (pp. 1–4). Routledge. https://doi.org/10.4324/9781351227704-1

Jolly, J. L. (2015). The cost of high-stakes testing for high-ability students. *Australasian Journal of Gifted Education, 24*(1), 30–36. https://doi.org/10.21505/ajge.2015.0005

Jolly, J. L., & Chessman, A. (2017). The landscape of Australian gifted education research: 1992–2013. *Gifted and Talented International, 32*(2), 87–98. https://doi.org/10.1080/15332276.2018.1522935

Jolly, J. L., & Jarvis, J. M. (Eds.). (2018). *Exploring gifted education: Australian and New Zealand perspectives.* Routledge. https://doi.org/10.4324/9781351227704

Kronborg, L. (2002). Foreword. In W. Vialle & J. G. Geake (Eds.), *The gifted enigma: A collection of articles* (pp. vi–xxi). Hawker Brownlow Education.

Kronborg, L. (2018). Gifted education in Australia and New Zealand. In S. I. Pfeiffer, E. Shaunessey-Dedrick, & M. Foley Nicpon (Eds.), *APA handbook of giftedness and talent* (pp. 85–96). American Psychological Association. https://doi.org/10.1037/0000038-006

Kronborg, L., & Cornejo-Araya, C. A. (2018). Gifted educational provisions for gifted and highly able students in Victorian schools, Australia. *Universitas Psychologica, 17*(5), 1–14. https://doi.org/10.11144/Javeriana.upsy17-5.gepg

Larsson, Y. (1986). Gifted education policy in Australia. *Gifted Education International, 4*(1):49–55. https://doi.org/10.1177/026142948600400115

Lingard, B., & Garrick, B. (1997). Producing and practicing social justice policy in education: A policy trajectory study from Queensland, Australia. *International Studies in Sociology of Education, 7*(2), 157–179. https://doi.org/10.1080/09620219900200009

Long, L. C., Barnett, K., & Rogers, K. B. (2015). Exploring the relationship between principal, policy, and gifted program scope and quality. *Journal for the Education of the Gifted, 38*(2), 118–140. https://doi.org/10.1177/0162353215578279

Lubric, I., & Jolly, J. L. (2019). An examination of the empirical literature: Gifted education in the Australian context. *Journal for the Education of the Gifted, 42*(1), 64–84. https://doi.org/10.1177/0162353218816498

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage.

Mills, M., Monk, S., Keddie, A., Renshaw, P., Christie, P., Geelan, D., & Gowlett, C. (2014). Differentiated learning: From policy to classroom. *Oxford Review of Education, 40*(3), 331–348. https://doi.org/10.1080/03054985.2014.911725

Moltzen, R., Jolly, J. L., & Jarvis, J. A. (2018). Framing gifted education in Australia and New Zealand. In J. L. Jolly & J. A. Jarvis (Eds.), *Exploring gifted education: Australian and New Zealand perspectives* (pp. 5–11). Routledge. https://doi.org/10.4324/9781351227704-2

National Association for Gifted Children. (2019). *2019 Pre-K–Grade 12 Gifted Education Programming Standards.* Author. https://www.nagc.org/sites/default/files/standards/Intro%202019%20Programming%20Standards.pdf

North, B., & Griffiths, K. (2019). *Revisiting gifted education*. Centre for Education Statistics and Evaluation. https://www.cese.nsw.gov.au//images/stories/PDF/Revisiting_gifted_education.pdf

OCED. (2007). *Competition policy and concessions.* https://www.oecd.org/daf/competition/sectors/38706036.pdf

Patton, M. Q. (2014). *Qualitative research and evaluation methods* (4th ed.). Sage.

Periathiruvadi, S., & Rinn, A. R. (2012). Technology in gifted education: A review of best practices and empirical research. *Journal of Research on Technology in Education, 45*(2), 153–169. https://doi.org/10.1080/15391523.2012.10782601

Peters, S. J., & Jolly, J. L. (2018). The influence of professional development in gifted education on the frequency of instructional practices. *Australian Educational Researcher, 45*(4), 473–491. https://doi.org/10.1007/s13384-018-0260-4

Phillipson, S. N., & Ziegler, A. (2020). Towards exceptionality: The current status and future prospects of Australian gifted education. In S. R. Smith (Ed.), *Handbook of giftedness and talent development in the Asia-Pacific* (pp.1–36). Springer. https://doi.org/10.1007/978-981-13-3021-6_2-1

Ping, C., Schellings, G., & Beijaard, D. (2018). Teacher educators' professional learning: A literature review. *Teaching and Teacher Education, 75*(1)*,* 93–104. https://doi.org/10.1016/j.tate.2018.06.003

Plucker, J. A., Giancola, J., Healey, G., Arndt, D., & Wang, C. (2015). *Equal talents, unequal opportunities: A report card on state support for academically talented low-income students.* Jack Kent Cook Foundation.

