



# Stronger HSC Standards

Blueprint

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## **EXECUTIVE SUMMARY**

The New South Wales Higher School Certificate (HSC) is a highly valued credential in Australia and internationally.

The HSC represents the completion of 13 years of schooling and provides a record of achievement. It is a two-year course of study designed to assist students develop their knowledge and understanding in learning areas that are considered significant by the community as a whole. It is an exit credential that provides a reliable basis for universities, TAFE and other training organisations to select prospective students and for employers building their workforce.

School education, including the HSC, is a key plank in NSW's social and economic infrastructure. The HSC provides a platform for developing and nurturing the skills and talents of the next generation of citizens, who are the future workforce. Their skills and creativity underpin the state's economic and social prosperity.

The award of the HSC is not the end of learning for students; it is the launchpad for the next stage of life. The challenge is to prepare students to meet the emerging needs of the workplace, community and daily life by providing them with a sound basis of knowledge, skills in key areas and the flexibility to adapt to rapidly changing circumstances.

The HSC was last revised 17 years ago, before the advent of smartphones, social media and Google, before the Global Financial Crisis and before the need for an education that meets the demands of a knowledge economy. The HSC and school education must take account of these global economic and technological changes and grasp the opportunities they present.

Key areas for reform have been identified through extensive consideration of issues relating to the HSC by the Board of Studies, Teaching and Educational Studies (BOSTES) at board level and in consultation with major stakeholders over the past three years.

At the heart of the HSC reforms is the establishment of a minimum standard in literacy and numeracy for the award of the HSC.

Literacy and numeracy skills underpin a student's success at school and in their life after they graduate, whether they choose to pursue further studies and training or enter the workforce. Ensuring students attain the requisite skills in these two essential areas is one of the main goals of the school education system. The priority of this goal will be realised by setting a minimum standard in literacy and numeracy for the award of the HSC credential.

The Minimum Standard reform underpins the two other areas of reform - Curriculum and Assessment - through revised course structure and content, as well as streamlined assessment.

These changes will provide:

- a flexible HSC that caters for the needs of all students, and
- options to extend all students in their studies.

Standards set for the HSC influence teaching and learning priorities in the earlier years of schools. The focus of this goal will be on identifying students at risk of not meeting the standard as early as possible to ensure they can acquire these fundamental skills. Schools will receive support in identifying students at risk in the earlier years of schooling as part of a comprehensive literacy and numeracy strategy.

Syllabus content will be refined to allow students to focus on acquiring a depth of knowledge and mastery of skills. New content and courses will be introduced, including additional extension courses.

The HSC reforms will refocus assessment to allow a better spread throughout the year to mitigate stress while also addressing issues of plagiarism. The final examinations will remain as the key HSC assessment but will be redesigned to reduce the opportunity for pre-prepared responses. BOSTES will evaluate and adopt new and emerging technologies as appropriate to provide ongoing feedback to students and teachers.

BOSTES will continue to work with teachers, educators, parents, business and the community to ensure the HSC reforms provides a solid grounding for all students, and opportunities to extend their abilities and interests in preparation for the next phase of their lives.

Each reform will be implemented to meet the specific needs of each syllabus area.

MINIMUM STANDARD	Reform 1:	Establish a minimum standard of literacy and numeracy for the award of the HSC
CURRICULUM		Ensure currency of syllabuses through regular syllabus review Offer new BOSTES HSC courses
ASSESSMENT	Reform 5:	Introduce new, rigorous guidelines for effective school-based assessment Redesign HSC examinations to assess depth of knowledge and application of skills Research and expand use of computer-based assessment Apply a common scale for subjects with a hierarchical structure

## INTRODUCTION

The New South Wales Higher School Certificate (HSC) represents the culmination of schooling for about 76,000 students every year. It is a key component of the state's social and economic infrastructure and one of the most important policy levers available to government.

The HSC provides a platform for students to demonstrate the skills and talents developed during their school years that increase productivity and creativity, which in turn drive the NSW economy. It is the credential that recognises 13 years of schooling, underpins an individual's future opportunities, and signals a formal transition into adult responsibilities and informed citizenship.

Like all public policy, the HSC must be considered in the light of global economic and technological developments. For the State of NSW to meet its strategic objectives, schooling – and ultimately the HSC – must reflect the highest international standards in education and provide the best possible foundation for each individual. Any changes to the HSC must provide equal opportunity to all students through flexible study options. Changes should also encapsulate government priorities to position NSW as a hub of knowledge, creativity and innovation.

