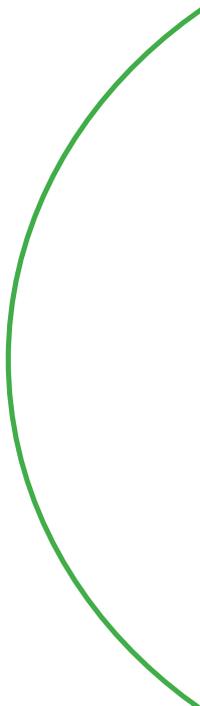

EXECUTIVE SUMMARY

This Review of the New South Wales school curriculum has concluded that change is required. The changes recommended by the Review are far-reaching and amount to the introduction of a new curriculum for NSW schools, from Kindergarten to Year 12. The syllabuses of this new curriculum (referred to as 'new syllabuses') are designed to ensure every student learns with understanding, builds skills in applying knowledge, and makes excellent ongoing progress in their learning. The goal is to provide every student, in each phase of their learning, with strong foundations for what comes next. Detailed planning, piloting and implementation of the new curriculum will be required over an extended period of time, possibly a decade, although some proposed changes should be introduced as a matter of priority. The long-term vision is for a curriculum that supports teachers to nurture wonder, ignite passion and provide every young person with knowledge, skills and attributes that will help prepare them for a lifetime of learning, meaningful adult employment and effective future citizenship.

Although the NSW school curriculum has served students well and continues to provide the foundations for a quality education, the Review was presented with strong evidence of the need for change. Broader changes in society, and particularly increasing globalisation and advances in technologies, have changed forever the world in which students live, including future employment possibilities. With a rapidly expanding range of activities now being performed by machines, occupations of the future will require people with levels of knowledge and skill beyond the capabilities of current and emerging technologies. The new and urgent challenge for schools and the school curriculum is to ensure that all students reach levels of attainment currently achieved by only some. This challenge is being taken seriously by some school systems internationally that recognise the risk of growing numbers of students being left unemployable and economically disadvantaged throughout their lives, with likely implications for increasing social inequalities and tensions.

However, by some indicators, current trends in student attainment in this state appear to be in the opposite direction. Although there is evidence of improvement in reading levels in primary schools (based on NAPLAN tests conducted between 2008 and 2018), the proportion of NSW 15 year olds meeting minimally acceptable standards of reading, mathematical and scientific literacy has been in steady decline (based on PISA assessments conducted between 2000 and 2018). New South Wales students slipped from being among the highest performers in the world in 2000 to being near the OECD average in 2018. In other words, while low-level skills are in declining demand in workplaces, the proportion of NSW 15 year olds achieving only low-level skills has been growing. Reforms to the content and structure of the curriculum, although only part of the solution, are essential in addressing this challenge.

Teachers who spoke with the Review made strong calls for change. They described many current syllabuses as overcrowded with content, impacting their ability to teach effectively. They commonly described being under time pressure to cover large numbers of syllabus 'dot points'. As a result, they experience difficulty in slowing down teaching and re-teaching to ensure students have learnt; they have limited time to teach core ideas in depth, including by providing opportunities for students to apply their learning in a range of contexts; and they often have insufficient time to build skills in knowledge application through student projects and problem-based activities. The crowded nature of many syllabuses, particularly in primary schools, but throughout the years of school, was described as encouraging superficial coverage of material rather than teaching for understanding, exploring relevance and meaning, and providing opportunities for students to transfer and apply what they learn.



Many submissions called for changes to give higher priority to skills development in the curriculum. Some argued for greater emphasis on '21st century skills', 'generic skills' or 'general capabilities', such as skills in using technologies, critical and creative thinking, problem solving, working with others, and communicating. Teachers described a tension between the development of skills of these kinds and the delivery of existing syllabuses, and saw a need to resolve this tension. Others expressed concern over the undervaluing of skills in the senior years of school, exacerbated by the current academic-vocational divide, and called for changes that would result in every subject in these years promoting both skills development and knowledge acquisition.

