Student Directed Inquiry

LEVEL 3	15 TCE CREDIT POINTS
COURSE CODE	SDI315117
COURSE SPAN	2017 — 2023
READING AND WRITING STANDARD	NO
MATHEMATICS STANDARD	NO
COMPUTERS AND INTERNET STANDARD	NO

This course was delivered in 2020. Use A-Z Courses to find the current version (if available).

Student Directed Inquiry provides opportunities for learners to undertake research, solve problems, communicate ideas, and manage their workload and learning in a personalized, authentic, meaningful context

Through undertaking a transdisciplinary student directed inquiry, learners develop an understanding of: what constitutes quality research; the purpose of an effective inquiry question; and what constitutes an ethical, robust, disciplined and rational approach to gathering, interpreting and evaluating evidence. Living and learning in the 21st century demands a new set of skills. Information is being accessed, used and created in new ways. This is creating a heightened need for well-developed 21st century skills for learning, work and life. Student Directed Inquiry prepares learners for participation in an advanced knowledge economy in which globalisation, collaboration and automation are the norm. The skills learners develop in Student Directed Inquiry will be transferable to further education, employment and in living a fulfilling life. The inquiry product may also provide evidence as part of portfolio entry to university.

Course Description

Student Directed Inquiry enables learners to explore an area of interest in a real world setting with a Mentor to guide them. Learners are encouraged to collaborate beyond the confines of the school context to solve problems, make decisions, create personal meaning and develop deep transdisciplinary understanding.

This course will challenge learners to set themselves learning goals that will enable them to explore deeply in an area of personal interest and that will require them to:

- take responsibility for their learning
- reflect on progress of their learning using formative and self-assessment
- make connections with others and between bodies of knowledge
- undertake quality research processes
- act autonomously and independently
- apply a range of substantial new learnings/knowledge.

Rationale

Student Directed Inquiry provides opportunities for learners to undertake research, solve problems, communicate ideas, and manage their workload and learning in a personalized, authentic, meaningful context.

Through undertaking a transdisciplinary student directed inquiry, learners develop an understanding of: what constitutes quality research; the purpose of an effective inquiry question; and what constitutes an ethical, robust, disciplined and rational approach to gathering, interpreting and evaluating evidence.

Living and learning in the 21st Century demands a new set of skills. Information is being accessed, used and created in new ways. This is creating a heightened need for well-developed 21st Century skills for learning, work and life. Student Directed Inquiry prepares learners for participation in an advanced knowledge economy in which globalisation, collaboration and automation are the norm.*

The skills learners develop in Student Directed Inquiry will be transferable to further education, employment and in living a fulfilling life. The inquiry product may also provide evidence as part of portfolio entry to university.

*Queensland Curriculum and Assessment Authority: *21st Century Skills For Senior Education* (*an analysis of educational trends, November 2015*).

Aims

The course provides learners with the opportunity to explore their learning in an area of personal interest. The study will be transdisciplinary in nature and involve learners in making meaningful connections between bodies of knowledge and the creation of new learnings for the learner.

The course promotes key skills, dispositions and ways of thinking essential for the development of self-directed, self-managing, life-long learning in the 21st Century. These include:

- planning and organising
- inquiry, problem solving, decision making
- making connections, synthesising, applying and transferring of knowledge and skills
- creative, critical and reflective thinking, seeking deep understanding
- communicating
- working autonomously and working collaboratively with others in the learning process
- global awareness, social responsibility and working ethically.

Expectations Of Learners

The course is designed for Year 12 learners, however learners may be considered in Year 11 at the discretion of the provider based on previous high achievement in academic or vocational studies with evidence of capacity for self-directed learning. Learners undertaking the course must show evidence to providers of:

- as a minimum, meeting the B standard in Australian Curriculum English at Year 10
- formulating inquiry questions
- planning and conducting research methods
- constructing evidence-based arguments
- using and analysing primary and secondary sources, and drawing conclusions.

The course may be delivered to individuals outside the context of a class grouping.

Learning Outcomes

On successful completion of this course, learners will be able to:

1. engage in transdisciplinary inquiry
2. apply creative and critical thinking
3. apply ethical principles in terms of the context of the inquiry and the perspectives of others
4. utilise, implement and apply tools for working (such as information literacy, ICT literacy, and qualitative and quantitative research methodologies)
5. apply capabilities of decision making, thinking globally, risk management and self-regulation within the context of the inquiry
6. work individually and collaboratively, using effective time management, planning and organising strategies and skills
7. effectively communicate in a range of modes and contexts
8. use metacognition to manage the learning process.

Learning Design

Each provider offering this course will develop an annual ***learning design***. The ***learning design*** will be submitted to TASC for approval before the end of February each year.

A ***learning design*** will be approved if it demonstrates that the provider's implementation of the course framework will meet the content, processes and assessment requirements, and have a coherent assessment program, consistent with the learning outcomes and standards given in the course document.

The ***learning design*** will specify over what period the program will be conducted, subject to meeting TASC requirements for procedures that ensure state-wide comparability of standards and assessment for end of year reporting.

The ***learning design*** will describe how learners apply for the course and how a selection is made including ensuring entry/access requirements are met. The ***learning design*** will also specify any limits to the range of studies.

The ***learning design*** will name staff allocated to the program with details of their relevant expertise. It will describe how any changes in staff availability will be managed.

The ***learning design*** will describe the method for ensuring that student-directed inquiries will:

- have a strong theoretical component
- require complex concepts and problem solving
- be inter-disciplinary and trans-disciplinary
- focus on developing skills of inquiry, critical and reflective thinking
- involve new ideas for the learner
- not duplicate content from existing TASC accredited courses
- be sufficient and challenging enough to provide the evidence described in the Work Requirements
- adhere to the principles of academic integrity.

Pathways

Student Directed Inquiry provides a pathway to university study, by fostering a broad set of skills required for tertiary study, irrespective of interest area. In some contexts the inquiry may be used as part evidence for portfolio entrance into a university undergraduate degree. Student Directed Inquiry also provides a pathway to employment. The course fosters the core skills required to be a successful worker.

Resource Requirements

Students are required to have access to:

- A Supervisor
- Mentor(s)
- Subject Expert(s)

The Supervisor will approve the Mentor(s) and Subject Expert(s). The Supervisor may also act as a Subject expert or Mentor, but not both.

