Enacting Australian Curriculum

Planning issues and strategies for P–10 multiple year level classrooms

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Introduction

The brief to the Australian Curriculum, Assessment and Reporting Authority (ACARA) from the education ministers of the states, territories and the Commonwealth is to develop a national curriculum addressing the goals of the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA 2008). The Melbourne Declaration represents a commitment to equity and excellence in schooling with a focus on supporting Australian students to become "successful learners, confident and creative individuals, and active and informed citizens" (p. 7). Debate continues as to the integrity of the Australian Curriculum in relation to the Melbourne Declaration (see, for example, Reid's 2009 paper which discusses a range of "serious design issues" including "the lack of understanding of equity issues and the curriculum").2 That argument aside, some educational communities face considerably greater challenges enacting the goals of the Melbourne Declaration and enacting the Australian Curriculum than do others.

Current educational reform invests a heavy focus on the teacher in the classroom to make a difference to students' learning through high expectations for academic and social outcomes, despite mitigating factors beyond school. Undoubtedly, teachers' high expectations for their students are vital for quality student learning. All students in Queensland deserve the best possible support to achieve worthwhile academic and social outcomes. The nature of the support that is needed across Queensland schools, however, is diverse.

The Queensland schooling landscape is not homogeneous and many communities have students with wide variations in terms of knowledge, aspirations and needs. Schools range in size. Students in Queensland schools, like their counterparts in other jurisdictions, have access to varying levels of cultural and economic resources that impact on their capacity to succeed or otherwise at school. The curriculum itself, with its valuing of particular knowledge, understandings and skills, is far from neutral and some students more easily align themselves with what is valued than do other students. A greater alignment or resonance with the mandated curriculum better positions some students to succeed. Schools differ in their proximity and capacity to access professional learning opportunities and in terms of the experience of their staff. Classrooms with multiple year levels are a feature of the diverse Queensland schooling landscape.

Purpose of the paper

The purpose of this paper is to highlight some of the planning issues associated with the enactment of the Australian Curriculum in Queensland classrooms with multiple year levels. Two issues confronting schools generally in relation to enacting the Australian Curriculum are considered. These relate to the staggered implementation of the Australian Curriculum and the ambiguous nature of the achievement standards. Consideration is then given to a key feature of the Australian Curriculum, that is, its organisation around what is expected of students at specific year levels. In order to appreciate the numbers and nature of schools for which single year level classes are not the norm, a snapshot is provided of the diverse classroom arrangements in Queensland in which multiple year level classes are the result of either necessity or choice. The need to highlight deep conceptual learning in relation to the Australian Curriculum generally as well as the potential use of "conceptual threads", is

Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) was replaced by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) on 1 July 2009.

Though this paper was published in September 2009, that is, prior to the release of phase 1 Australian Curriculum, it continues to be a significant resource for ongoing examination of the Australian Curriculum with its focus on five key areas of the Rudd government's "education revolution".

then considered. The paper concludes with possible processes for use in multiple year level settings. Finally, a snapshot of a Queensland classroom in 2011 provides the platform for a call for the support of teacher-centred inquiry into ways in which they can best enact the Australian Curriculum in multiple year level classrooms.

Prior to this, a comment about the use of the term "enactment" is warranted. The original brief for this paper from the Queensland Studies Authority (QSA) was to explore the issues associated with "implementing" the Australian Curriculum in classrooms with multiple year levels. This paper is premised on the view that the "enactment" of the Australian Curriculum might be a more conventional term. "Implementation" might suggest a relatively seamless translation of a required curriculum into practice in multiple year level classrooms. In contrast, the "enactment" of a curriculum might suggest a more significant role for those taking up and remaking the curriculum in their own contexts. Further, it is in this space of enactment that communities can do much to align the curriculum with the strengths, interests and needs of their particular community.

The Australian Curriculum: A focus on year level achievement

Challenges for all teachers 1.1

All Queensland teachers require deep knowledge, understandings and skills in terms of planning, enacting and reviewing curriculum that supports quality student learning within the context of the Australian Curriculum. As well as new disciplinary knowledge at particular stages of schooling, enacting the Australian Curriculum also requires professional knowledge, understandings and skills in relation to the key elements of the Australian Curriculum. Such elements include the rationale and aims, content descriptions within strands and substrands, achievement standards, general capabilities and cross-curriculum priorities.

