

SCHOOLS ONLINE THESAURUS

Specifications for the Schools Online Thesaurus (ScOT)

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Table of Contents

1	INTROD	UCTION	. 1
	1.1 1.2	PurposeAudience	
2	PRINCIP	PLES OF SCOT	. 1
	2.1 2.2 2.3	Scope Purpose Specificity	. 1
	2.4	Currency	
	2.5	Standards	
	2.6	Orphan subject terms	
3	OBJECT	IVES OF THESE SPECIFICATIONS	. 2
	3.1	Quality assurance	. 2
	3.2	Management of the quality assurance process	
	3.3	Requirement levels	
	3.4	Sustainability	. 3
4	QUALIT	Y ASSURANCE SPECIFICATIONS	. 3
	4.1	Introduction	2
	4.2	Scope, form and choice of descriptors	
	4.2.1	Parenthetical qualifiers	
	4.2.2	Scope notes	
	4.2.3	Reciprocal scope notes	
	4.2.4	Concept types	
	4.3	Grammatical forms of subject descriptors	
	4.3.1	Limiting the number of compound descriptors	. 7
	4.3.2	Retention of initial articles	. 7
	4.4	Singular and plural forms	. 7
	4.4.1	Count nouns	. 7
	4.4.2	Exceptions to plural count nouns	. 8
	4.4.3	Noncount (mass) nouns	
	4.4.4	Abstract concepts	
	4.4.5	Coexistence of singular and plural forms	
	4.5	Selection of preferred terms	
	4.5.1	Usage	
	4.5.2	Literary warrant	
	4.5.3	Published authorities and Spelling authorities	
	4.5.4	Other indexing languages	
	4.5.5	Personal authorities	
	4.5.6	Preference for abbreviations	
	4.5.7	Popular and scientific names	
	4.5.8	Proper names	
	4.5.9	Place names	
	4.6	Capitalisation, punctuation, and non-alphabetical characters	
	4.6.1	Capitalisation	
	4.6.2 4.6.3	Parenthesis	
	4.6.4	Apostrophes	
	4.6.5	Diacritical marks	
	4.6.5 4.6.6	Other symbols and punctuation marks	
	4.0.0 4.7	Compound terms	
	4.7 4.7.1	Interpretations	
	4.7.1	Examples	
	4.7.2	Relationships	
	4.8.1	Synonyms	
	4.8.2	Lexical variants	

4.8.3	Quasi-synonyms	16
4.8.4	Generic posting	
4.8.5	Hierarchical relationship	
4.8.6	Codes for the whole-part relationship	20
4.8.7	Codes for the instance relationship	20
4.8.8	Node labels	20
4.9	Print display	20
4.9.1	Introduction to format	20
4.9.2	Numerals	
4.9.3	Non alphanumeric characters	20
4.10	Thesaurus construction and verification	
4.10.1	Term records for preferred terms	21
4.10.2	Examples	22
4.10.3	Term records for non preferred terms	22
4.10.4	Candidate terms	
4.10.5	Provisional terms	
4.11	Feedback	23

1 Introduction

1.1 Purpose

This document outlines the background and principles of the Schools Online Thesaurus. It also outlines the quality assurance specifications (known as the *Specifications*) for the Schools Online Thesaurus (ScOT) Project and records decisions and interpretations from *ANSI/NISO Z39.19-2003*¹ (known as the *Standard*).

1.2 Audience

Any parties or individuals associated with the ScOT Project or interested in thesaurus construction and management.

2 Principles of ScOT

The following are overarching principles of ScOT that relate to the structure and content of the thesaurus.

2.1 Scope

ScOT will cover concepts relevant to the K-12 curricula within Australian states and territories and New Zealand. ScOT is an "all of knowledge" thesaurus to the extent that its scope covers topics that are taught and/or studied in schools within the Australian and New Zealand K-12 education sector and will meet the practical needs of teachers and students.

ScOT will not include proper names such as persons, organisations, programs, and place names.

2.2 Purpose

ScOT terms are used to describe the subject or 'aboutness' of digital content. ScOT terms should not be used to describe learning outcomes or assessment levels, specify target audiences or describe jurisdiction specific education issues.

2.3 Specificity

The level of specificity for descriptors will generally be determined by the breadth and depth of the subjects studied in the Australian and New Zealand K-12 curricula.

2.4 Currency

The latest terminology used in the curriculum will be used as descriptors in ScOT and revised as necessary. Less common or outdated terms will be used as non preferred terms and reviewed on a regular basis.

Bias and prejudice in choice of terms has been explicitly avoided through the selection of descriptors based on acceptable usage by Australian and New Zealand educational authorities.

2.5 Standards

ScOT is developed and managed in accordance with Z39.19 *Guidelines for the construction, format, and management of monolingual thesauri.*

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¹ National Information Standards Organisation. *ANSI/NISO Z39.19-2003 Guidelines for the construction, format and management of monolingual thesauri.* Bethesda, MD: NISO Press, 2003.

2.6 Orphan subject terms

Orphans are terms that do not have any broader terms (BTs). All terms in ScOT are assigned BTs and checks are made as part of the ongoing quality assurance and management to ensure no orphans are included. A small number of terms are permitted to have no BTs; 'top terms' that represent the broadest concepts that span curriculum topics are permitted and also subject to ongoing quality assurance.