*Individuals may take on one or two of these roles, but **must not** take on all three.*

Both the Mentor and Subject Expert roles require a commitment to support the learner to develop confidence, inquiry skills and knowledge of the area of inquiry.

Supervisor:
The Supervisor facilitates the learning and guides the learner towards personal and academic growth. The Supervisor differs from the Mentor in that they assess the learner's progress and the process and end product of the inquiry.

The Supervisor and the Mentor will need to collaborate for assessment purposes. The learner must be gathering evidence from conversations or interactions with the Mentor(s) and the Subject Expert(s) to include in their portfolio of evidence for assessment purposes.

The Supervisor may also take on the role of Mentor or Subject Expert, but not both.

Mentor:
The Mentor will provide guidance, encourage personal growth and academic development throughout the duration of the inquiry. The role of the Mentor is to be a sounding board, provide constructive and timely feedback, and generally support the learner in their inquiry endeavour.

Mentors may be another teacher or any other suitable adult holding a valid Working with Vulnerable People registration.

Students may engage more than one Mentor during their Inquiry.

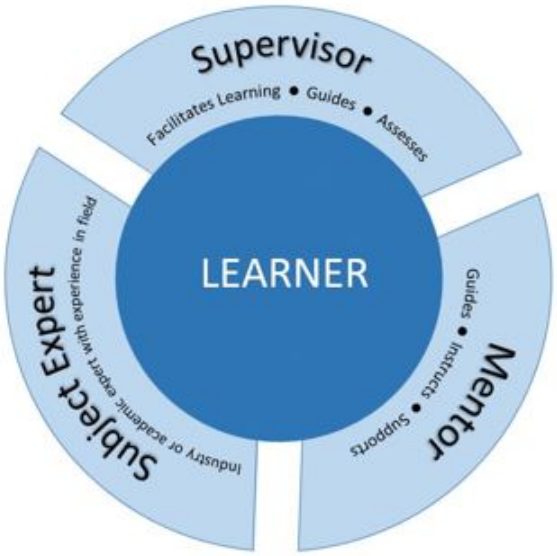
Mentors may also take on the role of Supervisor or Subject Expert, but not both.

Subject Expert:
The Subject Expert will be an academic expert or industry expert in the field(s) in which the student is undertaking the inquiry.

Providers are encouraged to support learners to access external Subject Experts. The role of the Subject Expert is to provide guidance on aspects of the inquiry within their area of expertise. Some inquiries may require more than one Subject Expert. The Subject Expert can be from outside of the school, either working or teaching in the field or they can be from within the school. If the Subject Expert is from within the school they must be an expert in the field of inquiry being undertaken by the learner.

Subject experts may also take on the role of Mentor or Supervisor, but not both.

Learners:
Learners will identify resources required to undertake their study as part of their study proposal and negotiate access to necessary resources.



Course Size And Complexity

This course has a complexity level of 3.

At Level 3, the learner is expected to acquire a combination of theoretical and/or technical and factual knowledge and skills and use judgement when varying procedures to deal with unusual or unexpected aspects that may arise. Some skills in organising self and others are expected. Level 3 is a standard suitable to prepare learners for further study at tertiary level. VET competencies at this level are often those characteristic of an AQF Certificate III.

This course has a size value of 15.

Relationship To Other TASC Accredited And Recognised Senior Secondary Course

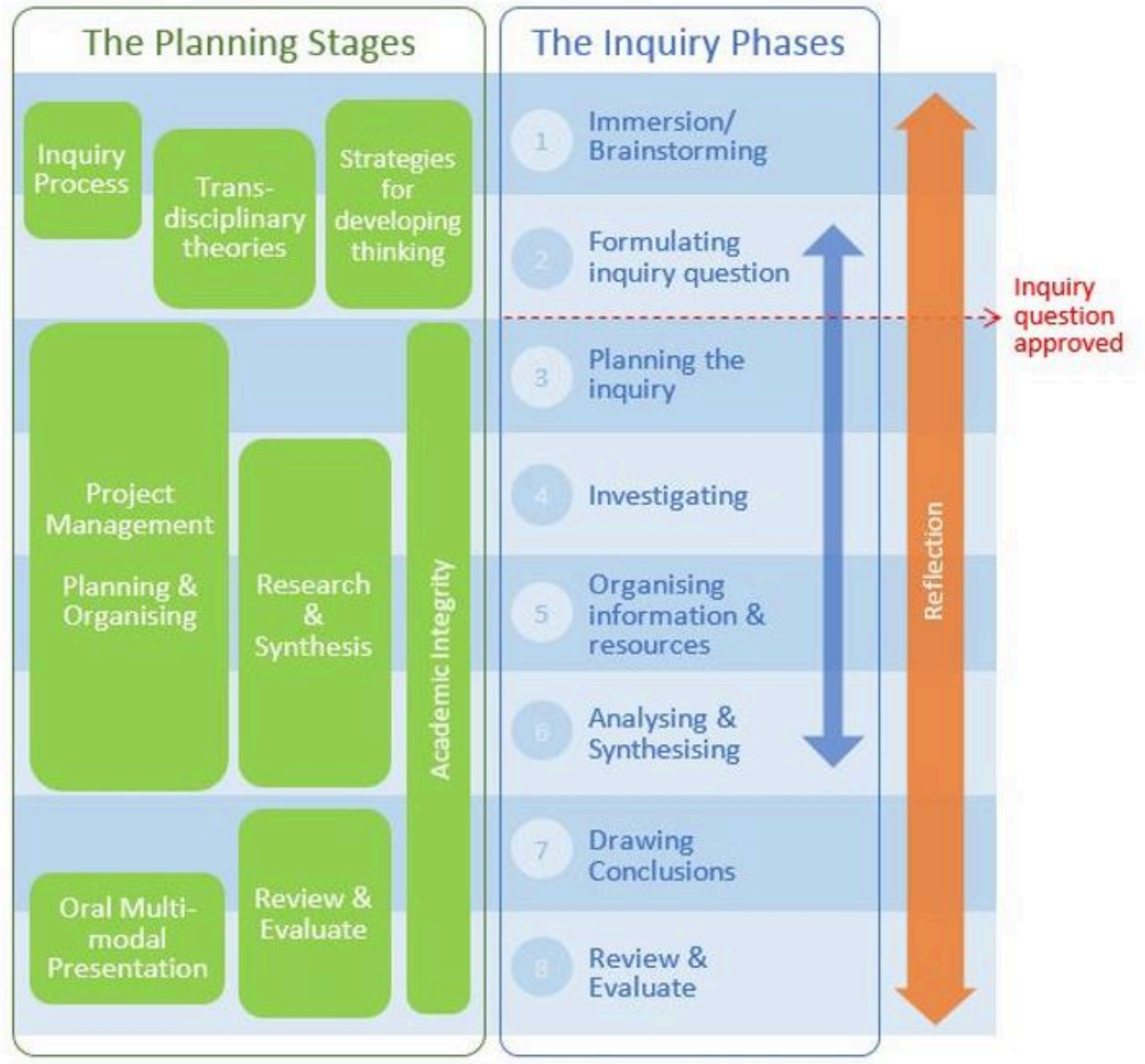
The student directed inquiry, while building on the learner's previous studies, will be new for the learner. Previous studies and/or projects cannot be used in meeting the requirements of this course. For example, a learner may not use an independent study, folio or project from a previously or concurrently studied TASC accredited or recognised course.