Further, schools need to continue to put into action education reforms of recent years. These reforms include a focus on high expectations for all students, the alignment of curriculum, pedagogy, assessment and reporting, as well as assessment for learning and standards-based approaches. Emphasis on innovative pedagogies that promote intellectual rigour, literacy and numeracy improvement, and the embedding of information and communication technologies continue to be key considerations for all Queensland schools. Quite rightly, reform also centres on innovative and generative pedagogies that support high achievement of students with special needs. Significantly, all of this reform for greater academic and social outcomes needs to occur within schooling contexts of increasingly diverse student populations. As a result, sectors, schools and teachers need to grapple with new equity questions that arise from such unprecedented diversity.

Queensland schools are obliged to plan, assess and report using the Australian Curriculum in English, Mathematics and Science in 2012, with the fourth phase 1 learning area, History, to be taken up in 2013. Other learning areas identified in the Melbourne Declaration are currently under development across phases 2 and 3. Materials to support the phase 1 Australian Curriculum areas of English, Mathematics, Science and History were released in December 2010. Despite Federal Minister for School Education, Early Childhood and Youth, Peter Garrett's heralding of this event as "a landmark decision and. a significant national reform" (2010), this curriculum initiative presents a range of specific issues for Queensland educators, as it does for those in other jurisdictions. Two issues are flagged here prior to issues associated with Australian Curriculum's focus on year level achievement.

The first issue for schools is that they will be required to operate within a transition stage for a considerable period of time. According to ACARA, curriculum for phase 2 learning areas of The Arts, Geography and Languages other than English will be released approximately one year after the curriculum for phase 1 learning areas. Curriculum development and release for the remainder of the learning areas, as identified in the Melbourne Declaration, will then follow. This staggered release of curriculum means that teachers and schools will need to plan, assess and report with national curriculum documents and state curriculum documents for several years. For Queensland teachers this will mean planning, assessing and reporting with the Australian Curriculum in English, Mathematics and Science from 2012 (and with history from 2013), while planning, assessing and reporting using the Queensland Curriculum, Assessment and Reporting (QCAR) Framework (QSA 2007) in Studies of Society and Environment, Technology, The Arts, Health and Physical Education, and Languages other than English. Further, teachers of the early phase of learning will continue to use the Early Years Curriculum Guidelines (QSA 2006). This situation will persist for the next several years. Not only will this dual curriculum arrangement impede integration of learning areas in meaningful and rigorous ways, it will mean additional and confusing work for teachers and schools as they negotiate two curriculum frameworks.

The second major issue flagged here relates to the ambiguous status of the achievement standards at the time of writing this paper. Wyatt-Smith and Klenowski's 2010 work, which draws on Zepke et al. (2005), is pertinent here. Based on their arguments, it is feasible to conclude that the "achievement standards", as they are represented in the phase 1 Australian Curriculum learning areas, resemble "content standards", described by Wyatt-Smith and Klenowski as "the knowledge, understanding and skills that students are expected to learn" (p. 38). As Wyatt-Smith and Klenowski point out, achievement standards are "different types of standards ... [designed] to indicate how well students have achieved via reference to levels of expected accomplishment" (p. 38). The current lack of a structure to support student and teacher focus on the standards required and teacher decision making about the quality of student work as is required within a standards environment in which A to E reporting is needed, is a serious obstacle.3

Having flagged these two issues, the focus here, however, is on one of the key design features of the Australian Curriculum, that is, the articulation of content descriptions and achievement standards for each year level from Foundation (Preparatory Year in Queensland) to Year 10. Content descriptions, comprising knowledge, understandings and skills, detail what teachers are expected to teach at each year level, and achievement standards describe the learning expected of students at each of those year levels — albeit not in terms of the quality of student work required within the specific year level.

1.2 Challenges associated with the year level focus in the **Australian Curriculum**

This paper is premised on the view that there are at least three distinct ways in which schools and teachers might enact the Australian Curriculum with its focus on year level achievement. This paper also recognises that decisions to take up one of three approaches, or other approaches, will in some cases be taken by the schooling sector. In the case of independent schools, boards or other employing agencies will have greater leeway in their decision making. Three possible approaches are outlined below. Note that the scenarios assume that the Australian Curriculum is being used in schools, as opposed to the situation in Queensland schools in 2011 where the focus is on familiarisation of three of the phase 1 learning areas.

