



UNSW
SYDNEY

Arts & Social Sciences

School of Education

EDST6725
Mathematics Method 1

Semester 1, 2018

Contents

1. LOCATION	2
2. STAFF CONTACT DETAILS	2
3. COURSE DETAILS	2
<i>Summary of Course</i>	2
<i>Important information</i>	2
<i>Student Learning Outcomes</i>	3
4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH	4
5. TEACHING STRATEGIES	4
6. COURSE CONTENT AND STRUCTURE	5
7. ASSESSMENT	7
8. RESOURCES	14
<i>Required Texts</i>	14
<i>Required Readings</i>	14
<i>Further Readings</i>	14
<i>Recommended Websites</i>	15
<i>Professional Associations</i>	15

IMPORTANT:

For student policies and procedures relating to assessment, attendance and student support, please see website, <https://education.arts.unsw.edu.au/students/courses/course-outlines/>

The School of Education acknowledges the Bedegal and Gadigal people as the traditional custodians of the lands upon which we learn and teach.

1. LOCATION

Faculty of Arts and Social Sciences
School of Education
EDST6725 Mathematics Method 1 (6 units of credit)
Semester 1, 2018

2. STAFF CONTACT DETAILS

Lecturer: Kate Patten
Email: k.patten@unsw.edu.au
Availability: Pleaes email to arrange an appointment

3. COURSE DETAILS

Course Name	Mathematics Method 1
Credit Points	6 units of credit (uoc)
Workload	150 hours including class contact hours, readings, class preparation, assessment, follow up activities, etc.
Schedule	http://classutil.unsw.edu.au/EDST_S1.html

Summary of Course

This course is designed to increase a student's pedagogical content knowledge for Mathematics teaching, with an emphasis on literacy and numeracy. The key elements of pedagogy and Mathematics content knowledge are examined and developed. Students will critically address how these elements can then be combined into effective classroom practice for addressing the requirements and philosophy of the NSW Mathematics syllabi.

Based on last year's student feedback, the following course changes have been made:

- Opportunity to work on assignments and cover more during class time

Important information

- **Assessment:** Students must pass all assignments to pass the course. Only by passing all assignments, can they go on placement for PE 1.
- **Attendance:** Students are expected to give priority to university study commitments. Unless specific and formal permission has been granted, failure to attend at least 80% of classes in this course may result in failure.

Student Learning Outcomes

Outcome	
1	Identify foundational aspects and structure of the NSW Board of Studies Mathematics syllabus documents and the depth of subject knowledge required to implement the syllabus
2	Evaluate how student characteristics affect learning and evaluate implications for teaching students with different characteristics and from diverse backgrounds
3	Use a range of strategies to plan and teach effective lessons to engage all students, address relevant syllabus outcomes and ensure a safe learning environment
4	Select appropriate resources, including ICT, to engage students and expand learning opportunities
5	Design and evaluate formative assessment strategies and use assessment information to improve learning
6	Practise the ethical and professional values expected of teachers

AITSL Professional Graduate Teaching Standards

Standard	
1.2	Demonstrate knowledge and understanding of research into how students learn and the implications for teaching.
1.3	Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistics, cultural, religious and socio-economic backgrounds.
2.1	Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area.
2.2	Organise content into an effective learning and teaching sequence.
2.3	Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans.
2.4	Demonstrate broad knowledge of, understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures and languages.
2.5	Know and understand literacy and numeracy teaching strategies and their application in teaching areas.
2.6	Implement teaching strategies for using ICT to expand curriculum learning opportunities for students.
3.1	Set learning goals that provide achievable challenges for students of varying abilities and characteristics.

3.2	Plan lesson sequences using knowledge of student learning, content and effective teaching strategies in teaching.
3.3	Include a range of teaching strategies in teaching.
3.4	Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning.
4.1	Identify strategies to support inclusive student participation and engagement in classroom activities.
4.2	Demonstrate the capacity to organise classroom activities and provide clear directions.
6.3	Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.

4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

This subject aims to develop in each student the ability to effectively teach Mathematics to secondary school students with an emphasis on the Australian Curriculum for NSW Mathematics. During the course, students will develop their knowledge of New South Wales syllabus documents. Lectures, tutorials and assignments will cover a variety of approaches to teaching and learning in the Mathematics classroom. Emphasis will be given to the relationship between Mathematics, literacy and numeracy and the role and value of Mathematics in the curriculum and the community.