3 Objectives of these Specifications

3.1 Quality assurance

Subject terms incorporated into ScOT *should* meet the specifications as outlined in Section 4 of this document, which are drawn from the *Standard*.

3.2 Management of the quality assurance process

Prior to July 2004 Curriculum Corporation (CC) was primarily responsible for undertaking and managing the quality assurance process. From July 2004 the responsibilities for the quality assurance and management of the ScOT Project was transferred to The Le@rning Federation (TLF). The quality assurance process is overseen by the ScOT Management Group (ScOTMG) comprised of representatives from the TLF, CC and *education.au limited* and advice and feedback sought from the ScOT Consultative Group (ScOTCG) which is comprised of representatives from Australian state and territory and New Zealand stakeholders.

3.3 Requirement levels

In many technical specifications several words are used to signify requirement levels. This section defines these words as they should be interpreted in this specification.

The key words may, should, should not, shall, and shall not (when italicised) in this document are interpreted as:

- 1. **shall**: This word means that the definition is an absolute requirement of the specification
- 2. **shall not**: This phrase means that the definition is an absolute prohibition of the specification
- 3. **should**: This word means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.
- 4. **should not**: This phrase means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications must be understood and carefully weighed before implementing any behaviour described with this label.
- 5. may. This word means that an item is truly optional. An implementation of any behaviour described with this label shall be prepared to interoperate with another implementation (eg content management system, search engine, other thesauruses etc) which does not include the option. Likewise, an implementation which does not include a particular option shall be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality.

3.4 Sustainability

The sustainability of ScOT relies on its quality and responsiveness to user needs. This is achieved through appropriate quality assurance processes and adherence to the *Specifications*.

4 Quality assurance Specifications

4.1 Introduction

The Specifications follow appropriate and relevant guidelines set out in the Standard.

The *Standard* sets out guidelines for the design and construction of subject terms and the management of thesauri. The objective of the *Standard* is not to provide a set of prescriptive rules but rather a set of guidelines which can be interpreted for the specific needs of a thesaurus under development.

As ScOT progresses through the stages of development it is expected that the *Specifications* will be adapted to suit specific changes in policy and scope of ScOT. This is undertaken with all stakeholders in the ScOT project including The Le@rning Federation and members of the ScOT Consultative Group.

Sections from the Standard that are referred to in the Specifications are:

- Section 3 (Scope, form and choice of descriptors)
- Section 4 (Compound terms)
- Section 5 (Relationships)
- Section 6 (Print display)
- Section 8 (Thesaurus construction and verification)

This specification records the decisions and interpretations of the guidelines as set out in the Standard and is illustrated with examples of subject terms from ScOT.

Unless otherwise specified the *Standard's* guidelines as printed are to be followed. Where the specification varies from the standard, an explanation is given for the variation.

4.2 Scope, form and choice of descriptors

4.2.1 Parenthetical qualifiers

ScOT shall follow this guideline from section 3.2.1 in the *Standard*. See also <u>Section 4.6.2</u> in this specification.

4.2.1.1 Interpretations

- Qualifiers will only be added to instances where homographs appear more than once in ScOT.
- 2. Qualifiers will not be applied to potential homographs in ScOT.
- 3. The qualifier will be the homograph's broader term if the meaning of the broader term is considered to be clear and it is not a compound term. An alternative simplified version of the qualifier *may* be chosen.
- 4. Compound terms should not be used as qualifiers.
- 5. Non preferred terms do not have broader terms; they *shall* derive qualifiers from the preferred term.

4.2.1.2 Examples

Dance (Arts)

```
Dances (Dance forms)
Flats (Apartments)
Flats (Music)
Flats (Stage)
Stars (Celebrities)
Stars (Polygons)
Stars (Universe)
```

In this example, non preferred terms (in italics) derive qualifiers from their preferred terms.

4.2.2 Scope notes

ScOT shall follow this guideline from section 3.2.2 in the Standard.

4.2.2.1 Interpretation

- 1. Scope notes *may* be used to clarify the meaning of a subject term where a definition cannot be sourced from the current edition of the *Macquarie Dictionary*.
- 2. Scope notes, if necessary, *may* be used to define the scope of a subject term to clarify an educational or cultural context.
- 3. Scope notes should start with "Use for resources...".
- 4. Where appropriate scope notes *may* be used to provide guidance on how the subject term is to be used either by the indexer or the searcher. This might be an instruction to use a more specific subject term if possible. The use of these scope notes *should* be kept to a minimum.
- Scope notes should be added to non preferred terms where there is more than one USE reference. These scope notes should specify either coordination of the USE terms or disambiguate the USE terms.

4.2.2.2 Examples

Type of	f scope note	Comment	
Agenda SN	Use for resources on the process of shaping and formulating opinion and direction through choice of topics considered and/or perspectives offered.	This scope note clarifies the meaning of the subject term where a definition cannot be sourced from the Macquarie Dictionary.	
Salt SN	Use for resources aimed at P-6 students on sodium chloride or for resources about salt as a preservative or seasoning in foods. For resources aimed at 7-12 students on sodium chloride use Sodium chloride. When indexing resources also use the term Sodium chloride where applicable.	Currently there are no examples of this type of scope note in ScOT. The example illustrates a subject term where an educational context has been clarified in the scope note. A reciprocal scope note is also included which refers to the related concept. An indexing note is also included.	
Return SN USE	ned soldiers Coordinate more general terms Repatriation	Non preferred terms that have more than one use reference should include a scope note that advises how to use preferred terms.	

