Guidelines for Accessible Assessment

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Assessing Students with Vision Impairment

Round Table on Information Access for People with Print Disabilities Inc.

Guidelines for Accessible Assessment

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These guidelines are published by Round Table on Information Access for People with Print Disabilities Inc. (Round Table). Round Table is an umbrella organisation that brings together producers, distributors and consumers of information in alternative formats such as blindness service agencies, tertiary institutions and government departments in Australia and New Zealand.

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Contents

Introduction

This document aims to guide the preparation and production of assessment tasks to ensure full participation for students with vision impairment enrolled in all public and privately funded education and training institutions in Australia and New Zealand.

The **Guidelines for Accessible Assessment** (2019) may be of benefit to:

- teachers and academic staff
- education and training authorities
- inclusion and/or disability support personnel in universities, TAFE colleges and private training organisations
- accessible format producers
- students and their parents/carers.

The *Guidelines* reflect current disability discrimination legislation, standards and protocols which seek to ensure that students with disability, including those with vision impairment, can access and participate in education on the same basis as other students. Equal access to information and online services is a:

- **right** under the United Nations Convention on the Rights of Persons with Disabilities
- **requirement** *by law* under Commonwealth Disability Discrimination Act (1992) and the Disability Standards for Education (2005) (Australia). The Human Rights Act (1993) (New Zealand)
- **procurement standard** *under Australian Standard* AS EN 301 549:2016
- **professional standard** for educators under the Australian Professional Standards for Teachers 1.5, 1.6, 2.6, 3.4, 4.1 and 7.2.

Recognised international standards and frameworks provide the technical and pedagogical guidelines for providing equal access to information and services which includes assessments. These include:

- the principles of Universal Design for Learning
- W3C's Web Content Accessibility Guidelines (WCAG) 2.1.

Assessments should be designed to provide equal access from the start, not as an afterthought. Inclusive teaching and assessment may require reasonable adjustments and/or accommodations be made to ensure maximum participation for students with vision impairment. To ensure that students with vision impairment are assessed in a fair and equitable manner, it is important to consider:

- input from teaching staff regarding the content to be taught and assessed
- input from the relevant disability support personnel, e.g. Specialist Teacher (Vision Impairment)
- input from the student and/or the family.

It is envisaged that assessment activities and processes developed in accordance with these *Guidelines* will accommodate the needs of most students with vision impairment.

Compliance with these *Guidelines* cannot guarantee protection against disability discrimination complaints. Refer to the Australian Human Rights Commission or the Human Rights Commission of New Zealand for more detailed information.

Students with print disabilities, other than vision impairment, may require reasonable adjustments that are outside the scope of these guidelines.

This document consists of five sections:

- **Section 1: Accessible Assessment** is concerned with issues pertinent to the construction of assessment tasks for students with vision impairment, and is of direct relevance to all personnel involved in assessing and supporting these students in an education/training setting
- **Section 2: General Considerations** address production issues such as security, timeliness and access to practice tests. Challenges with specific assessment types for students with vision impairment are also highlighted
- **Section 3: Responsibilities of Specialist Support Staff (Vision Impairment)** provides useful information to specialist support staff such as support teachers, teacher/consultants or disability service practitioners, in negotiating accessible forms of assessment for students with vision impairment with relevant staff or examining bodies
- **Section 4: Accessible Format Papers** relates specifically to the production and distribution of accessible format materials. It is relevant to blindness service agencies and education and training organisations that produce accessible format assessment materials for students with vision impairment
- **Section 5: Examination Environment and Conditions** details special provisions

that must be addressed to ensure there is no disadvantage to the student during examinations. The examination environment is a crucial element in the assessment process

- **Glossary:** a Glossary is included to define vision specific terminology
- **Additional Reading**
- **Web links.**

Section 1: Accessible Assessment

What is Assessment?

Students are assessed at all levels of education – from pre-school, through primary and secondary school to tertiary education.

Assessment is designed to examine a student's knowledge and understanding. Assessment may be:

- diagnostic – often undertaken prior to instruction
- summative – measures a student's achievement at the end of instruction
- formative – monitors a student's progress
- norm-referenced – compares a student's performance against other students
- criterion-referenced – measures a student's performance against a goal or standard
- interim/benchmark – evaluates student performance at periodic intervals.

Students may be assessed formally or informally; the structure of the assessment can vary from fill-the-gap worksheets, multiple choice and short or extended responses to experiments and research projects.

Assessment can be presented as a pen and paper test or via technology (e.g. online testing).

Open Book Exams

Open book exams may disadvantage a student with vision impairment if:

- they are required to access large amounts of hard copy examination material; or
- they need to bring to the examination venue additional equipment (which may be large and cumbersome) for use in accessing material, computer-based information or providing responses.

Open book exams are only recommended if digital files can be provided and/or arrangements are made by the institution for technology with which the student is familiar to be available at the examination venue.

What are Reasonable Adjustments?

An inclusive learning environment ensures all curriculum and assessment material is accessible and equitable for all students.

Schools and other teaching and/or training facilities are required to make "reasonable adjustments" to accommodate students with disabilities or additional learning needs, including those with vision impairment.

An adjustment is a measure or action taken to allow students with disability to participate in education and training on the same basis as other students.

For further information consult the Australian Human Rights Commission (https://www.humanrights.gov.au/human-rights-education-and-training) or the Disability Discrimination *Act* 1992 (https://www.legislation.gov.au/Details/C2017C00339).

All assessments should consider the nature of the student's disability by:

- providing materials in the student's preferred format
- maintaining the integrity of the assessment
- providing reasonable time for students to read and interpret questions
- considering the response required from the student.

