School of Education

EDST6755
Mathematics Method 2

Term 2 2020

1.

6.3.1 Seek and apply constructive feedback from

6. COURSE CONTENT AND STRUCTURE

Module	Topics	Tutorials
1 (24 hours eq. lecture/ tutorial time)	***On-line assessment module*** Introduction to the concept and principles of effective assessment practices and their applications to learning and teaching Focus is on building assessment knowledge and the skills required to plan, develop and implement a range of assessment strategies, to engage in moderation activities to ensure fair and consistent judgment of student learning, to analyse assessment data to inform future learning and teaching, and to develop reports for various stakeholders.	Critically describe the role of assessment in ensuring effective learning and teaching; Evaluate the appropriateness of various assessment strategies in ensuring effective learning and teaching Apply assessment knowledge and skills in developing effective learning, teaching and assessment plans. Content of this module will be assessed during the Hurdle Requirement in Week 7
2	Discussion of the course outline & assessment 1 Why Teach Mathematics? Teaching for Understanding: common misconceptions	Dan Meyer: Three Act Lessons *Oral Presentations*
3	Alternate Problem-Solving Methods. Solving one	

7. RESOURCES

Required readings

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

Goos, M., *Stillman*, G., & Vale, C. (2016). Teaching secondary school mathematics: Research and practice for the 21st century. Sydney: Allen & Unwin

All students must buy copies of the following Mathematics syllabuses:

Mathematics 7-10 Syllabus,
(New) Stage 6 Syllabus, Mathematics Advanced, Extension 1 and 2,
Alternatively, it is possible to download these syllabuses from the NESA website

http://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/stage-6-mathematics

Further readings

Readings on UNSW Moodle

Ernest, P. (1998). *Social constructivism as a philosophy of mathematics*: State University of New York Press.

Finger, G., Russell, G., Jamieson-Proctor, R. & Russell, N. (2006) *Transforming Learning with ICT Making IT Happen*. Pearson Australia

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

Hargreaves, E. (2005). Assessment for learning? Thinking outside the (black) box. *Cambridge Journal of Education, 35*(2), 213-224. doi: 10.1080/03057640500146880

Harrison, N. (2008). *Teaching and learning in Indigenous education.* Oxford, Sydney.

Hendersoe

www.aamt.com.au

Assessment Details

Assessment 1 (2000 wd eq, 40%)

PART 1: Create a scope and sequence, including learning outcomes, covering 10 weeks for a Year 11 Mathematics Advanced Course which includes the functions topic.

PART 2: Prepare an assessment task that directly links to the teaching and learning intentions for the l occur and how the feedback from the summative task can also be used for formative assessment. Make sure your instructions for the task are grammatically correct and communicate effectively for students.

Design a marking rubric, which also includes space for a holistic comment. Write a possible feedback comment to a student who achieves B Grade and explain to them what their strengths are and at least one aspect which could be improved.

Provide solutions for the assessment task.

Assessment 2 (3000 wd eq, 60%)

Prepare a unit of work for the Year 12 Mathematics Standard Course which covers approximately half the term and includes the Networks topic. You need to ensure the unit demonstrates you are ready to plan and teach Stage 6 effectively. Make sure you have reflected on the feedback you received for the scope and sequence you prepared for Assessment 1.

The unit of work should indicate a variety of formative assessment strategies which will provide students with feedback about:

a. what they can already do well

b. what they still need to improve

c. how they can effectively close the gap between a and b.

Include all activities and resources to support student learning. There must be at least one literacy activity/resource and one numeracy/ICT resource.

HURDLE REQUIREMENT

FEEDBACK AND REPORTING

Assessment is the process of gathering evidence from a variety of sources about learning outcomes and being able to use that information to improve learning and teaching. Evidence includes not only individual student work samples and test results, but also more global data derived from standardized tests (e.g. NAPLAN, ICAS, HSC etc) as well as more qualitative information generated from student self and peer evaluations, and student-parent conferences.

Feedback is a structured interaction with the student about their current learning: where they are, where they want and /or need to be and how to get there. It may be in oral or written form and may be given -assessment. Feedback needs to indicate learning that has been demonstrated (achieved) as well as what needs more work. For the feedback to also feed forward, comments need to provide students with strategies to guide their improvement. Feedback /reporting to and for parents is also important as they are critical stakeholders and partners

Moderation is a process used by teachers to compare their judgements about student performance so that assessment is trustworthy. Teachers work together as a group to ensure that the way they use assessment grades is consistent with agreed or published standards. For A to E grades this means the grade a student receives in one school can be fairly compared to the same grade anywhere in NSW. For school-based tasks, it means the work of students in different classes can be assessed using the same success criteria to evaluate progress toward learning outcomes. Watch the series of seven videos to enhance your understanding and knowledge on how to make sound and consistent judgment of student work.
https://www.youtube.com/watch?v=-QBLZAbhaYc&list=PLgBQxWO_rR7ZrlZopD_wZvdt6kY8EsfLK

It is recommended that students read widely on how to design appropriate assessment tasks, how provide written feedback for the student which indicates strengths and areas for improvement in relation to this work sample as well as their past performance and overall expectations/standards. Suggest a strategy that will guide the student in his/her learning. (If the task was used summatively you can still use it for formative purposes.)

indicate what the implications of your evaluation might be for the teacher in terms of future teaching.

2. Write a few lines that could be included in a mid-year report comment to parents. Provide enough detail to indicate to pare
commenting on. Add A, B, C, D or E to align with the advice and work samples provided by NESA and ACARA.

NOTES:

The student work samples must be authentic. <u>They should have been collected during Professional Experience 1 during a normal assessment task and/or provided by the method lecturer.</u> Annotated student work samples, notes and all other written evidence of teacher
bmitted by the
due date.

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FEEDBACK SHEET
EDST6755 MATHEMATICS METHOD 2

Student Name: Student Number:

Assessment Task 1: Scope and Sequence with Assessment Task for one term (Advanced Course)

SPECIFIC CRITERIA (-) ➤

UNSW SCHOOL OF EDUCATION
FEEDBACK SHEET
EDST6755 MATHEMATICS METHOD 2

Student Name: Student Number:

Assessment Task 2: Planning a unit of work including formative assessment strategies (Standard Course)

SPECIFIC CRITERIA	(-) → (+)
Understanding of the question or issue and the key concepts involved	
Demonstrates knowledge of selected Stage 6 course and syllabus outcomes	