Another strong call from teachers was for a more flexible curriculum that would allow them to better respond to individual learning needs. Most (but not all) existing syllabuses were described as specifying not only what teachers are to teach, but also when they are to teach and how long they are to spend teaching it. This often constrains their ability to make professional judgements about what individual students are ready to learn and to adapt their teaching accordingly. Instead, teaching becomes a process of delivering the specified year-level syllabus, ensuring it is fully covered, and then assessing and grading each student on how well they have learnt what has been taught. The expectation that teachers will deliver the same content to all students within mandated (or recommended) hours means some students are being taught content for which they are not yet ready or require more time. As a result, these students struggle, tend to achieve low grades year after year, and sometimes fall further behind the longer they are in school. On the other hand, the most advanced students – who typically begin each school year five or six years ahead of the least advanced students in the year level – often are not adequately challenged by the content of year-level syllabuses. There was concern that many of these students are not being stretched to the levels of which they are capable.

It seems likely that the crowded nature of many syllabuses, the undervaluing of skills in the curriculum, and constraints on teachers' abilities to address individual learning needs contribute to many students becoming disengaged from school. For too many students, school learning is a process of memorising facts and routines with limited conceptual understanding. They often have few opportunities to see and appreciate how what they are learning can be transferred and applied or to build practical skills in applying knowledge. And many are being given repeated messages that they are underperforming against year-level expectations, resulting in disengagement and some students falling even further behind.

Evidence from international research into learning – which also informed the Review's deliberations and shaped its recommendations – reinforces the importance of developing students' deep understandings of subject matter and their appreciation of the relevance and potential application of what they are taught. Other research highlights the important role positive self-concept plays in successful learning, and the possibility of promoting this by assisting students to see the progress they are making. And it is now well established through research that learning is maximised when learners are given learning opportunities appropriate to the points they have reached in their learning and at an appropriate level of stretch challenge.

The Review has concluded that significant change is required if the school curriculum is to address these concerns and provide every young person with the knowledge, skills and attributes they will require for further learning, life and work. The recommended changes are far-reaching and amount to the introduction of a new curriculum for NSW schools, from Kindergarten to Year 12. Central to this new curriculum is a set of new syllabuses that are leaner in content; are more focused on developing deep understandings of disciplinary concepts and principles; provide better integration of theory and the application of theory; build students' skills in applying knowledge; and are more flexible in relation to the timing of teaching and learning to accommodate students' widely varying levels of attainment and learning needs. In the senior years of school, a smaller number of rigorous, high quality HSC subjects is envisaged, achieved by combining and consolidating existing subjects. It is recommended that the core content of these new syllabuses be developed with reference to the Australian Curriculum and that, as they are developed, new syllabuses replace the existing syllabuses of the NSW curriculum.

The new curriculum

The new curriculum being proposed by the Review is based on the introduction of 'new syllabuses' for all areas of learning throughout the years of school. These new syllabuses are designed to address concerns raised with the Review about the need to prioritise depth rather than breadth of learning, to better integrate knowledge and skills, and to provide greater flexibility for teachers to respond to the learning needs of individual learners so that every student makes excellent ongoing progress in their learning. The development and introduction of these new syllabuses could take up to a decade.

Figure 1 summarises the key features of new syllabuses and the issues they are designed to address. These features apply to all subjects of the mandated curriculum in the early and middle years of school, as well as to all subjects in the senior years.

The aim of the new curriculum is to ensure every student	EXISTING SYLLABUSES	NEW SYLLABUSES
learns with understanding	<p>Overcrowded</p> <p>Teachers say overcrowded syllabuses make it difficult to teach important content in depth.</p> <p>Many students lack the depth of understanding required to apply subject learning in new and unfamiliar contexts – as evidenced by declining performances in PISA.</p>	<p>Refocused</p> <p>Teaching and learning are focused on developing students' deep understandings of important concepts, principles and methods in each subject. Factual and procedural knowledge remain essential, but the syllabuses of the new curriculum prioritise depth rather than breadth of learning.</p>
builds skills in applying knowledge	<p>Separation of knowledge and skills</p> <p>Existing syllabuses undervalue and underdevelop skills in applying knowledge. This is reflected in the content of most tests and examinations; the separation of 'general capabilities' from subject knowledge; and the separation of knowledge-based and skills-based learning in the senior years.</p>	<p>Integration of knowledge and skills</p> <p>Learning in every subject is a mix of theory and application, with no subject focused only on knowledge or only on skills. New syllabuses develop skills in applying knowledge (for example, critical and creative thinking) and provide opportunities for students to develop and demonstrate such skills.</p>
makes excellent ongoing progress	<p>Progress based on time</p> <p>Existing syllabuses are time-limited. Many students are forced to move to the next year-level syllabus before they have mastered the current syllabus, and so fall increasingly far behind over time. Many other students ready for the next syllabus are required to mark time and are not adequately challenged.</p>	<p>Progress based on attainment</p> <p>New syllabuses are untimed. They do not specify when every student must commence, or how long they have to learn, each syllabus. Students progress to the next syllabus once they have mastered the prior syllabus. Students who require more time have it; students ready to advance are able to do so.</p>