Student-centered activities will form the basis of the course examining the central ideas and common misconceptions. These activities will draw on the prior knowledge of the students and will allow them to engage in relevant and challenging experiences that mirror those they will be expected to design for the secondary students they will later teach.

5. TEACHING STRATEGIES

- Explicit teaching, including lectures, to demonstrate an understanding of students' different approaches to learning and the use of a range of teaching strategies to foster interest and support learning.
- Small group cooperative learning to understand the importance of teamwork in an educational context and to demonstrate the use of group structures as appropriate to address teaching and learning goals.
- Extensive opportunities for whole group and small group dialogue and discussion, allowing students the opportunity to demonstrate their capacity to communicate and liaise with the diverse members of an education community, and to demonstrate their knowledge and understanding of method content and language.
- Structured occasions for reflection on learning to allow students to reflect critically on and improve teaching practice and strategies.
- Online learning from readings on the Moodle website.
- Peer teaching in a simulated classroom setting.

These activities will occur in a classroom climate that is supportive and inclusive of all learners.

6. COURSE CONTENT AND STRUCTURE

Week Beginning	Weekly Topic
<p>1 26 Feb – 2 March</p>	<p>Working Mathematically / Proficiencies</p> <p>Writing Assessments/ Rubrics/ Marking Criteria Questioning Techniques Literacy Introduction to the Course Presenter: Yvette Semler</p>
<p>2 5 - 9 March</p>	<p>Teaching strategies to enhance Literacy and Numeracy in the Classroom</p> <p>Meeting the literacy and numeracy needs of all students in the classroom Respect and knowledge of different cultures A4-6, B1-5, C1-6, D1-12, 17-19, E1-4, F3-7</p> <p><i>Short presentations by students</i></p>
<p>3 12 – 16 March</p>	<p>Number & Algebra: Decimals, Fractions and Percentages</p> <p>Lesson Planning B1-5, C1-6, D1-12, 17-19, E1-4, F3-7</p> <p><i>Short presentations by students</i></p> <p>* Remember to submit proposed lesson plan 1 week prior to your Microteaching.</p>
<p>4 19 – 23 March</p>	<p>Number & Algebra: Financial Mathematics Using ICT: Excel</p> <p>Differentiation A1-6, B1-5, C1-6, D1-12, 17-19, E1-4, F3-7</p> <p><i>Short presentations by students</i></p>
<p>5 26 – 29 March</p>	<p>Number & Algebra: Introducing Algebra</p> <p>Microteaching Expectations B1-5, C1-6, D1-12, 17-19, E1-4, F3-7</p> <p><i>Microteaching</i></p>

Mid-semester break (30th March – 8th April)

6 9 – 13 April	<p style="text-align: center;">Measurement & Geometry: Geometry Hands on Maths B1-5, C1-6, D1-12,17-19, E1-4, F3-7</p> <p style="text-align: center;"><i>Microteaching</i></p>
7 16 – 20 April	<p style="text-align: center;">Measurement & Geometry: Area & Volume B1-5, C1-6, D1-12,17-19, E1-4, F3-7 <i>Microteaching</i> <i>Presenter: Yvette Semler</i> <i>school holidays</i></p>
8 23 – 27 April ANZAC Day Wed 25th April	<p>No <u>Thursday</u> class this week (catch up week 11) <i>school holidays</i></p>
9 30 April – 4 May	<p style="text-align: center;">Number & Algebra: Graphs Using ICT: Graphic software DESMOS B1-5, C1-6, D1-12,17-19, E1-4, F3-7 <i>Microteaching</i></p>
10 7 – 11 May	<p style="text-align: center;">Measurement & Geometry: Trigonometry What to expect on practicum. B1-5, C1-6, D1-12,17-19, E1-4, F3-7 <i>Microteaching</i></p>
11 14 – 18 May	<p style="text-align: center;">Senior Syllabus: The Standard Mathematics Course on-line course evaluation B1-5, D1-12, 17-19, E1-4, F3-7</p>