Soldiers	

4.2.3 Reciprocal scope notes

ScOT shall follow this guideline from section 3.2.2.1 in the Standard.

4.2.3.1 Interpretations

Reciprocal scope notes *may* be used to clarify the definition of related subject terms. Reciprocal scope notes use the syntax "Use for resources... For resources...".

Reciprocal scope notes *may* be used to distinguish concepts, curricula and cultural equivalence or near equivalence. Both subject terms must include reciprocal scope notes. The use of these scope notes *should* be treated with caution and on a case by case basis. Reciprocal scope notes of this type will use the syntax "When indexing..."

4.2.3.2 Examples

Type of scope note		Comment
Aeron	utics Use for resources on the science, technology or art of flight. For resources of a more general nature use Flight.	The examples shown here are a general reciprocal scope note.
Fligh	t	
SN	Use for resources on the general nature of flight. For resources on the science, technology or art of flight use Aeronautics.	
Bushwalking		Currently there are no examples of this type of
SN	Use for resources about hiking through the bush for pleasure. Use this subject term in Australia. When indexing resources also use Tramping.	reciprocal scope note in ScOT. The example illustrates a subject term where a cultural context has been clarified in the scope note. These types of reciprocal scope notes distinguish concepts from either a curricula or, as shown, a
Tramping		cultural aspect.
SN	Use for resources about hiking through the bush for pleasure. Use this subject term in New Zealand. When indexing resources also use Bushwalking.	Note that these scope notes also include an indexing note: "When indexing resources" These types of reciprocal scope notes should be used with care and only following extensive consultation.

4.2.4 Concept types

The *Standard* defines 'concept types' in section 3.3. In this specification, concept types are used as a basis for selecting the form of descriptors. Where two or more terms represent similar concepts but are or differing *concept types*, some are to be preferred over others. The *Standard* does not specify preference for selecting terms on this basis. The requirement for this guideline arises from identified redundancies in reference structures and subsequent indexing consistency issues.

4.2.4.1 Preferred concept types

The list of concept types in section 3.3 of the *Standard* is not exhaustive. The list below is annotated to include *performers* of particular actions or roles. Concept types listed in this specification are:

- Things and their physical parts
- Materials
- Activities or processes
- Events or occurrences
- Properties or states of persons, things, materials
- Disciplines or areas of study
- Units of measurement
- Performers

The subject scope of ScOT is broad. It is unrealistic for a discrete concept to be expressed as a thing, a material, an activities, a property, a discipline, in units and as a performer. Candidate terms in ScOT *should not* be approved where they coincide with existing terms that will lead to ambiguity in meaning or inconsistency in indexing.

Where two or more terms represent similar concepts, but are of different concept types, the following guidelines *shall* be consulted:

- 1. Performers should defer to either Activities or Processes, or Disciplines.
- 2. Things and their physical parts and Materials *should* defer preference to Activities or Processes.

Terms representing Events or Occurrences should be minimised. Bounded by temporal and spatial parameters, Events and Occurrences tend towards greater levels of specificity and often represent 'instances', which should be minimised (See section 4.8.5.1.3). Inappropriate Events and Occurrences include "ANZAC day", "World Expo 88", and "Moomba". Suitable Events include "Anniversaries", "Trade shows" and "Parades".

4.2.4.2 Examples

The table below shows terms in the second column that *should* only be used as non preferred terms that reference terms in the first column (in the first column).

Preferred concept	Non preferred concept	Preferred reference structure
Vacuum cleaning (Activity/ Process)	Vacuum cleaners (Things and their physical parts)	Vacuum cleaning UF Vacuum cleaners
Child care (Activity/ Process)	Child care centres (Things and their physical parts)	Child care UF Child care centres
Stage management (Discipline/ Process)	Stage managers (Performer)	Stage management UF Stage managers

Activism (Activity/ Process)	Activists (Performer)	Activism UF Activists
Boxing (Activity/ Process)	Boxers (Performer)	Boxing UF Boxers

4.3 Grammatical forms of subject descriptors

4.3.1 Limiting the number of compound descriptors

ScOT shall not apply the guidelines from section 3.4.2 in the Standard.

4.3.1.1 Interpretations

The *Standard* provides guidelines for use of adjectives and adverbs as separate descriptors that can be post-coordinated with other terms by indexer and user. ScOT is intended as a natural language thesaurus and therefore all terms contain at least one noun.

ScOT may use the subjects shown on the right in the table below and not those on the left.

Subject terms A	Subject terms B
Mobile	Mobile libraries
Portable	Portable heaters

According to the *Standard* adjectives, as those shown on the left in the table above, may appear as separate subject terms in a thesaurus when designing it to be pre-coordinated in indexing or post-coordinated in searching. ScOT shall not apply this guideline from section 3.4.2.1 in the *Standard*.

4.3.2 Retention of initial articles

ScOT shall follow this guideline from section 3.4.4.2 in the Standard.

4.3.2.1 Interpretations

ScOT will include a cross reference when the initial article is part of the subject term.