Figure 1 Key features of 'new syllabuses'

Learning with understanding

A feature of all new syllabuses is their strong focus on ensuring students learn with understanding. This is achieved by giving greater priority to fundamental concepts and principles in each subject and by providing opportunities for students to see how these concepts and principles can be applied in a range of meaningful contexts. In many subjects, this means emphasising depth rather than breadth of learning. Rather than attempting to cover large amounts of factual and procedural content, new syllabuses focus on a smaller set of core factual knowledge, concepts and principles and are designed to develop increasingly deep understandings of these over time.

The objectives here are to: focus new syllabuses on what is essential to each subject; address concerns about 'overcrowded' syllabuses that require large amounts of material to be covered in limited amounts of time, thereby encouraging more superficial forms of teaching and learning; provide opportunities for students to develop deeper understandings of content through the transfer and application of their learning to a range of situations and problems; and enhance engagement and enjoyment of learning by keeping rote learning to a minimum and assisting students to see the meaning and relevance of what they are learning.

This feature of new syllabuses requires the identification of core content in each subject and the design of teaching and learning around this core. The prioritised factual and procedural knowledge is knowledge required for further learning in a subject. The prioritised concepts and principles are those around which knowledge is organised and that are developed and understood in increasing depth over time. The sequencing of content is informed by theoretical and empirical research into how learning occurs in each subject.

- 1. Design new syllabuses for each subject, including subjects of the senior years, to reduce the volume of mandated content where appropriate and to prioritise the learning of core facts, concepts and principles.**
 - 1.1 In each subject of the new curriculum, identify essential facts, concepts and principles, the understanding of which is developed in increasing depth over time, and where required, use this to identify content that is more peripheral and could be removed.
 - 1.2 Decide how this core content is to be sequenced through new syllabuses, informed by evidence of how increasingly deep knowledge and understandings in a subject commonly unfold and are best developed over time.

Skills in applying knowledge

The second feature of all new syllabuses is their design to give greater attention to skills in using knowledge. This feature applies both to learning areas of the common curriculum that all students undertake and also to subjects that extend and build on subjects of the common curriculum in the later years of school.

New syllabuses are designed not only to develop increasingly sophisticated knowledge and deeper understanding of an area of learning, but also skills in applying that knowledge. No subject is focused solely on developing knowledge or solely on developing skills; theory and the application of theory are seen as intertwined and essential features of every subject.

Skills in applying knowledge include subject-specific skills, but also skills in using technologies, sourcing and analysing information, critical and creative thinking, collaborating, and communicating. New syllabuses specify how students' skills in applying knowledge are to be developed in parallel with their advancing knowledge and understanding of each subject. Rather than being taught or assessed separately from subjects, such skills are incorporated into new syllabuses and are seen as an integral part of developing competence in each subject.

The development and demonstration of skills depend on opportunities for students to put their subject knowledge and understandings to work, for example, through practical applications, problem solving activities or investigative projects. In these ways, students build and extend their subject knowledge and also develop an important range of skills in using that knowledge.

- 2. Design new syllabuses not only to develop increasingly sophisticated knowledge and deeper understandings of a subject, but also skills in applying that knowledge.**
 - 2.1 Make explicit in new syllabuses for every subject that skills in applying knowledge are part of the intended learning, and show how these skills are to be developed over time. These skills include subject-specific skills, but also skills in using technologies, sourcing and analysing information, critical and creative thinking, collaborating and communicating.

Excellent ongoing progress

The third feature of all new syllabuses is their design to ensure every student makes excellent ongoing progress in their learning. This feature is a response to the observation that existing syllabuses are time-limited, meaning that many students are required to move to the next year-level syllabus before they have mastered the current syllabus. These students often fall increasingly far behind with each year of school and fail to make the progress they otherwise could. Many other students are not adequately challenged by their current syllabus and are ready for the next. These students often mark time and also do not make the progress they are capable of making.