Professional Experience

4th June – 29th June 2019

7. ASSESSMENT

Assessment Task	Length	Weight	Student Learning Outcomes Assessed	AITSL Standards	National Priority Area Elaborations	Due Date
1. Short Presentations	10 mins	0%	1,3,4,6	2.1, 2.5, 2.6, 3.1, 3.3, 3.4, 4.1, 6.3	A1–6 B1–5 C1–6, D 1-11 E1–4, F 3–7	Weeks 2-4
2. Designing a Lesson	2000-word equivalent	40%	2,3,4,6	1.2,1.3,2.1, 2.2,2.4,2.5, 2.6,3.1,3.2, 3.3,3.4,4.1, 4.2,6.3	A4–6, B1,2,4,5 C1–6 D1–12,17–19 E1–4 F3–7	Week 3 Date 14 March Due 5pm
3. Unit of work	3500-word equivalent	60%	1-6	All listed attributes	A1–6 B1,2,4,5 C1–6 D1–12,17–19 F 1–4	Week 7 Date 18 April Due 5pm
4. Microteaching	10 mins	Satisfactory/ Unsatisfactory	3, 4, 5	1.2, 1.3, 2.1, 2.5, 2.6, 3.4, 3.3, 6.3	A1-6, B1-5 C 1-6 D 1-12, 17-19 F 3-7	Weeks 5-7, 9-11

Submission of Assessment Tasks

*Students are required to follow their lecturer's instructions when submitting their work for assessment. All assessment will be submitted **online via Moodle (Turnitin) by 5pm**. Students no longer need to use a cover sheet. Students are also required to keep all drafts, original data and other evidence of the authenticity of the work for at least one year after examination. If an assessment is mislaid the student is responsible for providing a further copy. Please see the Student Policies and Procedures for information regarding submission, extensions, special consideration, late penalties and hurdle requirements etc.*

Assessment Details

1. Short Presentation

Student 'Short Presentations' will occur in weeks 2, 3 and 4. Each student will be required to either present a solution/explanation to a mathematical problem or present a short lesson about a mathematical concept. The presentations are not to be lectures but should be seen as a segment from a mathematics lesson, pitched at a Stage 4 or 5 student. Your peers will play the role of the class. These presentations will not form part of your assessment for this course but will give you an opportunity to practise skills such as eye contact, voice production and communication for your Microteaching. Your lecturer and class will give you feedback about your level of skill.

a) Presentation of a solution/explanation to a mathematical problem.

If necessary, give the class 5 minutes to familiarise themselves with your problem, so they can attempt their own solution. Then, imagine that you were discussing the problem with (or teaching this content to) a Year 7-10 class. Lead a class discussion of the solution to the problem and any other materials (such as simpler versions of the problem, alternative solution strategies, etc.), which you feel are relevant. Consider the teaching strategies you will use, the questions you will ask, the language used and your use of ICT or white board summary.

OR

b) A short lesson/explanation about a mathematical concept

Introduce the content you will be teaching. Briefly describe your target students (eg Year 7 students who are only at early stage 3 and who also have poor literacy.) Consider the teaching strategies you will use, the questions you will ask, literacy and numeracy needs, your use of ICT or white board summary. In summation, explain to your peers why you chose to teach the concept this way.

A brief class discussion on your lesson segment will take place at the end of your presentation to give you feedback. A **maximum of 15 minutes** is allowed for the whole episode of presentation and feedback.

These presentations are designed to give you a chance to develop your teaching skills and receive constructive feedback from the group. They provide an opportunity for students to practise and demonstrate the Graduate Teacher Standards.

2. Assessment Task 1: Designing a Lesson (2 000-word equivalent, 40%)

Plan and design one 60-minute lesson for a mixed-ability Stage 4 class. (If Method is stage 6 only: for a Stage 6 Preliminary class). The lesson plan must follow a standard SED format and be presented using the template provided.

Plan your lesson for a class in a comprehensive high school which would typically include EAL/D students, Indigenous students and students with various religious and cultural backgrounds. Some students may have low levels of literacy. Differentiation to cater for some students is therefore required. Appropriate differentiation strategies are scaffolding, group work and/or an alternative task or mode of presentation.

1. Write a rationale for your lesson plan. Your rationale should address the questions: What do I want the students to learn? Why is it important? What strategies will I use? What assessment for learning strategies will I use to monitor progress?