1.2.1 Approach 1: The "lock-step" approach

In the "lock-step" approach teachers and schools plan, assess and report using only the content descriptions and the achievement standards of the "official" year level of their students. This means that the Year 5 teacher, for example, will use the content descriptions and the achievement standards for the Australian Curriculum in each of the learning areas to plan, assess and report. The assumption underpinning this approach is that the Year 5 class — or any other single year level class — is a relatively homogeneous grouping of same-age students in terms of their knowledge, experiences, aspirations and needs.

Possible comment from a proponent of the "lock-step" approach

My students are in Year 5 and I know what students in this year level are meant to know and be able to do. I'm focusing on the content descriptions and achievement standards for that level.

It is acknowledged that work in this area is being undertaken by ACARA in collaboration with the states and territories. Further, a paper on assessment, standards and reporting is forthcoming from QSA.

1.2.2 Approach 2: The "standards for learning" approach

In the "standards for learning" approach, teachers gather information about their students from a range of systemic, commercial and teacher-generated diagnostic assessment to gain a detailed picture of what each student knows and can do. Specifically, teachers use the content descriptions and achievement standards diagnostically to locate their students' learning needs within the context of the "levels" of the Australian Curriculum. Following their initial assessment, teachers then plan, assess and report using the content descriptions and achievement standards, from a range of year levels. In a multiple year level context the range of year levels considered extend the learning and achievement of individual students and groups of students based on what they know and can do and what they need to know and be able to do to further their learning in rigorous ways.

Possible comment from a proponent of the "standards for learning" approach

My students are all in Year 5 officially but their knowledge and skills vary considerably. I have considerable information on all of my students from standardised tests our school routinely uses and from further diagnostic testing I've done. So far I've gathered data on each student in relation to what they know and can do in terms of the Australian Curriculum in both English and Mathematics. Some students are not able to demonstrate the achievement standard for Year 4 in several of the Maths strands and one student needs support to reach the achievement standards for both English and Mathematics in most strands. As well as that, I have two students who seem to be well above the Year 5 achievement standards for English and Mathematics. I'm doing my best to plan learning units and activities that will provide a challenge for all students. This means planning, assessing and reporting using content descriptions and achievement standards that are most appropriate for individuals and groups of students. With the support of my curriculum leader, I'm using content descriptions and achievement standards from Year 2 to Year 6 in my class. It's a big challenge.

1.2.3 Approach 3: The "balancing act" approach

In the "balancing act" approach teachers attempt to manage the tension between the two approaches above. They use a range of diagnostic resources to gather detailed information about what their students know and can do. They continually gather information about their students' learning from diagnostic, formative and summative assessment as they plan and assess. They draw on content descriptions and achievement standards from levels of the Australian Curriculum appropriate to extend the learning of individuals and groups of students. As in approach 2, the range of content descriptions and achievement standards are used as a pivotal resource to differentiate the curriculum for the students (coupled with differentiation of pedagogy and assessment). Teachers using this approach plan, assess and report student learning achievement based on the levels that extend their learning, but they also fulfil requirements by assessing their students in terms of the level deemed appropriate for their age cohort. They recognise that it is desirable to have students achieving — at least — at the levels expected of their age cohort.

Possible comment from a proponent of the "balancing act" approach

I have students with a range of abilities in my Year 5 class and I am aware that I must plan, assess and report my students' achievement against the achievement standards in English, Mathematics and Science. In my current work, I'm using the Australian Curriculum achievement standards as a diagnostic tool — I'm striving to find out what each student knows and can do in relation to parts of the achievement standards as they are relevant. When I detect that some students have gaps in their knowledge, understandings or skills, I attempt to work through learning activities that support them to attain the achievement standards of the earlier levels. I'm also attempting to fully use the learning support available at my school. When I report their learning, however, I use only the achievement standard for their official year level. It's difficult — I feel that I have some students for whom there will be little useable knowledge about where they are up to in terms of knowledge, understandings and skills from this approach. I know that these students will get an "E" in most areas of their report. It's not just the lack of nuanced information that bothers me — it's also the impact of being given "E"s on their motivation to continue to learn that I worry about.