Principles of Reasonable Adjustments

Reasonable adjustment should take the following principles into consideration:

- the nature of the adjustments should be determined through an established process
- the needs of individual students may be unique to that student
- the integrity and academic rigour of the assessment should be maintained
- the adjustments should not confer advantage to the student
- the student is familiar with the adjustments in the assessment.

Students with vision impairments may require one or more of the following examination arrangements:

- assessment materials in braille and/or tactile format; a print transcript of the braille paper should be provided for the use of the examination supervisor

- assessment materials in a larger text size and nominated font e.g. Arial 18 point
- assessment materials on a specific paper size and/or colour e.g. A4, buff-coloured paper
- assessment materials in electronic format
- additional time for examinations and assessments.

For further information see **Section 5: Examination Environment and Conditions.**

Section 2: General Considerations

Security and confidentiality

The same level of security and confidentiality as that afforded to the relevant assessment materials should be maintained.

Access to assessment materials

Only authorised personnel may have access to the assessment materials during the production period or until advised by the assessor or assessment authority. To ensure appropriate security:

- personnel with access to the assessment material who have relatives involved in the same assessment must declare this relationship to the examiner
- discussions about the preparation of the assessment materials and proofreading should always occur in a secure location
- the existence and content of assessment materials must not be discussed with unauthorised people
- personnel involved in supervising a student or transcribing their responses for marking following completion of the assessment, must not discuss the assessment task or student responses with anyone other than authorised staff.

Production and storage of assessment materials

To ensure appropriate security:

- assessment materials must be produced in a secure physical environment
- assessment materials must be produced and stored on a secure computer
- assessment materials should not be left unattended
- all waste generated during production should be disposed of (preferably by shredding) or stored securely until the secure period has expired.

The assessor or assessment authority must be informed immediately if the security of the assessment materials has been compromised by fire, theft, loss, damage, unauthorised disclosure or any other circumstances.

Delivery of assessment materials

Secure transportation or electronic transmission of both the original documents and completed assessment material must be:

- undertaken only by authorised personnel
- password protected or securely sealed.

Timeliness

The timelines for production should be negotiated and agreed in advance.

Production of materials in accessible formats, particularly subjects such as mathematics, science, geography and music, can be very time-consuming.

Assessment materials must be made available by the assessor to the transcription service in a timely manner.

Assessment materials may include:

- a clean copy of the original print paper including answer sheets, colour stimulus material etc.
- an electronic copy of the original paper
- a description of all non-text assessment material e.g. photographs
- a list of agreed and/or approved adjustments for individual students.

Access to practice tests

Students should be provided with practice tests in their preferred format and at the same time as their peers. Students should have the opportunity to become confident with the necessary navigation tools to ensure as much familiarity as possible with the examination format.

Randomised Assessment

Randomised assessments, e.g. spot tests, which are administered to students without prior notice, are increasingly being used in some education/training settings to monitor student performance at various stages of their learning. For students with vision impairment, this can cause disadvantage for the following reasons:

- the student may not have brought all information, e.g. statistical tables needed to respond to specific questions on the day of the assessment

- randomised assessment does not necessarily allow for provision of accessible assessment materials or provision of reasonable adjustments.

Given these **issues,** the use of this type of assessment is not recommended. Tests of this nature may breach DDA requirements for accessibility and could be considered inequitable. If, however, use of randomised assessment is imperative to skill/competency development, consideration of the above points and provision of timely reasonable adjustments must be provided for students with vision impairment by the education/training provider.

Section 3: Responsibilities of Specialist Teachers Vision Impairment/Disability Service Practitioners

Specialist Teachers Vision Impairment (VI) and Disability Service Practitioners are qualified staff in the school/tertiary environment whose role is to work with students with vision impairment. Specialist Teachers (VI) make recommendations regarding reasonable adjustments required for particular assessment materials and tasks based on a student's functional vision. In adult training and education settings, Teacher-consultants and Disability Service Practitioners negotiate provision of reasonable adjustments, for students with vision impairment.

The purpose of adjusting examination or other assessment materials for students with vision impairment is to ensure that the assessment is accessible and equitable. It is the role of a qualified educator in vision impairment to collaborate with examining bodies or school/department personnel in deciding what adjustments are needed to achieve this outcome.

General recommendations

In setting an assessment task, teachers, trainers and academic staff need to ensure they have supplied accessible and equitable materials. Assessment materials should only be altered by the examiner in consultation with Specialist Teachers (VI) or Disability Service Practitioners as appropriate.

All documents produced, including assessment materials, should be 'born accessible'.

The following principles should be applied before any adjustments are made:

- Specialist Teachers (VI) and Disability Service Practitioners should provide the examiner with as much information as possible to assist the examiner in making equitable adjustment
- the amended question must assess the same skills, knowledge and concepts as the original question and/or enable the student to meet the same assessment objectives
- the question should be of an equivalent level of difficulty and weighting as the original
- the amended question should not require students to spend a disproportionately large amount of time to gain relatively few marks
- the adjustment of an examination paper or other assessment activity may require overall amendment to the instructions of the paper or the instructions for individual

questions.

Recommendations for measuring and drawing

A Specialist Teacher (VI) or Disability Service Practitioner should be consulted by an education provider to advise on the degree of tolerance (accuracy) that would be reasonable to expect from a student with vision impairment in answering a question involving either measuring or drawing. The degree of accuracy expected of these students should not be greater than 0.5 cm or 5 degrees.

Some students with vision impairment have difficulty perceiving depth. Questions where students are required to draw complex graphics or 3D shapes should be avoided. Consideration should be given to assessing the students' conceptual understanding and skills rather than the ability to construct the graphic.

Section 4: Accessible Format Papers

Decisions about the alternative format required of the assessment materials should be made in consultation with a qualified educator in vision impairment and where appropriate, the student, and be based on a functional vision assessment.