An HSC that helps students meet these standards will draw on the best available technology, the professional judgement of the most expert teachers, and support students as they move into work, further study and on their chosen pathway in life.

## **PURPOSES OF THE HSC**

The HSC is not the end of learning for NSW school students. It prepares students for the next stage in their life – whether academic study, vocational training, or employment – and to take their place as adult members of society. Primarily, it records school completion and achievement for students, parents, employers and the community. For many students, completing the HSC is a significant achievement.

However, the HSC is more than a credential of completion. A key element of its architecture is to record student performance at school. It provides a citation of a student's academic achievement in fields of study defined by the NSW curriculum, and describes this achievement against clearly defined performance standards. The HSC is also used by the Universities Admissions Centre (UAC) to identify a cohort of students eligible for entry into university programs through the Australian Tertiary Admission Rank (ATAR).

## STRENGTHS OF THE HSC

The HSC is a credential that has the support and respect of students, parents and teachers, employers, the community, and Australian and international universities.

Senior secondary education in NSW went through significant reform in 2000 and established the key pillars of the current HSC's architecture, which are still relevant today. It is a framework that will underpin the HSC reforms.

The elements of the HSC that will remain unchanged include:

- a standards-referenced system that assesses every student against specified outcomes
- a 2-Unit course as the base structure in every subject
- the balance of assessment in each course which comprises 50% schoolbased and 50% external BOSTES assessment, where the external examination allows fair comparison of school assessments.

## A CHANGING WORLD

The HSC was last revised more than 17 years ago. Since then, the world has changed dramatically. The use of the internet and mobile technology has exploded, leading to a rapid increase in the globalisation of society. The ubiquitous use of information technology in society, and its potential applications, has transformed all aspects of contemporary education, including subject content and teaching methods. Within individual subjects, content knowledge has been amended or reconceptualised. New disciplines and interdisciplinary applications have emerged.

The jobs of the past that could be performed with minimal levels of knowledge and skills are either disappearing or have been supplanted. Employers now require workers with transferrable skills and a solid foundation of knowledge in key areas, including: literacy and numeracy skills; creative thinking and problem-solving skills; an ability to work collaboratively; and character attributes such as curiosity, flexibility and resilience.

Students are now required to stay at school until they turn 17 to gain a higher level of education, which in turn is associated with improved career opportunities, higher earning capacity, better health, well-being and social interactions. The economy and society as a whole benefit from a more highly educated population through improved health, welfare and justice outcomes.

The challenge for our schools is to educate high school students for emerging workplace and societal demands by providing them with a sound basis of knowledge and the skills required to adapt their thinking in changing circumstances. The Organisation for Economic Co-operation and Development (OECD) calls essential knowledge and skills the new "global currency". The students of the HSC reforms will need this currency in order to become the independent thinkers, problem-solvers, and decision-makers of the future.

## THEMES OF THE HSC REFORMS

This Blueprint sets out the Board of Studies, Teaching and Educational Standards NSW (BOSTES) reforms to the HSC. The reforms address these challenges and aim to ensure that the credential continues to meet the highest international standards, now and into the future.

1 OECD, 2015c

To achieve the broad objectives listed above, the reforms that follow are underpinned by three themes:

- supporting the achievement of high minimum standards for all students
- ensuring the flexibility and versatility of the HSC to cater for the full range of students
- stretching the achievement of every student to their highest possible level.

## High minimum standards

If NSW is to lift the achievement of students who are required by legislation to remain at school through the senior secondary years, the HSC must accommodate the full range of academic abilities. It must provide all students with opportunities to develop and succeed, cultivate their personal potential, and derive enjoyment from their studies.

The HSC reforms should set a minimum expectation of the literacy and numeracy skills that students require in their daily lives, to expand their career options and give employers confidence in their capabilities. The OECD calculates that the economic benefit to Australia of ensuring that every student finishes school with basic skills in literacy, numeracy and scientific understanding is worth 130% of current gross domestic product (GDP). For each extra year of education, the average Australian can expect to earn an additional 8–10% of income per year.<sup>2</sup>

#### A flexible and versatile HSC

The HSC adopts a combination of traditional end-of-year written exams and school-based assessments. It is organised into syllabuses that represent familiar and historically established disciplines and areas of study.