Student Directed Inquiry is not an extension of any existing course, nor is it a substitute or alternative for any existing courses.

It is differentiated from any other TASC courses in that it enables transdisciplinary enquiry at levels of depth and sophistication outside the specifications of other TASC accredited courses.

Course Delivery

The content of Unit 1 will be delivered throughout the Phases of the Inquiry (Unit 2) as appropriate.



Source: Curriculum Services, Department of Education, Tasmania

Course Requirements

The negotiated transdisciplinary study has two components:

- Part 1: The Planning stage – Underpinning skills, knowledge and understanding
- Part 2: The Inquiry process – Practical and applied inquiry.

Course Content

UNIT 1: THE PLANNING STAGE: UNDERPINNING SKILLS, KNOWLEDGE AND UNDERSTANDINGS

The Inquiry Process

- forms of inquiry:
    - historical
    - scientific
    - mathematical
    - philosophical
    - aesthetic.
- role of form of inquiry in developing research methods
- process of inquiry – using an inquiry cycle.

Strategies to Develop Thinking (stimulate, monitor, regulate and evaluate thinking processes)

- formulating Inquiry questions
- divergent thinking
- thinking strategies
    - scamper
    - SWOT
    - PMI
    - brainstorming
    - mind mapping
    - lotus diagram.
- nature of innovation and entrepreneurial thinking
- role of creativity in the workplace and community
- metacognition
- perspective taking
- ethical reasoning
- reflective thinking.

Transdisciplinary Theories, Perspectives and Application

- theories that inform collaboration, communication, and plan tasks and achieve deep understanding of issues.

Planning and Organising

- development of personal capability
    - personal identity
    - reviewing and planning personal goals.
- developing social capability
    - individual and shared responsibilities and rights
    - making responsible decisions.
- principles of backward planning
- problem solving.

Project Management

- stages and phases of an inquiry
- skills and strategies for project management:
    - collaboration
    - tools and templates
    - managing timeframes.
- research timeframes – access and specific approvals
- progress monitoring
- risk management
    - risk identification and reduction.
- creating a project plan and inquiry proposal.

Research and Synthesis

- purpose of research:
    - role of research in our lives
    - large scale research (e.g. Census)
    - for charting the future (projecting health
    - market research
    - social media as a research tool
    - role of international research such as that undertaken by the United Nations
    - nature of research by individuals in relation to aspects of their own lives.
- range of research methods
    - qualitative research

            - ethnographic research (techniques such as observation, video diaries, photographs, contextual interviews and analysis of artefacts)
            - interviews
            - action research
            - case study research
            - narrative inquiry
            - focus groups.
        - quantitative research
            - descriptive studies – measures/observes behaviour or conditions. E.g. surveys, interviews, using tools such as discourse analysis or Likert scales of attitude
            - experimental/longitudinal/repeated studies – measures/observes behaviour, applies and intervention and then repeats the measurement to determine if any changes have occurred, often using a control or experimental group
        - other research methods that complement these approaches
        - mixed research
            - methods collecting and analysing both quantitative and qualitative data into a single study design.
- ethical research principles
    - safety practices relevant to particular studies
    - legislative requirements.
- creative and critical thinking
- accessing, analysing and selecting appropriate primary and secondary sources
- synthesising information from a range of sources
- report writing
    - audience and style of writing suitable for the specified audience
    - objective and subjective.

Academic Integrity

- academic integrity
- referencing
- copyright and ownership.

Oral Multimodal Presentations

- presentation styles
- presentation formats
- presentation tools.

Review and Evaluation

- impact of the inquiry on self and society
- consequences of the inquiry.

UNIT 2: PHASES OF THE INQUIRY: PRACTICAL AND APPLIED INQUIRY

Source: Curriculum Services, Department of Education, Tasmania

Phase 1: Immersion / brainstorming

- exploring all the possibilities
- identifying an area of research interest which may include the development of a hypothesis or proposition.

Phase 2: Formulating an inquiry question

- develop an Inquiry Proposal:
  - developing an inquiry question
  - refining an inquiry question
  - developing guiding questions.

The following criteria must be considered in development of the proposed inquiry question:

- the question is substantial and significant
- the question is practical, realistic and manageable within the limits that the time and resources impose
- the question aims for critical distance and an impersonal or objective stance
- the question can be addressed by systemic and sound research methods
- the student can gain access to appropriate and relevant primary and secondary sources
- the question and the research methods are likely to produce a useful result
- the question is clearly and precisely worded
- the scope of the question is contained and focused
- the question and method comply with responsible and ethical research guidelines

- the question will sustain student inquiry over the duration of the study
- duplication does not exist with any other TASC course.

Phase 3: Planning the inquiry

- inquiry question must have been approved by the Supervisor before commencing Phase 3
- develop a project plan:
    - consider , select and design research processes that are appropriate to the inquiry question
    - investigate and propose safe and ethical research processes
    - identify knowledge, skills and idea that are specific to the inquiry
    - identify people with whom to work (Mentor, Subject Expert(s) or other)
    - negotiate processes for working together
    - plan the inquiry into manageable parts
    - identify any risks and a risk reduction plan
    - identify project management strategies.