Braille Assessment Materials

Overview

When constructing the assessment task the examiner should adhere to the principles of appropriate assessment as outlined in **Section 1: Accessible Assessment**.

Braille assessment materials should be made available according to the needs of the individual student. It is essential that all braille and tactile graphics assessment materials be made available to students at the time of the examination.

Braille and tactile materials are extremely time-consuming to produce and the time frame for production should be negotiated and agreed upon by the assessment authority and the production department well in advance.

It is the education/training authority's responsibility to ensure that the practice materials are provided so the student has access to the materials in appropriate format at the same time as the rest of the class. The purpose of adjusting examination materials is to make the assessment accessible and equitable to students. Specialist Teachers (VI) or Disability Service Practitioners may recommend to the examiner what action they need to take to achieve this outcome.

Assessment instructions may need to be amended to reflect any adjustments to the questions.

The format of braille assessment papers must:

- be clear and unambiguous; and
- enable efficient navigation.

Paper format

- Page headers that contain the exam subject name and section should be included
- References to the location of any relevant pages of an examination question should

reflect the appropriate braille page numbers.

Instructions to the student

- The instruction page should omit details specific to print users (this will need to be approved by the examiner)
- Adjust all time allowances throughout the paper to reflect any additional time the student has been granted
- A note indicating that the original examination times have not been adjusted should be included if the allocation of additional time is unknown.

Body of the paper

- Papers should be formatted for efficiency of navigation
- Question numbers should be located on the left margin, clear of any overruns as this will allow for efficient scanning by the reader
- A blank line may be left between questions, this will assist in navigation
- The marks assigned to the questions should be placed after the question number, e.g. Question 1 (5 marks)
- Splitting questions across pages should be avoided wherever possible;
- If splitting questions across pages is unavoidable, care should be taken to ensure the break is made mid-sentence
- When the student is required to do extended reading in order to answer questions, it may be helpful to insert the questions both at the beginning and at the end of the passage
- The approximate length of the answer required should be indicated except for very short answers (allow approximately 7 words per print line).

Graphics

- Diagrams may need to be produced in tactual form. Some graphic or diagrammatic material may be best presented in written form. All descriptions should be provided by the examiner in consultation with the Specialist Teacher (VI) or Disability Service Practitioner as relevant and, where appropriate, the producer. For further information on visual description, refer to the Round Table *Guidelines for Conveying Visual*

Information

- Diagrams may need to be simplified and unnecessary detail deleted or the information split over two or more diagrams. Changes may require negotiations with the examiner. It may be necessary to provide an alternative question where adjustments to diagrams are not accessible for a braille reading student
- Where the inclusion of a diagram means the question extends to two braille pages, the diagram should appear adjacent to the question to which it refers
- In some situations it may be appropriate for diagrams to be placed in a separate booklet, and in this case the diagram heading(s) should state the question number (e.g. 'diagram for question 8'), as well as any other heading information present in the original. This practice should also be followed if diagrams are on loose or removable sheets
- Concrete materials such as models may be necessary to supplement diagrams.

Proofreading

- Meticulous proofreading by people with expertise in braille is essential to ensure accuracy. Wherever possible touch reader/s should be used in the proofreading process to ensure clarity of layout. It is essential that proofreaders are fully aware of the production guidelines for the format and have knowledge of any specialist codes used
- The proofreader can also make practical judgements about how easily the different tactile features in a diagram can be discerned; and
- Proofreaders check that the diagram contains all the relevant information to ensure the question can be answered.

Compiling the paper

- Examination papers are bound and not stapled
- Papers are bound in sections or as one volume (preferably no more than 40 braille pages)
- Volumes are divided where a natural break occurs
- A table of contents of the sections or options in the examination paper is provided; and
- The supervisor has a print transcript of the braille paper.

Checking:

- that the assessment material is clearly labelled in print
- that all the assessment material is present and appears in the correct order
- all details relating to the examination are correct on the front cover of the question paper and that these details correspond to those stated on the print copy
- where there are any diagrams or other material to be included, ensure that figure references in the text correspond to those on the diagrams
- that the line references to prose passages in questions have been correctly amended if line numbers in the braille version of the passage do not correspond with those in the print version
- that references to the location of the diagrams have been amended to reflect the actual location in the braille copy, e.g. “diagram opposite”, “ diagram below” or “diagram following”
- page numbers, including diagram sheets, to ensure that all the pages are identified
- that the various sections and/or parts end according to the current *Formatting Rules and Guidelines* produced by the Australian Braille Authority (ABA) e.g. End of Section II; End of Paper
- each page for the quality of the braille, e.g. all dots have been embossed satisfactorily and have not been flattened, and the cells have not been embossed out of alignment
- that any graphics/diagrams are tactually clear and concise
- that any special instructions concerning the collation of separate sections have been followed.

When an examination paper has been checked and is correct, the examining body’s name, the subject, and any other identifying features of the paper, such as a code and/or the paper number, must be in print on the top of the front page of the braille paper to assist non-braille readers to identify the paper.

Include:

- the print transcript of the braille paper
- all elements of an examination paper that are required for the student to undertake the exam.

Dispatch:

- examination papers should be forwarded by secure transport or registered post, clearly marked for the attention of the contact person
- the post pack should state clearly that the materials are confidential, braille and fragile
- it may be advisable to send an advice note under separate cover to the contact officer that the examination paper has been dispatched on a particular date; and
- storage and transport of assessment materials should be undertaken under the same level of security afforded to the regular print assessment materials.

Large Print Assessment Materials

Overview

These guidelines only provide information that is relevant to the production of examination papers. There are many additional large print issues which need to be considered. For further information about large print, please refer to the Round Table *Guidelines for Producing Clear Print*.

