

Teacher briefing

The resource

This book and related online materials are curriculum resources for secondary teachers and students produced by Sydney Metro Northwest in consultation with practising teachers and curriculum specialists. Both teachers and specialists are members of the Sydney Metro Northwest Education Reference Group, an advisory body formed under the auspices of the Sydney Metro Northwest Education Program in March 2013. The Sydney Metro Northwest Education Reference Group advised on the design and development of this resource and, along with independent reviewers, provided comments on a final draft of this document.

Since its release in March 2014, teachers have used *FastTracking the Future* extensively to support stage-based programming, lesson planning and classroom teaching and learning in schools across the North West Sydney region.

Sydney Metro's *FastTracking the Future* Education Program won the Planning Institute of Australia (NSW) Promotion of Planning Award in November 2014.

Judges said the education program, is an:

"...innovative and important initiative developed specifically for school aged children to engage directly with Australia's biggest public transport project.

"It ensures that school children have a unique opportunity to participate in the delivery of a major infrastructure project, which will also change their built environment and impact their lives now and into the future.

"The judges believe that this is an excellent model for using an idea or project to implant an interest in children's minds about planning and what infrastructure means for a city. Hopefully this will lead to many young people from Sydney's north west considering planning as a career option!"

Subsequent editions offer additional features to assist teachers with the implementation of NSW Education Standards Authority K-10 syllabuses.

These features include:

- The review of outcomes to align with all current NSW K-10 syllabuses
- The addition of lessons to support teaching and learning about the Indigenous history and geography of Sydney's North West, and to underpin learning across the curriculum: cross-curriculum priorities in the area of Aboriginal and Torres Strait Islander histories and cultures
- Integration of an archaeological perspective into teaching and learning about the history and geography of Sydney's North West with the addition of Indigenous lessons as noted above and a lesson on the White Hart Inn, Kellyville.

Educational aims – Think global, teach local

The aim of this resource is to provide teachers with classroom-ready materials that will assist students explore the goals of the Sydney Metro Northwest project and its legacy for the people and communities of Sydney's North West region.

To achieve this, the resource surveys the unique historical and geographical identity of the North West region, examines the design and construction of Sydney Metro Northwest, and investigates the types of changes this large infrastructure project will bring to the region. The construction of the rail line offers a unique opportunity for students to investigate a locally significant project inside and outside the classroom, and to participate in regional growth and change.

About this resource

This resource consists of three elements:

- **A teaching and learning book** containing classroom-ready teaching and learning ideas and activities, unit and lesson plans, source materials and worksheets
- **Book chapters in PDF format**
- **Downloadable materials** in PDF and MS Word document format including worksheets; images of maps and photographs for use with the interactive whiteboard; and additional teacher support materials to assist with lesson planning and delivery.

Key features

This resource employs an inquiry approach to place-based teaching and learning and features:

- **Background information for teachers** on the resource topics with web-based support
- **Unit plans and lessons for different subject areas** to assist in developing students' understanding of their locality and its changing nature as the Sydney Metro Northwest project rolls out
- **Teaching ideas and activities** that fit with existing teaching programs and units of work or form the basis for a whole new program, built around local change. As such, the materials contained in this resource, although specifically designed to support the Sydney Metro Northwest Education Program, may be used by teachers elsewhere to examine change in their own locality
- **Colour coded icons** to navigate Key Learning Areas



Science



Mathematics



History



English



Geography

- Lessons and learning activities that provide clear curriculum connections to the new NSW Education Standards Authority Australian Curriculum-based syllabuses in terms of subject area and learning across the curriculum content. Learning across the curriculum content addressed in this resource includes: cross curriculum priorities (Aboriginal and Torres Strait Islander histories and cultures) and sustainability; general capabilities (critical and creative thinking, ethical understanding, information and communication capability, intercultural understanding, literacy, numeracy, and personal and social capability); and areas identified by the NSW Education Standards Authority as essential to students' learning (civics and citizenship, difference and diversity, and work and enterprise)
- **Resources in digital form** with links throughout the book, identifying where materials can be downloaded
- **Student planned investigations** supported by materials and tools, which encourage participation in authentic learning tasks grounded in local events and issues. Research suggests that some of the most powerful learning takes place in environments and around experiences which are personally relevant to learners
- **Lesson writers who are experienced practising teachers.** Like all experienced teachers, the writers of this resource have found their own interesting and effective ways of doing things in the classroom. Writers' individual approaches have been retained as much as possible.

