

The Shape of the National Curriculum: A Proposal for Discussion

Contents

Preamble: National Curriculum Board's consultative process	(i)
Determining the form of the national curriculum	(i)
Developing the scope and content of each national curriculum.....	(i)
Building Australia's future	1
Changed context	1
Goals of education for young Australians	2
The national curriculum	4
Principles and specifications for development	4
Curriculum content – knowledge, understanding and skills	4
Solid foundation in skills and knowledge for further learning	6
Deep knowledge and skills.....	6
General capabilities.....	8
Achievement standards.....	9
Curriculum development.....	10
Implementation	11

Preamble: National Curriculum Board's consultative process

Determining the form of the national curriculum

1 The National Curriculum Board is committed to an open development process with substantial consultation with the profession and the public. The Board began its consultation with the publication on its website (www.ncb.org.au) of *National Curriculum Development Paper*, a discussion paper in which it described the context of its work and set down a set of questions that it said it needed to answer to determine the kind of curriculum it would produce. That paper has been discussed at a national forum attended by 200 people on 27 June 2008 and in subsequent state and territory forums.

2 In the light of these discussions and its own further work the Board now sets down answers to its questions in the document *Shaping the National Curriculum: a Proposal for Discussion*. That does not mean, however, that discussion is closed. The paper is posted on the Board's website with an invitation to anyone interested to provide comment and advice during Term 4, 2008¹. They can be provided via the Board's website, by email to feedback@ncb.org.au or by mail to National Curriculum Board, PO Box 177, Carlton South VIC 3053. After this time, the Board will determine its final recommendations and post them on its website in Term 1, 2009.

Developing the scope and content of each national curriculum

3 The Board has also begun work on the shape of the national curriculum in English, mathematics, the sciences and history. For each, the Board recruited a writer who has worked with a small advisory group to draft a relatively brief initial advice paper that provides a rationale for students studying the curriculum and a broad scope and sequence of material to be covered over the years Kindergarten to year 12.

4 This approach will facilitate a discussion of the key issues in each curriculum before any detailed curriculum development commences. The first discussions will be held in the following national forums attended by 150-250 people:

Monday 13 October 2008	<i>Science</i>
Tuesday 14 October 2008	<i>Mathematics</i>
Wednesday 15 October 2008	<i>History</i>
Friday 17 October 2008	<i>English</i>

5 At the forums there will also be some discussion about cross-curriculum learnings, including literacy and numeracy. Feedback from the forums will form part of the consultative process that will ultimately lead to more focused consultation about literacy and numeracy as a strong foundation for all learning, as outlined in the Board's remit to develop national curriculum.

6 On the day after each forum a small group of nominees from the relevant subject associations will meet with the authors and staff from the Office of the National Curriculum Board to provide their interpretation of the discussion in the forum and its implications for developing the curriculum. More detailed papers will be posted on the Board's website with an invitation to anyone interested to provide comment and advice in the period to 28 February 2009. After that, the Board will post on its website its final recommendations to guide curriculum development.

¹ Individuals can register on the website to receive email alerts when any new material is posted, particularly material on which comment and advice are invited.

BUILDING AUSTRALIA'S FUTURE

Changed context

1 Education plays an important role in forming the young people who will take responsibility for Australia in the future. If it is to play this role effectively, education must address the intellectual, personal, social and economic development of young Australians and it must do so in circumstances that are changing our national conception of the goals of education.

2 The draft *National Declaration on Educational Goals for Young Australians*, prepared under the auspices of the Ministerial Council on Education, Employment, Training and Youth Affairs, nominates five major changes that, over the twenty years since Ministers' first collaborative statement on goals for schooling in their 1989 Hobart Declaration, have altered the way in which the citizens of the world interact with each other (Box 1).

3 Schooling must not only deal with these remarkable changes but also to some extent anticipate futures that are distant and seen only dimly. We expect almost all young Australians who begin primary school in 2011 will continue their initial education until 2022. Many will go on to post-secondary education and not complete their initial education until the mid-2020s and later.