Examples

```
El Nino
UF Nino
Nino
USE El Nino
```

4.4 Singular and plural forms

ScOT shall follow this guideline from section 3.5 in the Standard.

4.4.1 Count nouns

ScOT shall follow this guideline from section 3.5.1 in the Standard.

4.4.1.1 Interpretations

Count nouns are subject terms that describe objects or concepts that can be subjected to the question "How many?" but not "How much?" These subject terms *should* be expressed in their plural form.

4.4.1.2 Examples

Circles

Chemical reactions

Invertebrates

Numbers

Percentages

Vertices

4.4.2 Exceptions to plural count nouns

ScOT shall follow this guideline from section 3.5.1.1 in the Standard.

4.4.2.1 Interpretations

Anatomy and biomedicine are two subject areas within the scope of ScOT. Subject terms for parts of the body are singular or plural depending on the part. If the subject term relates to a part of the body in which there is usually more than one the plural form is used. The singular form is used when the subject term relates to the part of the body which occurs once.

4.4.2.2 Examples

Ears

Eyes

Nose

Mouth

4.4.3 Noncount (mass) nouns

ScOT shall follow this guideline from section 5.3.2 in the Standard.

4.4.3.1 Interpretations

Noncount subject terms describe subjects or concepts that can be subjected to the question "How much?" but not "How many?"

An exception is when the subject term refers to a concept or subject as a class with more than one member. In these cases the subject term *should* be in the plural.

4.4.3.2 Examples

Acid rain

Acids (different types of acid)

Copper

Fishes (different species of fish)
Paints (different types of paint)

Snow

4.4.4 Abstract concepts

ScOT shall follow this guideline from section 5.3.2.1 in the Standard.

4.4.4.1 Interpretations

Subject terms in ScOT that describe abstract concepts including systems of belief, activities and processes, emotions, properties and disciplines *should* be shown in the singular form.

4.4.4.2 Examples

Abstract concept	Subject term in ScOT
Beliefs	Christianity

Activities and processes	Digestion, Migration, Welding
Emotions	Anger, Love
Properties	Conductivity
Disciplines	Chemistry

4.4.5 Coexistence of singular and plural forms

ScOT shall follow the guideline from section 3.5.3 in the Standard.

4.4.5.1 Interpretations

When there is a singular and plural form of a word and they both represent the same broad concept and one is a preferred term and one is a nonpreferred term, a qualifier will not be added. When both singular and plural forms are preferred terms, a qualifier will be added to distinguish their meanings and usage in ScOT.Examples

4.4.5.2 Examples

```
Allegories (Folk tales)
Allegory (Visual arts) USE Art symbolism
Circuses USE Circus
Person (Language)
Persons (Groups)
```

4.5 Selection of preferred terms

ScOT shall apply the option from section 3.6 in the *Standard* to record the authority for the subject term selected. See also 4.10 in this specification on Term records.

4.5.1 Usage

ScOT shall follow the guideline from section 3.6.1 in the Standard.

4.5.1.1 Interpretation

The guideline from the *Standard* states that subject terms *should* be selected that reflect the user group familiar with the domain covered by the thesaurus.

ScOT will include subject terms that are applicable to the K-12 education sector in Australian states and territory and New Zealand. ScOT subject terms *should* cater for the different levels of subject knowledge and cultural backgrounds of its users to ensure that resources are indexed and retrieved effectively.

In some cases more specific examples of concepts that are described in ScOT *may* have a non preferred subject term cross referenced to the subject term for the broader concept. A decision to use a non preferred subject term describing a more specific concept is to be taken on a case by case basis.

4.5.1.2 Examples

```
Chinese calendar

USE Lunisolar calendars

Cochlear implants

USE Hearing aids

Prostheses
```

Sea transport
USE Water transport
Snowmen
USE Snow sculpture

Note that more than one USE references are permitted. Within these examples Cochlear implants references two terms that are each broader concepts.

4.5.2 Literary warrant

ScOT shall follow the guideline from section 3.6.1.1 in the Standard.

4.5.2.1 Interpretation

The *Standard* states that words and phrases from the literature *should* determine the construction of subject terms. Where two or more variants have literary warrant, the most frequently used subject term *should* be the preferred subject term. The lesser variant(s) will be used as non preferred subject terms to the preferred subject term.

Literary warrant is based on the curricula of K-12 education in Australia and New Zealand. Terminology *should* reflect the curricula language used by teachers and students to describe the topic of the learning resource.

4.5.3 Published authorities and Spelling authorities

ScOT shall follow this guideline from the Standard including both sections 3.6.1.2 and 3.6.2.2.

4.5.3.1 Interpretations

The latest edition of the *Macquarie Dictionary* will be used as the authority for spelling and form of words and phrases used as subject terms in ScOT.

There are instances when specialist resources such as medical dictionaries or mathematics websites are referred to for additional information when reviewing or developing subject terms for ScOT.

4.5.4 Other indexing languages

ScOT shall follow this guideline from section 3.6.1.3 in the Standard.

4.5.4.1 Interpretations

ScOT shall use other thesauri as a reference tool for the development of appropriate subject terms as required. The principle that ScOT needs to be relevant to the curriculum takes precedence therefore some of the subject terms in these thesauri may not be useful or relevant.

