EDST8525

Understanding the Brain, Learning and Development (Primary/Secondary)

Session 1, In person-scheduled-weekday, North Ryde 2025

Macquarie School of Education

Contents

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General Information

Unit convenor and teaching staff
Unit Convenor (consultation convener)
Anne McMaugh
anne.mcmaugh@mq.edu.au
Contact via For general queries about the unit, please check iLearn. For confidential queries or inquiries specific to Anne's lectures or tutorial classes, please email with the unit code in subject line.
Monday 10-11am by Zoom

Unit Convenor (non-consultation convener)
Penny Van Bergen
penny.vanbergen@mq.edu.au
Contact via For general queries about the unit, please contact Anne McMaugh as above. For inquiries specific to Penny's lectures or tutorial classes, please email with the unit code in subject line.
Thursday 4-5pm by Zoom

Credit points
10

Prerequisites
Admission to MTeach(Prim) or MTeach(Sec) or MEd or MEdLead or MEChild or GradCertEdStud or GradCertEd or MInc&SpecEd

Corequisites

Co-badged status

Unit description
This unit develops an understanding of educational psychology and learner development by drawing on the fields of neuropsychology, cognitive science, human development and social-cognitive research to examine learning and behaviour in classroom and school contexts. The unit guides students through practical and theoretical approaches to pedagogies that support student motivation and engagement and address cognitive processes of learning such as attention, memory, cognitive load and self-regulation. Students will develop a deeper understanding of psychosocial factors including teacher-student relationships, peer relationships, mental health and wellbeing that also shape learning and classroom practice. Students are encouraged to develop a research-based understanding of learner development that can be further developed and applied in their practical workplace context.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Analyse and understand research about development of the brain and learning from cognitive and neuropsychological research and apply to educational practice.

ULO2: Evaluate the implications for learning of student characteristics including typical cognitive, physical and socio-cognitive development.

ULO3: Develop an understanding of classroom practices and pedagogies that motivate, engage and support learners.

ULO4: Critically reflect on understanding and knowledge from the fields of educational psychology and child development to investigate a problem of practical or theoretical significance to students and teaching and learning contexts.

ULO5: Apply understanding of research and theory to evaluate educational practices, develop evidence-based solutions, and communicate this knowledge to the education community.

General Assessment Information

General Submission Information

Please format assessments using 12-point font and 1.5 spacing.

All assessments must be submitted electronically. Turnitin plagiarism detection software is used to check all written assessments. It is the responsibility of all students to ensure that their submitted work is in a format compatible with Turnitin software for plagiarism checking. Submissions must meet the required file type and formatting specifications outlined in the assessment guidelines. Failure to submit work in an acceptable format may result in delays in processing your submission and potential penalties for non-compliance with assessment requirements. If you are unsure about the file format or have technical difficulties, it is your responsibility to seek assistance before the submission deadline. Students should be careful to check that they submit the correct file for an assessment as no re-submissions will be accepted after the due date and time, including instances where students upload an incorrect file. It is not the responsibility of unit staff to contact students who have failed to submit assessments. If you have any missing items of assessment, it is your responsibility to contact the unit convenor.

Students can use Turnitin's Originality Report as a learning tool to improve their academic writing if this option is made available in the unit.

Word limits are strictly applied. Work above the word limit will not be marked.

Use of Artificial Intelligence (AI) in this unit

The use of AI is not permitted for quizzes.

Your assignments cannot report content generated by a third party or AI sources.

While AI tools (e.g. Copilot, ChatGPT, ResearchRabbit and other generative AI tools), can be useful sources of information and ideas, it is fraudulent and a breach of acdemic integrity to pass off the content generated by these tools as your own writing and ideas. Please note that information or references generated by a third party or AI (e.g. Multisearch, Google Scholar, Chat GPT, etc.) needs to be checked for accuracy and reliability.

AI and third party information generators are notorious for providing wrong, false, and incomplete information. It is your responsibility to check any content, information or references you acquire or use from any third party sources.