Box 1: Changes over the past 20 years with implications for education

- Increasing global integration and interdependence, as well as increased mobility and migration, are driving the need for greater religious tolerance, an appreciation of cultural diversity and a sense of global citizenship and commitment to peaceful conflict resolution among all Australians. Successful and equitable societies – at local, national and global levels - have the skills and desire to benefit from and build on cultural, religious, intellectual and social diversities.
- India, China and other Asia-Pacific nations are growing and strengthening their impact on the world, representing a huge shift in geopolitical power and sparking the need for all Australians to become 'Asia literate'.
- Globalisation and technological change also place an ever increasing premium on successful education and skill development, so that opportunities for fulfilling and rewarding lives for young people who do not complete secondary education, and also proceed into further training or education, are becoming few and far between.
- Increasingly complex environmental pressures that extend beyond national borders – such as climate change – pose unprecedented challenges, requiring countries with different priorities to work together in ways never before achieved. They also demand all Australians engage with science and approach problem-solving in new and creative ways.
- Rapid and continuing advances in information and communication technologies (ICT) are changing the way we share, use, develop and process information and technology, and there has been a massive shift in power – to consumers in general, and to learners specifically. In this digital age, young people generally need to be highly literate in ICT and increasingly expect to be able to use such technologies in their learning. While there is some knowledge about how to effectively embed these technologies in learning in schools, we need to make a quantum leap in this effectiveness over the next decade.

Ministerial Council on Education, Employment, Training and Youth Affairs, *National Declaration on Educational Goals for Young Australians – Draft*, 8 September 2008, p.3.

4 Curriculum will be only one influence on how well young Australians are prepared for their futures by their education but it will be important because it sets the level of expectation of their learning. High-performing countries set high-expectations. They support the fulfilment of those expectations with high-quality teaching, school and system leadership, and commitment and support from families, communities and business and industry.

5 The commitment to develop a national curriculum reflects a willingness of Australians to work together, across geographic and school sector boundaries, to develop a world class curriculum for all young Australians. It involves national acceptance of responsibility for high-quality, high-equity education across the country. It offers the prospect of harnessing expertise and effort nationally in the pursuit of common national goals.

6 National collaboration in education in Australia is not new. Both the 1989 Ministerial Hobart Declaration and the subsequent 1999 Ministerial Adelaide Declaration authorised and stimulated national effort. The new *National Declaration on Educational Goals for Young Australians* currently being prepared will be a significant further step and will provide a framework for the National Curriculum Board's development of a national, K–12 curriculum in English, mathematics, the sciences and history and later in geography and languages other than English.

7 In working together on a common curriculum Australia will be taking a lead among federal countries in the OECD. There are OECD countries with national education systems but in those with federal systems, education is generally the constitutional responsibility of the states and not the federal government. There is consultation across state borders but no active collaboration on a national curriculum. That is the case in Canada, Germany, Mexico, Switzerland and the United States. It is also the case in the United Kingdom where Scotland has long had an education system different from England's and where Wales and Northern Ireland are increasingly different.

8 Mobility of students and teachers across state and territory borders within Australia is one reason for developing a national curriculum but there are other compelling ones as well. Among the OECD federal states, Australia is relatively small, and some of its jurisdictions are particularly so. Harnessing effort across the country offers economies of scale and a substantial reduction in duplication of effort. Most importantly it will enable us to work collectively in defining what young Australians should learn and in creating and sustaining a world-class, and even a world-best, schooling system.

Goals of education for young Australians

9 While the National Curriculum Board's curricula for English, mathematics, the sciences and history will have more specific goals, the Board's work overall will be guided by the *National Declaration on Educational Goals for Young Australians* adopted by Ministers. The 8 September 2008 draft of the *National Declaration* declares commitments 'to supporting all young Australians to become successful learners, confident individuals and active and informed citizens' (Box 2) and to promoting equity in education.

10 The Board's curriculum can address the three goals for young Australians directly. In pursuing the goal of a more equitable education system, curriculum can make some contribution but success will depend more on substantial action by education authorities funding and running schools.

11 One important lesson of past efforts to address inequity is that an alternative curriculum for students perceived to be disadvantaged does not treat them equitably. Setting lower expectations through a different curriculum can consign disadvantaged students to poorer outcomes. It is better to set the same high expectations for all students and to provide differentiated levels of support to ensure that all students have a fair chance to achieve them. That is a view put by many leaders in the indigenous community on behalf of their young people.

Box 2: Educational goals for young Australians

Successful learners...