Thesauri	Subject coverage
Australian Public Affairs Information Service Thesaurus published by the National Library of Australia	Social sciences, humanities, politics
Available at	
http://www.nla.gov.au/apais/thesaurus/	

Australian Thesaurus of Education Descriptors published by Australian Council for Educational Research.	Education and educational research
Available at	
http://www.acer.edu.au/library/catalogues/edthesaurus.html	
ERIC Thesaurus	Education and

Available at http://www.eric.ed.gov/	educational research
ETB Thesaurus Available at http://www.eun.org/eun.org2/eun/en/etb/content.cfm?lang=en&ov=7208	Education
Health and Ageing Thesaurus published by Commonwealth Department of Health and Ageing.	Health
Library of Congress Subject Headings published by the Library of Congress Available at http://authorities.loc.gov	General subjects
Maths Thesaurus published by Cambridge University http://thesaurus.maths.org	Mathematics
SCIS Subject Headings published by Curriculum Corporation Available at http://www.curriculum.edu.au/scis/productinfo/subheadsonline.htm	Australian and New Zealand curriculum subjects
Thesaurus of Australian Government Subjects (TAGS) published by the National Office for the Information Economy (now Australian Government Information Management Office (AGIMO)) Available at: http://www.agimo.gov.au/services/tags/	Government, services, activities and responsibilities
UNESCO Thesaurus published by UNESCO Available at http://www.ulcc.ac.uk/unesco/	Social sciences, humanities, politics
USAID Thesaurus published by the Center for Development Information and Evaluation.	General subjects
Zoological record thesaurus published by BIOSIS Available at http://scientific.thomson.com/support/products/zr/thesaurus/	Zoology

There are many other thesauri and glossaries that have been referred to during the initial development of ScOT. The following URLs point to websites which contain links to thesauri covering a range of subjects.

http://www.lub.lu.se/metadata/subject-help

http://hilt.cdlr.strath.ac.uk/Sources/thesauri.html

http://palimpsest.stanford.edu/lex/

4.5.5 Personal authorities

ScOT shall follow this guideline from section 3.6.1.4 in the Standard.

4.5.5.1 Interpretations

Where applicable curricula subject experts *shall* be consulted including curriculum planners, coordinators and teachers. This is to ensure that subject terms specifically focus on the curriculum.

4.5.6 Preference for abbreviations

ScOT shall follow this guideline from section 3.6.3.1 in the Standard.

4.5.6.1 Interpretations

The *Standard* states that acronyms and abbreviations *should* be selected as subject terms only when they have become well known in the user community, and when the full form of the abbreviation is rarely used.

Consideration however needs to be given with ScOT subject terms as to whether the abbreviated form of the subject term is well known in the curriculum. If this is not the case then the fuller form of the subject term *may* be preferred with a cross reference from the non preferred abbreviated form. Examples

```
4Ps
USE Marketing mix

ATMs
USE Automatic teller machines

IVF
UF In vitro fertilisation
```

4.5.7 Popular and scientific names

ScOT shall follow this guideline from section 3.6.6 in the Standard.

4.5.7.1 Interpretations

Subject terms in ScOT will be formed of words and phrases that are most appropriate to the users. Popular rather than scientific names will be given preference with the scientific form being used as a cross reference.

4.5.7.2 Examples

```
Apiculture
USE Beekeeping
Beekeeping
UF Apiculture
Ootheca
USE Egg cases
Egg cases
UF Ootheca
```

4.5.8 Proper names

ScOT shall follow this guideline from section 3.6.8 in the *Standard*. See also 4.5.9 in this specification for more on Place names.

Proper names are heavily restricted in ScOT. Proper names are permitted as preferred terms in ScOT provided that they *are not* of the following types:

- Place names
- Personal names
- Organisations
- Programs

Proper names of Organisations or Programs *may* be included as *non preferred* terms if they are close synonyms of preferred terms. For example:

```
International Court of Justice USE International law
```

GST
USE Consumption tax

4.5.9 Place names

ScOT will not include any place names with the exception of those derivatives relating to languages.

4.5.9.1.1 Examples

Australian English Chinese language

4.6 Capitalisation, punctuation, and non-alphabetical characters

ScOT shall follow guidelines from section 3.7 in the Standard.

4.6.1 Capitalisation

ScOT *shall* use sentence case in subject terms (initial word capitalised, others starting with lower case).

4.6.1.1 Interpretations

Section 3.7.1 of the standard recommends use of lower case throughout a term. This recommendation is not adopted in these specifications. Sentence case benefits the alphabetical display of ScOT terms.

Lower case *should* be used in cases where subject terms represent mathematical and scientific formulas and concepts.

4.6.1.2 Examples

e pi

4.6.2 Parenthesis

ScOT shall follow this guideline from section 3.7.2.1 in the Standard. See also Section 4.2.1.

4.6.2.1 Examples

```
Credit (Finance)
Credits (Films)
```

4.6.3 Hyphens

ScOT shall follow section 3.7.2.2 from the *Standard* and TLF editorial guidelines.