The HSC reforms will continue to describe the essential core content to be taught. But it will also provide increased opportunities for students to synthesise and manipulate information, and the skills to apply their knowledge and use it creatively. Syllabus content and the method of assessing student performance in schools should be recalibrated to reflect this aim. Furthermore, the HSC syllabuses will be reviewed more frequently and efficiently to ensure that subject content remains relevant and contemporary.

## **Extending achievement**

Any changes to the senior secondary curriculum must retain its rigour and encourage all students to strive for better results. The HSC reforms will also provide more opportunities for the best students to extend themselves even further. These achievements will open academic and employment pathways.

2 OECD, 2015c

Expanding the range of subjects, including extension courses and new subjects will motivate all students to perform at the highest levels of their abilities and interests.

## **OBJECTIVES OF THE HSC REFORMS**

The HSC is the culmination of a rigorous and demanding cycle of teaching, learning and assessment. Its continued success and reputation relies on its capacity to deliver this into the future. However, it is now time to refresh and renew the key components of the HSC while retaining the strengths of its architecture and design.

The accumulation of more than a decade of new content knowledge, the evolving potential of information technology and the changing nature of contemporary students and the workforce means it is appropriate to initiate this process now. The proposed reforms will ensure NSW remains an international leader in curriculum, teaching and technology for learning.

The HSC reforms will ensure that students leave school with the literacy and numeracy skills needed for future employment and life. It will prepare students for the emerging demands of society, and equip them with the skills required in the STEM-focussed (Science, Technology, Engineering and Mathematics) workforce of the future.

The HSC reforms align with the NSW Government's existing education and economic policies: the Premier's Priorities to improve education results; Great Teaching, Inspired Learning – A Blueprint for Action; Future Focused Schools; Rural and Remote Education Blueprint for Action; Early Action for Success initiatives; and the Innovative Education, Successful Students package.

## DEVELOPMENT AND CONSULTATION

NSW stakeholders have highlighted the need to reform the HSC and the BOSTES Board has extensively considered issues relating to the HSC over the past three years.

The reforms that follow have been developed by BOSTES in close cooperation with teacher and parent representatives, and expert advisers from across the government, Catholic and independent school sectors in NSW. Stakeholders consulted in the development of the reforms outlined in the Blueprint include:

- Aboriginal Education Consultative Group
- Association of Heads of Independent Schools of Australia (NSW)
- Association of Independent Schools of NSW
- Business Council of Australia
- Catholic Education Commission NSW
- Catholic Secondary Schools Association
- Christian Education National
- Christian Schools Australia

- Council of Catholic School Parents NSW/ACT
- English Teachers' Association NSW
- Federation of Parents & Citizens' Association NSW
- History Teachers' Association of NSW
- Independent Education Union
- Mathematical Association of NSW
- NSW Business Chamber
- NSW Department of Education
- NSW Parents' Council
- NSW Secondary Principals' Council
- NSW Teachers Federation
- NSW Vice Chancellors' Committee
- Professional Teachers' Council
- Science Teachers' Association of NSW
- Universities Admissions Centre (NSW & ACT).

These reforms are based on an analysis of BOSTES data, the experience of other Australian jurisdictions, and international research, trends and best practices.

The reforms will equip NSW students to meet the challenges and capitalise on the opportunities of the future.

## **HSC REFORMS**

The HSC constitutes: courses of study, or curriculum; a series of assessments, including examinations; and a record of achievement represented by a formal credential. Therefore, the policy reforms are organised by the two main areas of the HSC: Curriculum and Assessment.

These reforms are underpinned by the requirement that students meet a minimum standard in literacy and numeracy to attain the HSC credential.

All of the reforms are independent but interrelated. BOSTES Board endorsement will be required for a number of the reforms. The reforms relate to the review of senior secondary curriculum in English, mathematics, science and history and these learning areas will be the initial focus areas of the reforms. Over time the reforms will be expanded to the full range of senior years curriculum offerings.

A minimum standard in literacy and numeracy will offer stronger assurance to business, industry and the community.

Curriculum reforms will allow for senior secondary curriculum to be more agile and flexible, responsive to new and emerging contemporary approaches to learning and will expand the range of study options available to students.

Assessment reforms will allow senior secondary assessment to emphasise a focus on improving student learning and reduce the potential for student stress.

Each reform will be implemented to meet the specific needs of each syllabus area.