- have the essential skills in literacy and numeracy as a foundation for success in all learning areas
- are creative and resourceful and are able to think critically, analyse information and solve problems
- are able to learn and plan activities independently, collaborate and communicate ideas
- are motivated to reach their full potential
- have the capacity to make sense of their world and think about how things became the way they are
- are on a pathway towards further education, training or employment, and acquire the skills that support this, including an appetite for life-long learning

Confident individuals...

- have a sense of optimism, self-esteem and are able to manage their emotional, mental and physical wellbeing
- have a sense of respect for others, control over their lives and are well prepared for their potential life roles as family, community and workforce members
- value their culture and place in Australia and have a strong sense of identity
- are creative and productive users of technologies, particularly information and communication technologies
- have the knowledge, skills and attitudes to establish and maintain healthy, satisfying lifestyles
- are able to embrace opportunities, make rational and informed decisions about their own lives, and accept responsibility for their own actions

Active and informed citizens...

- have the capacity and inclination to act with moral and ethical integrity
- have an understanding of Australia's system of government and civic life and appreciate its diversity of culture and history, including the special place of Aboriginal and Torres Strait Islander cultures
- are able to relate and communicate across cultures, especially in relation to cultures and countries of the Asia-Pacific
- have a desire and capacity to work for the common good, including stewardship of the natural environment
- are responsible global and local citizens

Ministerial Council on Education, Employment, Training and Youth Affairs, *National Declaration on Educational Goals for Young Australians – Draft*, 8 September 2008, pp.5-6.

12 Since the Board is not responsible for the whole curriculum, it will seek to ensure that its curriculum connects with the curriculum areas that will continue to be developed by the states and territories

THE NATIONAL CURRICULUM

Principles and specifications for development

13 The National Curriculum Board's work will be guided by the following principles and specifications for development.

- a) The curriculum should make clear to teachers what has to be taught and to students what they should learn and what achievement standards are expected of them. This means that curriculum documents will be explicit about knowledge, understanding and skills and will provide a clear foundation for the development of a teaching program.
- b) The curriculum should be based on the assumptions that all students can learn and that every child matters. It should set high standards and ensure that they apply to all young Australians while acknowledging the markedly different rates at which students develop.
- c) The curriculum should connect with and build on the early years learning framework being developed for the pre-K phase.
- d) The curriculum should build firm foundational skills and a basis for the development of expertise by those who move to specialised advanced studies in academic disciplines, professions and technical trades. It should anticipate and provide for an increase in the proportion of students who remain in education and training to complete Year 12 or equivalent vocational education and training and the proportion who continue to further study.
- e) The curriculum should provide students with an understanding of the past that has shaped the society and culture in which they are growing and developing, and with knowledge, understandings and skills that will help them in their future lives.
- f) The curriculum should be feasible, taking account of the time and resources available to teachers and students and the time it takes to learn complex concepts and ideas. In particular, the curriculum documents should take account of the fact that many primary teachers are responsible for several learning areas and should limit the volume of material which they must read in order to develop teaching programs.
- g) The primary audience for national curriculum documents should be classroom teachers. Documents should be concise and expressed in plain language which, nevertheless, preserves a complexity in ideas appropriate for professional practitioners. Documents should be recognisably similar across learning areas in language, structure and length.
- h) Time demands on students must leave room for learning areas that will not be part of the national curriculum.
- i) The curriculum should allow jurisdictions, systems and schools to implement it in a way that values teachers' professional knowledge and reflects local contexts.
- j) The curriculum should be established on a strong evidence base on learning, pedagogy and what works in professional practice and should encourage teachers to experiment systematically with and evaluate their practices.

Curriculum content – knowledge, understanding and skills

14 Within each learning area for which it is responsible, the Board will describe the knowledge, understandings and skills that students will be expected to develop. The draft

Box 3: Intended educational outcomes for young Australians

- **a solid foundation in skills and knowledge on which further learning and adult life can be built**

The curriculum must include a strong focus on literacy and numeracy skills. It should also enable students to develop competence in a range of other areas, such as developing an understanding of history and culture and the key principles of science; knowledge of spiritual, moral and aesthetic dimensions of life; and competence in and appreciation of the creative arts.