2. Prepare the lesson plan to demonstrate how you will use appropriate structure, activities, strategies and formative assessment to develop understanding of the material.

Make sure you:

- choose an appropriate topic for the year group
- support your rationale using references indicating your professional reading
- choose appropriate outcomes and lesson content
- demonstrate knowledge of effective teaching and learning strategies
- use appropriate format and provide sufficient detail for an effective lesson plan
- include an aspect of literacy/numeracy which integrates with the lesson focus
- provide in full one activity (which may be ICT-based)
- express yourself in clear, standard Australian English.

3. Assessment Task 2: (3 500-word equivalent, 60%) Unit of Work

Prepare an outline for a unit of work for a Stage 5 class. The unit of work should cover the first five lessons; however, you are not preparing full lesson plans.

You must write a rationale for the unit (600-800 words) in which you:

- provide a brief outline of the school and class context
- state precisely what you want the students to learn and why it is important
- justify your choice of topic/text to suit the needs and abilities of this class
- justify your teaching strategies by referring to readings, research and material presented in lectures and the Quality Teaching framework
- demonstrate how differentiation will support a diverse range of learners
- state the prior knowledge students have to begin this unit and discuss how you would assess and build on this prior knowledge.
- Include in your unit outline
 - the learning intention(s) for each lesson
 - one full activity for formative assessment (not an essay)
 - one ICT-based activity (not watching a video or PowerPoint presentation)
 - one group-work task with a focus on literacy/numeracy (not a mind-map)
 - one incursion/excursion/performance/product activity
 - outlines only for the other teaching materials required.

4. Assessment Task 3: (Satisfactory/Unsatisfactory)

Microteaching (including student reflection) see page 12

UNSW SCHOOL OF EDUCATION
 FEEDBACK SHEET
 EDST6725 MATHEMATICS METHOD 1

Student Name:

Student No.:

Assessment Task: Assessment 1 – Designing a lesson

Specific criteria	(-) —————> (+)				
Understanding of the question or issue and the key concepts involved <ul style="list-style-type: none"> • Understanding of the task and its relationship to relevant areas of theory, research and practice. • Rationale linked to outcomes in the syllabus. 					
Depth of analysis and/or critique in response to the task <ul style="list-style-type: none"> • Ability to plan and assess for effective learning by using knowledge of the NSW syllabus documents or other curriculum requirements of the education act. • Reasons for the choice of teaching and learning strategies effectively explained. • Demonstration of knowledge, respect and understanding of the social, ethnic, cultural and religious backgrounds of students and how these factors may affect learning. • Demonstrates knowledge of resources that <u>will engage and extend all</u> students. • Sharing of helpful resources with your colleagues either via Moodle or in hardcopy. • Clear statement of syllabus outcomes. • Lesson goal(s) clearly linked to syllabus outcomes and chosen strategies • Effective use of student group structures to address teaching and learning goals. 					
Familiarity with and relevance of professional and/or research literature used to support response <ul style="list-style-type: none"> • Reference specifically to material, research and ideas presented in method lectures, <u>readings from the prescribed text and other sources</u>, relevant lectures from the combined method lecture series and from the professional experience lectures on diversity. • Reference all sources of your work including yourself if you are the author 					
Structure and organisation of response					
Presentation of response according to appropriate academic and linguistic conventions <ul style="list-style-type: none"> • Clarity and accuracy in use of key terms and concepts in mathematics teaching. 					
General comments/recommendations for next time					

Lecturer

Date

Recommended: /20 (FL PS CR DN HD) Weighting 40%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.

UNSW SCHOOL OF EDUCATION
FEEDBACK SHEET
EDST6725 MATHEMATICS METHOD 1

Student Name:

Student No.:

Assessment Task: Assessment 3 – Unit of Work

Specific criteria	(-) —————> (+)				
Understanding of the question or issue and the key concepts involved <ul style="list-style-type: none"> • Understanding of the task and its relationship to relevant areas of theory, research and practice. • Rationale linked to outcomes in the syllabus. 					
Depth of analysis and/or critique in response to the task <ul style="list-style-type: none"> • Ability to plan and assess for effective learning by designing a detailed lesson on the SED lesson template, using knowledge of the NSW syllabus documents or other curriculum requirements of the education act. • Lesson details include timing and questions /examples asked. • Reasons for the choice of teaching and learning strategies effectively explained. • Demonstration of knowledge, respect and understanding of the social, ethnic, cultural and religious backgrounds of students and how these factors may affect learning. • Demonstrates knowledge of resources that will <u>engage and extend</u> all students. • Clear statement of syllabus outcomes. • Lesson goal(s) clearly linked to syllabus outcomes and chosen strategies. • Effective use of student group structures to address teaching and learning goals. 					
Familiarity with and relevance of professional and/or research literature used to support response <ul style="list-style-type: none"> • Reference specifically to material, research and ideas presented in method lectures, readings from the prescribed text and other sources, relevant lectures from the combined method lecture series and from the professional experience lectures on diversity. 					
Structure and organisation of response					
Presentation of response according to appropriate academic and linguistic conventions <ul style="list-style-type: none"> • Clarity and accuracy in use of key terms and concepts in mathematics teaching. 					
General comments/recommendations for next time					

Lecturer

Date

Recommended: /20 (FL PS CR DN HD)

Weighting 60%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.

HURDLE REQUIREMENT

4. MICROTEACHING

Microteaching is the planning, presentation and evaluation of a lesson over a shortened period of time (a 10-minute mini-lesson). It is a critical aspect of method as it provides students with the opportunity to demonstrate key competencies that must be achieved before student teachers are permitted to undertake Professional Experience 1, at the same time observing other student teachers and engaging in peer review. It is recommended that students read widely on effective classroom strategies and practise aspects of their mini-lesson with a small group of peers prior to assessment.

The assessment process will consist of the following two components:

1. A detailed lesson plan using the prescribed template, including a statement of expected learning outcomes
2. A 10 minute mini-lesson

Initial Lesson Plan: All students must submit to the method lecturer their proposed lesson plan at least one week prior to the presentation. If you are unsure of any aspect, please discuss your plan with your lecturer after class in the previous week.

Microteaching: This will be assessed according to the attached criteria, and will be graded as Satisfactory or Unsatisfactory. Any student whose first microteaching episode is judged as unsatisfactory will be given a further (one only) opportunity to gain a satisfactory grade.

NOTE: If a student is assessed as unsatisfactory in microteaching s/he will automatically fail Method 1 overall, and not be permitted to undertake Professional Experience or any further method work in that teaching area until the key concerns have been resolved.

Microteaching Feedback Form for Pre-Service Teacher

STUDENT TEACHER			
Name:	zID:	Date:	
Method		Topic/level	
Standards	Comments		
<p>A. Teachers know their subject content and how to teach that content to their students (AITSL Standard 2)</p> <ul style="list-style-type: none"> Was the lesson or unit of work relevant to the needs of the students and based on the appropriate syllabus document requirements? (1.3.1, 2.3.1) Was knowledge of relevant concepts, topics and themes demonstrated, including ATSI perspectives? (2.1.1, 2.4.1) Were relevant linguistic structures and features and literacy /numeracy knowledge and skills integrated into the lesson? (2.5.1) Was a clear and coherent sequence of activities undertaken to engage and support the learning of all students within a class or cohort? (2.2.1, 3.2.1) Were the teaching resources and materials suitable for the aims of the lesson? (2.1.1) Were tasks required of students modelled and scaffolded? (2.1.1, 			
<p>B. Teachers plan for and implement effective teaching and learning (AITSL Standard 3)</p> <ul style="list-style-type: none"> Were challenging yet realistic and achievable goals in teaching and learning activities planned? Were these explicitly articulated in the lesson plan/to students? (3.1.1) Were instructions, explanations and questioning techniques effective? (3.3.1) Were verbal and non-verbal communication strategies used effectively in the classroom to support student understanding of content and encourage participation and engagement of students? (3.5.1) 			
<p>C. Teachers create and maintain supportive and safe learning environments (AITSL Standard 4)</p> <ul style="list-style-type: none"> Was rapport with the learners established and responsiveness to their needs in the class demonstrated? (4.1.1) Were activities well organised and direction clear? (4.2.2) Was respect and appreciation of others demonstrated through active listening, being accessible to all students and exhibiting a caring attitude? (4.1.1, 4.1.1, 4.1.1) 			
<p>D. Teachers engage professionally with colleagues, parents/carers and the community (AITSL Standard 7)</p> <ul style="list-style-type: none"> Was there adequate in-class discussion and involvement that demonstrated the understanding and application of professional ethics and responsibilities? (7.1.1) Were contributions to other teachers' professional growth made in a positive manner? (7.4.1) Was constructive feedback provided to the presenting teacher to 			
Comments: (See over page)			
Lecturer:	Date:	Satisfactory /Unsatisfactory (circle)	