General considerations

- Assessment materials in large print must be made available according to the needs of the individual student, as advised by relevant specialist staff, e.g. Specialist Teacher (VI), or Orthoptist.
  Recommendations may include reference to:
    - font style
    - font size
    - paper size
    - paper colour
    - use of colour or black and white only
    - line thickness in diagrams
    - grid size
    - single/double spacing
    - single/double-sided printing
- Electronic assessment materials are preferable to those produced on the photocopier to ensure print quality and greater usability of the document

- Ensure that print and image details are sharp, making use of contrasting colours (where appropriate) and well-spaced text
- Photocopying does not allow for:
    - fonts to be changed
    - pages to be reformatted
    - decluttering or
    - usability of the document.

Reformatting Large Print Papers

When reformatting examination papers it is important:

- to retain as much as possible of the content of the original paper, including visual stimuli
- to ensure visual material is only removed if it does not constitute an integral part of the purpose of the question
- the mark value of each question should be placed immediately after the question number, irrespective of its location in the standard print copy
- to consider whether lengthy passages of text or graphics need to be placed in a separate booklet to the accompanying questions. Reference to the location of text or graphics should be amended as necessary
- adjustments to time allocations and/or instructions should be reflected at the beginning of the paper and throughout the assessment.

Consistency:

- Consistent formatting from year to year is helpful for students who regularly use past papers for practice.

Paper Size, Type, and Binding:

- Paper size should reflect the individual student's needs:
    - A4 sized paper may be preferred by some students, for example those with reduced visual field or students who may have trouble manipulating the larger paper

    - A3 sized paper may be preferred by some students, for example for technical material, graphics and lengthy text-based stimulus material
    - B4 sized paper is also an option for students
- assessment papers are to be printed on matte paper of sufficient weight to minimise show-through
- the paper may be produced in either single-sided or double-sided format
- generally papers should be bound on the left to enable them to be opened out flat. Materials that are in landscape orientation may need to be bound at the top.

Formatting and Fonts:

- the placement of question numbers and the indentation of questions and sub-questions should normally be followed
- references to the location of diagrams, tables, etc. should be amended as necessary
- the font selected should be sans serif, such as Arial or Verdana
- there should be an increase in spacing between lines to aid readability
- italicised passages should be avoided where they only serve a visual function. Consideration should be given to indent the passage or replace individual italicised words or phrases with bolding, where bolding has not been used in the same context
- colours or patterns must provide maximum contrast
- where the original material (including stimulus material) is in colour, the enlarged version should also be in colour
- for students who have difficulty with colour perception, reformatting should take into account the needs of the individual
- the following symbols are of sufficient size and weight to be seen clearly by the student:
    - punctuation marks
    - line numbers in plays and poetry (aligned on the left-hand side of the text)
    - stimulus and source materials
    - subscripts, superscripts and operation signs
    - algebraic letters
    - verse numbers from the Bible

    - contour lines on maps
    - note heads
    - accents in foreign languages
    - map symbols and keys

- where there are expressions with superscripts and subscripts in a paper, the base font for mathematical expressions throughout the paper may need to be increased or the font size of the superscript/subscript increased

- paragraphs should be left aligned, not fully justified; and

- information should not be placed on the right margin without indication as it may be inadvertently overlooked by the student.

Setting out and Splitting of Questions:

- in general, more space should be left between questions than between sub-questions or paragraphs

- if dividing lines are used between questions in the original (standard) print copy, ensure that there is sufficient space between the lines and the text in the large print format

- the mark value of each question should normally be placed immediately after the question number, irrespective of its location in the original (standard print) format

- questions that start at the bottom of a page should be moved to the top of the next page

- when questions are split over more than one page, ensure that the question is split mid-sentence or insert “Question continued on next page”/“Question continued from previous page” as appropriate.

Answer Sheets, Booklets and Answer Spaces:

- reference materials, stimulus materials, answer sheets, multiple choice sheets, and booklets must be available to the student in the same large print specifications as the assessment paper

- lined paper may be printed with heavy bold lines with increased line spacing so that the student can write in a size that they can proofread

- grids or tables that form part of a response should also be produced in large print

- ample spaces for working out should be reproduced in the large print version of the paper wherever possible.

Reference Material:

- all reference and stimulus material should be in the student's required font size
- for lengthy passages of text it may be useful to consider placing the questions and passages in separate booklets. Reference should be made at the beginning of the question as to the exact location of the stimulus material.

Explanatory Notes:

- stimulus material may occasionally need an accompanying description (which should be provided by the examiner). The written description should not interfere with the integrity of the question
- some questions will require special layouts or presentation of information. If descriptions are provided, care must be taken to avoid key words required for answers; and
- descriptions of photographs and diagrams should be clear and unambiguous and not provide advantage or disadvantage to students.

Graphics

All elements of a graphic need to adhere to the student's large print requirements. Ensure that:

- information obtained from cartoons, photographs, sketches, diagrams or graphs should be clarified by the examiner. This type of material should be accompanied by a written description
- a layout with arrows and a series of pictures may need to be simplified and enlarged
- where increased contrast is required, diagrams, line thickness and style can be adapted, and areas can be coloured or shaded using distinctive patterns
- information may be provided in a key to reduce visual clutter and should be placed in a prominent position
- graphics may be simplified as long as the answer to the accompanying question/s is not compromised

- if the focus of the graphic is printed information it may be able to be converted to text
- the graphic may need to be split into more than one diagram and relevant sections of the diagram highlighted
- scaled diagrams need to be accurately represented. Diagrams cannot be enlarged without the scale being affected. To create a scale of equivalent standard to the original, it may be necessary to re-draw a scale diagram completely. Alternatively the relevant numerical values in the question can be adjusted so that the enlarged scale diagram (using the original scale) gives the correct results
- ensure that visual/tactile versions of graphics are provided where necessary
- supplementary material in the form of shapes or models to replace 3D diagrams may be helpful. The approval for the use of models should be sought from the examiner; and
- if no appropriate adaptation can be made to inaccessible graphics it may be necessary to consider approaching the examiner to provide a substitution of source material or a substitute question.