Phase 4: Investigating

- develop and explore ideas
- locate, select, record, organise, analyse, use and acknowledge information from different sources
- consult with experts and Mentor
- participate in discussions with Supervisor and/or Mentor
- apply safe and ethical research processes
- conduct research which will include analysis of primary and secondary sources and may include (but not limited to) one or more of these methods
    - interview
    - case study
    - survey
    - statistical analysis
    - scientific experiment, and other established research methods.
- in selecting the most appropriate research methods, students should consider:
    - the particular nature and demands of the research question
    - the availability of resources and their constraints
    - the need for the research question to allow them to meet all the outcomes of the inquiry.

Phase 5: Organising and recording information and resources

- locate, select, organise, analyse, use and acknowledge information from different sources
- monitor progress being made and document actions taken in response to challenges and/or opportunities
- review and adjust the direction of the inquiry in response to feedback, opportunities questions and problems as they arise
- maintain a record of progress made and sources used.

Phase 6: Analysing and synthesizing (knowledge skills and ideas) to produce an outcome

- synthesise information and data (key findings)
    - what information has been gathered
    - collate information from all sources and viewpoints to gain a deep understanding of the inquiry question
    - put information back together to construct a coherent approach to generate new ideas, approaches, products or designs
    - describe what works and under what conditions
    - describe what doesn't work and why.
- interpret and interrogate data
    - what does the data tell you
    - what evidence supports / refutes the inquiry question
    - identify the significance of data that supports the inquiry question
    - refer to data in the preceding text
    - use appendix for large tables / figures and raw data.
- cross referencing information, ideas and data (own and others).

Phase 7: Drawing conclusions

- substantiate the research outcome
    - consistently reference aspects of the research outcome to sources, using, for example, in-text references and thereby demonstrating the origin of ideas and thoughts;
    - explain the validity of the methodology adopted and thereby demonstrating that it is able to be reproduced.
- make recommendations and conclusions
- present a balanced interpretation of findings
- present findings to appropriate audience.

Phase 8: Reviewing and evaluating

- review the knowledge and skills developed in response the inquiry question
- reflect on the quality of the research outcome

- reflect on own progress and achievements
- review decisions made in response to unexpected challenges and/or opportunities
- seek and consider feedback from others
- organise information coherently and communicate ideas accurately and appropriately and with academic integrity
- recommendations for future research
- communicate findings and evaluation to an appropriate audience.

Work Requirements

Learners will provide evidence of their learning throughout the stages of their inquiry through:

- **Inquiry Proposal** – minimum 1000 words – including:
  - inquiry question
  - guiding questions
  - project plan – including:
    - research methodologies
    - timelines and milestones
    - resources required to undertake the study.
  - background research that will inform the inquiry question and the scoping of the research. (This may include a literature review.)

  The proposed inquiry will have the following characteristics:

  - significant challenge
  - broad scope
  - trans-disciplinary (* see glossary – minimum across two disciplines)
  - requiring complex concepts and problem-solving
  - involve new ideas for the learner.

- **Inquiry Product** with a record of transactional interactions* (minimum 2500 words)
  - the product must display characteristics of
    - compatibility with inquiry objectives
    - use of appropriate design and construction methods
    - use of ethical and safety principles
    - evidence of transdisciplinary knowledge
    - a strong theoretical component that demonstrates validity of research.
  - Communication Log will include, but are not limited to:
    - record of discussions with Mentor, Subject Expert and others and reflection on discussions
    - major activities undertaken and reasons for actions
    - sources and types of information gathered
    - diary or log of nominal hours.

- **Reflective Journal** – minimum 1500 words demonstrating how the learner:
  - monitored the effectiveness of the plans for their inquiry using appropriate strategies (e.g. developing criteria to measure effective implementation, checking progress according to a timeline, providing progress reports on action taken and decisions made during the process)
  - addressed problems encountered
  - analysed how perspectives were shaped by the sources of information they used
  - effectiveness of the collaborative strategies they used in planning and implementing their inquiry
  - evaluated the effectiveness of the inquiry including their research sources, methods, findings and plans and by revising their plans as problems arose.

  The reflective journal serves an important function. It is a formal record that provides the student and Supervisor with documentation to authenticate student work. It may be maintained in print or electronic form. All items in the journal must be dated and legible. The reflective journal assists with ongoing support and supervision and will enable authentication of the learner's work.

- **Inquiry Presentation** – This will be a student directed presentation to an external assessment panel. The presentation will be a maximum of 30 minutes in duration with 10 minutes for questions from the panel to the learner at the conclusion of the presentation. The presentation may be multimodal.*

  The learner will provide evidence of:

  - the inquiry process they undertook
  - the decisions they made throughout the process and reasons for those decisions
  - analytical thinking and generation of new ideas.

- **Executive Summary**

  - 300–500 word summary of the Inquiry and findings.

- **Verified acknowledgement** of quality of subject matter by Subject Expert(s) using the SDI Acknowledgement of Student Work proforma.
- **Authenticated record of progress form** must be completed by the student and the Supervisor, and submitted with the Inquiry product.
- **Midyear collaborative sharing and feedback from peers**

- where possible this will be between providers.

The total word count will not be more than a maximum of 15000 words. (N.B. this excludes documentation included in the Communication Log.)

The Inquiry Product and the Executive Summary are to be submitted to TASC four weeks prior to the external assessment. If the product is physical in nature electronic evidence (photo or video) must be submitted. Physical products may be presented at the presentation.

Summary of Work Requirements

Work Requirements	Minimum word count	Maximum word count
Inquiry Proposal	1000	
Inquiry Product	2500	
Reflective Journal	1500	
Midyear Collaborative sharing and feedback from peers		
Inquiry Presentation		
Executive Summary	300	500
Total word count for all work requirements		
Verified Acknowledgement of subject matter by Subject Expert(s)		
Authenticated Record of Progress		

Assessment

Criterion-based assessment is a form of outcomes assessment that identifies the extent of learner achievement at an appropriate end-point of study. Although assessment – as part of the learning program – is continuous, much of it is formative, and is done to help learners identify what they need to do to attain the maximum benefit from their study of the course. Therefore, assessment for summative reporting to TASC will focus on what both teacher and learner understand to reflect end-point achievement.