4.6.3.1 Interpretation

Sense and clarity (and not system limitations) should inform decisions on use of hyphens. Use a hyphen to clarify meaning where necessary, for example to distinguish between:

```
Short story-writer rather than Short-story writer New-age music rather than New age music
```

After-school care rather than After school care Old-growth forest rather that Old growth forest Cross-section rather than Cross section

Prefixes that do usually take a hyphen include: ex-, non-, and self-.

```
Self-confidence
Non-current assets
```

Prefixes that do not usually take a hyphen include: anti, auto, co, counter, multi, neo, pan, pre, pro, sub and un. If, however, the second word begins with a capital, creates a word that could be confused with one of the same spelling, or creates a run of vowels or consonants that looks awkward, use a hyphen.

Anti-infective drugs Antisocial behaviour Neoclassicism Neo-impressionism

See section 4.5.3 in this specification for spelling authorities.

4.6.4 Apostrophes

Section 3.7.2.3 from the standard is interpreted here. ScOT shall follow this guideline from the *Standard*.

4.6.4.1 **Examples**

Artists' brushes Moh's scale

4.6.5 Diacritical marks

Section 3.7.2.4 from the standard is interpreted here.

ScOT *shall not* follow this guideline from the *Standard* as thesaurus management software used to manage the ScOT files is unable to display diacritical characters. At this stage there is no intention to use diacritics in ScOT.

4.6.6 Other symbols and punctuation marks

Section 3.7.2.5 from the standard is interpreted here.

ScOT shall follow this guideline from ScOT.

4.6.6.1 Interpretations

The following symbols should not be used in ScOT.

```
@ # $ % & + < > ! ? [ ] \{ \} . The following symbols are acceptable:
```

4.6.6.2 Examples

Focus (Optics)
Moh's scale

4.7 Compound terms

ScOT shall follow guidelines from this section in the Standard. See also section 2.2.2.

4.7.1 Interpretations

Consideration of the curriculum and education levels *should* be a major factor when determining when a compound term *should* be split or retained.

The following factors from the guidelines of the *Standard should* be considered:

- 1. Literary warrant whereby a compound term is used so frequently in the curriculum that splitting the subject term would lead to ambiguity.
- 2. "False drops" in searching whereby a compound term obviates errors in retrieval when the same words used in different combinations result in a different meaning. For example the subject term Library science if split into Library and Science when combined in a Boolean search will also retrieve resources about science libraries.
- 3. There will be no cross references to compound subject terms using an inverted non preferred subject term.
- 4. Where appropriate scope notes *may* be used to provide guidance on post coordination of subject terms to represent compound concepts.

4.7.2 Examples

The following examples are terms that *should not* be split into separate descriptors because they have frequent use in curriculum:

Performing arts Literary texts Environmental sciences Mathematical formulas Historical fiction

The following example includes a scope note that provides guidance on how subject terms can be post coordinated to represent compound concepts

```
Extinct mammals
SN See also names of individual extinct mammals
```

4.8 Relationships

ScOT shall follow guidelines from section 5 in the Standard.

4.8.1 Synonyms

ScOT shall follow the guidelines from section 5.2.2 in the Standard that applies to synonyms.

4.8.1.1 Interpretations

The *Standard* states that the subject term that is most commonly known or appropriate for the user group *should* be chosen however for ScOT this will cause some challenges from an educational and cultural perspective.

Given the nature of ScOT and its clientele there are exceptions that will need to be considered in the context of the following guidelines:

- 1. ScOT will adopt as a policy the guideline from the *Standard* that states that if it is possible for a subject to be clearly distinguished within the thesaurus within its own right then it *should* be retained as a preferred subject term.
- Reciprocal scope notes should be used in cases where it is necessary to distinguish similar subjects. The reciprocal scope note shall include a reference to the other term and its application. An indexing note may also be included. See Section 4.2.3 for further guidelines on reciprocal scope notes.

4.8.2 Lexical variants

ScOT shall follow this guideline from section 5.2.3 in the Standard.

4.8.2.1 Interpretations

- 1. Inverted forms of subject terms shall not be used in ScOT.
- 2. Abbreviations *should* only be selected as the preferred subject term when they have become well known within the educational community. A cross reference *shall* be established between the abbreviated and full form of the subject term. The same principle *shall* apply if the abbreviated form of the subject term is not widely known.

4.8.2.2 Examples

```
Acquired Immune Deficiency Syndrome
USE AIDS

AIDS

UF Acquired Immune Deficiency Syndrome
```

4.8.3 Quasi-synonyms

ScOT shall follow this guideline from section 5.2.4 in the Standard.

4.8.3.1 Interpretations

There are two types of quasi-synonyms. The first type are subject terms whose meanings in ordinary usage are regarded as being different, but for the purposes of the thesaurus are treated as if they are synonyms. Subject terms in this type have a significant overlap in meaning. The acceptability of sets of subject terms as quasi-synonyms will be affected by the subject field of the thesaurus, for example a specialist thesaurus on occupational health and safety might not treat the subject terms Industrial injury or Occupational injury as synonymous, whereas in a more general thesaurus such as ScOT they might be.

The second type of quasi-synonym are those subject terms that are antonyms, or subject terms that represent different views on the same property continuum. For example, a search on Literacy might also involve resources that cover both literacy and its antonym illiteracy and therefore the subject terms *should* be treated as quasi-synonyms. However if it is possible to provide a clear distinction between the two opposite subject terms, they *should* both be included in the thesaurus as preferred subject terms. The two subject terms *should* also be related to each other to improve precision.