As suggested earlier, some sectors will determine the approach — not necessarily constructed within the frame of the above three approaches — to be used by schools within their influence. Independent schools will have more discretion. The view here is that the most educationally sound and socially just approach is the "standards for learning" approach. There are, of course, significant resource implications for classrooms in which teachers attempt to support every student to learn and achieve in relation to the most appropriate achievement standard for them as individual learners — regardless of the official year level in which the student might be located. This "standards for learning" approach, for example, resonates with Earl's "assessment for learning" approach.

Earl (2003, p. 24) describes an assessment for learning approach as one in which:

teachers collect a wide range of data so that they can modify the learning work for their students. They craft assessment tasks that open a window on what students know and can do already and use the insights that come from the process to design the next steps in instruction. To do this, teachers use observation, worksheets, questioning in class, studentteacher conferences or whatever mechanism is likely to give them information that will be useful for their planning and teaching. Marking is not designed to make comparative judgments among the students but to highlight each student's strengths and weaknesses and provide them with feedback that will further their learning [emphasis added].

The argument here is that a "standards for learning" approach would avoid what Fullan, Hill and Crevola (2006, p. 31) refer to as the "grade-progression model". They explain this model further when they caution against this model which:

is a factory assembly-line model of schooling that assumes equal readiness to learn and equal rates of learning. The model persists despite overwhelming evidence that by around Grade 3, the achievement gap within a single grade may span five or more years of schooling. The model makes assessment of students to establish starting points irrelevant because the starting points are dictated by the curriculum, not by the readiness of students to learn. It denies individual differences. However, the differences remain and constitute the nub of the problem ...

It is also important to acknowledge that ACARA, in its paper, The Shape of the Australian Curriculum (2010, p. 23), states:

The Australian Curriculum ... has been written on a year by year basis to assist teachers to identify current levels of student achievement and to plan for further learning, building on prior learning ...

The paper also states:

Schools and teachers continue to have the flexibility to enable students to progress at different rates through the curriculum. The year-by-year structure of English, mathematics. science and history provides an indication of the content and achievement standards it is expected most students in particular grades will meet, but more importantly it provides a map that defines key indicators of learning development and progress. It continues to be the case that schools and teachers should provide flexible pathways to enable every student to make progress in their learning (p. 23).

The claim in this paper is that ACARA is endorsing a "standards for learning" approach. that is, an alignment of levels to meet individual student learning needs, but that its design, with labels such as "Year 1" and so on rather than "Level 1", privileges a focus on year levels. Such a design creates an expectation that this is the way the curriculum should operate. The question emerges: What approach will be taken by the Queensland schooling sectors in relation to this pivotal issue?

In addition to the issues highlighted above, classrooms with students in more than one "official" year level have added complexities. There is, of course, a range of factors that contributes to complexity, including, but not confined to, rurality, remoteness, poverty, Indigeneity and higher than average representation of students from non-English speaking backgrounds. Not all learning contexts that have more than one official year level do so because of necessity, but those who do have a range of year levels in the one classroom of necessity in Queensland are often those characterised by rurality, remoteness and Indigeneity.

In the next section, an overview of diverse Queensland classroom arrangements is provided in order to explore the ways in which the scope of official year levels accommodated in one classroom varies. Following this, some specific strategies are proposed for supporting meaningful and rigorous learning within these diverse contexts.

2_ **Diverse Queensland classroom** arrangements

A range of factors determines the ways in which schools across Catholic, independent and state sectors group their students. The most common practice in Queensland schools is to organise students according to their age and into what has been referred to in this paper as the "official" year level, that is, one that corresponds to their age. Variations to this practice exist either as a result of necessity or as a result of commitment to a particular educational philosophy.

Multiple year level classrooms as a matter of necessity 2.1

Schools which have multiple year levels in one classroom as a result of necessity do so for two main reasons. In rural and remote locations, small schools have classrooms which cater for students from the Preparatory Year to Year 7. The state sector, for example, has 261 one- and two-teacher schools in 2011 (J Drazek, personal communication, 17 February 2011), representing around one-quarter of that sector's schools. There are further small schools in which the teaching responsibilities are shared among fewer teachers than there are year levels, resulting in classrooms with multiple year levels.

The practice of having multiple year levels in one classroom also occurs in larger schools. Usually referred to as composite classes, this arrangement occurs when additional single year level classes are unfeasible in terms of resources. Composite classes are formed in these circumstances and usually involve students in consecutive year levels (e.g. a Year 4-5 composite class).