How this resource is organised

This resource is organised around three topics which provide teachers and students with materials to investigate strands in the Sydney Metro Northwest story: the geography of the localities through which the rail line will pass; the history and character of the region over time; and the rail line as a technological innovation and its role in accessing social and economic opportunities for people and communities in Sydney's North West region.

Each part of the Sydney Metro Northwest narrative is examined in the following topics:

Topic One: A railway for Sydney's North West region – lessons and a unit of work about planning for the future.

Topic Two: Linking the nation – lessons and a unit of work linking the past to the present of Australian transport.

Topic Three: Planning, designing and building a railway – lessons linking the present to the future of Sydney's North West region.

How to use this resource

This resource is a teachers' guide to teaching and learning about the Sydney Metro Northwest project. Teachers are not required to complete all lessons, activities and/or units of work contained in each topic. It is appreciated that school programs and student abilities vary widely.

As such, teachers are encouraged to select and adapt topic materials to complement and support their teaching and learning programs, and to suit the needs and interests of students in differing school contexts.

Modifying the resource for English as an Additional Language or Dialect (EAL/D) and Special Education learners

These lessons focus on themes and content that enable teachers to introduce Sydney Metro Northwest into their classrooms at different levels, in different Key Learning Areas and to different groups of learners. Although advice is provided in this resource to demonstrate how materials may be modified, teachers will need to address their own specific classroom circumstances.

Many students in Australian schools are learning English as an Additional Language or Dialect (EAL/D). EAL/D learners are students whose first language is a language other than Standard Australian English and who require additional support to assist them to develop English language proficiency.

EAL/D learners enter Australian schools at different ages and stages of schooling and at different stages of English language learning. They have diverse talents and capabilities and a range of prior learning experiences and levels of literacy in their first language and in English.

Only the teacher can explore ways of modifying the language and concepts in this resource to suit their students' needs. For more information go to the NSW Education Standards Authority website.

<https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/english-year-10/english-k-10/introduction/students-learning-english-as-an-additional-language-or-dialect>

Teachers will also need to modify the materials for their Special Education and lower ability students. The NSW Education Standards Authority provides advice on how to do this.

Refer to the following materials:

English K-10:

<https://syllabus.bostes.nsw.edu.au/english/english-k10/supporting-special-education-students/>

Mathematics K-10:

<https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/mathematics/mathematics-k-10>

Science 7-10:

<https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-7-10-2018>

History K-10:

<https://syllabus.bostes.nsw.edu.au/hsie/history-k10/>

Geography K-10:

<https://syllabus.bostes.nsw.edu.au/hsie/geography-k10/>

Web links



It is important to check the syllabus implementation timeline on the NSW Education Standards Authority website.

<https://syllabus.nesa.nsw.edu.au/implementation/>

Implementation support at:

https://syllabus.bostes.nsw.edu.au/assets/global/files/hsie-k_6-guide.pdf

Programming assistance at:

<https://pb.bostes.nsw.edu.au>

Curriculum Links: NSW Education Standards Authority

Each unit of work and lesson in this resource has an indicative connection to the New South Wales Education Standards Authority's K-10 or 7-10 syllabuses incorporating Australian Curriculum content. These syllabuses to which these resources explicitly link are:

Board of Studies New South Wales.(2012). English

K-10 Syllabus. <https://educationstandards.nsw.edu.au/wps/wcm/connect/1c3d7c13-87c1-402a-a43e-897a4b7dd74c/english-k10-syllabus.pdf?MOD=AJPERES&CVID=> on 8/01/19

New South Wales Education Standards Authority (2018) Science

Years 7-10 Syllabus, <https://tinyurl.com/Science7to10> on 8/01/19

New South Wales Education Standards Authority. (2015). Geography K-10 Syllabus.

<https://tinyurl.com/Geogr7-10> on 8/01/19

New South Wales Education Standards Authority.(2015). History K-10 Syllabus.