- **deep knowledge and skills that will enable advanced learning and an ability to create new ideas and translate them into practical applications**

The curriculum must enable young people to develop sound knowledge in disciplines such as mathematics, science, languages, humanities and arts, to develop expertise in specific disciplines and open up new ways of thinking. This requires development of deep knowledge within a discipline that shapes the ways in which problems are represented, considered and solved, and provides a foundation for development of multidisciplinary capabilities. This enables multidisciplinary capabilities that draw on knowledge and skills from different disciplines and can be applied to new challenges, such as climate change, genetic engineering and understanding and managing cultural difference.

- **general capabilities that underpin flexible and critical thinking, a capacity to work with others and an ability to move across subject disciplines to develop new expertise**

The curriculum should support young people to develop a range of generic skills such as the ability to think flexibly, to communicate well and work collaboratively with others. They also need the capacity to think creatively and innovate, to problem solve and engage with new subject disciplines.

Ministerial Council on Education, Employment, Training and Youth Affairs, *National Declaration on Educational Goals for Young Australians – Draft*, 8 September 2008, p.10.

National Declaration on Educational Goals for Young Australians identifies three broad categories of outcomes that the curriculum should deliver for students (Box 3) and the national curriculum will be developed with these categories in view.

15 The National Curriculum Board's remit requires it 'to develop a national curriculum that sets core content and achievement standards that are expected of students at each year of schooling'. Current Australian curriculum documents are set out in phases or stages of schooling, not in year levels though, in some cases, schools are required to have a curriculum outlined in year levels.

16 The current representation reflects the important point that students develop at markedly different rates and that year-by-year specification of the curriculum can risk imposing lock-step progression on all students. Presenting the curriculum in stages or phases, such as K-2, 3-4, 5-6, 7-8, 9-10 and 11-12, is intended to recognise that students' levels of development are spread over more than one year of the curriculum's expectations. In fact, they will be spread beyond the boundaries of a phase/stage, particularly when the class is notionally in the final year of a phase/stage.

17 Teachers understand the developmental diversity among the students before them but still need to organise work for a year level if that is how their students are grouped. Organising the curriculum by year level will make this easier for teachers and will minimise the risk of repetition of content from year to year as students change teachers or even schools between years.

18 While the national curriculum will be set out in year levels, it could perhaps provide for significant reviews of students at key transition points, such as from year 3 to 4 and around years 9 and 10 by summarising the objectives to have been achieved by students to those transition points. Many students will be well ahead of standard expectations but it is important that those who are struggling are identified systematically and helped to catch up, otherwise their further learning will be jeopardised.

19 Some of the variation among students in their level of development and progress can become the basis for inequities in their educational experiences. The Board will not accommodate these differences by setting different expectations for different group, since that reinforces differences and creates inequitable outcomes. The primary role in dealing with these differences lies with school systems, schools and teachers. The national curriculum will seek to contribute by making its content inclusive of the experiences and knowledge of all students, including marginalised ones.

Solid foundation in skills and knowledge for further learning

20 Literacy and numeracy are foundation skills on which much further learning depends so it is important that strong foundations are laid early. The foundation for literacy will be built primarily in English and the foundation for numeracy primarily in mathematics but both literacy and numeracy must also be strengthened in the sciences and history as well.

21 The Board's remit requires it to develop 'a continuum of learning in literacy and numeracy skills, ranging from basic competence in the early years through to the advancement and extension of these skills in the middle and later years of schooling'. It is important, as the remit recognises, that these foundation skills not be thought of only in terms of initial or minimally acceptable levels of competence.

22 The OECD's international comparisons of the performances of 15 year olds in reading in the Program for International Student Assessment (PISA) ranks Australia high in average performance – behind only Finland in 2000 and 2003 but behind Finland, South Korea, Hong Kong, Canada and New Zealand in 2006. Australia's relative decline in 2006 from equal second to equal sixth occurred because Australia's mean declined while those for Korea and Hong Kong rose and those for Finland, Canada and New Zealand held constant. The proportion of poorly performing Australians, with serious literacy problems, did not increase and is not greater than the proportions in the other high-performing countries. The decline in Australia's mean occurred because of a decline in the proportion of high performers able to deal with complex text.

23 In mathematics in PISA, Australia's mean held constant from 2003 to 2006 with a slight decline among high performers offset by an improvement among low performers.

24 These international comparisons emphasise the importance of conceptualising literacy and numeracy over a full scale from the acquisition of initial skills to the development of sophisticated skills. The Board's curriculum documents for English, mathematics, the sciences and history will each deal explicitly with these developmental continua.