In some circumstances composite classes include students from non-consecutive year levels (e.g. a composite class of Year 4 and Year 6 students). This may occur for two main reasons. It may be the result of specific numbers in particular year levels. Anecdotal evidence suggests that schools will take measures to avoid having composite classes of non-consecutive year levels. For example, in 2010, one Queensland school created the following composite classes: Year 2-3, Year 3-4, Year 4-5, Year 5-6 and Year 6-7, rather than form a composite class of Year 4 and Year 6 students. In other circumstances, composite classes with students from non-consecutive year levels may occur as a result of the non-enrolment of students in a particular year level. In other Queensland contexts, multiple year level classrooms are the result of choice.

Multiple year level classrooms to serve an educational 2.2 philosophy

The take-up of what is often referred to as a "multi-age" practice results from innovative reform to enhance a school's capacity to meet student needs. Most commonly, multi-age classes involve groups of students across either a two- or three-year age span. The literature provides insights into the motivations for establishing such groupings:

Multi-age classes are created when children of different ages and grade levels are intentionally combined in a single classroom to realize academic and social benefits. (Stuart, Connor, Cady & Zweifel 2006, p. 2)

Educators may be attracted by the benefits that an idealized model of multi-age classrooms can bring to schools. An idealized model creates diverse yet balanced groupings of students of mixed ages with different abilities, including special needs and gifted students. (Song. Spradlin & Plucker 2009 p. 2)

(See Song, Spradlin & Plucker for a review of the relevant literature on the advantages and disadvantages of multi-age classrooms.)

In contrast to the heterogeneous groupings described above, a variation of such multi-age arrangements occurs in some schools in which students are grouped according to ability. This practice of homogeneous groupings is referred to as "staged multi-age". This practice occurs when educators consider that there are benefits in catering for similar ability levels in the one classroom.

Special education schools use a range of criteria, including age and ability, for grouping their students in order to maximise student learning. Indeed some schools group students according to their disability. There is, of course, no suggestion here that students with similar special needs would be grouped together, regardless of their age, but rather that professional decision making regarding the range of needs of groups of students would be the key driver in creating groupings of students. Much can be learnt from special education practitioners who create multiple year level classrooms as they strive to provide learning experiences that will attend to students' academic and social needs. In such classes there is often an imperative to support students to achieve age- or almost age-appropriate conceptual knowledge, whereas skills and processes might not be targeted at a similar level.

Whatever the arrangement used to group students, every Queensland classroom has a diverse range of learners in terms of their prior knowledge, interests, abilities and aspirations. Every Queensland classroom, therefore, needs to cater for multiple levels of learning. This is the case whether the classroom consists of Preparatory Year to Year 7 students, two or three consecutive year levels or a group made up of students from nonconsecutive year levels (e.g. a class of Year 5 and Year 7 students). This is also the case if the classroom is made up of students from the same year level. Teacher practice and research bears testament to the premise that any class with students born within a given twelve-month period will include students with a diverse range of academic and social needs and abilities. For quality learning to occur for every student, each of these classroom contexts — including a class with all students born within a given one-year period and located in the same official year level — requires curriculum differentiation in the identification of curriculum, as well as pedagogical differentiation in relation to sequencing teaching and learning.

In summary, the main contexts in which teachers need to identify curriculum across a range of official year levels in Queensland schools include the following:

- whole primary schools from Preparatory Year to Year 7
- composite class groups with students from more than one consecutive year level as well as groups with students from multiple non-consecutive year levels

- multi-age classrooms with heterogeneous groupings of students, usually across two or three consecutive year levels (which may include special education classrooms)
- multi-age classrooms with homogeneous groupings, usually across two or three consecutive year levels (which may include special education classrooms).

On the basis of the explorations made throughout this paper, there are two key circumstances in which teachers might use a range of year level achievement standards to support quality student learning. Firstly, this may occur within a single year level classroom taking up either a "standards for learning" or "balancing act" approach. Secondly, teachers will also work with a range of year level achievement standards within a specific learning area if they have students from any of the multiple year level contexts described above. Whatever the motivation for working with more than one achievement standard in a specific learning area, a strategy for meaningful and rigorous learning for the diverse range of learning could involve the use of "conceptual threads".