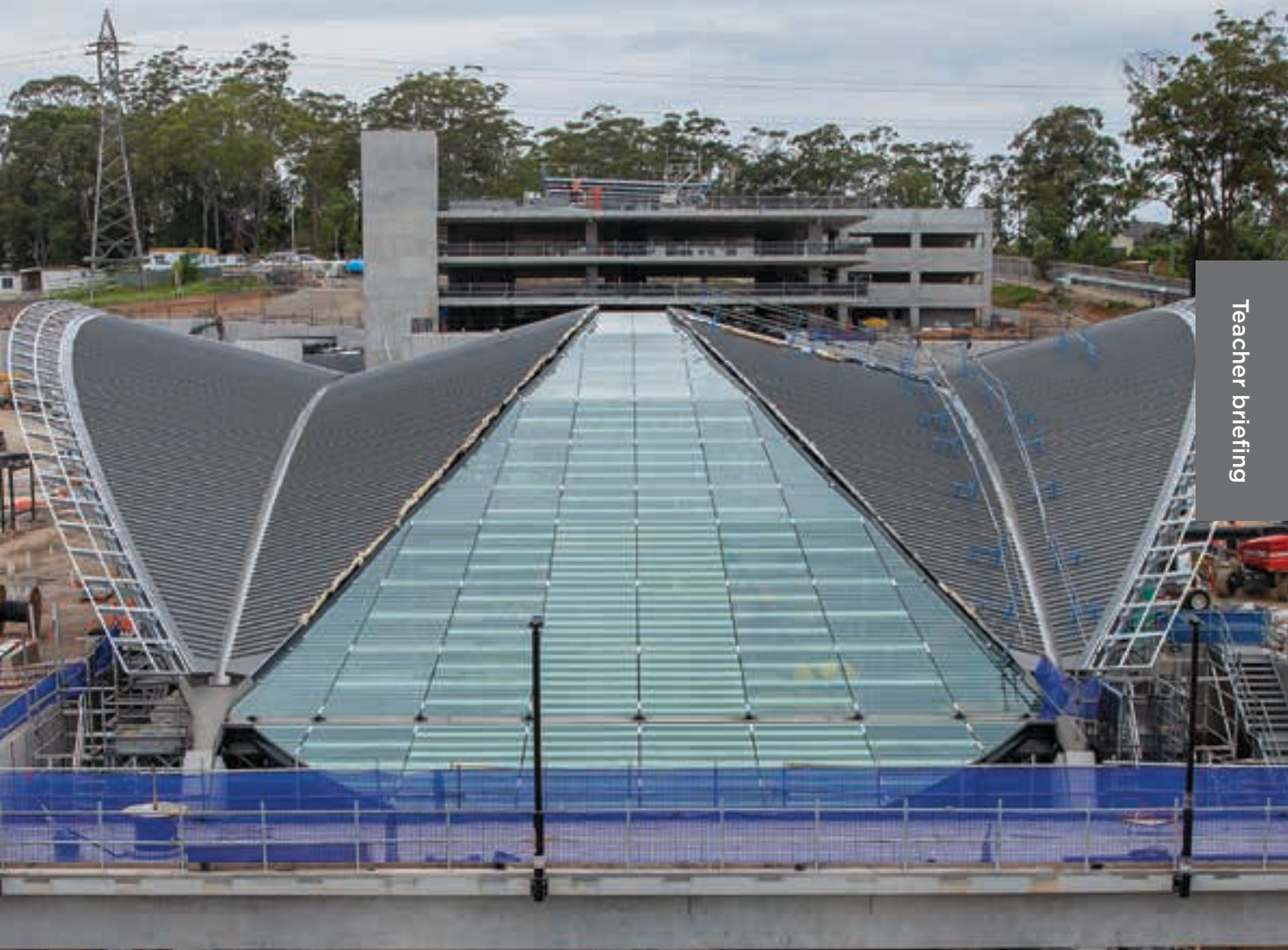
<https://educationstandards.nsw.edu.au/wps/wcm/connect/55f81fec-7312-45ff-b7a7-0a92a868c675/history-k10-syllabus.pdf?MOD=AJPERES&CVID=> on 8/01/19

Board of Studies New South Wales, Mathematics K-10 Syllabus (2012).

<https://educationstandards.nsw.edu.au/wps/wcm/connect/2e4e2801-eef8-4a9f-bd43-5cc3e9487f19/mathematics-k10-syllabus.pdf?MOD=AJPERES&CVID=> on 8/01/19

K-10 syllabuses are designed to be taught within the New South Wales Education Standards Authority's recommended percentages of time for each Key Learning Area in a typical school week.

The materials in this book are designed to make it as easy as possible to build them into new or existing teaching programs. To assist, use the NSW Education Standards Authority Program Builder.



Cherrybrook Station canopy, November 2018.