The standard of achievement each learner attains on each criterion is recorded as a rating 'A', 'B', or 'C', according to the outcomes specified in the standards section of the course.

A 't' notation must be used where a learner demonstrates any achievement against a criterion less than the standard specified for the 'C' rating.

A 'z' notation is to be used where a learner provides no evidence of achievement at all.

Providers offering this course must participate in quality assurance processes specified by TASC to ensure provider validity and comparability of standards across all awards. For further information, see TASC's quality assurance and assessment processes.

Internal assessment of all criteria will be made by the provider. Providers will report the learner's rating for each criterion to TASC.

TASC will supervise the external assessment of designated criteria which will be indicated by an asterisk (*). The ratings obtained from the external assessments will be used in addition to internal ratings from the provider to determine the final award.

Quality Assurance Process

The following processes will be facilitated by TASC to ensure there is:

- a match between the standards of achievement specified in the course and the skills and knowledge demonstrated by learners
- community confidence in the integrity and meaning of the qualification.

Process – TASC gives course providers feedback about any systematic differences in the relationship of their internal and external assessments and, where appropriate, seeks further evidence through audit and requires corrective action in the future.

External Assessment Requirements

The external assessment for this course will comprise:

A presentation and discussion of the study to an assessment panel comprising of:

- chief marking examiner
- two regional independent examiners.

Validation of the academic rigor of the research will be provided by the subject matter expert prior to the assessment occurring through a formal validation process. This will be submitted to TASC with the external assessment documentation.

For further information see the current external assessment specifications and guidelines for this course available in the Supporting Documents below.

Criteria

Student Directed Inquiry Level 3 will be based on the degree to which the learner can:

1. apply self-directed, transdisciplinary inquiry skills *
2. utilise project management skills to manage the inquiry process
3. determine research methodologies and utilise appropriate tools and methods
4. apply ethical understanding throughout all phases of the inquiry *
5. apply personal and social capabilities in the process of inquiry *
6. apply creative and critical thinking to analyse and synthesise reasoning and procedures *
7. apply metacognition to reflect on processes and transfer knowledge into new contexts*
8. communicate in a range of modes and contexts.*

* = denotes criteria that are both internally and externally assessed.

Relationship Between Course Criteria And The Australian Curriculum General Capabilities (GC)

Four criteria in this course align with the Australian Curriculum General Capabilities (GC) of:

- ethical understanding (Criterion 4)
- critical and creative thinking: analysing, synthesising and evaluating reasoning and procedures (Criterion 6)
- critical and creative thinking: reflecting on thinking and processes (Criterion 7)
- personal and social capability (Criterion 5).

Standards

Criterion 1: apply self-directed, transdisciplinary inquiry skills

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
creates inquiry questions which are substantial in scope, contained and focused, clearly and precisely worded, demonstrate critical distance and an objective stance and allow for transdisciplinary inquiry	creates inquiry questions which are substantial in scope, contained and focused, demonstrate an objective stance and allow for transdisciplinary inquiry	creates inquiry questions which are substantial in scope with limited objectivity and allow for transdisciplinary inquiry
creates detailed and clearly and concisely articulated inquiry proposals with key features*	creates detailed and clearly articulated inquiry proposals with key features*	creates detailed inquiry proposals with key features*
responds to inquiry questions from a broad range of perspectives***	responds to inquiry questions from a range of perspectives***	responds to inquiry questions from a limited range of perspectives***
uses a wide range of ICT tools to effectively support and enhance development of inquiry	uses a range of ICT tools to support and enhance development of inquiry	uses a range of ICT tools to support the development of an inquiry
assesses the success of addressing the inquiry question by articulating clear, detailed and concise reflection	assesses the success of addressing the inquiry question by articulating clear and detailed reflection	assesses the success of addressing the inquiry question by articulating clear reflection on own work
presents logical conclusions that coherently synthesise the outcomes and explicitly refer to the inquiry question	presents conclusions that coherently synthesise the outcomes from the inquiry	presents conclusions that logically follow the outcomes of the inquiry
analyses and articulates degree to which the inquiry is transdisciplinary in nature	identifies, assesses and articulates degree to which the inquiry is transdisciplinary in nature	identifies and articulates degree to which the inquiry is transdisciplinary in nature
clearly and concisely articulates highly effective development of own knowledge and skills specific to the inquiry question.	clearly and concisely articulates effective development of own knowledge and skills specific to the inquiry question.	clearly articulates development of own knowledge and skills specific to the inquiry question.

*Key Features include: transdisciplinary; complex concepts and problem solving; broad scope; significant challenge; new ideas for the learner

**perspectives may include range of stakeholder perspectives or; geographic perspectives or; thematic perspectives or time perspectives

Criterion 2: utilise project management skills to manage the inquiry process

The learner:

Rating A	Rating B	Rating C
plans and applies effective time management skills in order to meet all milestones and deadlines through all phases of the inquiry, making adjustments when necessary	plans and applies effective time management skills in order to meet major milestones and deadlines through all phases of the inquiry	plans and applies effective time management skills in order to meet key milestones and deadlines of the inquiry
sets short, medium and long term SMART ** goals and strategically monitors and reviews progress against SMART** personal goals, clearly articulating reflection on these	sets short and medium term SMART** goals and clearly monitors and reviews progress against SMART** personal goals	sets short term SMART** goals and undertakes detailed review of progress against SMART** personal goals
uses evidence based strategies to pre-empt and solve complex problems	identifies and solves simple and complex problems as they occur	identifies basic problems and provides a limited range of solutions as they occur
selects and utilises appropriate project management approaches* to monitor progress towards goals and makes adjustments when and where necessary.	utilises appropriate project management approaches* to monitor progress towards goals and makes adjustments when necessary.	utilises basic project management approaches* to monitor progress towards goals.

*Project management approaches may include: time scheduling, resource scheduling and tracking documents.