Conceptual threads to link learning 3. across year levels

One of the greatest risks in the enactment of the Australian Curriculum, which schools and teachers in multiple year level settings share with their counterparts responsible for single year levels, is the superficial and disconnected "coverage" of content descriptions and achievement standards. While this issue requires detailed exploration, this paper argues that the foregrounding of deep conceptual knowledge and understanding, with the associated skills, is a pivotal consideration in the meaningful enactment of the Australian Curriculum.

The importance and nature of conceptual knowledge is explored by Tennyson (1994, p. 1020) in the following definition:

Concepts form the basic elements of human knowledge, and the learning of concepts includes the cognitive processes of: (a) acquisition of newly encountered concepts, (b) elaboration of existing concepts, and (c) development of cognitive strategies to employ concepts in previously encountered and unencountered situations. Concepts are defined as classes of instances that represent objects, symbols, or events ... Acquisition of concepts occurs by abstracting information from examples and forming prototypes within memory based on a given situation or contextual culture. Employment or application of concepts occurs through the cognitive strategies of generalizations and discrimination.

Gilbert and Vick (2004, p. 88) shed further light on the nature of concepts and the implications for learning and teaching when they identify two types of concepts, descriptive or substantive concepts and analytical or syntactical concepts. They claim that Tennyson's definition reflects the character of descriptive concepts with its focus on "classes of things, people [such as] nations, industries, workers, wars, suburbs, governments, rivers", while analytical concepts are "terms referring not to phenomena but to procedures and ways of thinking about substantive concepts". They list examples of the latter as "cost-benefit analysis, spatial association, historical continuity or cultural change".

Clearly, quality teaching and learning must build conceptual knowledge, focusing on both descriptive and analytical concepts. As indicated earlier, the need for deep and relevant conceptual knowledge exists in all classrooms, those with single year levels and multiple year levels. A device or curriculum design element useful in enacting the Australian Curriculum in multiple year level classrooms is the conceptual thread.⁴

Conceptual threads are defined here as explicit statements which demonstrate the linkage of concepts, in the identified curriculum, across more than one year level in a particular learning area. These threads establish links to connect learning across year levels, and clarify shared concepts, including concepts that build up from one year to the next. The conceptual threads are used in unit planning but may also be evident in whole school or year planning in multiple year level contexts.

This term, as it is used here, was developed by the author in collaboration with officers of the Queensland Studies Authority in the development of practical materials for schools and teachers planning for multiple year levels.

Planning based on conceptual threads 4.

Planning for quality learning is essential. According to QSA (2011):

Planning improves student learning by ensuring that the required knowledge, skills and understandings are included in the learning programs; that there is depth of learning; and increasing sophistication of learning as students progress through their schooling.

Planning that uses content descriptions and achievement standards from more than one year level of the Australian Curriculum is clearly more complicated than that involving only a single year level curriculum. It is assumed that teachers planning learning for multiple year levels will be doing so within one of two contexts. In some cases teachers may be working within the already allocated content descriptions of the learning area and will be planning ways in which they can link student learning across year levels in meaningful ways. This may be the case where content descriptions have already been allocated across the term, the semester and the year through the whole school curriculum and assessment plan. In other cases, teachers will be exploring the ways in which they can meaningfully scope and sequence the content descriptions in a learning area in order to create their year level overviews and whole school plans.⁵ The strategies that follow relate to the identification of curriculum, one of the "elements of effective planning" advocated by QSA (2011). The other planning elements, not foregrounded in these processes, also play out differently in a classroom with multiple year levels. These elements include:

- developing assessment
- sequencing teaching and learning
- making judgments
- using feedback.

4.1 Planning processes for multiple year level classrooms

Possible processes for planning in multiple year level classrooms are described below. The key element in the processes is the conceptual thread.

Become familiar with the key focus of the learning area based on the year level descriptions. Note the build-on from one year to the next in the example below.

Note: The example below is drawn from the year level descriptions from the *Australian* Curriculum: Mathematics, version 1.2 (ACARA 2011). This highlighted version can be found in the QSA Mathematics Prep Year to Year 7 year plan for multiple year levels and unit overviews for multiple year levels <www.qsa.qld.edu.au>.