Placement of Graphics:

- the location of the graphic should first be indicated if different from the original
- relevant caption and heading references should precede the graphic
- arrange diagrams, tables and other ancillary material to appear on the same page spread as the question(s) that relate wherever possible. If this is not possible then consider repeating the graphic material with subsequent questions on following pages
- the basic order of the material as presented in the standard print version of the examination paper should normally be adhered to
- If a whole page is left blank the words [blank page] should be placed near the top of the page. It is not necessary to retain redundant original blank pages; and
- if diagrams are placed in a separate booklet, the diagram should state the question number (e.g. 'diagram for question 8'). This practice should also be followed if diagrams are provided loose/unbound.

Labelling of Graphics:

- graphics headings should normally be placed at the top, whatever the position in the original

- names, labels and captions should be at least the same size as the main text and horizontal wherever possible. On occasions labels may need to be placed differently to enhance clarity of the diagram
- information for example “not to scale” or compass direction(s) should be placed at the top left of the diagram
- a complex diagram could be simplified by use of a key
- essential lines or arrows should be:
    - clear
    - a suitable thickness/weight
    - clearly differentiated.

Written Descriptions:

A written description may be necessary to provide clarification of photographs and/or images.

- All descriptions should be provided by the examination authority in consultation with the Specialist Teacher (VI) or Disability Service Practitioner
- Care must be taken with written descriptions to ensure they do not provide leading information or material which is not available to other students
- A statement should be included indicating that a description has been provided where necessary
- All descriptions should be provided in English.

Proofreading

Proof readers must have knowledge of any specialist material (or content) and be aware of Round Table *Guidelines for Producing Clear Print* relating to the production and formatting of clear print.

All accessible examination formats must be proofread against the original to ensure accuracy by checking that:

- the materials required to support the question including any accompanying separate resources such as answer booklets, stimulus, diagrams or models are provided for proofing
- the assessment material is clearly labelled in print

- all details relating to the examination are correct on the front cover of the question paper and that these details correspond to those on the original print copy
- the large print paper accurately reflects the original examination with any relevant adjustments
- all the pages are reproduced and in the correct sequence
- the quality and size of the font on each page meets the student's requirements
- any special instructions for binding the diagrams have been followed; and
- that any special instructions concerning the collation of separate sections have been followed.

Any errors must be corrected; **examination papers must be 100% correct.**

Include:

The large print package should include:

- the large print examination
- any other materials or booklets which need to be supplied, e.g. maps, coloured photographs and machine-read answer sheets; and
- any relevant notes or instructions.

Dispatch:

- examination papers should be delivered securely, clearly marked for the attention of the contact person within the examining body
- the package should state clearly that the contents are confidential
- it may be advisable to send an advice note under separate cover, notifying the examining body that the test materials have been dispatched on a particular date.

Digital Assessment Material – online and offline

Web Content Accessibility Guidelines (WCAG) compliance is essential but not sufficient to achieve a valid and equitable assessment.

It is important to note that all digital assessment material must be usable, functional and be able to be navigated efficiently with ease of operation by the student.

Student performance is increasingly being assessed online by schools, vocational education and training organisations and universities. Assessment and feedback on accessibility should be addressed in consultation with teaching/support staff and the student well in advance of the digital assessment task. The following steps can greatly improve access for a student with vision impairment undertaking assessment in an online environment:

- ensure host sites conform to guidelines for producing accessible digital material
- trial the compatibility of key online platforms and assessment tools with the most common access technology used by people with vision impairment
- check well in advance for the availability of access technology and the student's capacity to interact with the online assessment environment
- trial the accessibility of the digital assessment in order to avoid:
    - resolution causing unclear and pixelated images when enlarged
    - limited contrast between text and background
    - text displayed on a busy background image making it difficult to read; and
    - the movement between screens multiple times to answer questions
- consider the online time adjustments to meet the needs of additional time to avoid programs shutting down at pre-determined times
- provide access to assessment feedback that ensures independence, privacy and dignity.

For those with vision impairment, information presented online must:

- be readily usable via inbuilt or third party applications designed to enlarge text, convert text to speech or text to braille
- contain options to simplify the layout, change the colour scheme, enlarge onscreen mouse pointers and other functions required by those with low vision
- be controlled by keyboard shortcuts
- be simple to navigate
- respond to common commands in predictable ways
- be easy to edit/correct input errors
- maintain compatibility with current and future access technology devices.

Accessibility and Universal Design

Digital assessment should utilise the Principles of Universal Design. Universal Design for Learning (UDL) provides the pedagogical framework for inclusive assessments. When designing content, the following must be considered from the outset:

- What is the *purpose* of the assessment?
- What *does a successful response look like?*
- Are there any *barriers* that may limit students perceiving, understanding and responding?
- What *strategies* will be implemented so that all students can perceive, understand and respond?
- Which *techniques and tools* will be utilised to quality assure the assessment system and items are inclusive?

The following factors affect accessibility and usability for students with vision impairment:

Platform Design

- The assessment should demonstrate functionality, efficiency and consistency with magnification, navigation, scrolling, and positioning of “NEXT and BACK” button
- The assessment should be stable over various browsers and devices
- The platform should provide for time allowance of rest breaks and extra time
- The platform should allow for use of access technology, changes to colour contrast, text size etc.
- The platform should allow users to increase text size without loss of content or functionality
- The system should adjust to time-outs by saving responses and returning the student to the correct place in the test.