Students should be aware of and apply the University policy on academic integrity (see: https://policies.mq.edu.au/document/view.php?id=3). Any student suspected of using unauthorised AI in an assignment will be referred to the Faculty of Arts Discipline Committee. Penalties can include reduced marks for an assessment, being awarded '0' for a task, failing an entire unit, being excluded from a course of study. Please see each assessment task description/rubric for expectations about AI.

Special Consideration / Late Penalties

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day an assessment is not submitted, up until the 7th day (including weekends) (see: https://students.mq.edu.au/study/assessment-exams/special-consideration). Applications for extensions must be made via Service Connect. After the 7th day, a mark of 0 (zero) will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11:55pm. A 1-hour grace period is provided to students who experience a technical issue. This late penalty will apply to non-timed sensitive assessments (incl. essays, reports, posters, portfolios, journals, recordings etc).

Late submission of time sensitive tasks (such as tests/exams, performance assessments/ presentations, scheduled practical assessments/labs etc) will only be addressed by the unit convenor in a Special Consideration application. A Special Consideration outcome may result in a new question or topic.

Marking

All assessments are marked using a rubric.

Marking of all assessments is moderated by the Unit Convenor.

Quizzes

The quiz is an individual assessment task and must be completed by each student individually. Similarities in responses between students will be checked and investigated for possible collusion.

University Policy on Grading

Assignments will be awarded grades ranging from HD to F according to guidelines set out in the University's Grading System and University Assessment Policy.

To attain a pass or higher grade in Professional Experience a student must obtain a satisfactory in both the Professional Experience component and a pass or higher grade in the academic component. For Professional Experience units the Professional Experience Evaluation Report is marked as Satisfactory or Unsatisfactory. The Macquarie Teaching Performance Assessment (MQTPA - in final WIL/PEx units) is marked as Not met, Met or Exceeds.

Results

Results shown in iLearn, or released directly by your Unit Convenor, are not confirmed because they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit Service Connect.

Withdrawing from this unit

If you are considering withdrawing from this unit, please seek academic advice via Service Connect before doing so as this unit may be a co-requisite or prerequisite for units in the following sessions and may impact your course progression.

Assessment Tasks

Name	Weighting	Hurdle	Due
Mid Term Review	50%	No	Week 6. In tutes 3/04/2025 or On-Campus day 5/04/2025.
Presentation	50%	No	Week 10. Completed by 18 May 2025.

Mid Term Review

Assessment Type [1]: Quiz/Test
Indicative Time on Task [2]: 50 hours
Due: **Week 6. In tutes 3/04/2025 or On-Campus day 5/04/2025.**
Weighting: **50%**

Assessment on understanding of the brain, learning sciences, and development of learners. Will include multiple-choice and short-answer questions.

On successful completion you will be able to:
- Analyse and understand research about development of the brain and learning from cognitive and neuropsychological research and apply to educational practice.
- Develop an understanding of classroom practices and pedagogies that motivate, engage

and support learners.
- Critically reflect on understanding and knowledge from the fields of educational psychology and child development to investigate a problem of practical or theoretical significance to students and teaching and learning contexts.
- Apply understanding of research and theory to evaluate educational practices, develop evidence-based solutions, and communicate this knowledge to the education community.

Presentation

Assessment Type [1]: Presentation
Indicative Time on Task [2]: 50 hours
Due: **Week 10. Completed by 18 May 2025.**
Weighting: **50%**

A webinar/viva voce for a professional audience in which students explain and apply key concepts and theory from the unit to a practice-based scenario and problem. Students justify their approach based on their understanding of student learning and development from the unit.

On successful completion you will be able to:
- Analyse and understand research about development of the brain and learning from cognitive and neuropsychological research and apply to educational practice.
- Evaluate the implications for learning of student characteristics including typical cognitive, physical and socio-cognitive development.
- Develop an understanding of classroom practices and pedagogies that motivate, engage and support learners.
- Apply understanding of research and theory to evaluate educational practices, develop evidence-based solutions, and communicate this knowledge to the education community.

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Structure

This unit has twelve (12) teaching weeks. Each week there are around three (3) lectures/ short podcasts and ONE (1) tutorial. Tutorials are offered in two modes: a weekly face-to-face class on campus, or you may choose to attend the Infrequent mode with THREE (3) half-day On-Campus sessions. You must register in one of these tutorial modes and attend your registered tutorial or on-campus days.