New syllabuses are untimed. They do not specify when every student must commence, or how long they have to learn, any given syllabus. Students progress to the next syllabus once they have mastered the prior syllabus. Students who require more time have it; students ready to advance are able to do so. Teachers determine when students have achieved a syllabus and are ready to move to the next.

A consequence is that students in the same year of school may not all be working on the same new syllabus at the same time. The underlying principle is that learning is maximised when learners are presented with appropriately challenging material, rather than being under-challenged by what they already know or over-challenged by what they are not yet ready to learn.

3. **Design new syllabuses that do not specify when every student must commence, or how long they have to learn, the content of each syllabus.**
 - 3.1 Make new syllabuses untimed, with students progressing to the next syllabus once they have mastered the prior syllabus. Students who require more time should have it; students ready to advance should be able to do so.
 - 3.2 Specify what students are expected to know, understand and be able to do as a result of being taught each syllabus in a subject and illustrate this standard with samples of student responses and work.

Building strong foundations

The primary objective of the new curriculum is to provide every student, in each phase of learning, with strong foundations for what comes next. The ultimate aim is to ensure every student leaves school well prepared for a lifetime of ongoing learning and informed and active citizenship and with knowledge, skills and attributes that will help equip them for meaningful work and satisfying careers. Underpinning this objective is recognition that there are currently significant costs to individuals and society when students fall behind in their learning and leave school with inadequate levels of attainment.

As well as introducing new syllabuses for every subject to give greater priority to learning with understanding, building skills in applying knowledge, and ensuring every student makes excellent ongoing progress in their learning, the new curriculum establishes a number of priorities for teaching and learning in each phase of school.

The early years

The early years of school are crucial in establishing foundations for future learning success. By the time they commence school, children are at widely varying points in their learning and development. They have very different levels of social and emotional maturity, language skills, cognitive development and psychomotor development. The challenge in these early years is to ensure that every child, especially those with developmental delays and from disadvantaged backgrounds, gets off to a good start and builds the foundations for subsequent success at school.

The new curriculum makes this a priority. It does this first by giving precedence to foundational aspects of children's learning and development: their social and emotional development, oral language skills, early reading skills, and early mathematics knowledge and skills. These are prioritised over all other areas of the school curriculum, particularly for children who are less advanced in these aspects of their development. The new curriculum does not propose that children spend inordinate amounts of time on reading and mathematics to the exclusion of other aspects of learning, including physical activity, play, music and art. However, given their importance as foundations for future success at school, these prioritised areas of learning are singled out in the new curriculum for special attention, particularly for children who require it.

Second, the new curriculum recognises that teachers require flexibility to respond to children's widely varying levels of development and learning needs. A key to ensuring every child establishes strong foundations in the early years is to identify the points they have reached in their learning – for example, the extent to which they have mastered early reading skills – and to tailor teaching accordingly. Rather than assuming every child in the same year of school is ready for the same year-level syllabus, the new curriculum is redesigned to support teachers to identify the stages individuals have reached in their learning so that they can respond flexibly to their different learning needs. This includes ensuring more advanced children are challenged to the levels of which they are capable.

- 4. In the early years of school, give priority to providing every child with solid foundations in the basics, especially oral language development, early reading and writing skills and early mathematics knowledge and skills.**
- 4.1 Make explicit in the curriculum that oral language development, early reading and writing skills and early mathematics skills are top priorities in the early years of school, particularly for children who are less advanced in these areas, and that these take precedence over other aspects of learning.
- 4.2 Develop a detailed and explicit curriculum for the teaching of reading as part of new syllabuses for the subject English, structured to assist teachers to establish and diagnose where individual children are in their reading development, and accompanied by evidence-based teaching advice.
- 4.3 Structure the early mathematics curriculum to support teachers to establish the points children have reached in their mathematics learning, including by diagnosing conceptual gaps and skills deficits, and provide accompanying evidence-based teaching advice as part of new syllabuses in mathematics.

The middle years

During the middle years of school every student studies a set of mandated subjects. These subjects are intended to build students' understandings of themselves, society and the wider world, and to provide exposure to important bodies of human knowledge. The subjects of this common curriculum provide essential foundations for learning in the later years of school and for life more generally.