Identify curriculum		Understanding includes connecting number representations with number sequences, partitioning and combining numbers identifying environmental symmetry Fluency includes recalling multiplication facts, using familiar metric units to order and compare objects, identifying and des Problem Solving includes formulating and modelling authentic situations involving planning methods of data collection and continue number patterns Reasoning includes using generalising from number properties and results of calculations, comparing angles, creating and
Ider		Understanding includes making connections between representations of numbers, partitioning and combining numbers fleusing informal units for comparing, and describing properties of symmetrical shapes
	ear 4	Fluency includes recalling multiplication tables, communicating sequences of simple fractions, using instruments to measu recording data
	>	Problem Solving includes formulating, modelling and recording authentic situations involving operations, comparing large reasoning includes using generalising from number properties and results of calculations, deriving strategies for unfamilia graphical displays and evaluating the appropriateness of different displays.

See QSA templates for whole school curriculum and assessment plans, year level overviews, and unit overviews for classrooms with multiple year levels at <www.qsa.qld.edu.au/13639>.

2. Consider school and community context and demographics. Also consider whole school focus based on systemic and school data, as well as systemic priorities.

Our whole school focus is on investigation, encouraging students to develop their understanding and skills through practical application. Our curriculum intention is to weave the proficiencies as described in the Australian Curriculum through the curriculum content.

Develop big idea/s based on knowledge of the required curriculum from Preparatory Year to Year 7, school context and demographics, systemic and school focus.

Unit outline

The big idea for this unit is that comparing and measuring helps us to discover the world around us.

- Identify content descriptions and relevant sections of the achievement standards.
- Develop inquiry questions that respond to the content descriptions within the context of the big idea/s. Focus on developing inquiry questions for each year level or across year levels.

Unit outline

The big idea for this unit is that comparing and measuring helps us to discover the world around us. The inquiry questions for this unit include:

- What is the language of measurement?
- How can we explain our measurements?
- Which measuring tool will give the most accurate measurement?
- How do I compare two or more objects?
- What makes a good way of measuring capacity, length or mass?
- · Where do we use measurement in our world?
- 6. Articulate the conceptual threads, that is, explicit statements which demonstrate the linkage of concepts across more than one year level. These conceptual threads reflect the continuities across year levels evident in the big ideas, inquiry questions and learning focus. The filter facility on the Australian Curriculum website <www.australiancurriculum.edu.au> provides support for highlighting the development of conceptual threads across year levels.

Outlining the conceptual threads

Develop	ment of concepts				
Prep	Comparisons of units of measurement: direct comparison of length, mass and capacity				
Year 1	Comparisons of units of measurement: uniform informal units to compare length and capacity				
Year 2	Comparisons of units of measurement: uniform informal units to order and compare length, mass, capacity and volume				
Year 3	Comparisons of units of measurement: familiar metric units to measure and compare length, mass and capacity				
Year 4	Comparisons of units of measurement: familiar metric units to measure and compare length, mass, capacity, temperature, area and volume				
Year 5	Comparisons using calculations: choose appropriate metric units for length, area, volume, capacity and mass and calculate perimeter and area				
Year 6	Comparisons using calculations: solve problems involving the comparison of lengths and areas				
Year 7	Comparisons using calculations: use formulas to calculate area and volume				

Applying planning processes in multiple year level 4.2 classrooms

The planning processes described above are suggested as a guide only. For example, teachers might commence their planning with:

- the content, i.e. the content descriptions to be used in planning and the relevant parts of the achievement standards, as shown in the processes above
- the context, i.e. the problem, question, issue or theme from which the unit overview builds
- the concepts, i.e. the descriptive or analytical ideas, built from the content descriptions.

The above processes can be used in the identification of curriculum for classrooms with two or three consecutive or non-consecutive year levels. Further, a teacher may identify a unit overview from the QSA Assessment Bank which has been designed for a single year level and apply these processes.

Conceptual threads are also a useful construct for those working in special education. Tracey Chappell, a special education school principal, explains below some key practices used in classrooms catering for students with disabilities. There is resonance between what she describes and the idea of conceptual threads. She says:

In our special education setting, we group our students so that we can support our students' learning through their engagement with manageable chunks of knowledge, processes and skills — not unlike what's described in this paper as conceptual threads. We may have to spend more time than our colleagues do in mainstream settings, to build the field knowledge in terms of the concepts, background knowledge or generic structures associated with the learning. Through this we make the concepts as concrete as possible so students can hook into the learning and build to the abstract, for those who are capable.

