

Title	Demonstrate knowledge of flight instructional techniques		
Level	5	Credits	8

Purpose	People credited with this unit standard are, within an aviation learning environment, in accordance with Subject No 62, able to demonstrate knowledge of: how people learn; teaching methods; setting lesson aims and objectives; lesson planning; programme planning; communication models; questioning techniques; training aids; briefing and debriefing; applied instruction in the cockpit; the profile of aviation students; the qualities of an aviation instructor; the assessment of learning; and threat and error management.
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Classification	Aviation > Aircraft Operation
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Available grade	Achieved
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Guidance Information

- 1 This unit standard is aligned with the relevant parts of the prescribed syllabi of the Civil Aviation Authority of New Zealand (CAA) for Subject No 62 for a flight instructor rating. Credit will be awarded on meeting the requirements of the CAA-approved assessment or examination.
- 2 Definitions, abbreviations, and acronyms used in this unit standard are to be found in:
 - a *Civil Aviation Rules Part 1* on the CAA website at <https://www.caa.govt.nz>, and
 - b *Aeronautical Information Publication (AIP)* published by Aeronautical Information Management (AIM), PO Box 294, Wellington 6140 or on the AIM website at <http://www.aip.net.nz>.
- 3 All references to the CAA refer specifically to the Civil Aviation Authority of New Zealand.
- 4 Industry standards and recommended practices are those set in place by the CAA.
- 5 For the purpose of this unit standard, *knowledge* refers to the knowledge, understanding, and application of the subject matter.
- 6 Industry requirements are that the candidate must meet the eligibility requirements of the Civil Aviation Act 1990 and the Civil Aviation Rules Part 61 for a flight instructor rating.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of how people learn within an aviation-learning environment in accordance with Subject No 62.

Performance criteria

- 1.1 Learning within an aviation environment is defined in accordance with industry texts and standards.
- Range includes but is not limited to – domains of learning, Bloom's taxonomy, brain processes, limitation of memory, value of each sense.
- 1.2 Perception is explained in terms of the limits of perception in accordance with industry texts and standards.
- 1.3 The application of styles of learning within an aviation environment is described in accordance with industry texts and standards.
- Range styles may include but are not limited to – visual, aural/auditory, reading/writing, kinaesthetic; own learning style.
- 1.4 Principles of learning are described in accordance with industry texts and standards.
- Range principles may include but are not limited to – readiness, exercise, effect, primacy, intensity, recency, belonging, reinforcement, feedback.
- 1.5 The role of motivation in the learning process within an aviation learning environment is explained in accordance with industry texts and standards.
- Range includes but is not limited to – extrinsic, intrinsic.
- 1.6 Barriers to effective learning and ways of overcoming barriers within an aviation learning environment are described in accordance with industry texts and standards.
- Range barriers include but are not limited to – physical, intellectual, emotional, administrative, stress.
- 1.7 The phases of learning motor skills within an aviation learning environment are described in accordance with industry texts and standards.
- Range includes but is not limited to – cognitive, associative, automatic, learning plateau.

- 1.8 The process for learning attitudes is explained in accordance with industry texts and standards.

Outcome 2

Demonstrate knowledge of teaching methods within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 2.1 The characteristics of various teaching methods within an aviation learning environment are described in accordance with industry texts and standards.
- Range includes but is not limited to – lecture, theory lesson, guided discussion, pre-exercise briefing, practical skill lesson, post-exercise debriefing, programmed instruction, facilitation.
- 2.2 The strengths and weakness of various teaching methods within an aviation learning environment are described in accordance with industry texts and standards.
- 2.3 The importance of creating an effective learning environment within an aviation learning environment is explained in accordance with industry texts and standards.

Outcome 3

Demonstrate knowledge of setting lesson aims and objectives within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 3.1 Instructional objectives and lesson aims within an aviation learning environment are explained and contrasted in accordance with industry texts and standards.
- 3.2 An instructional objective within an aviation learning environment is written in accordance with industry texts and standards.

Outcome 4

Demonstrate knowledge of lesson planning within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 4.1 Major sections of a lesson model within an aviation learning environment are described in accordance with industry texts and standards.
- Range includes but is not limited to – introduction, body, conclusion, steps of planning.

- 4.2 A plan for a lesson within an aviation learning environment is written in accordance with industry texts and standards.

Outcome 5

Demonstrate knowledge of programme planning within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 5.1 Relevance of prior learning to programme planning within an aviation learning environment is explained in accordance with industry texts and standards.
- Range includes but is not limited to – needs assessment.
- 5.2 Principles of planning and managing training programmes within an aviation learning environment are described in accordance with industry texts and standards.
- 5.3 The influence of differing aviation goals on the structure and delivery of training courses within an aviation learning environment is described in accordance with industry texts and standards.

Outcome 6

Demonstrate knowledge of communication models within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 6.1 A basic model of communication within an aviation learning environment is explained in accordance with industry texts and standards.
- 6.2 Effective verbal and non-verbal communication and listening skills are demonstrated when instructing in accordance with industry texts and standards.

Outcome 7

Demonstrate knowledge of questioning techniques within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 7.1 The purpose of using questioning techniques in instruction within an aviation learning environment is explained in accordance with industry texts and standards.
- Range includes but is not limited to – framing techniques, faulty techniques.

- 7.2 A range of questions to reinforce learning within an aviation learning environment is used in accordance with industry texts and standards.

Range may include but is not limited to – open, closed, leading, multiple, direct, neutral, feedback, answering.