** SMART personal goals: Specific, Measurable, Achievable, Relevant , Time-bound

Criterion 3: determine research methodologies and utilise appropriate tools and methods

The learner:

Rating A	Rating B	Rating C
selects and reject tools and methodologies as appropriate providing justification for choice	identifies and use appropriate methodologies providing justification for choice	identifies appropriate methodologies and provide limited justification for choice
describes and executes planned solutions associated with identified problems or challenges and creative / innovative responses to unforeseen problems and challenges when undertaking research	describes and executes planned solutions associated with identified problems or challenges requiring solutions when undertaking research	identifies potential problems associated with chosen methodology/ies and describes planned solutions when undertaking research
analyses, selects and/or designs research processes that are appropriate to the research question (e.g.: qualitative, quantitative research, practical experience, field work)	analyses options for research processes and selects processes that are appropriate for the research question (e.g.: qualitative research, practical experience, field work)	selects appropriate research processes for the inquiry
accesses, organises, uses and evaluates information effectively	accesses, organises and analyses information effectively	accesses and organises information effectively
discriminately selects and effectively uses a wide range of digital technology* to research, write and present work and communicate succinctly with others	selects and effectively uses a range of digital technology* to research, write and present work and communicate with others	effectively uses a range of digital technology* to research, write and present work and communicate with others
critically analyses the usefulness and effectiveness of sources and resources.	analyses the usefulness and effectiveness of sources and resources.	assesses the usefulness of sources and resources.

*research catalogues, word processor, internet, social media, database, spreadsheets, email, camera, 3D printers, and other and emerging technologies as required

Criterion 4: apply ethical understanding throughout all phases of the inquiry

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
clearly differentiates the information, images, ideas and words of others from the learner's own	clearly differentiates the information, images, ideas and words of others from the learner's own	differentiates the information, images, ideas and words of others from the learner's own
referencing conventions and methodologies are followed with a high degree of accuracy	referencing conventions and methodologies are followed correctly	referencing conventions and methodologies are generally followed correctly
creates appropriate, well structured reference lists/bibliographies	creates appropriate, structured reference lists/bibliographies	creates appropriate reference lists/bibliographies
considers and complies with safe and ethical research processes including respecting the rights and work of others, acknowledging sources and observing protocols when approaching people and organisations	considers and complies with safe and ethical research processes including respecting the rights and work of others, acknowledging sources and observing protocols when approaching people and organisations	considers and complies with safe and ethical research processes including respecting the rights and work of others, acknowledging sources and observing protocols when approaching people and organisations
accesses and discriminately selects a range of resources across disciplines and community expertise (print, digital and human) and justifies choices	accesses and discriminately selects a range of relevant sources and resources (print, digital and human) and justifies selections	accesses and selects relevant sources and resources (print, digital and human) with limited justification for choices made
identifies, clearly documents and explains ethical and legal protocols used to research, communicate and record information justifying choices.	identifies, clearly documents and explains relevant ethical and legal protocols used in conducting own research.	identifies and clearly documents relevant ethical and legal protocols used in conducting own research.

Criterion 5: apply personal and social capabilities in the process of inquiry

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
identifies appropriate people with whom to collaborate and determines contingency plans	identifies a range of appropriate people with whom to collaborate	identifies appropriate people with whom to collaborate
establishes, manages and negotiates professional relationships and processes for working together	establishes and maintains professional relationships related to the inquiry	maintains appropriate professional relationships related to the inquiry as directed
initiates and effectively collaborates with relevant others locally and/or nationally and/or internationally to achieve stated goals of the inquiry	effectively collaborates with others locally and/or nationally and/or internationally to achieve stated goals of the inquiry	collaborates with others locally and/or nationally and / or globally to seek guidance and input into inquiry
identifies, evaluates and articulates in writing potential risks and monitors and manages them considering the likelihood and seriousness of them occurring.	identifies and analyses potential risks related to the completion of the inquiry and articulates verbally and /or in writing how to manage them.	identifies potential risks related to the completion of the inquiry and articulates verbally and / or in writing how to manage them.

Criterion 6: apply creative and critical thinking to analyse and synthesise reasoning and procedures

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
speculates on creative options to modify ideas when circumstances change and generates alternative and innovative solutions including when information is limited or conflicting	generates alternative and innovative solutions, and adapts ideas, including when information is limited	identifies situations where current approaches do not work, challenges existing ideas and generates plausible alternative solutions
clearly and coherently describes and substantiates research outcomes	clearly and coherently describes research outcomes	clearly describes research outcomes
presents clear, coherent and balanced interpretation of own findings	presents clear and coherent interpretation of own findings	presents clear interpretation of own findings
presents logical conclusions that coherently synthesise the outcomes and explicitly refer to the inquiry question	presents conclusions that coherently synthesise the outcomes from the inquiry	presents conclusions that logically follow the outcomes of the inquiry
in conducting their research synthesises a diverse and complex range of perspectives and issues when solving complex problems.	in conducting their research synthesises a range of perspectives and issues when solve complex problems.	in conducting their research synthesises a limited range of others' perspectives and issues when solving complex problems.

Criterion 7: apply metacognition to reflect on processes and transfer knowledge into new contexts

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
clearly articulates (giving examples) adaption, innovation and responses to new* demands, knowledge and changing circumstances	clearly articulates (giving examples) adaption and responses to new* demands, knowledge and changing circumstances	articulates (giving examples) adaption to new* demands, knowledge and changing circumstances

explains development of new learnings and ideas for self across disciplines ***	explains development of new learnings for self across disciplines ***	describes development of new learnings for self across disciplines ***
initiates feedback cycle and clearly and concisely articulates feedback received, responses made and justifications for making a particular decision in light of feedback	clearly articulates feedback received, responses made and justifications for making a particular decision in light of feedback	articulates feedback received and clearly describes decisions made in light of feedback
critically analyses feedback from others, takes action in line with feedback, justifying future feedback ***	analyses feedback from others, takes action in line with feedback, justifying future action ***	assesses feedback from others, taking action from recommendations and providing limited justification for action taken ***
critically evaluates own learning and progress in learning against stated success indicators****	evaluates own learning and progress in learning against stated success indicators****	accurately describes own learning against stated success indicators****
critically analyses the usefulness and effectiveness of sources and resources.	analyses the usefulness and effectiveness of sources and resources.	assesses the usefulness of sources and resources.