The new curriculum maintains this existing set of subjects. However, many students during these middle years currently do not achieve intended levels of learning in mandated subjects. The OECD has identified minimally acceptable levels of attainment in reading, mathematics and science by 15 years of age. Between one in five and one in four students in NSW do not reach these levels, and these percentages have been increasing steadily over the past two decades. For these students, the common curriculum of the middle years does not build strong foundations for life or further learning at school.

The new curriculum is designed to address this challenge. It does this by setting clear standards that every student is expected to achieve in mandated subjects by the completion of their schooling – something that does not exist currently – and by providing teachers and parents/carers with an improved basis for monitoring students' long-term progress and for identifying students who are not on track to achieve these standards.

In addition, the new curriculum requires every student to commence learning a second language during their primary years. The goal of language learning in the new curriculum is to provide every student with some knowledge of a second language and to lay the foundations for an increased number of students to pursue advanced levels of proficiency, particularly in languages of the region.

The curriculum also expects every student during the middle years of school to develop a common understanding and appreciation of Aboriginal cultures and histories. These are seen as essential foundations for informed adult citizenship in Australia.

5. **In the middle years of school, give priority to providing every student with challenging learning material appropriate to their current level of attainment in the expectation that they meet (and ideally exceed) a minimally acceptable standard in each mandated subject by the completion of school.**
 - 5.1 Maintain the existing set of mandated subjects; for each subject define the minimum level of attainment every student should achieve by the completion of school; and provide teachers and parents/carers with a way of monitoring whether individuals are on track to achieve that standard.
 - 5.2 Require every student to commence learning a second language during their primary years, making use of technology where possible.
 - 5.3 Develop a curriculum that specifies what every student should know and understand about Aboriginal cultures and histories, and incorporate this curriculum into Human Society and its Environment.

The later years

During the later years of school, the focus of student learning currently is on preparation for particular post-school destinations. For most students, this means working to achieve entry to a desired higher education course. For others, it means preparing for work. During these years, students undertake programs of study that reflect their aspirations, interests and perceived capabilities.

There is a strong divide in these years between academic and vocational learning. These two kinds of preparation are based on different intended outcomes, curricular approaches, pedagogies, and forms of assessment. In one case, the focus is primarily on acquiring knowledge to be tested in final examinations which determine a student's Australian Tertiary Admission Rank (ATAR) and thus likelihood of being selected into a university course of choice. In the other, the focus is primarily on acquiring skills that must be demonstrated and confirmed in practice and that usually are determined by the requirements of externally provided vocational qualifications. There is also a clear hierarchy; most students and parents see the academic pathway as preferable to the vocational pathway, which tends to be viewed as more appropriate for 'less able' students.

It is not obvious that these existing arrangements provide the strong foundations that every student now requires for further learning, adult life and the world of work. Both provide relatively narrow preparations in their own way, either driven by the needs of universities or by industry bodies. They also promote artificial and unhelpful distinctions between knowledge and skills, theory and practice, and academic and vocational learning. The new curriculum aims to ensure that every student in the later years of school develops advanced knowledge in chosen areas of study, skills in applying that knowledge, and attributes to equip them for life and future careers.

Central to the new curriculum in the later years is a limited number of rigorous, high quality HSC subjects. A smaller number of subjects is envisaged, achieved by combining and consolidating earlier subjects. Each new subject integrates theory and the application of theory. The mix of theory and application varies from subject to subject, but advanced knowledge and advanced skills are features of every subject. Vocational learning is not quarantined to a set of vocational education and training (VET) subjects, but is seen as relevant to every student and area of learning. Skills such as problem solving, working in teams, collaborating, communicating, and thinking critically and creatively are promoted in all subjects and are also developed and demonstrated through a major investigative project that every student undertakes.

To minimise the current academic-vocational dichotomy and to support student pathways from school to post-school destinations, the new curriculum introduces a new framework for learning in the senior years. This framework consists of a set of new 'learning areas' which function as focal points for schools' relationships with relevant industries and post-school providers, as well as playing a role in developing students' understandings of career opportunities, courses and pathways. Figure 2 shows what these new learning areas might look like. Every subject in the senior years is assigned to one of these areas.