Deep knowledge and skills

25 Solid foundations need to be built more generally in English, mathematics, the sciences and history but the K-12 curriculum sequence must also provide the means for students to develop deep knowledge and skills. In the selection of content, the Board will need to deal with the rapidly expanding bodies of knowledge that can create problems for curriculum development.

26 At times, the expansion of knowledge has led to the curriculum becoming overcrowded as competing claims for priority have been dealt with by compromise rather than by rigorous

evaluation to determine what to include and what to exclude. The result is a volume of curriculum content that cannot be covered adequately in the time available. The Board will develop a national curriculum that provides for rigorous, in-depth study and will prefer that to breadth wherever a choice needs to be made.

27 At other times the expansion of knowledge has created a sense that any choice of content will necessarily be relatively arbitrary. This, in turn, has led to a view that it would be better to focus on the processes used in particular domains of knowledge rather than on knowledge itself and to choose the content simply as the vehicle to develop students' understanding of the processes. The result is a focus on scientific investigation rather than science, a focus on historical method rather than history, and a variation in content across schools that is arbitrary or even idiosyncratic.

28 That kind of separation of content and process is not helpful and will be avoided in the development of the national curriculum. It does not reflect what is known about the differences between experts and novices. Experts solve problems more quickly and efficiently than novices not only because they can call on automated responses honed through considerable experience but because they represent problems in ways that facilitate solution. The problem representations of experts depend on deep knowledge and understandings within the domain from which the problems are drawn. The K-12 national curriculum will help students begin to develop the knowledge and understandings of domains on the basis of which at least some of them will go on to develop very high levels of expertise.

29 The Board will publish *Proposed Structures for the National Curriculum* in English, mathematics, the sciences and history setting out for each the nature of knowledge involved, the ways in which knowledge is acquired and tested, a rationale for the choice of content that makes clear to teachers and students why it is important for students, and the broad scope and sequence of learning to be expected through the K-12 years. The rationale will make clear where the choice is based on 'big ideas' that are essential to deep understanding of a domain of knowledge, learning that is essential for particular further learning, or other important considerations such as the students' developing sense of an 'Australian identity' or Australia's geographic and historical context. The scope and sequence will ensure that learning is appropriately ordered and that unnecessary repetition is avoided.

30 The OECD PISA results that show Australian 15 year olds to be high performers show them also to rank relatively low among countries in their liking for the learning in which they perform well. Students' attitudes to the knowledge, understandings and skills they are development will be influenced perhaps more by teaching than by curriculum but the curriculum can help if its content is connected in relevant ways to students' lives and their futures.

31 The national curriculum will not be just a core around which other things will need to be developed by schools of systems. It will be complete in its specification but will allow for additions. There will be scope, as there is in state and territory curricula, for teacher professional judgement about what to cover and in what sequence, about how to reflect local and regional circumstances and about how to take advantage of teachers' special knowledge and teachers' and students' interests.

32 In K-10, there will be a national curriculum in English, mathematics, science and history. In years 11 and 12, and perhaps earlier, the curriculum will be differentiated into separate subjects. Just how this differentiation might be arranged is considered in the four documents:

National Science Curriculum: Initial Advice

National Mathematics Curriculum: Initial Advice

National History Curriculum: Initial Advice

National English Curriculum: Initial Advice

on which comment and advice are invited.

General capabilities

33 Not all learning is well contained within learning areas into which the school curriculum has traditionally been divided. Reflections on the nature of work in the 21st Century typically identify important general capabilities that it is argued schools should also help students develop. As shown in Box 3, the draft *National Declaration on Educational Goals for Young Australians* characterises these as ‘the ability to think flexibly, to communicate well and work collaboratively with others ... the capacity to think creatively and innovate, to problem solve and engage with new subject disciplines’.

34 Generic competencies have been important in discussions of the goals of education in Australia for many years. In 1992, the Myer Committee² nominated seven. In 2002, the Business Council of Australia and the Australian Chamber of Commerce and Industry³ updated the Mayer Committee’s set with a list with eight: The relationship between the two sets is summarised in Table 1.