*new may be 'new' for the learner, not necessarily 'unique' or never thought of before

** This will be explicitly evidenced in the: inquiry product; inquiry presentation; reflective journal

***this may include rejection of suggestions (though alternatives must be suggested and justified)

****success indicators/ success criteria are listed under Unit 2, Phase 2.

Criterion 8: communicate in a range of modes and contexts.

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
selects and uses relevant content and communication style, language and tools to meet needs and context of the audience*	selects and uses relevant content and communication style, language and tools to meet needs and context of the audience*	selects relevant content and communication styles, language and tools to meet the needs and context of the audience*
clearly articulates and documents constructive questions, opinions and a wide range of perspectives taken into account through all phases of the inquiry	clearly articulates and documents questions, opinions and a range of perspectives taken into account through several phases of the inquiry	articulates and documents questions, opinions and a limited range of perspectives taken into account through several phases of the inquiry
selects and utilises a wide range of appropriate multimodal communication tools to communicate precisely and effectively in multiple context	utilises a range of appropriate multimodal communication tools to communicate effectively in multiple context	utilises a limited range of multimodal communication tools to communicate clearly in multiple contexts
communicates effectively with a range of people using controlled expression, both verbally and in writing	communicates effectively with a range of people both verbally and in writing	communicates with a limited range of people
clearly communicates specific, concise, accurate and complete ideas across a range of coherent texts for different purposes, contexts and audiences	clearly communicates a range of ideas across a range of effective texts for different purposes	clearly communicates key ideas in texts appropriate for purpose and audience
critically analyses the main ideas and concepts in inquiry documentation.	analyses the main ideas and concepts in inquiry documentation.	clearly explains the main ideas and concepts in inquiry documentation.

*Audience / range of people may include:

- Subject Expert
- Mentor;
- Supervisor;
- Assessment panel;
- Peers
- Targeted audiences and/or the general public**

** These may be through: consultations; social media; websites; surveys; public presentations or exhibitions

Qualifications Available

Student Directed Inquiry Level 3 (with the award of):

EXCEPTIONAL ACHIEVEMENT

HIGH ACHIEVEMENT

COMMENDABLE ACHIEVEMENT

SATISFACTORY ACHIEVEMENT

PRELIMINARY ACHIEVEMENT

Award Requirements

The final award will be determined by the Office of Tasmanian Assessment, Standards and Certification from 14 ratings (8 from the internal assessment, 6 from external assessment).

The minimum requirements for an award in Student Directed Inquiry Level 3 are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)
12 'A' ratings, 2 'B' ratings (with 5 'A' ratings and 1 'B' rating in the external assessment)

HIGH ACHIEVEMENT (HA)
6 'A' ratings, 6 'B' ratings, 2 'C' ratings (with 2 'A' ratings, 3 'B' ratings and 1 'C' rating in the external assessment)

COMMENDABLE ACHIEVEMENT (CA)
8 'B' ratings, 5 'C' ratings (with 2 'B' ratings and 3 'C' ratings in the external assessment)

SATISFACTORY ACHIEVEMENT (SA)
12 'C' ratings (4 'C' ratings in the external assessment)

PRELIMINARY ACHIEVEMENT (PA)
7 'C' ratings

A learner who otherwise achieves the ratings for a CA (Commendable Achievement) or SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award.

Course Evaluation

The Department of Education's Curriculum Services will develop and regularly revise the curriculum. This evaluation will be informed by the experience of the course's implementation, delivery and assessment.

In addition, stakeholders may request Curriculum Services to review a particular aspect of an accredited course.

Requests for amendments to an accredited course will be forwarded by Curriculum Services to the Office of TASC for formal consideration.

Such requests for amendment will be considered in terms of the likely improvements to the outcomes for learners, possible consequences for delivery and assessment of the course, and alignment with Australian Curriculum materials.

A course is formally analysed prior to the expiry of its accreditation as part of the process to develop specifications to guide the development of any replacement course.

Course Developer

The Department of Education acknowledges the significant leadership of Dr Jill Abell, Jodie Blackburn, Megan Gunn, Sarah Lillywhite, Sonja Peters, Dr Julie Rimes, Carmen Rowbotham, Bruce Stack, Aimee Woodward in the development of this course.

Expectations Defined By National Standards

There are no statements of national standards relevant to this course.

Accreditation

The accreditation period for this course has been renewed from 1 January 2019 until 31 December 2021.

During the accreditation period required amendments can be considered via established processes.

Should outcomes of the Years 9-12 Review process find this course unsuitable for inclusion in the Tasmanian senior secondary curriculum, its accreditation may be cancelled. Any such cancellation would not occur during an academic year.

Version History

Version 1 – Accredited on 7 February 2017 for use effective from 1 January 2017. This course replaces Student Directed Inquiry (SDI315113).

Version 1.1 – Renewal of accreditation on 13 August 2017 for use in 2018.

Accreditation renewed on 22 November 2018 for the period 1 January 2019 until 31 December 2021.

Version 2 - Accreditation renewed on 14 July 2021 for the period 1 January 2022 until 31 December 2023. Criterion 5 is replaced by Criterion 3 for the external assessment of this course (yet to action in main body of course document).

Appendix 1

Glossary of Course Terminology

Term	Explanation
Academic integrity	Honesty and respect for knowledge and truth mean taking responsibility and giving credit or acknowledgement to the work or scholarship of others
Adaption	The process of changing something to suit new conditions or needs
Apply	To put into operation or affect
Articulate	Express an idea or feeling fluently and coherently
Authenticate	To prove something is true, real or genuine
Autonomous	Acting separately from other people
Body of knowledge	A set of concepts terms and activities that make a domain of knowledge
Capabilities	The ability to do something
Coherent	Logical and well organised, easy to understand
Collaborative	To work with another person or group in order to achieve or do something
Comparability	The quality or state of being very similar and being able to be compared
Constructive	Promoting improvement or development
Conventions	A general agreement about basic principles or procedures
Critically	Using or involving careful judgement about the strengths and weaknesses of something
Critical distance	The distance needed for impartiality and detachment from our own presuppositions

Term	Explanation
Determine	To settle or decide by choice of alternatives or possibilities
Differentiate	To state the differences between two or more things
Divergent thinking	Creative thinking that may follow many lines of thought and tends to generate new and original solutions to problems
Effectively	In a way that produces a desired result
Entrepreneurial thinking	A way of thinking which contributes to identifying and/or creating opportunities, and implementing this thinking in a productive way
Formative assessment	The assessment at regular intervals of a student's progress with accompanying feedback in order to help to improve the student's performance