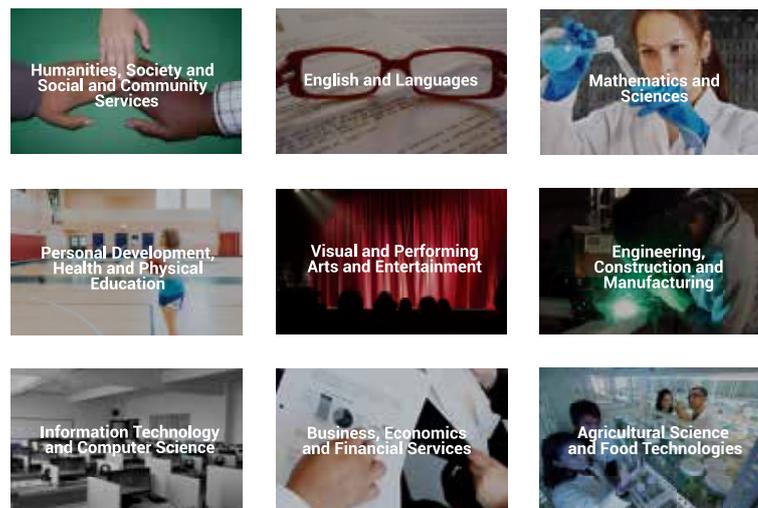


Figure 2 A new framework for learning in the senior years of school

- 6. In the later years of school, give priority to providing every student with opportunities to pursue personal interests and strengths through rigorous, specialised subjects, each of which builds solid theoretical foundations, provides opportunities to transfer and apply knowledge, and develops skills in the practical application of subject learning.**
 - 6.1 Eliminate the current bifurcation of learning in the later years by developing over time a new set of HSC subjects, each of which involves rigorous, high-quality learning that integrates knowledge and the practical application of knowledge.
 - 6.2 Replace the existing learning areas in the later years with a newly defined set, allocate all future HSC subjects to these areas and promote them as focal points for schools' connections with relevant industries and post-school providers and pathway and career advice.
 - 6.3 Require every student to undertake a major investigative project in a subject of their choosing, with common assessment criteria, moderation of teacher assessments, and performances forming part of a student's HSC results.
 - 6.4 Establish a taskforce comprising representatives of the higher education sector, the school sector and the Universities Admissions Centre, to investigate the feasibility of not calculating and reporting the Australian Tertiary Admission Rank (ATAR).

Stakeholder engagement

The implementation of the new curriculum will need to occur over a number of years to allow new syllabuses and curriculum features to be designed, developed and piloted in schools. Stakeholder groups, particularly teachers, should be closely involved in all phases of implementation. This will be important to ensure new arrangements are introduced in ways that best support the work of teachers and schools, as well as achieve their broader educational purposes. The new curriculum should be developed collaboratively and 'owned' by the widest possible range of NSW stakeholders.

It will be essential that those leading the implementation of the new curriculum communicate clearly the key intentions, guiding principles and underpinning evidence base for the new curriculum. This includes explaining the urgency of change. It will be equally important to communicate what is not intended. Although feedback on the Review's Interim Report provided strong support for its proposed reform directions, it was often made clear that this support was contingent on how the Review's intentions were implemented in practice.

- 7. Involve stakeholder groups, especially teachers, in all implementation phases of the new curriculum.**
- 7.1 Consult and actively involve all relevant stakeholder groups in the planning, development and pilot testing of new curriculum arrangements.
- 7.2 Implement a communications plan to explain the urgency of curriculum reform and the key intentions, guiding principles and underpinning evidence base for the new curriculum, including by clarifying what is not intended.

Creating enabling conditions

The successful introduction of the new curriculum will depend on the creation of a number of enabling conditions, including increased time for teachers to focus on the priorities of the new curriculum; teaching, assessment and reporting practices aligned with the principles and intentions of the new curriculum; and professional capacity building to support schools' delivery of the new curriculum.

Time for teaching and learning

Many teachers who spoke with the Review described being under time pressure. Some commented that this made it difficult to teach important content in depth. Teachers described experiencing time pressure from a number of directions. Much of it arose from the amount of content in existing syllabuses. Some reported that the volume of content meant that they moved quickly from one 'dot point' to the next in an effort to cover everything, often skating across the surface of the curriculum in the process. There were also concerns about extra requirements imposed on schools by governments and school systems. Submissions to the Review listed a variety of topics that have been added to the work of schools in recent years in response to specific events, pressure from lobby groups, and government concerns about health and social issues not being addressed elsewhere. Schools pointed out that these issues were added with little or no consideration of their impact on the rest of the curriculum or the workload of schools. And a range of other recent developments were considered to have reduced teachers' time to teach the curriculum, including external compliance requirements. There were numerous references to 'box ticking' and paperwork now required of teachers. These additional demands on teachers' time will need to be addressed to maximise the time available to teach the new curriculum.