Table 1: Mapping key competencies onto employability skills⁴

Key competencies	Employability skills
Communicate ideas and information	Communication
Work with others in teams	Teamwork
Solve problems	Problem solving
Use technology	Technology
Collect, analyse and organise information	Planning and organising
	Initiative and enterprise
Plan and organise activities	Self-management
	Learning
Use mathematical ideas and techniques	Contained in descriptions of several of the employability skills

35 The Board will deal explicitly with general capabilities within its English, mathematics, the sciences and history curricula to avoid any risk that they will languish unattended on the assumption that they will be addressed by schools ‘across the curriculum’.

36 As already indicated, literacy and numeracy are cross-curriculum competences that need to be used and developed in all learning areas. Their initial and major continuing development will be in English and mathematics respectively but the national curriculum will ensure that they are used and developed in all learning areas. Literacy will be broadened to include communications skills.

37 Information and communications technology (ICT) competence has cross-curriculum implications. Skills and understanding in the use of ICT are required for all learning areas. Many applications will be specific to particular learning areas, such as remote sensing or modelling in science or modelling in mathematics, and will obviously need to be addressed through the curriculum for the relevant learning area. Some aspects of ICT competence are as much about

² Australian Education Council - Mayer Committee (1992), *Key Competencies: Report of the Committee to Advise the Australian Education Council and Ministers of Vocational Education, Employment and Training on Employment-related Key Competencies for Post-compulsory Education and Training*, Australian Education Council.

³ Australian Chamber of Commerce and Industry & Business Council of Australia (2002), *Employability skills for the future*, Department of Education, Science and Training, Canberra.

⁴ Precision Consultancy (2006), *Employability skills: from framework to practice*, Department of Education, Science and Training, Canberra, p.10.

information management as about the use of technology so an important aspect of the competence is the ability to evaluate the source, reliability, accuracy and validity of information that abounds in cyberspace and is readily retrievable. This set of capacities will be represented in each curriculum area in ways appropriate to that area.

38 ICT also offers a means by which schools and students can collaborate with others outside the school and even outside the country. Exploration and use of these possibilities, however, is a matter for teachers and school administrators not the curriculum *per se*.

39 While problem solving is frequently advanced as a general capability that schools should develop, including in the lists in Table 1, it is not one that transfers across domains. Problem solving in history is not the same as problem solving in physics. Furthermore, there is good research evidence that problem-solving competence in one area, particularly high-level problem-solving competence of the type developed by experts, does not transfer readily from one domain to another. Experts moving outside their domain of expertise become novices in a new domain. They have to acquire the knowledge, understandings and skills relevant to that domain in order to become skilled problem solvers with any marked level of expertise. Problem solving will be a clear focus in the national curriculum within each learning area in ways characteristic of that area.

40 Creativity is also advanced as a cross-curriculum capability and perhaps more properly so. It depends on a capacity to break out of the constraints of well-learned ways of doing things. It is related to the employability skills of initiative and enterprise. These can be developed within particular learning areas and also by making connections with other areas, including those outside the current scope of the national curriculum such as the creative arts. How and when that might be done will be primarily a matter for teachers and resource materials not the curriculum.

41 Some cross-curriculum competences are clearly not domain-specific. A capacity and a predisposition to work together with others in teams characterised by mutual respect among members is one example. Being able to manage and monitor one's own learning is another that is particularly important if students are to become effective lifelong learners. These competences can be taught and learned by students in any domain. Their development will depend on teachers' choices of classroom activities.

42 There are other cross-curriculum capabilities that can be thought of as perspectives rather than competences. Cultural sensitivity and respect, engaged citizenship and a commitment to sustainable patterns of living are examples though each depends on particular knowledge and understandings as well. Development of a perspective on the world beyond Australia, in the Asia-Pacific region and globally, is also important. Aspects of these will be addressed in the national curriculum.

Achievement standards

43 Descriptions of content make clear what should be taught and the knowledge, understandings and skills that students are to acquire or develop. Achievement standards indicate the quality of achievement that is expected and provide the basis for judgements about the quality of students' work.

44 It is not helpful to describe a single achievement standard for a year level (or the end of a phase/stage) because of the wide variation in students' achievements. Focusing on a minimum benchmark is unhelpful for students who might have reached and surpassed it in earlier years of schooling and is not necessarily all that helpful for students who might not have reached the benchmark but whose achievement levels are improving year on year.