Outcome 8

Demonstrate knowledge of training aids within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 8.1 The reasons for using and the method of using of training aids within an aviation learning environment are explained in accordance with industry texts and standards.

- 8.2 The characteristics of effective training aids within an aviation learning environment are described in accordance with industry texts and standards.

- 8.3 Principles for planning for the use of training aids within an aviation learning environment are explained in accordance with industry texts and standards.

- 8.4 The principles for the construction or development of training aids within an aviation learning environment are explained in accordance with industry texts and standards.

- 8.5 The techniques for effective use of training aids within an aviation learning environment are explained in accordance with industry texts and standards.

Range aids include but are not limited to – PowerPoint, overhead projectors and transparencies, magnetic whiteboards, models, cutaways, videos, DVDs, films, slides, synthetic flight training devices, manuals, handouts, textbooks, wall flip charts, posters; evidence of eight is required.

- 8.6 Training aids are developed, constructed, and used effectively during an aviation training course in accordance with industry texts and standards.

Range aids may include but are not limited to – PowerPoint, overhead transparencies, models, cutaways, photographs, films, slides, synthetic flight training devices, handouts, wall flip charts, posters; evidence of three is required.

Outcome 9

Demonstrate knowledge of briefing and debriefing within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 9.1 The purpose and techniques of a briefing within an aviation learning environment are explained in accordance with industry texts and standards.
- Range includes but is not limited to – formal ground briefing (long briefing), pre-brief prior to airborne training.
- 9.2 The techniques and purpose of debriefing within an aviation learning environment are explained.
- Range includes but is not limited to – critical reflection.
- 9.3 The elements of an appropriate briefing/debriefing environment within an aviation learning environment are described.
- Range includes but is not limited to – removing potential distractions.
- 9.4 An effective briefing and debriefing are carried out in an aviation instructional setting.

Outcome 10

Demonstrate knowledge of applied instruction in the cockpit.

Performance criteria

- 10.1 The instruction principles and practices relevant to 'between briefing room and cockpit' are described in accordance with industry texts and standards.
- 10.2 The management of the cockpit while instructing is explained in accordance with industry texts and standards.
- Range includes but is not limited to – workload, instructing, responsibilities of the Pilot in Command.
- 10.3 The components of a model of airborne instruction are described in accordance with industry texts and standards.
- 10.4 The monitoring of student performance within an aviation learning environment is discussed in accordance with industry texts and standards.
- 10.5 Principles and techniques of intervention within an aviation learning environment are described in accordance with industry texts and standards.
- 10.6 Principles of managing time, lesson objectives, student performance, and cost are described in accordance with industry texts and standards.

Outcome 11

Demonstrate knowledge of the profile of aviation students in accordance with Subject No 62.

Performance criteria

- 11.1 Characteristics particular to aviation students are identified in accordance with industry texts and standards.

Range includes but is not limited to – the characteristics of adult learners.

- 11.2 The importance of recognising differing personality traits and strategies for effectively managing them within an aviation learning environment are explained in accordance with industry texts and standards.

Outcome 12

Demonstrate knowledge of the qualities of an aviation instructor in accordance with Subject No 62.

Performance criteria

- 12.1 The role and responsibilities of an aviation instructor are explained in accordance with industry texts and standards.

Range includes but is not limited to – facilitator, mentor, assessor.

- 12.2 The characteristics of a good trainer within an aviation learning environment are identified in accordance with industry texts and standards.

Range includes but is not limited to – self-assessment, credibility.

- 12.3 Traits and behaviours that should be avoided within an aviation learning environment are discussed in accordance with industry texts and standards.

- 12.4 Stress in the role of an aviation instructor and techniques for managing it are identified in accordance with industry texts and standards.

- 12.5 The professional duties and obligations of an aviation instructor are defined in accordance with industry texts and standards.

- 12.6 The ethics applicable to aviation instruction are defined in accordance with industry texts and standards.

Outcome 13

Demonstrate knowledge of the assessment of learning within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 13.1 The purpose of the assessment of learning within an aviation learning environment is explained in accordance with industry texts and standards.

- 13.2 The broad functions of the assessment of learning within an aviation learning environment are described in accordance with industry texts and standards.
- Range functions include but are not limited to – diagnosis, achievement, prediction, feedback.
- 13.3 The difference between evaluation and assessment within an aviation learning environment is explained in accordance with industry texts and standards.
- 13.4 Different types of assessment used in aviation are described in accordance with industry texts and standards.
- Range types include but are not limited to – criterion-referenced, norm-referenced, objective, subjective, competency based standards.
- 13.5 The elements of effective assessment in the practical aviation environment are described in accordance with industry texts and standards.
- Range includes but is not limited to – validity, reliability, objectivity, differentiation, comprehensiveness, checklists, scales.
- 13.6 The requirements for and principles of documenting records of training within an aviation learning environment are described in accordance with industry texts and standards.
- 13.7 The performance of course participants in their demonstration of aviation instructional techniques is assessed in accordance with industry texts and standards.

Outcome 14

Demonstrate knowledge of threat and error management within an aviation learning environment in accordance with Subject No 62.

Performance criteria

- 14.1 Threat and error management in flight instruction is described in accordance with industry texts and standards.
- Range includes but is not limited to – recognition, avoidance, mitigation of effects.

Replacement information	This unit standard replaced unit standard 16331.
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2010	31 December 2018
Review	2	20 October 2016	31 December 2027
Review	3	28 September 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference

0169

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.