Term	Explanation
Guidance	Help or advice that tells you what to do
Implement	To put into effect according to or by means of a definite plan or procedure
Implementation	The act of putting a plan into effect
Innovation	The act or process of introducing new ideas, devices or methods
Inquiry	A systematic investigation
Inquiry proposal	A document proposing a research inquiry
Interpretation	The way something is explained or understood
Interrogate	To ask questions in a thorough way

Term	Explanation
Learning design	A documented plan describing who is involved, resources required and the structure of proposed activities in teaching Student Directed Inquiry
Literature review	A literature review is an assessment of a body of research that addresses a research question
Lotus diagram	A brainstorming tool to expand thinking around a single topic. The expansion may include types, categories, details or questions around the theme
Measurable	Able to be measured
Metacognition	Awareness or analysis of one's own learning or thinking processes
Methodologies	A set of methods, rules or ideas used by those who engage in an inquiry
Milestone	An important point in the progress or development of something

Term	Explanation
Objective	Based on facts rather than feelings
Personal capability	Developing an awareness of one's own emotional states, needs and perspectives and developing the metacognitive skill of learning when and how to use particular strategies to manage themselves in a range of situations
Perspective	A particular evaluation of a situation or facts, from one person's point of view
Phases	Distinct periods or stages in the process
Project plan	A document describing how and when the Inquiry's objectives are to be achieved, by showing the major products, milestones, activities and resources required to complete the Inquiry
Protocols	Accepted or established codes of procedure or behaviour
Qualitative research	Research that aims to find out information on people's opinions and feelings that is difficult to be represented as numbers
Quantitative research	Research that Investigates numerical data

Term	Explanation
Reflective thinking	Process of analysing and making judgements about what has happened
Social capability	Recognising others' feelings and knowing how and when to assist others; interacting effectively and respectfully with a range of adults and peers
Strategy	A careful plan or method for achieving a particular goal
Substantiate	Provide evidence to support or prove the truth of (something)
Synthesis	The process of combining ideas into a complex whole
Transdisciplinary	Pertaining to or involving more than one discipline
Utilise	To use something for a particular purpose
Vocational Studies	Studies relating to an occupation or employment

Appendix 2

LINE OF SIGHT – Student Directed Inquiry Level 3

Learning Outcomes	**Criteria**	**Criteria and Standards**	**Work Requirements**	**Content Unit 1**	**Content Unit 2**
Engage in transdisciplinary inquiry	C1 Apply self directed transdisciplinary inquiry skills	C1 E1–8	Project Proposal Inquiry Project Reflective Journal	The inquiry process Strategies to develop thinking Interdisciplinary theories Review and evaluation	Immersion/brainstorming Formulating an inquiry question Planning the inquiry Investigating Reviewing and evaluating
Apply ethical principles in terms of context of the inquiry and the perspectives of others	C4 Apply ethical understanding throughout all phases of the inquiry (GC)	C4 E 1–6	Authenticated acknowledgement of quality of subject matter Signed Declaration Inquiry Product	Research and Synthesis Planning and organising	Formulation of the inquiry question Background research – Literature review Investigating Organising information and resources
Apply creative and critical thinking	C6 Apply critical and creative thinking to analyse and synthesise reasoning (GC)	C6 E 1–5	Inquiry Project Reflective Journal	Research and synthesis Review and evaluation	Analysis and synthesis Drawing conclusions Reviewing and evaluating
Utilise, implement and apply tools for working such as information literacy, ICT literacy, and qualitative and quantitative methodologies	C3 Determine research methodologies and utilise appropriate tools and methods including ICT	C3 E 1–6	Inquiry Proposal Inquiry Product Inquiry Presentation	Research and Synthesis Oral Multimodal Presentations Missing Report Writing	Investigating Analysis and synthesis
Apply capabilities of decision making, thinking globally, risk management, planning and organising strategies and skills	C5 Apply personal and social capabilities in the process of inquiry (GC) C2 Demonstrate project management skills to manage the inquiry process	C5 E 1–4 C2 E 1–5	Journal Executive summary	Planning and Organising Review and Reflection	All stages of the inquiry cycle
Work individually and collaboratively using effective time management and planning and organising strategies and skills	C5 Apply personal and social capabilities in the process of inquiry (GC) C2 Demonstrate project management skills to manage the inquiry process	C5 E 1–3 C2 E 1–5	Inquiry Proposal including Project Plan Communication Log Reflective Journal	Project Management Review and Evaluation	Planning the inquiry Reviewing and evaluating

Effectively communicate in a range of modes and contexts	C8 Communicate in a range of modes and contexts	C8 E 1–7	Inquiry Project Reflective Journal Inquiry Proposal Inquiry Presentation	Research and Synthesis Oral Multimodal Presentations Review and Evaluation	Formulating an inquiry question Investigating Drawing conclusions
Use metacognition to manage the learning process	C7 Apply metacognition to reflect on processes and transfer knowledge to new contexts	C7 E 1–5	Reflective Journal Executive Summary Inquiry Product with Communication Log	Strategies to develop thinking Interdisciplinary theories Review and evaluation	Immersion and brainstorming Reviewing and evaluating Analysis and synthesis

Supporting documents including external assessment material

- SDI315117 Assessment Report 2017.pdf (2018-12-14 08:56am AEDT)
- SDI315117 - Assessment Panel Report 2018.pdf (2019-02-07 11:46am AEDT)
- SDI315117 - Subject Expert Proforma.docx (2019-09-30 03:30pm AEST)
- SDI315117 Assessment Report 2019.pdf (2020-01-24 03:04pm AEDT)
- TASC Student Folio Declaration form Information Sheet.pdf (2020-09-10 07:07pm AEST)
- SDI315117 Assessment Report 2020.pdf (2021-01-14 12:27pm AEDT)
- 2021 SDI315117 TASC Student Folio Declaration Form.pdf (2021-02-15 11:51am AEDT)
- SDI315117 - External Assessment Specifications.pdf (2022-03-04 01:58pm AEDT)

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