Using ScOT

Guidelines for Indexers and Cataloguers

Report prepared by Education Services Australia Ltd

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Date	Version	Comment	Person
February 2009	1.0	First public release.	Les Kneebone
April 2012	1.1	Updated	Les Kneebone; Steve Sunter; Ben Chadwick
October 2013	1.2	Support for curriculum tagging External references moved into footnotes Other minor changes	Les Kneebone

Contents

Executive Summary

This document contains guidelines for using Schools Online Thesaurus (ScOT)[1] to describe educational resources. ScOT terms are entered into metadata and catalogue records. ScOT is available at: **http://scot.curriculum.edu.au**

1.0 Overview

1.1 When should I use ScOT?

Use ScOT to describe school education resources.

Use of ScOT is especially indicated for resources related to, or that exist because of the Australian Curriculum. ScOT concepts are embedded in Australian Curriculum metadata[2] allowing links to be inferred between resources and curriculum statements.

1.2 What can I describe with ScOT?

ScOT concepts can be used to describe a wide range of school education resources, including:

- School library items

- Electronic resources accessed by school portals

- Curriculum frameworks or elements

- Professional learning services or programs

- Education websites

1.3 What standards support ScOT concept indexing?

ScOT concepts can be referenced in various indexing and cataloguing schemes. Some that are important in the school education sector include:

- Dublin Core[3]

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[1] http://scot.curriculum.edu.au
[2] Example in Appendix D

- MARC 21[4]

- ANZ-LOM[5]

- LRMI[6] (Schema.org[7])

ScOT may also be used as a source of terms for back-of-book indexing.

Some examples are given in the appendix.

2.0 Principles and practices

Controlled vocabularies are used to provide subject access points in bibliographic records. Many collections, such as those held in libraries, use "subject headings", which are similar to thesauri. The Library of Congress Subject Headings is the best known example. A more local example that is familiar in the schools sector is the Schools Catalogue Information Service (SCIS) Subject Headings. ScOT differs from subject headings such as these in structure and purpose.

2.1 The subject indexing process

The subject indexing process involves:

- scanning the resource to determine the subject content
- assessing the predominant themes of the resource
- translating the themes into subject access points by selecting terms from a controlled vocabulary (e.g. ScOT)
- entering the subject terms in the bibliographic record using fields designated in the system's record structure to hold subject access points.

2.2 Main differences between ScOT and subject headings

- In subject heading vocabularies concepts are combined to form a single subject access point. In ScOT, concepts are entered as subject access points in their own right.

    Subject heading approach:

        Birds - Diseases; Frogs - Diseases
    ScOT approach:

        Birds; Frogs; Diseases

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[3] http://dublincore.org/documents/dcmi-terms/
[4] http://www.loc.gov/marc/
[5] National Digital Learning Resources Network (2012). Metadata application profile: ANZ-LOM. Available: http://www.ndlrn.edu.au/standards_for_digital_resources/metadata/metadata_profile.html
[6] http://www.lrmi.net/
[7] http://schema.org/

- Relationships among terms in ScOT are strongly defined and a distinct hierarchy is adhered to in the maintenance of the thesaurus. An awareness of this hierarchy will help you to use ScOT in cataloguing.
- ScOT is a collection of abstract concept types. ScOT terms describe *ideas* rather than *disciplines* – the latter are retained as non-preferred terms.

For example:

Tree rings

Alternative Label   *Dendrochronology*

2.3   Element types

Relationships and other attributes for ScOT concepts include:

Element	Notes	Reference
Preferred Label	Also known as the preferred term. In the web interface, the fieldname 'Preferred label' does not display – only the label is displayed.	http://www.w3.org/2009/08/skos-reference/skos.html#prefLabel
Alternative Labels	Also known as non-preferred terms, 'used for', 'UF or 'see reference'.	http://www.w3.org/2009/08/skos-reference/skos.html#altLabel
Broader Concept	Also known as 'Broader Term', or 'BT'.	http://www.w3.org/2009/08/skos-reference/skos.html#broader
Narrower Concept	Also known as 'Narrower Term', or 'NT'.	http://www.w3.org/2009/08/skos-reference/skos.html#narrower
Related Concept	Also known as 'Related Term', 'RT' or 'see also' reference.	http://www.w3.org/2009/08/skos-reference/skos.html#related
Scope Notes		http://www.w3.org/2009/08/skos-reference/skos.html#scopeNote
URI	Concepts are identified by unique URIs. A numeric code is appended to the URI base to form the full identifier.	http://tools.ietf.org/html/rfc3986

3.0 Searching ScOT

It is a good idea to search widely in ScOT to make sure that you find the best ScOT terms for the subject concepts you have identified.

You can search ScOT via a web interface at http:///scot.curriculum.edu.au (see Figure 1).

You can search ScOT by selecting an autocompleted term from the search box, or browse through the ScOT hierarchy by selecting one of the top concepts on the left hand side.

Figure 1 Homepage

When you select a term you will be directed to the selected concept located at another domain – vocabulary.curriculum.edu.au/scot. Note that the concept URI has this base URL as the prefix and a

numeric code as the suffix, as in http://vocabulary.curriculum.edu.au/**2458**

Figure 2 Concept display

From here you can conduct another search or select hyperlinked terms for Broader, Narrower or Related Concepts.