4.8.4 Generic posting

ScOT shall follow this guideline from section 5.2.4.1 in the Standard.

Generic posting *may* be performed on existing or new preferred terms. Terms treated this way *should* be changed back into preferred terms if high usage of the term in indexing or searching is evident, or if further sibling terms are required for a non preferred term.

Three scenarios are provided below where generic posting is relevant to ScOT.

- 1. Generic posting *may* be performed when a term has no narrow terms, has no sibling terms and is unlikely to gain a sibling term.
- 2. Generic posting *should* be performed when a term has no narrow terms, has no sibling terms and is commonly treated as synonymous with the broader term.
- 3. Generic posting *should* be performed when a term has no narrow terms, has no sibling terms, and has a broader term that *itself* has no sibling terms. Examples of reference structures that have this characteristic are given below:

4.8.4.1 Examples

Purchasing

.Shopping

.. Home shopping

Where Home shopping is the only NT of Shopping, and Shopping is the only NT of Purchasing, the recommended structure is:

Home shopping USE Shopping

Shopping

UF Home shopping BT Purchasing

Agribusiness

- .Farm management
- .. Pasture management

Where Pasture management is the only NT of Farm management, and Farm management is the only NT of Agribusiness, the recommended structure is:

Pasture management USE Farm management

Farm management

UF Pasture management

4.8.4.2 Examples

Hire purchase USE Hiring

... where Hire purchase was the only narrow term of Hiring and it is unlikely that other types of 'hiring' will be added as siblings.

Lava flows
USE Lava

 \dots where Lava flows was the only narrow term of Lava, which is the only narrow term of Volcanic eruptions

```
Back to back stem and leaf plots
USE Stem and leaf plots
```

... where Back to back stem and leaf plots is used synonymously with Stem and leaf plots and is unlikely to gain sibling terms.

4.8.5 Hierarchical relationship

ScOT shall follow this guideline from section 5.3 in the Standard.

4.8.5.1 Interpretations

The hierarchical relationship includes the 'generic relationship', 'hierarchical whole-part relationship', 'instance relationship' and 'poly-hierarchical relationship'. Interpretations of each of these relationships are discussed in this section.

4.8.5.1.1 Generic relationship

The 'generic relationship' (also known as the 'inclusion relationship'), identifies the 'link between a class or category and its members or species' (*Standard*, 5.3.1)

The Generic relationship is amenable to tests, such as:

1. 'Are the subordinate descriptors the same basic type of concept?' For example:

```
Vehicles
NT Road vehicles
Snowmobiles
Tractors
```

'Are road vehicles, snowmobiles, tractors and vehicles all objects/entities?'

- 2. 'Is [narrower term] a type of [broader term]?' For example, 'Is a road vehicle a type of vehicle?'
- 3. 'Are all [narrower terms] also [broader descriptors]?' For example, 'Are road vehicles, snowmobiles' and tractors all vehicles?'

If the answer to all these questions is 'Yes', then the BT/NT relationship is logical. If the answer is 'No' then the term in question should not be in the hierarchy.

4.8.5.1.2 Whole-part relationship

The hierarchical Whole-part relationship (in which 'one concept is inherently included in another' (*Standard*, 5.3.2) provides for relationships between parts and systems of the bodies, geographical locations, disciplines or fields of study, and hierarchical organisations or social structures. Examples include:

```
Biology
NT Botany
Zoology
Respiratory organs
NT Lungs
Nose
```

Note that geographical locations are not controlled in ScOT (section 4.5.9).

4.8.5.1.3 Instance relationship

The 'instance relationship' is the link between a general category of things, expressed by a common noun, and a specific instance of that category, often a proper name (*Standard*, 5.3.3).

Terms that would normally satisfy this relationship and are proper names *shall* not be included as preferred terms in ScOT.

4.8.5.1.4 Poly-hierarchical relationship

When concepts belong, on logical grounds, to more than one category they are said to have a poly-hierarchical relationship (*Standard*, 5.3.4).

It is likely in a whole of knowledge thesaurus that some concepts will have more than one logical parent term. However, structural economy is lost when terms have more parents than needed. Giving consideration to simple reference structures, a term *may* have two Generic relationship parent terms or one Generic relationship and one Whole-part relationship.

Where a term logically has two Whole-part relationships, a new term *should* be created with a parenthetical qualification. For example, where "Wings" logically forms a whole-part relationship with both Birds and Aeroplanes, the following two terms should be created: "Wings (Aeroplanes)", and "Wings (Birds)". The existing unqualified form of Wings is then removed from ScOT.

```
Wings (Aeroplanes)
BT Aeroplanes
Wings (Birds)
BT Birds
```

In this example, the new qualified terms *may* have a further Generic relationship. For example:

```
Wings (Aeroplanes)
BT Aeroplanes
Flight
Wings (Birds)
```

BT Birds
Body parts

4.8.6 Codes for the whole-part relationship

ScOT *shall not* follow this guideline from section 5.3.2.1 in the *Standard* as thesaurus management software used to manage the ScOT files is unable to display these codes.

4.8.7 Codes for the instance relationship

ScOT shall not follow this guideline from section 5.3.3.1 in the *Standard* as thesaurus management software used to manage the ScOT files is unable to display these codes.

4.8.8 Node labels

ScOT shall not follow this guideline from section 5.3.5 and 5.4.3 in the Standard.

