



Australian Government

CHCEDS045 Support student mathematics learning

Release: 1

CHCEDS045 Support student mathematics learning

Modification History

Release 1. CHCEDS045 Support student mathematics learning supersedes and is equivalent to CHCEDS019 Support students' mathematics learning.

Application

This unit describes the performance outcomes, skills and knowledge required to work with teachers to support primary or secondary students to develop mathematics skills in number and algebra, measurements and geometry, and statistics and probability as included in current curriculum documents.

These skills and knowledge enable education support workers to work with the teacher to reinforce mathematics skills across the curriculum.

The unit applies to education support workers who operate under the guidance and supervision of a teacher or other educational professional. They work mainly with students in classroom settings in primary or secondary schools, as defined by State/Territory legislation.

The skills in this unit must be applied in accordance with Commonwealth and State/Territory legislation, Australian standards and industry codes of practice.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Education Support

Unit Sector

Children's Education and Care

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1. Monitor mathematics skills. | 1.1. Monitor students' understanding and use of mathematics through observation, listening and conversation.
1.2. Provide information to teacher to inform planning based on observations.
1.3. Identify progress of acquisition of mathematics skills for numeracy and discuss with the teacher. |
| 2. Support students to develop mathematics skills. | 2.1. Determine appropriate strategies for supporting students in the application of mathematics skills in consultation with the teacher.
2.2. Implement planned strategies and scaffolding to enhance the abilities of students and address their individual needs.
2.3. Encourage students to problem-solve using mathematics knowledge and skills and make links to everyday life contexts.
2.4. Use activities and examples to demonstrate different mathematical functions.
2.5. Use explicit talk to focus students on specific mathematics knowledge and skills. |
| 3. Enhance students' mathematics knowledge and skills through structured activities. | 3.1. Use accurate mathematics terminology and concepts, as planned with teacher, to support student's learning.
3.2. Encourage students to improve mental computation and calculation skills using strategies appropriate to student's developmental levels.
3.3. Ensure students check for reasonableness of solutions when calculating, using a range of strategies including estimating and technology.
3.4. Encourage students and build their confidence to attempt problem-solving that requires the use of mathematics knowledge and skills. |

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed below.

SKILLS	DESCRIPTION
Reading skills to:	interpret teacher planning documents.
Oral communication skills to:	interact and engage with students to build rapport and provide encouragement.

- Problem-solving skills to:
- provide support to students and determine methods to appropriately scaffold their learning according to their individual ability.
- Initiative and enterprise skills to:
- use appropriate support strategies when opportunities arise.

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e0c25cc-3d9d-4b43-80d3-bd22cc4f1e53>

Assessment Requirements for CHCEDS045 Support student mathematics learning

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Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- contribute to the development of support strategies for two students who are at different levels of mathematical ability and adapt and incorporate strategies and resources appropriate to learner needs
- implement above support strategies on at least one occasion for each student and report to teacher on student outcomes to inform future planning.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- the role of education support workers in implementing planned mathematics activities with students
- differences between the roles and responsibilities of teachers and education support workers
- assessment methodologies and how they are used in mathematics:
 - formative
 - summative
 - standardised testing
- key content strands of current mathematics curriculum:
 - number and algebra
 - measurement and geometry
 - statistics and probability
- terminology and concepts associated with mathematics and numeracy as used by supervising teacher:
 - vocabulary
 - symbols
 - displays such as graphs and tables
 - units of measurement
 - mathematical conventions
- factors affecting acquisition of mathematics skills:

- limited opportunities for practice
- health issues
- socio-economic issues
- home language other than English
- level of confidence
- planned or incidental learning opportunities
- questioning techniques that can be used to scaffold learning and assist students to problem-solve.

Assessment Conditions

Skills must be demonstrated in the workplace:

- implementation of strategies must be directly observed by the assessor on at least one occasion
- remaining performance evidence may be collected through authenticated third-party reports
- observation and third-party reports must be supplemented by other forms of evidence.

Skills related to resource adaptation may be demonstrated outside of the workplace but must be based on work in a primary or secondary school in Australia.

Interactions with students must be supervised by a teacher or other educational professional.

Assessment must ensure access to:

- student information to inform planning
- maths curriculum information
- maths support resources in the areas of:
 - number and algebra
 - measurement and geometry
 - statistics and probability
- organisational policies and procedures for support programs
- students in a school
- colleagues for guidance and collaboration.

Assessors must satisfy the Standards for Registered Training Organisations requirements for assessors.

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