Linking to the "year" levels equivalent to the age — in flexible ways — helps us to ensure we don't narrow or diminish the learning and our expectations for the students. Our students can engage with the concepts at age or close-to-age level, but they are often functioning at a lower level in terms of skills and the ways that they can communicate that knowledge. For us, this means the layers within each of the content descriptions and achievement standards may vary, with a student engaging with the conceptual knowledge at one level, but the process and skills may be developing at another level. The conceptual thread represents a key linking of concepts a special education teacher might be working with as they support a number of students in their classroom.

(T Chappell, personal communication, 7 February 2011)

To reiterate a key point, these possible processes are based on the articulation of conceptual threads that are formed from the identified curriculum across the span of year levels in the multiple year level classroom. These threads establish links to connect learning across year levels, and clarify shared concepts, including concepts that build up from one year to the next. Specifically, the conceptual threads synthesise the big ideas and inquiry questions that drive the unit planning for multiple year level classrooms. Many teachers have been using such an approach while working with other curriculum frameworks. Processes proposed here are based on the design and the elements of the Australian Curriculum.

Conclusion 5.

This paper has attempted to highlight some of the planning issues associated with the enactment of the Australian Curriculum in Queensland classrooms with multiple year levels. Two issues confronting schools with single year levels classrooms, as well as those with multiple year level classrooms, were also explored. These included the need for teachers to commence their planning, assessing and reporting using the Australian Curriculum available while simultaneously continuing to use state-based frameworks in other areas. The ambiguous nature of the achievement standards, at the time of writing this paper, was also identified. A snapshot was provided of the diverse classroom arrangements in Queensland in which multiple year level classes are the result of either necessity or choice. The need for deep conceptual learning in relation to the Australian Curriculum was explored in relation to schools generally but also as an integrating device for use across multiple year levels. Specifically, the conceptual thread was explored as an explicit linking of concepts that underpin the identified curriculum at each level of the span of targeted year levels in a particular learning area. The paper concluded with possible processes for use in multiple year level settings. All of these processes draw on the conceptual thread as a way to promote a common planning focus for teachers across year levels and a common basis for learning among students in complex multiple year level classrooms.

Teachers working every day in classrooms across Queensland know that articulated processes may be of use but that they are continually challenged to draw elements from a range of processes in order to respond to the complex contexts in which they find themselves. Students do not follow the steps outlined in texts on how to teach or plan curriculum and assessment. Nor do students and classrooms fit neatly into scenarios explored in issues papers. This paper calls for greater support for teachers to engage in inquiry into their own contexts, exploring issues, and formulating and enacting solutions. Heeding Reid's (2004) proposal that "being an educator in the 21st century centrally involves the capacity to inquire into professional practice", the suggestion here is that teachers should be supported, with assistance from external critical friends, where appropriate, to explore ways in which the Australian Curriculum can be enacted to promote quality learning for all students in local and complex contexts.

The reader is invited to consider the snapshot of one Queensland classroom in 2011.

Pat is a teacher at a small school in Ipswich. Nearly one-third of the students at her school are Aboriginal or Torres Strait Islander and 10% of students have a recognised disability. One in 20 students is in care.

In 2011, Pat has a class of 24 students. The class is made up of:

- two Year 4 students
- eight Year 5 students
- nine Year 6 students
- five Year 7 students.

Six of her students have intellectual impairment and three of those have autism spectrum disorder (ASD). Pat comments that there are lots of social emotional problems among students in the class. There is another class at the school with Years 5, 6 and 7 students, but the decision to locate the students with special needs in Pat's class was taken in order to centralise support for intervention strategies. As a result of National Partnerships funding, a relatively high level of teacher-aide support is available in this class. For example, this class is supported by a teacher-aide every day until lunch-time with an additional teacher-aide to support students during the two-hour literacy block three times a week.

During the course of 2010, Pat will prepare students for the Year 4 and Year 6 Queensland Comparable Assessment Tasks (QCATs) in English, Mathematics and Science. In May, her students in Years 5 and 7 will complete a series of tests as part of the National Assessment Program — Literacy and Numeracy (NAPLAN).

Pat is likely to have a similar class in 2012 when she will be required to plan, assess and report her students' learning against achievement standards for Years 4, 5, 6 and 7 in English, Mathematics and Science, while also drawing on the QCAR Framework to plan, assess and report in five key learning areas.

Pat's class is just one of the many complex classrooms in Queensland schools that justify the call for support to be provided to teachers as inquirers into their own practice as they enact the Australian Curriculum in multiple year level settings.

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