Keyboard accessibility

- All functionality, features and interactivity must be available from a keyboard
- Ensure there is a logical keyboard tab order, i.e. the tab order follows the page reading order

- Navigating to and interacting with form controls should not cause a change of context (for example, form submission, page reload, page redirect, etc.). All forms should include a “SUBMIT” button.

Item Design

Readability

- The use of tables, colours, contrasts and screen design should be consistently and appropriately used
- There should be an opportunity for the student to familiarise with the interface by a practice test using identical tools and navigation
- The instructions should be explicit and meaningful regardless of the student’s media
- The item design should allow the student to simultaneously access stimulus information and questions and record responses efficiently.

Font and styling

- Use sans serif fonts, e.g. Arial and Helvetica
- Avoid excessive use of italic, bold and all-capitals formatting
- Use stylised headings rather than underlining to emphasise headings
- Use bold font rather than underlining to emphasise text
- Use a line spacing of 1.5 to improve readability.

Layout and structure

- The assessment should put instructions and key information at the top of the page
- The stimulus material should be located close to the question
- Use informative headings and lists to group information where appropriate
- Use true heading and list styles rather than formatting.

Tables

- Column headers should be clearly identified. Cascading Style Sheets (CSS) should

be used for websites. Ensure header cells are marked-up as table header <th> elements

- Avoid complex tables (merged cells, nested tables, etc.). Instead, break-up complex tables into multiple, simple tables where possible
- Avoid excessive use of blank characters or blank cells
- Any web links should be up-to date and dead links deleted
- Diagrams and stimulus should have an ALT<TAG description or text equivalent
- There should be provision of tactual format and /or written description for diagrams and /or tables.

Colour contrast

- Ensure foreground and background colours have a minimum contrast ratio of 4.5:1 for normal text or 3:1 for large-scale text.

Use of colour to convey information

- Avoid using colour alone to convey information, e.g. identifying a form field error by highlighting it in red font.

Text alignment

- Align text to the left and avoid indenting paragraphs.

Physical Environment

- Reliability of bandwidth at the assessment site should be available
- The student should be familiar with a variety of digital assessment styles
- The student should be familiar with the range of technically enhanced items and response types that may be incorporated in a digital assessment. For example, drag and drop, hotspot, dropdown menus, etc.
- The battery charge of student's device should be sufficient for the duration of the assessment and a backup power source available
- The student's navigation and keyboard skills should be sufficient to demonstrate their

knowledge

- The student's approved disability provisions should be administered (see Section 1: Accessible Assessment).

Refer to *Round Table Guidelines for Accessible E-Text* to ensure assessments are produced in compliance with relevant standards.

Multiple Format Assessment Materials

Examination material in multiple formats should only be provided if this is the student's current practice:

- braille
- tactile graphics (diagrams only)
- 3D models
- electronic format (e.g. Word doc, or online)
- audio
- large print.

Where a student is utilising multiple formats, care must be taken to ensure the assessment materials are compatible across all formats. E.g. a student may be working from an exam paper in electronic text as well as using tactile diagrams in braille.

Check that any support materials, such as diagrams have been included and are correctly labelled.

Section 5: Examination Environment and Conditions

Disability provisions

Applications for disability provisions must be lodged with the examining body before the examination takes place. Specialist Teachers (VI) or Disability Service Practitioners should make recommendations to the assessment body regarding disability provisions appropriate for the student. Requests should be supported by appropriate medical and functional evidence.

The allocation of additional time for completion of examinations should reflect the content of the examination (e.g. extensive reading and interpretation of graphics).

Readers and/or scribes should only be considered if this is the student's preferred and familiar strategy. The use of a reader/scribe should never be considered an acceptable alternative to the provision of preferred formats.

Disability provisions include:

Extension of examination time:

Students with vision impairment **may** be eligible for extension of time to accommodate:

- navigation of the assessment materials
- interpretation of tactile or enlarged graphics
- reading descriptions of graphic material
- technology access
    - low vision devices (hand held magnifiers, electronic magnifiers)
    - navigation of enlarged content on screen (scrolling, multiple tabs).

Applications for extensions of time should be based on evidence of:

- a functional vision assessment
- reading speeds (using standardised assessments)
- writing speeds.

Rest breaks related to visual and physical fatigue may extend the examination time but the

student is not permitted to work during this period.

Reader

A reader is a person who reads the content of the examination paper to the student. It is the responsibility of the exam author to consult with the Specialist Teacher Vision Impairment (VI) or other specialist, to capture the critical elements required for a verbal description that is to be provided for the reader. A reader must **never** undertake interpretation of the material. It is recommended contact be made with relevant education authorities to determine the appropriate protocols.

The student may request the reader to repeat any content element a number of times in order to process the information.

Amanuensis (Scribe or Writer)

An amanuensis is a person who writes down a student's dictated answers to questions in an examination.

The amanuensis should:

- produce an accurate and legible record of the student's responses
- read back and/or repeat what has been recorded at the student's request in order to ensure accuracy
- record answers exactly as they are dictated and draw diagrams, maps and graphs only in accordance with the student's instructions
- be aware that some students may prefer to draw their own diagrams/charts when they are required for an answer.

Important considerations

A reader and/or amanuensis:

- should not give factual help or offer suggestions to the student
- should neither give the student an unfair advantage nor disadvantage the student
- should be a responsible adult, unrelated to the student
- should have a good working knowledge of the subject matter being examined so specialised vocabulary is read and pronounced correctly

- should not advise the student regarding which questions to do, when to move on to the next question, or the order in which the questions should be attempted.