8. RESOURCES

Required Texts

Cavanagh, M., & Prescott, A. (2014). *Your Professional experience handbook: A guide for preservice teachers*. Sydney: Pearson.

Goos, M., Stillman, G., & Vale, C. (2007). *Teaching secondary school mathematics: Research and practice for the 21st century*. Sydney: Allen & Unwin.

Australian Curriculum for NSW for stages 4, 5 & 6.

Required Readings

Jones, K., & Smith, K. (1997). Student Teachers Learning to Plan Mathematics Lessons. Paper presented at the 1997 Annual Conference of the Association of Mathematics Education Teachers (AMET1997). Leicester. 15-17 May 1997.

Further Readings

Anstey, M., & Bull, G. (2006). *Teaching and learning multiliteracies: Changing times, changing literacies*. Melbourne: Curriculum Press.

Attwood, B. (2005). *Telling the truth about Aboriginal history*. Crows Nest: All and Unwin.

Boaler, J. (2010). *The elephant in the classroom: Helping children learn and love maths*. London: Souvenir Press Limited.

Finger, G., Russell, G., Jamieson-Proctor, R., & Russell, N. (2006). *Transforming learning with ICT: Making IT happen*. Frenchs Forest: Pearson Australia.

Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Portsmouth: Heinemann.

Harrison, N. (2008). *Teaching and learning in indigenous education, Melbourne*: Oxford University Press.

Henderson, R. (2012). *Teaching literacies, pedagogies and diversity in the middle years*. Melbourne: Oxford University Press.

Hyde, M., Carpenter, L., & Conway, R. (2010). *Diversity and inclusion in Australian schools*. Melbourne: Oxford University Press.

Martin, K. (2008). The intersection of Aboriginal knowledges, Aboriginal literacies and new learning pedagogy for Aboriginal students. In Healy, A. (Ed.) *Multiliteracies and diversity in education: New pedagogies for expanding landscapes* (pp. 59-81). Melbourne: Oxford University Press.

Murray, M. (2011). *A very good literacy focus on mathematics (Books 1-8)*. Sydney: Mathematical Publications.

Palmer, S., Greenwood, D., Wooley, S., Goodman, J., & Vaughan, J. (2014). *Cambridge Mathematics NSW Syllabus for the Australian Curriculum, Year 10, Stage 5.1/5.2/5.3*. Cambridge University Press.

Powers, G. K. (2013). *Cambridge Preliminary Mathematics General (2nd ed.)*. Cambridge University Press.

Powers, G. K. (2013). *Cambridge HSC Mathematics General 1*. Cambridge University Press.

Powers, G. K. (2013). *Cambridge HSC Mathematics General 2 (2nd ed.)*. Cambridge University Press.

Price, K. (2012). *Aboriginal and Torres Strait Islander education: An introduction for the teaching profession*. Cambridge University Press.

Watson, A., Jones, K., & Pratt, D. (2013). *Key ideas in teaching mathematics: Research-based guidance for ages 9-19*. Oxford: Oxford University Press.

Recommended Websites

www.boardofstudies.nsw.edu.au (Students can download syllabuses from the Board of Studies website)

www.det.nsw.edu.au

www.curriculumsupport.education.nsw.gov.au/secondary/english/index

www.hsc.csu.edu.au

www.studentnet.edu.au/aispd/index.html

www.cecsw.catholic.edu.au

www.curriculum.edu.au

www.curriculumsupport.education.nsw.gov.au

www.aboriginaleducation.nsw.edu.au/index.html

www.nswteachers.nsw.edu.au

www.naplan.edu.au

www.acara.edu.au

Professional Associations

www.mansw.nsw.edu.au

www.aamt.com.au

www.austms.org.au

www.mathematiciansinschools.edu.au