45 Acceptance of wide variation should not become an excuse for accepting poor achievement or, worse, setting low expectations for some students based on their prior

achievements or their membership of some groups that might, on average, be characterised by relatively poor achievements. Clear definitions of achievement standards should provide the means to set the same appropriately challenging expectations for all students.

46 One approach to the definition of standards has been to provide descriptors of different levels of achievement. A difficulty with that approach is that distinctions between levels often rest upon the use of adjectives such as 'limited', 'considerable' and 'substantial' to qualify similar descriptions. It is hard then to use these descriptors consistently across schools and classes within schools. Another difficulty with this approach is that very large numbers of descriptors can be required to cover the various strands of a curriculum.

47 A more helpful approach for teachers has been the provision of examples of student work which provide the task and a student's response with an assessment and annotations setting out the basis for the assessment. The National Curriculum Board is collaborating with the Australasian Curriculum, Assessment and Certification Authorities in a project that will test the feasibility of gathering nationally such annotated student work samples in English and mathematics in the first instance. The tasks will be real tasks used by teachers in schools and the assessments will be provided by groups of teachers working with staff of the Authorities. If this project works satisfactorily, the approach will be used for English, mathematics, the sciences and history as the national curriculum development work proceeds and materials are trialled in schools.

48 These annotated student work samples will be used to illustrate the differences in quality of student work that would receive the A-E grade levels currently in use in Australian schools. They will also be used to define developmental continua on which students' progress can be mapped. For numeracy and literacy, the national results in the National Assessment Program – Literacy and Numeracy (*NAPLAN*) will define continua on which the annotated student work samples will be located. That will enable schools to locate their judgements of the quality of students' achievements on the same continua.

49 Just how this will be resolved in the national curriculum documents will depend on what the pilot project shows and also how well the approach could be extended to the sciences and history.

50 Whatever the expression of achievement standards in the national curriculum documents, they must serve three purposes at least. One is to make clear what quality of learning (knowledge, understanding and skills) is expected to be achieved. A second is to provide a helpful language with which teachers can discuss with students and their parents the students' current achievement level, progress to date and what should come next. The third is to help in identifying students whose rate of progress puts them at risk of being unable to reach satisfactory achievement levels in later years.

51 For years 11-12, a finer-grained reporting scale would be needed to yield the discrimination in assessments required for post-school selection purposes. This is currently achieved in most jurisdictions with external examinations and in Queensland and the Australian Capital Territory with school-based assessment and reviews of student work by teachers across schools to ensure consistency of assessment and reporting. Those practices could continue in subjects that are part of the national curriculum.

CURRICULUM DEVELOPMENT

52 As indicated in the Preamble (p. i), the Board is seeking comment and advice on this document and on the documents in which it will propose the broad scope and sequence for the national curricula in English, mathematics, science and history. Once the Board has reviewed all the advice that it receives, it will produce its final versions of these documents and publish them on its website (www.ncb.org.au).

53 By March 2009, the Board will have developed detailed writing briefs for writers whom it will recruit to develop the detailed curriculum documents. The Board will organise extensive consultation during the development phase, particularly with practising teachers, and will recruit a panel of schools across the country in which to trial material being developed.

IMPLEMENTATION

54 The Board is to develop national K-12 curriculum in English, mathematics, the sciences and history by the end of 2010. Implementation will follow but this will clearly not mean for all year levels in 2011. For years 11-12, all jurisdictions have rules about the period of notice required before a new curriculum is implemented. Below years 11-12, the extent to which the sequences in the Board's curriculum match those in the states and territories will determine whether particular years could be introduced simultaneously or would need to be staged in a sequence so that students have the basis for each year's content before being presented with it.

55 All states and territories currently have processes by which schools can be accredited to offer something other than their relevant state or territory curriculum. These offerings include the International Baccalaureate, programs developed within a particular educational philosophy that influences curriculum design (e.g. Montessori and Steiner) and special schools with curriculum adapted to the needs of their students. Such provisions could continue in the presence of a national curriculum though that will remain a matter for the states and territories' registration authorities.

56 Professional development for teachers, principals and other curriculum managers in schools will be essential for implementation of the national curriculum. It will be the responsibility of jurisdictions and schools, not the National Curriculum Board, but the Board will seek to collaborate in the process.

57 The implementation of the national curriculum will have implications for initial teacher education as well. Teachers of subjects included in the national curriculum would be able to move more easily between states and territories and teacher education will be able to adopt a more national perspective.