## MINIMUM STANDARD

# **REFORM 1:** Establish a minimum standard of literacy and numeracy for the award of the HSC

The HSC is a universal credential awarded to every student who satisfactorily completes 13 years of schooling. It carries an expectation from students, parents and the community that students with an HSC have developed the level of literacy and numeracy needed for employment, continued study and everyday life. However, employers and higher education providers have consistently raised concerns about the literacy and numeracy skills of some NSW school leavers.

Establishing a minimum standard of literacy and numeracy will meet the expectations of students, parents and the community and also address concerns that some students leave school without the requisite skills.

As the NSW agency with the responsibility for setting and maintaining standards in curriculum, assessment and credentials, it is appropriate for BOSTES to establish a minimum literacy and numeracy standard for attainment of the HSC.

The literacy and numeracy standard will be set at a level of proficiency required for work and life after school.

The focus of this reform is to identify students at risk of not meeting the standard as early as possible to give them additional support to acquire these fundamental skills.

Students will be given a number of opportunities from Year 9 to Year 12 to demonstrate they meet the standard.

Students at risk of not meeting the standard will be identified by Year 9 NAPLAN and directed into English and mathematics courses which have units specifically designed to focus on essential literacy and numeracy.

Students who have not reached the numeracy standard by the end of Year 10 will be required to take a prescribed mathematics course or topics in Preliminary and HSC and specific English units until they demonstrate they have met the standard.

Students who fall short of the standard by the end of Year 12 will receive the Record of School Achievement (RoSA) and have five years after leaving school to pass an online BOSTES literacy and numeracy test to receive an HSC.

This reform will allow schools to work with parents to identify as early as possible students at risk of not meeting the minimum standard at the end of Year 9. It will identify students who require intervention and support to reach an appropriate standard to help them succeed in life after secondary school. This identification may occur at the commencement of secondary school including in Year 7 NAPLAN, or even in late primary school.

The minimum standard will not apply to students with disability who study Life Skills outcomes and content in English or mathematics. Further work will be undertaken with stakeholders to determine whether Beginning English language learners<sup>3</sup> should be required to achieve the minimum standard, and at what stage it could apply to them.

## **ACTION**

An appropriate minimum standard for literacy and numeracy will be set at a level required for work, continued study and life after school.

Students can demonstrate they have met the standard by receiving:

- a nominated result in Year 9 NAPLAN Numeracy, Reading and Writing; or
- a pass in a BOSTES online literacy and numeracy test in Year 10, 11 or 12.

Students who do not meet the minimum literacy and numeracy standard by the end of Year 12 will receive the RoSA.

The minimum standard will not apply to students with disability who study Life Skills courses in English or mathematics.

<sup>3</sup> Students learning English as an additional language or dialect (EAL/D) are grouped along a learning progression, developed by ACARA. The first phase is Beginning English, and includes students with some print literacy in their first language. A subcategory, Limited Literacy Background, is included to describe the reading/viewing and writing behaviours typical of students with little or no experience of literacy in any language.

## **CURRICULUM**

# **REFORM 2:** Ensure currency of HSC syllabuses through regular syllabus review

The NSW curriculum must maintain stability and certainty for teachers and students but should be responsive to ensure relevance and currency.

The pace of social, scientific and technological change requires a regular refresh of syllabuses to update obsolete terms, concepts and practices.

For students to achieve mastery of knowledge and skills, NSW syllabuses need to be reviewed to ensure balance between breadth of content, and space for students to engage in more depth in a subject or topic.

#### **ACTION**

Minor curriculum adjustments will be made as required and ready for implementation within 12 months.

The syllabus review process will be amended and a regular five-year review cycle established for all syllabuses to maintain currency.

All HSC syllabuses will be published online on the interactive BOSTES e-syllabus platform.

#### **REFORM 3**: Offer new BOSTES HSC courses

Other jurisdictions offer subjects that are valued and popular with senior students, such as philosophy and psychology, which are not available in NSW. Popular NSW subjects such as Modern and Ancient History can be made available to other jurisdictions.

Sharing syllabuses with other jurisdictions will expand the range of subjects available to NSW students. BOSTES quality assurance processes will apply in determining any additional subjects offered.

Opportunities for high-achieving students need to be revised and expanded to ensure these students continue to be challenged and extended in their studies.

Education stakeholders have expressed concerns about the falling number of students taking extension courses for the HSC, and have advised that a review of the current offering of HSC extension courses is required.