The student should have adequate practice in working with a reader and/or amanuensis before taking an examination

Examination supervision

Students with vision impairment will require separate supervision (individual or small group setting) if they are accessing any of the following:

  - a brailler
  - additional time
  - a reader and/or amanuensis.

The appointed supervisor of the examination should not have an existing association with the student(s).

Role of the supervisor

The supervisor needs to:

- ensure that the student is able to locate their designated work space within the examination area
- ensure that the student is granted sufficient time to locate and position any approved access technology
- inform the student (if appropriate) of the location of all relevant examination papers or items in their workspace
- be aware of the student's disability provisions as approved by the examiner
- advise the student of both the original examination time and the extra time which has been approved by the examiner; and
- liaise with the student and supervise any approved rest break provisions.

During the examination the supervisor should:

- maintain professional management, ensuring that conversation, volume and behaviour are appropriate
- consult (when supervising students completing braille examination papers) the print transcript of the braille paper in responding to student queries

- assist the student if material appears to be omitted, damaged or unreadable. The supervisor cannot interpret the material.

Venue

The examination venue should:

- be comparable to the conditions for the other students, (e.g. have air conditioning, heating, be sufficiently soundproof with minimal disturbance)
- have sufficient lighting and power outlets available (including desk lamp)
- be spacious enough, with adequate furniture to accommodate specialised equipment and a guide dog where necessary
- have seating for the supervisor and if approved, reader/amanuensis
- have access to bathroom facilities.

A suitable venue needs to be arranged in conjunction with the examination authority if these facilities are not available.

Following the examination the supervisor should:

- ensure that the relevant sections of the student's responses are correctly collated, and secured.

Use of Access Technology

The use of technology during examination should consider the following:

- the student should use equipment with which they are familiar
- the technology device should be checked in advance to ensure that it is charged and in working order with a power adaptor available
- back-up equipment should be available for the student to use in the case of a technology failure
- devices used in exams must be locked down without access to browsers or other documents stored on the device. Refreshable Braille note-takers should be connected to a monitor to ensure security is not breached
- decisions need to be made in advance regarding the access of computer functions. (e.g. spell or grammar-check)
- access to Digital materials are available in a secure environment during open book

examinations.

Glossary

3D Vision - the ability to see objects in a three-dimensional format.

Access Technology - a generic term that is also referred to as adaptive technology or assistive technology. It describes devices or products for people with vision impairment that enable access to information that might otherwise be inaccessible (some examples include hand-held optical magnification aids, screen reader and magnification software, video magnifiers, reading/writing stands, speech synthesisers, refreshable braille displays etc.).

Accessible Information/Accessible Format - text or graphics that have been adapted to a format enabling equity of access for a student with vision impairment.

Accessible Assessment - an assessment method, practice or activity free from visual bias which takes into account a student's support needs and learning style related to disability.

Accommodations - changes that are made to assessment procedures to enable access for a student with vision impairment.

Additional Time - extra time allocated to the student with vision impairment that is over and above the standard examination time.

Adjustments - questions that have been altered in some manner (e.g. through changed wording or graphics, modified lists) or replaced with an alternative question to accommodate the needs of a student with vision impairment.

Amanuensis - a person who writes or types a student's dictated responses.

Bold Lined Paper - paper in landscape or portrait format which has thickened lines, usually black in colour and spaced to suit the individual needs of the student.

Braille - a tactile system of reading and writing invented by Frenchman Louis Braille for use by people who are blind. Braille symbols are composed of combinations of dots from a matrix of three rows and two columns.

Disability Provisions - practical arrangements designed to level the playing field for students with vision impairment so that they can demonstrate their knowledge and understanding in an assessment environment.

Disability Service Practitioner - a staff member with professional qualifications/experience employed by a tertiary institution or training organisation to

facilitate provision of reasonable adjustments for students with chronic medical conditions and those with disabilities impacting on vision, hearing, mobility, physical access, cognition or mental health.

Equity - excluding disadvantage by ensuring the student has access to all materials in the learning environment as well as the assessment materials.

Functional Vision Assessment - an assessment that measures how well students use their vision to carry out routine tasks in different places and at different times throughout the day.

Graphics - illustrations, tables, photographs, diagrams, charts and cartoons.

ICT - Information and Communications Technology.

Inclusion of Students With Disabilities - provision for the needs of all students regardless of their ability or disability.

Large Print/Clear Print - font styles and sizes that are used in the preparation of papers for students with vision impairment (see Round Table's *Guidelines on Clear Print*).

Low Vision - visual acuity less than 6/18 and equal to or better than 3/60 in the better eye with best correction. (World Health Organisation)

Multiple Format - papers that have been prepared for students, or which are submitted by students, using more than one format such as multi-media, print copy, electronic format, audio, braille, clear print/large print.

Open Book Examinations - examinations in which students are allowed to use notes (hard copy or digital files), texts or resource materials for reference.

Overruns - where a line of text flows onto the next line of print.

Print Disability - a print disability is a difficulty or inability to read printed material due to a perceptual, physical or visual disability.

Proofreading - comparing a prepared copy with an original text to detect and correct production errors.

Reader - a person who reads written material to a student or into audio format.

Read-Only File - computer file that you can read, but cannot change in any way.

Reasonable Adjustments – an adjustment is reasonable in relation to a student with a disability if it balances the interests of all parties affected.

Specialist Teacher Vision Impairment - teachers employed by an education/training

organisation whose role includes provision of support to students with vision impairment.

Stimulus Material - visual material that may take the form of text, drawings, advertisements, three-dimensional objects, graphs, tables, photographs, flow diagrams, symbols and images that communicate information.

Supervisor - a person with the responsibility of ensuring that the security and integrity of the exam environment is maintained.

