All pre-service teachers studying Early Childhood (ED39 or EU30) and Primary (ED49 or EU40) are required to study a primary specialisation. The primary specialisations that QUT offers are

- Literacy/English
- Numeracy/Mathematics
- Science

Pre-service teachers choose one of these and undertake modules in their selected specialisation that go beyond the required curriculum that all pre-service students undertake regardless of their specialisation area.

Pre-service teachers will be assessed on their ability to demonstrate

- expert content knowledge
- expert pedagogical content knowledge and
- highly effective classroom teaching in their area of specialisation.

Supervising Teachers are required to assess pre-service teachers in these three areas when it is included on the Professional Experience report. This document is a guide provided to assist Supervising Teachers in their assessment of primary specialisation.

In considering the skills and knowledge of graduates with a primary specialisation, it is important to note that graduate teachers are required to meet the Graduate career stage of the Australian Professional Standards for Teachers (APST), and it is not an expectation that graduates with a primary specialisation will surpass this career stage.

**Literacy/English Primary Specialisation**

Below are multiple indicators of possible features a graduate pre-service teacher with a literacy/English primary specialisation may demonstrate. **Please note this is not to be used as a checklist and meeting all of the indicators is not a requirement to meet the standards of a graduate teacher.**

Possible features of graduate primary teachers with a specialisation in literacy/English may include:

**Expert Content Knowledge**

- knowledge and understanding of essential concepts and key ideas for the teaching of English in primary school
- sound knowledge of the metalinguistic foundations of the English language and the research base underpinning the essential components of effective early reading instruction
- detailed knowledge of the alphabetic code of written English, the linguistic constructs that describe the English language, the spelling conventions of written English, and its etymological and morphological foundations.
- solid understanding of the multi-disciplinary research on how children learn to read as well as the scientific evidence base supporting effective early reading instruction.
- sufficient understanding of language and reading development to identify areas of strength and weaknesses in children’s reading progress and apply the appropriate interventions.
• Deep appreciation of the changing nature of English as a language and the changing world of literacy
• knowledge of effective English and literacy pedagogies that have proven efficacy for progressing students’ reading, viewing and writing achievement, and a deep understanding of their evidence base.
• capacity to seize opportunities for literacy learning across all primary year groups and across curricula
• knowledge of classroom assessment, including knowledge of different forms and purposes of formative and summative assessments, and curriculum-based and curriculum-based standardised assessments, how assessment impacts students’ motivation and learning around literacy.

Expert Pedagogical Content Knowledge
• deep knowledge of a comprehensive range of evidence-based teaching strategies
• comprehensive knowledge of strategies to enable all students to attain high levels of literacy proficiency and proficiency in English
• capacity to teach English and literacy as a General Capability, and with an emphasis on supporting less capable students
• an ability to locate and draw on a wide range of resources to support instruction and assist colleagues.
• knowledge of pedagogies that support and enhance capabilities of advanced and gifted and talented students of English
• capacity to use curriculum, assessment and reporting knowledge to design effective learning sequences, units of work and assessments within English and across curricula, and to interpret and use assessment data.

Highly Effective Classroom Teaching
• enthusiasm for the teaching of English
• capacity to identify and assess challenges related to under-performing students, and opportunities for assisting high-performing students
• teacher professionalism indicative of their commitment to engage with and contribute to the profession of English and literacy educators
• confidence as teachers of English in their capacity to work with colleagues to plan for, assess, and constantly improve teaching and learning associated with the study of English.

Science Primary Specialisation

Below are multiple indicators of possible features a graduate pre-service teacher with a science primary specialisation may demonstrate. Please note this is not to be used as a checklist and meeting all of the indicators is not a requirement to meet the standards of a graduate teacher.

Possible features of graduate primary teachers with a specialisation in science may include:

Expert Content Knowledge
• knowledge and understanding of science concepts and the processes used to develop scientific knowledge.
• understanding of science’s contribution to our culture, society and economy as well as its influence in our lives.
• capacity to make connections and creatively integrate science across other Key Learning Areas
• curiosity in seeking to learn about and understand the natural world.
• a capacity to contribute to the design and provision of high quality primary science education.
• a capacity to critique science curriculum, programmes, teaching resources, pedagogies and practices.
• understanding of and capacity to articulate the theoretical and research basis for science curriculum and effective pedagogies.
Expert Pedagogical Content Knowledge
- comprehensive knowledge of how to enable students to achieve requirements of the curriculum.
- extensive understanding of science concepts relevant to primary science, and the extent to which these are encapsulated in the curriculum.
- deep understanding of scientific inquiry and the extent to which this is encapsulated in the curriculum.
- understanding of the ways in which scientists pursue the production of trustworthy knowledge and the extent to which these are encapsulated in the curriculum.
- capacity to capitalise on and orchestrate opportunities for science learning across all primary year groups including the selection of a range and balance of explicit teaching, play, inquiry, problem-based, project-based strategies
- thorough understanding of learning in science, including students’ conceptions, the diagnosis of barriers to and enablers of science learning.
- capacity to implement assessment processes to improve science teaching and learning.
- capacity to work with colleagues to plan for, to evaluate and to improve science teaching and learning.
- capacity to organise and manage spaces, materials and equipment required for the teaching and learning of science.
- capacity to use digital technologies to enhance science teaching and learning.
- knowledge of teaching strategies that enable students to develop an appreciation of and enthusiasm for science.

Highly Effective Classroom Teaching
- capacity to evaluate and improve the impact of their teaching on student learning.
- ability to differentiate learning experiences for students.
- confidence in and enthusiasm for science teaching.

Numeracy/Mathematics Primary Specialisation
Below are multiple indicators of possible features a graduate pre-service teacher with a numeracy/mathematics primary specialisation may demonstrate. Please note this is not to be used as a checklist and meeting all of the indicators is not a requirement to meet the standards of a graduate teacher.

Possible features of graduate primary teachers with a specialisation in numeracy/mathematics may include:

Expert Content Knowledge
- deep understanding of the nature of mathematics and how this is encapsulated in the proficiency strands of the curriculum.
- capacity to see the connections between key concepts in the mathematics curriculum
- capacity to creatively integrate mathematics across other subject areas.
- ability to capitalise on and orchestrate opportunities for mathematics learning across all primary year groups.
- capacity to advocate for research informed mathematics teaching.
- deep understanding of the research basis for mathematics curricula and pedagogies.
- deep understanding of mathematical concepts and processes used to develop mathematical knowledge
Expert Pedagogical Content Knowledge

- knowledge of how to teach mathematics including pedagogies appropriate to specific groups of learners.
- knowledge of a broad range of teaching strategies that enable students to develop an appreciation of and enthusiasm for the discipline of mathematics.
- comprehensive knowledge of strategies to enable all students to develop mathematical proficiency and that positively impact on those students’ mathematical proficiency.
- strong capacity to design assessments and to interpret and use assessment data from a broad range of sources to inform planning and teaching including differentiating teaching for students with particular mathematics learning needs.
- strong knowledge of students’ typical developmental pathways and common difficulties in learning mathematics.
- strong knowledge of age-appropriate mathematics pedagogy

Highly Effective Classroom Teaching

- enthusiasm for mathematics teaching,
- belief in the capacity of all students to learn mathematics,
- commitment to engage with and contribute to the profession of mathematics teaching and
- enhanced confidence as teachers of mathematics