- 8. Review current external demands on teachers' and school leaders' time in an effort to maximise the time available for teaching, learning and instructional leadership.**
- 8.1 Review recent requests that schools add extra-curricular issues and topics to the school curriculum to determine whether all are still necessary, and review protocols for adding such issues and topics in the future.
- 8.2 Review current paperwork and compliance requirements of teachers and school leaders with a view to reducing the time currently spent on such activities. This review should be undertaken by NESAs and each school sector.

An aligned learning 'system'

The successful introduction of the new curriculum also will depend on changes to other aspects of schooling to bring them into alignment with the principles and intentions of the new curriculum. These other aspects include, but are not limited to, approaches to classroom teaching, assessment and reporting, as well as broader approaches to improvement, including professional development and networking, initial teacher education, performance monitoring and accountability. The new curriculum is envisaged as part of an integrated learning 'system' in which the components of the system are mutually supportive and aligned with the principles that underpin the new curriculum. In particular, they need to reflect the new curriculum's focus on promoting learning with understanding, building skills in applying knowledge, establishing and understanding where individuals are in their learning, and targeting individual learning needs with evidence-based teaching.

Because tests, examinations and other assessment processes have a significant influence in directing teacher and student effort, it is particularly important that these are closely aligned with the intentions of the new curriculum. The new curriculum's focus on learning with understanding means that assessment processes should value and provide information about how well students understand core concepts, principles and ways of thinking and working in a subject. The new curriculum's focus on integrating knowledge and skills means that assessments designed solely or primarily to test students' mastery of a body of knowledge or a checklist of skills provide an incomplete picture of student learning. And the new curriculum's focus on ensuring every student makes excellent ongoing progress in their learning requires assessments capable of establishing where students are in their learning, providing feedback to guide next steps, and monitoring long-term learning progress.

- 9. Work to ensure all components of the learning system – including professional capacity building, assessment and reporting processes, and broader improvement efforts – are aligned with the principles and intentions of the new curriculum.**
 - 9.1 Build a coherent system of support for the new curriculum's goals to promote learning with understanding, to build skills in applying knowledge, and to assist teachers to establish where students are in their learning so that individual needs can be addressed with appropriately targeted, evidence-based teaching.
 - 9.2 In assessing student learning, give greater priority to students' understanding of core facts, concepts and principles, ability to apply these understandings in relevant settings, and skills in knowledge application.
 - 9.3 Develop, implement and promote assessment and reporting practices to establish the points individuals have reached in their learning, to provide diagnostic feedback to support further learning, and to monitor students' long-term learning progress.

Professional capacity building

The successful implementation of the new curriculum depends on teachers understanding its intentions and having the requisite professional knowledge and skills for implementation. Core to the new curriculum is its view of teaching as the process of establishing where students are in their learning and then ensuring individuals are taught new syllabuses appropriate to their current levels of attainment. Initial teacher education programs and ongoing professional learning should be based on recognition that teaching, at its heart, is about understanding where learners are in their learning, including by identifying skills gaps and misunderstandings, and providing targeted teaching that challenges and extends learners to higher levels of attainment. And, having established where individuals are in their learning, teachers need an understanding of effective, evidence-based teaching strategies and interventions.

- 10. Invest in professional capacity building to support the implementation of the new curriculum.**
 - 10.1 Promote an understanding of teaching as the process of first establishing where students are in their learning and then providing stretch learning challenges appropriate to individuals' current levels of attainment.
 - 10.2 Develop and deliver professional learning to build teachers' skills in assessing and diagnosing student learning and their knowledge of effective, evidence-based teaching strategies.

Timeline for introduction

Work should be commenced as soon as possible on the development of new syllabuses for English and Mathematics in the early and middle years of school. It is proposed that syllabuses for these two learning areas be developed in parallel, with syllabuses for the early years being available after two years of development. The staged design, development, piloting and introduction of all syllabuses in English and Mathematics will require six years. The Review has proposed a timeline for developing, finalising and introducing new syllabuses (Figure 3). If possible, new syllabuses should be developed in consultation with the Australian Curriculum Assessment and Reporting Authority as it redevelops the Australian Curriculum.