Plucker, J. A., Makel, M. C., Matthews, M. S., Peters, S. J., & Rambo-Hernandez, K. E. (2017). Blazing new trails: Strengthening policy research in gifted education. *Gifted Child Quarterly, 61*(3), 210–218. https://doi.org/10.1177/0016986217701838

Polikoff, M. S. (2012). The association of state policy attributes with teachers' instructional alignment. *Educational Evaluation and Policy Analysis, 34*(3), 278–294. https://doi.org/10.3102/0162373711431302

RAND. (n.d.). *Education policy.* https://www.rand.org/topics/education-policy.html

Rao, K., & Meo, G. (2016). Using Universal Design for Learning to design standards-based lessons. *SAGE Open*, *6*(4). https://doi.org/10.1177/2158244016680688

Reid, E. (2015). Development of gifted education and an overview of gifted education in the USA, Canada, Equator, and Mexico. *Slovonic Pedagogical Studies Journal, 4*(2), 241–247. https://doi.org/10.18355/PG.2015.4.2.241-247

Rinn, A. N., Mun, R. U., Hodges, J. (2020). *2018–2019 State of the States in Gifted Education*. National Association of Gifted Children and the Council of State Directors of Programs for the Gifted. https://www.nagc.org/2018-2019-state-states-gifted-education

Robinson, A., & Moon, S. (2003). A national study of local and state advocacy in gifted education. *Gifted Child Quarterly, 47*(1), 8–25. https://doi.org/10.1177/001698620304700103

Robinson, M. (1992). A vision splendid: Gifted education in Australia. *Roeper Review, 14*(4). https://doi.org/10.1080/02783199209553431

Savage, G. C. (2021). *The quest for revolution in Australian schooling policy.* Routledge. https://doi.org/10.4324/9781003141792

Savage, G. C., & O'Connor, K. (2015). National agendas in global times: Curriculum reforms in Australia and the USA since the 1980s. *Journal of Education Policy, 30*(5), 609–630. https://doi.org/10.1080/02680939.2014.969321

Saiying, S-H., Makel, M. C., & Olszewski-Kubilius, P. (2016). What one hundred years or research says about the effects of ability grouping and acceleration on K–12 students' academic achievement: Findings of two second-order meta-analyses. *Review of Education Research, 86*(4), 848–899. https://doi.org/10.3102/0034654316675417

Schmidt, W. H., & Houang, R. T. (2012). Curricular coherence and the Common Core State Standards for mathematics. *Educational Researcher, 41*(8), 294–308. https://doi.org/10.3102/0034654316675417

Senate References Committee. (2001). *The education of gifted and talented children.* Parliament of the Commonwealth of Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_Employment_and_Workplace_Relations/Completed_inquiries/1999-02/gifted/report/contents

Spreen, C. A. (2004). Appropriating borrowed policies: Outcomes-based education in South Africa. In G. Steiner-Khamsi (Ed.), *The global politics of educational borrowing and lending.* Teachers College Press.

Slater, E. (2018). The identification of gifted children in Australia: The importance of policy. *TalentED, 30*(1), 1–16.

Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest, 12*(1), 3–54. https://doi.org/10.1177/1529100611418056

Swanson, J. D., & Lord, E. W. (2013). Harnessing the guiding the power of policy: Examples from one state's experiences. *Journal for the Education of the Gifted, 36*(2), 198–219. https://doi.org/10.1177/0162353213480434

UNESCO. (2013). *UNESCO handbook on education policy and analysis.* https://unesdoc.unesco.org/ark:/48223/pf0000221189

VanTassel-Baska, J. (2013). The world of cross-cultural research: Insights for gifted education. *Journal for the Education of the Gifted, 36*(1), 6–18. https://doi.org/10.1177/0162353212471451

VanTassel-Baska, J. (2019). Are we differentiating effectively for the gifted or not? a commentary on differentiated curriculum use in schools. *Gifted Child Today, 41*(2), 165–167. https://doi.org/10.1177/1076217519842626

Vasilevska, S., & Merrotsy, P. (2011). Academic acceleration in Australia: An annotated bibliography. *TalentEd, 27,* 75–126.

Walsh, R. L., & Jolly, J. L. (2018). Gifted education in the Australian context. *Gifted Child Today, 41*(2), 81–88. https://doi.org/10.1177/1076217517750702

Watters, J. J., & Diezmann, C. M. (2008, March 24–28). *In pursuit of excellence: A policy driven systemic initiative to embed gifted education* [Paper presentation]. American Education Research Association Annual Meeting, New York, NY, United States.

Westberg, K. L., Archambault Jr., F. X., & Dobyns, S. M., & Salvin, T. J. (1993). The classroom practices observation study. *Journal for the Education of the Gifted, 16*(2), 120–146. https://doi.org/10.1177/016235329301600204

Wood, D., & Zundans-Fraser, L. (2013). Reaching out: Overcoming distance and supporting rural gifted students through educational opportunities. *Australasian Journal of Gifted Education, 22, 42–50*.

Wyn, J., Turnbull, M., & Grimshaw, L. (2014). *The experience of education: The impacts of high stakes testing on school students and their families.* The Whitlam Institute.