Required and Recommended Readings

Each week the iLearn site will contain a **required reading** which will be located in the Leganto tool in iLearn.

Please also see iLearn each week for **recommended** extension texts, including recent journal articles, seminal historical or groundbreaking papers, and user-friendly explainers. These resources are optional and designed to extend your knowledge.

Recommended text: Duchesne, S., McMaugh, A., & Mackenzie, E. (2022). *Educational psychology: for learning and teaching. (*7th ed.) Cengage Learning Australia.

The iLearn website

This unit has a full web presence through iLearn. Information for students about access to the online component of this unit is available at https://ilearn.mq.edu.au/login/index.php. You will need to enter your student username and password.

IT help

Please do NOT contact the Unit Convenor regarding iLearn technical help. Assistance is available from IT Helpdesk: via email onehelp@mq.edu.au or Ph: 9850 4357 or 1800 67 4357. On Campus: Ground floor at 18 Wally's Walk.

Unit Schedule

Your weekly schedule is detailed in iLearn.

The topics will be covered in three modules addressing (1) Learning and Cognition; (2)Theories of Positive Development and Motivation; (3) Supporting Wellbeing and Mental Health.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy

- Academic Progression Policy

- Assessment Policy

- Fitness to Practice Procedure

- Assessment Procedure

- Complaints Resolution Procedure for Students and Members of the Public

- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit connect.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

School of Education Procedures

In addition, the following policies and procedures for the Macquarie School of Education apply to this unit.

Academic Progression Policy

This unit is a part of a professional course listed on Schedules 2 and 3 of the Academic Progression Policy. This course has additional requirements that are applicable for the full duration of the course, including course-specific Inherent Requirements, Fitness to Practice requirements and other compulsory course requirements. It also has rigorous academic progression standards. Inability to meet these requirements may result in a withdrawal of offer of admission and/or permanent exclusion from the course in accordance with the General Coursework Rules.

Communication

It is the student's responsibility to check all electronic communication on a weekly basis. Communication may occur via:

- Official MQ Student Email Address

- The Dialogue function on iLearn

- Other iLearn communication functions

Attendance and Participation [for all UG and PG ITE units]

See the University timetable for information about when classes begin in this unit. Creating your t imetable - Enrolling | Macquarie University, Sydney (mq.edu.au)

Attendance at all synchronous activities, completion of non-synchronous formative/diagnostic class tasks and involvement in professional forums is expected as the [[insert ITE degree title here]] is a professional qualification. Activities completed during weekly tutorials (DAY or ONLINE DAY mode) or on campus days (INFQ mode) are essential for building the core knowledge and/or skills required to demonstrate the learning outcomes of this unit and to meet the AITSL Graduate Teacher Standards and/or ACECQA requirements. Attendance at all tutorials and/or on campus days is expected and will be recorded. Make up tasks may be given if attendance is missed to ensure all content is covered to meet accreditation requirements.

Students are required to attend the tutorial in which they are enrolled. Any changes to tutorial enrolments must be completed officially through e-Student. Please do not contact the unit convenor to request a change.

Infrequent Attendance Students

Information about the dates of the on-campus sessions can be found in the university timetable. Creating your timetable - Enrolling | Macquarie University, Sydney (mq.edu.au)

- The on campus sessions are essential to student engagement and learning and attendance is expected. Failure to attend or not to have an approved Special Consideration may result in a Fail grade.

- Prior to the on campus sessions, students should have read the prescribed readings and listened to the lectures, summarise the main points, and make notes of the key terms and definitions. Prepare any discussion questions of your own that you wish to share.

- Please make effective use of the online component of the unit and access iLearn regularly. Keep up to date with listening to the lectures on a weekly basis.

- Further details and any updates about times and locations will be posted on iLearn as an Announcement during first half of the semester.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://stu

dents.mq.edu.au/support/

Academic Success

Academic Success provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the Service Connect Portal, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

Changes since First Published

Date	Description
16/02/2025	Updated consultation time for co-convener (previously submitted in error without this). Thanks!

Unit information based on version 2025.04 of the Handbook