Work to develop syllabuses for Science and Human Society and its Environment will commence one year later than syllabuses for English and Mathematics, and for other key learning areas, one year after that.

New syllabuses in Human Society and its Environment should incorporate an explicit curriculum in Aboriginal cultures and histories and, in the first two years of planning the new curriculum, work should be commenced on scoping and confirming technology-based resources to support second language learning in primary schools.

In parallel with work to develop new syllabuses for the early and middle years of school, work should be commenced as soon as possible on the planning and development of new syllabuses for the senior years of school. This work should commence with the development of a new framework for learning in the senior years, consisting of a set of newly defined 'learning areas', with every existing subject then being allocated to one of these areas. Consideration should be given to how these new learning areas can serve as focal points for building stronger connections between schools and post-school education and training providers and relevant industries, and also for developing students' understandings of career possibilities and pathways into those careers.

NESA should then begin a process of reviewing subjects within each new learning area with a view to designing a set of future HSC subjects, each of which integrates knowledge and skills, and theory and application. A key task will be to consider how learning in each subject might be modularised to enable progress in the subject to be assessed and recognised, and to provide students with more flexibility to choose which and how many modules they complete. At least a decade may be required to develop and introduce the entire set of new HSC subjects. The Review also has proposed a timeline for the development of new HSC syllabuses (Figure 4).

In the first two years of planning the new curriculum, specifications should be developed for the major investigative project recommended by the Review. Key tasks will be to decide on the size of the project (anticipated number of hours) and the essential features and requirements of the project.

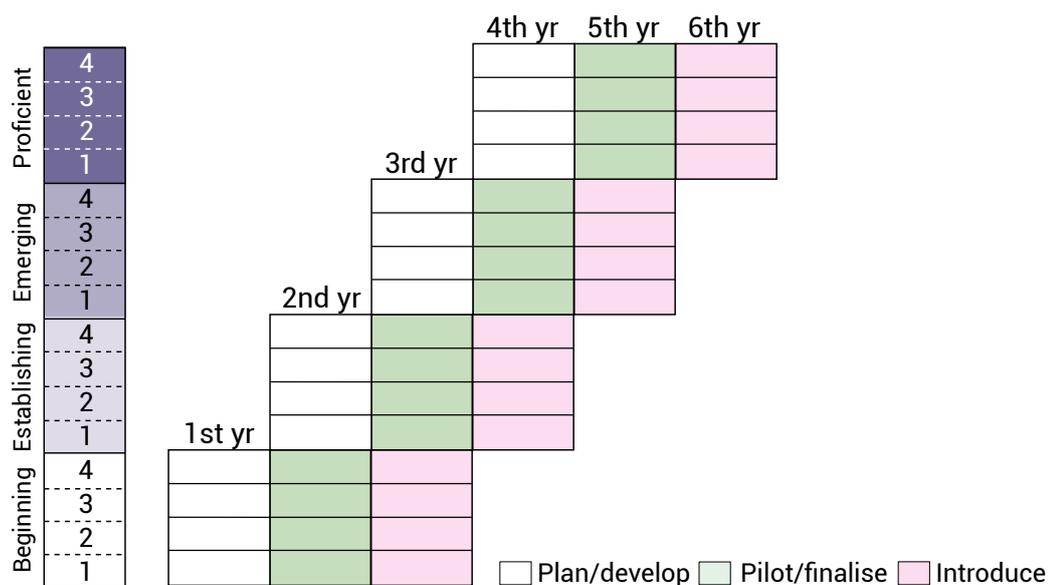


Figure 3 Timeline for developing, finalising and introducing new syllabuses

1st yr	2nd yr	3rd yr	4th yr	5th yr	6th yr	7th yr
Define a set of new learning areas. Begin exploring how these will provide focal points for student pathways.	Within each newly defined learning area, plan and design a set of rigorous, high-quality future HSC subjects, each of which integrates theory and the application of theory.		Develop each new subject, focusing on core knowledge, skills and conceptual understandings; the integration of theory and practice; and the development of students' skills in applying knowledge. Design the subject as a set of modules that enable choice and the assessment and recognition of student progress.		Pilot the new subject in schools and finalise its details, including assessment processes.	Introduce the new subject into schools.

Figure 4 Timeline for developing, finalising and introducing new syllabuses in the senior years