The Standard states that node labels may be used to indicate principles of division or association in the hierarchy or associative relationship respectively.

ScOT does not use node labels to indicate principles of division or association. Instead, scope notes are used to indicate either that narrower terms are preferred or to express the nature of association between two associated terms.

4.9 Print display

Section 6 of the *Standard* is largely not relevant to ScOT. There are however some useful exceptions which are outlined below.

4.9.1 Introduction to format

ScOT shall follow this guideline from section 6.3.2 in the Standard.

4.9.1.1 Interpretations

The ScOT website shall be used as a mechanism to provide information about the thesaurus and the project.

4.9.2 Numerals

Numerals shall file at the beginning of ScOT. Section 6.3.5.2 of the Standard indicates that either the beginning or the end are acceptable, provided that this is explained in supporting documentation.

4.9.2.1 Examples

2D animation

2D art

365 day calendar

3D animation

3D art

4 Ps

A effect

ABC

Abdomen

4.9.3 Non alphanumeric characters

ScOT shall follow this guideline from section 6.3.5.3 in the Standard.

4.9.3.1 Examples

ENSO
Enterprise (Psychology)

Enterprise bargaining

4.10 Thesaurus construction and verification

ScOT shall follow this guideline from section 8.5 of in the Standard.

Term records shall be created and edited for all new and revised terms respectively.

Term records requirements *shall* differ for preferred terms and non preferred terms, where the latter are a subset of the former. Where preferred terms are revised and converted into non preferred terms, full term records should be retained in the records. Where non preferred terms are revised and converted into preferred terms, full term records *shall* be created in the records.

Depending on system functionality, some elements may be created automatically by thesaurus management software.

4.10.1 Term records for preferred terms

As a minimum requirement, term records for preferred terms *shall* contain the following elements:

- Descriptor (the term itself)
- Broader terms (BT) unless term is a 'top term'
- Scope note (SN) where a reciprocal scope note exists
- History note (HN)

History notes *shall* include the version number of the addition or revision of the term (eg "5.2"). Revisions for preferred terms include:

- Spelling or punctuation changes
- Addition or subtraction of relationships (e.g. BT, NT, RT).
- Addition, or modification of scope notes
- Change from preferred term to non preferred term

Where multiple history notes are needed (e.g. for an addition and a modification in a later version) version numbers shall be separated with semi colons ";" (see example below).

Note: History notes should not indicate details on whether a version number refers to an addition or modification, or what type of modification. Quality Assurance Summary reports detail corresponding information for each version of ScOT released. History notes provide access to these reports for detailed information on the history of the term.

Limiting history notes to version numbers is a variation from the *Standard* which provides guidelines for adding detailed bibliographic information to history notes. This is because

Quality Assurance Summary reports for each version provide evidence of research and consultation conducted in term development as well as a broader revision context.

Term records for preferred terms *should* contain the following elements:

UF references

Term records for preferred terms *may* contain the following elements:

- Scope note where a term is a homonym or otherwise ambiguous; mandatory where a reciprocal scope note exists.
- Sources consulted for descriptors, either reference to published sources or personal authorities. A reference field may be used to indicate relevant sources.

4.10.2 Examples

```
Semidetached houses UF Duplex houses BT Houses HN 4.6; 5.1
```

... where Semidetached houses was added in version 4.6 and its spelling later modified in version 5.1 from "Semi detached houses" to "Semidetached houses".

```
Cultural imperialism

SN Use for resources on cultural standards imposed upon colonies or dependent territories. For resources about the unforced absorption into any group of certain features of a different culture use Acculturation

UF Cultural domination

BT Cultural interaction

RT Acculturation

...

HN 4.4; 5.1
```

... where a History Note is added because a scope note has been added to the record, and the scope note is mandatory because it is a reciprocal scope note (RT Acculturation).

4.10.3 Term records for non preferred terms

As a minimum requirement, term records for non preferred terms *shall* contain the following elements:

- Descriptor (the term itself)
- History note (HN) 4.10.1
- USE references

Term records for non preferred terms *may* contain the following elements:

- Scope note where a non preferred term has more than one USE reference
- Sources consulted for descriptors, either reference to published sources or personal authorities

4.10.4 Candidate terms

ScOT shall follow this guideline from section 8.6.1 of in the Standard

Spelling authorities mentioned in section 4.3 of this Specification shall be used for verification.

Other indexing languages, including thesauri and classification systems, some of which are listed in 4.5.4 of this specification, should be consulted as basis for term verification.

Expert advice and feedback *shall* be solicited from the ScOT Consultative Group (ScOTCG) which is comprised of representatives from Australian state and territory and New Zealand education jurisdictions. The ScOT Management Group *shall* act in an executive capacity in resolving problematic cases involving selection of descriptors.

4.10.5 Provisional terms

Provisional terms, as defined in 8.6.2 of the *Standard shall* be managed according to specifications for Candidate terms – see section 4.10.4 in this specification.

4.11 Feedback

ScOT is intended to be a frequently updated resource for the education sector. Educational relevance and accuracy benefit greatly from user feedback on the relevance of the subject terms to the curriculum. Key stakeholders are encouraged to participate in the ongoing development and quality assurance of ScOT.

Feedback pathways will be made available within indexing guidelines documentation and also through publicly available websites.