Beginning with the Sciences, BOSTES will establish an extension course in Physics or Chemistry, or a combined Sciences extension course, to provide greater opportunities for students with an aptitude in the STEM disciplines.

In other courses, where there is a hierarchy of complex knowledge and understanding, opportunities to stretch high-achieving students will be identified.

New opportunities and incentives for high-ability students to study approved university courses will also be established. BOSTES will develop criteria to approve university courses to be taught in schools and eligibility guidelines for students.

BOSTES will work with the university sector to have student achievement in the courses recognised for the calculation of the ATAR and credit towards subsequent tertiary study.

#### **ACTION**

Current arrangements for sharing syllabuses with other jurisdictions will be expanded to include subjects not currently available in the HSC.

Where BOSTES identifies the merit of introducing a new subject, it will consider the efficacy of developing the course or borrowing an existing syllabus.

Existing extension courses will be reviewed to ensure they focus on more complex knowledge and skills.

New extension courses will be introduced, starting with the sciences. Other disciplines will be considered, as appropriate.

University courses will be available to high-performing senior secondary students and successful achievement will count towards the HSC, the ATAR and as university credit.

## **ASSESSMENT**

# **REFORM 4:** Introduce new, rigorous guidelines for effective school-based assessment

The role of school-based assessment is to build a more complete picture of students' overall achievement. School-based assessment is best used to evaluate outcomes that are not as effectively measured in the final written examination. It should be reliable, fair and tailored for the specific course and outcomes.

Professional subject associations and parent groups have expressed concern to BOSTES that school-based assessment is used as a way to motivate students or to ensure students attempt work. An endless cycle of assessments through Years 11 and 12 unnecessarily adds to the pressure and stress of senior study.

The powerful purpose of assessment is to provide feedback to improve learning. Too often, students are 'over-assessed' and the range of assessment tasks restricted to those that mimic the structure and conditions of the HSC examinations in an attempt to prepare students for those exams.

#### **ACTION**

New guidelines governing school-based assessment will include rules around the type, length, style and number of tasks. The guidelines will also address issues of plagiarism and cheating.

A maximum number of school assessments in any subject will be established, and the potential for one assessment in each subject to take place in Year 11 will be explored.

# **REFORM 5:** Redesign HSC examinations to assess depth of knowledge and application of skills

Students need to be aware that external examinations not only test their recall of facts but also their ability to apply knowledge and skills.

Posing questions in the external examinations that require a greater depth of analytical skills will reduce the opportunity for pre-prepared responses.

The most effective length of an examination required for a valid and reliable assessment of student achievement will be reviewed.

## **ACTION**

The HSC examination will remain as the main moderated assessment task, but it will be redesigned to focus on more in-depth analysis, and reduce opportunities for pre-prepared or plagiarised work.

# **REFORM 6**: Research and expand use of computer-based assessment

Computer-based and online tests have the potential to deliver more efficient and reliable testing in some domains, improve feedback to students and teachers, provide greater flexibility and distribute assessment more evenly over the senior secondary years.

NSW is well situated to take advantage of new technology to provide a greater range of assessment tools and provide more immediate feedback to students on their progress to lift the achievement of all students.

BOSTES will develop strategies for computer-based assessment by researching different styles and its appropriate use, subject by subject.

Starting with an online minimum literacy and numeracy test, BOSTES will continue to investigate and adopt new forms of assessment, as appropriate, to inform and improve student learning.

## **ACTION**

State-wide computer-based assessment will be researched and introduced, as appropriate, over time to augment existing school assessments and HSC examinations.

# **REFORM 7:** Apply a common scale for subjects with a hierarchical structure

Common scaling allows the comparison of achievement between students in the same subject studying at different levels. It also provides a disincentive to students choosing lower-level courses to gain a perceived advantage in their ATAR. English and mathematics are the most hierarchical subjects in the HSC, both having five courses including two extension courses.

English is already marked and reported on a common scale, allowing a reliable comparison and guarding against any perceived advantage for academically able students sitting a less-demanding English course. Placing the mathematics courses on a common scale will similarly discourage students from taking courses for a perceived ATAR advantage.

## **ACTION**

Subjects with a number of courses across different levels of difficulty, such as mathematics and English, will use a common marking scale to assess common content.

The principle of a common scale will apply across other subjects of a hierarchical nature in the future, as appropriate.