Tactile Format - graphics produced in a raised form that can be interpreted by touch (e.g. illustrations, slit tape diagrams, stereocopy diagrams).

Time Allowances - see additional time.

Timeliness - production of accessible format materials to ensure the student with disability receives his/her materials at the same time as peers.

Unified English Braille - the braille code used for all braille production across Australia and New Zealand.

Universal Design for Learning (**UDL**) is an educational framework based on research in the learning sciences, including cognitive neuroscience, that guides the development of flexible learning environments that can accommodate individual learning differences.

Vision Impairment - Vision impairment is defined as a limitation of one or more functions of the eye (or visual system) (Royal Institute for Deaf and Blind Children).

Vision Specialist - a medical or allied health professional with qualifications in ophthalmology, optometry or orthoptics.

Links

The following list of links to websites, while not exhaustive, provides additional sources of information to readers.

ACARA the Australian Curriculum, Assessment and Reporting Authority is an independent statutory authority responsible for developing the national curriculum and national assessments, including NAPLAN.

ACARA website: https://www.acara.edu.au/

ACHIEVE provides best practice guidelines on inclusive tertiary education provision in New Zealand, developed by a national network established to ensure equal opportunity and access to post-secondary education and training for people with impairments.

ACHIEVE website: http://www.achieve.org.nz/

Australian Braille Authority (ABA) includes information regarding the work of the Australian Braille Authority and some valuable resources and guidelines about braille usage, production and formatting.

Australian Braille Authority (ABA): http://brailleaustralia.org/

Australian Disability Clearinghouse on Education and Training (ADCET) provides information and resources to support the work of disability service practitioners in the Australian post-secondary education and training sector.

ADCET website: http://www.adcet.edu.au/

Australian Human Rights Commission (AHRC) provides important information regarding current Australian anti-discrimination legislation and its application to people with disabilities in Australia.

Australian Human Rights Commission: http://www.humanrights.gov.au/disability_rights/

DAISY Consortium provides information on the work of this international association which develops, maintains and promotes development and use of international DAISY standards for the production of digitised material for people with print disabilities.

DAISY Consortium: http://www.daisy.org/

ICEB – International Council on English Braille provides a medium for international cooperation among national standard setting bodies on English language braille, and collaborates with other organisations which have an interest in the standardization, teaching, promotion or dissemination of braille.

ICEB website: http://www.iceb.org/

ICEVI – International Council of Educators for the Vision Impaired is a membership organisation with a mission to promote access to inclusive, equitable, and quality education for all people with vision impairment.

ICEVI website: http://icevi.org/

Human Rights Commission - Te Kāhui Tika Tangata provides information about human rights and anti-discrimination legislation in New Zealand.

Human Rights Commission: http://www.hrc.co.nz/

Round Table on Information Access for People with Print Disabilities provides information about Round Table and invaluable resources produced as a direct result of its work.

Round Table on Information Access for People with Print Disabilities website: http://www.printdisability.org

South Pacific Educators in Vision Impairment (SPEVI) provides information about the work of SPEVI (the professional body concerned with matters pertaining to the education of people with vision impairment within the South Pacific region) and links to information and resources regarding vision impairment.

SPEVI website: https://www.spevi.net/

United Nations Declaration on the Rights of Persons with Disabilities

United Nations Declaration on the Rights of Persons with Disabilities website: https://www.ohchr.org/en/professionalinterest/pages/rightsofdisabledpersons.aspx

Universal Design for Learning (UDL) is a research-based set of principles to guide the design of learning environments that are accessible and effective for all.

UDL website: www.cast.org

Web Accessibility Initiative (WAI) includes strategies, guidelines and resources for use in making the world-wide web accessible to people with disabilities.

Web Accessibility Initiative (WAI) website: http://www.w3c.org/wai

Additional Reading

Australian Braille Authority. (2016). *ABA Rules and Guidelines for Formatting Braille*. Round Table on Information Access for People with Print Disabilities Inc.

Australian Vice-Chancellors Committee. (2004). *Guidelines on Information Access for Students with Print Disabilities*. Universities Australia.

Australian Vice-Chancellors Committee. (2006). *Guidelines Relating to Students with a Disability.* Universities Australia.

Commonwealth Attorney-General's Department. (2006). *Disability Standards for Education 2005.* Commonwealth of Australia.

DAISY Consortium. (2008). *DAISY 3 Structure Guidelines.* Daisy Consortium

International Council on English Braille (ICEB). (2014). *Unified English Braille Guidelines for Technical Material.* ICEB.

Round Table on Information Access for People with Print Disabilities. (2018). *Guidelines for Accessible E-text.* Round Table on Information Access for People with Print Disabilities.

Round Table on Information Access for People with Print Disabilities. (2005). *Guidelines on Conveying Visual Information.* Round Table on Information Access for People with Print Disabilities.

Round Table on Information Access for People with Print Disabilities. (2011). *Guidelines for Producing Clear Print*. Second Edition. Round Table on Information Access for People with Print Disabilities.

Round Table on Information Access for People with Print Disabilities, and International Council on English Braille, Christine Simpson (Ed.). (2013), *The Rules of Unified English Braille.* Second Edition. Round Table on Information Access for People with Print Disabilities, and International Council on English Braille.

Rose, DH, & Meyer, A (2002) *Teaching Every Student in the Digital Age*: Universal Design for Learning. Alexandria, VA: ASC

South Pacific Educators in Vision Impairment. (2016). *SPEVI Principles and Practice Guidelines for quality education of learners with vision impairment*. Second Edition. South Pacific Educators in Vision Impairment.

World Wide Web Consortium (W3C). (2018) *Web Content Accessibility Guidelines (WCAG) 2.1*. W3