3.1   Languages

The default language for ScOT is English. All ScOT concepts have one English preferred label. Selected concepts have labels in other languages. To display a label in a given language, or to search for concepts within a given language, first use the language selector on the top right hand side of the page (note you can only search English labels from the ScOT homepage).

ScOT is gradually being expanded to included priority languages identified by ACARA and the other national initiatives. Many lower-level concepts will display "[No label]" when a translation is not available.

3.2   View more

More information may be available for a concept. Some concepts are matched with concepts in other vocabularies such as Library of Congress Subject Headings or DBpedia. Select 'view more' to find more information about ScOT concepts.

4.0   Assigning ScOT subject access points

4.1   Resources on several subjects

For resources on more than one subject treated separately, assign a ScOT term for each topic. (See examples 3 and 7 in Appendix.)

4.2   Resources on many related subjects

For resources that treat many related subjects separately assign one or more broad ScOT terms to represent the diverse subject content of the resource. (See example 9 in Appendix.)

4.3   Assigning broader and narrower subjects

Assigning terms where another assigned term is a descendent is not recommended. Descendent terms are the narrow terms under another term (nt1, nt2, nt3, etc).

In the reference structure illustrated in the example below, neither 'Life' nor 'Ecosystems' should be assigned to a record where 'Habitats' is assigned.

~~Life~~

   ~~NT1: Ecosystems~~

      NT2: Habitats

'Habitats' is NT1 of 'Ecosystems' and NT2 of 'Life'. 'Animal behaviour' is at a higher level than 'Habitats' but it is not a direct parent or grandparent. The relationship between 'Animal behaviour' and 'Habitats' is analogous to that of uncle and nephew. Uncle–nephew terms may be assigned to the same record.

~~Life~~

~~NT1: Ecosystems~~

~~NT2: Habitats~~

~~NT1: Animal behaviour~~

Because all ScOT terms have logical hierarchical relationships, the more specific term should always imply the broader terms above it. However the hierarchies are reviewed and subject to change. Use careful judgement and apply both narrower and broader terms if the narrower term does not adequately imply the broader concept for the indexed item. If assigning the most specific term only does not adequately imply the broader term, both may be selected for the record.

Use the Hierarchy checker tool[8] on the ScOT website to identify hierarchical redundancies in sets of concepts.

Note that "top terms" are rarely assigned to records. Top terms are terms that themselves have no broader terms, such as "Arts", "Mathematics" and "Science". Always consider a more specific term before assigning a top term.

4.4   Subjects not covered by ScOT

As with all controlled vocabularies, some subjects are not covered. They may be regarded as out of subject scope, ambiguous or too specific. For example, proper names are rarely controlled via ScOT. Such terms may enhance retrieval and should be entered into fields where the purpose is to record proper names. If no other fields are relevant, additional terms may be added into an uncontrolled keywords field. (See example 8 in Appendix for a record with uncontrolled keywords.)

ScOT limits the number of compound descriptors and minimises terms representing events or occurrences. The following concept types will not be added to ScOT:

- literary awards and prizes (e.g. "Book of the Year Award")
- compound terms where the components can stand alone (e.g. "Hand in art", "Hindus in Australia", "Field crops and climate", "Flour and flour mills", "Women and Christianity")
- 'language text' headings (e.g. "French language text")
- brand names (e.g. of computers, vacuum cleaners, interactive whiteboards)
- species of plants or animals, breeds of dogs, etc.
- names of legendary, mythical and fictional characters
- named events (e.g. "Battle of Trafalgar", "Newcastle earthquake")
- special days or years (e.g. "ANZAC Day", "International Year of Water Cooperation").

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[8] http://scot.curriculum.edu.au/indexing.asp

Where appropriate, assign a broader term from ScOT. For example, a resource about a Holden Commodore should be assigned the ScOT term "Cars", as there is no provision in ScOT to create additional terms for brands of car.

When potential terms are identified that may represent subject gaps in school curriculum, please send feedback at http://scot.curriculum.edu.au/contact.asp.

6   Appendixes

Appendix A. Dublin Core examples

```
   1.
<dcterms:title>
     <rdf:value xml:lang="en">Easy dressmaking techniques</rdf:value>
</dcterms:title>
<dcterms:subject>
     <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/3884">
       <rdf:value xml:lang="en">Dressmaking</rdf:value>
     </rdf:Description>
   </dcterms:subject>


   2.
<dcterms:title>
     <rdf:value xml:lang="en"> How to play cricket</rdf:value>
</dcterms:title>
<dcterms:subject>
     <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/2765">
       <rdf:value xml:lang="en">Cricket (Sport)</rdf:value>
     </rdf:Description>
   </dcterms:subject>


3.
<dcterms:title>
     <rdf:value xml:lang="en"> Cars, trucks, trains</rdf:value>
</dcterms:title>
<dcterms:subject>
     <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/932">
       <rdf:value xml:lang="en">Cars</rdf:value>
     </rdf:Description>
     <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/7619">
       <rdf:value xml:lang="en">Trucks</rdf:value>
     </rdf:Description>
     <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/5066">
       <rdf:value xml:lang="en">Trains</rdf:value>
     </rdf:Description>
   </dcterms:subject>
```

```
4.
<dcterms:title>
      <rdf:value xml:lang="en"> Australia's whales, dolphins and porpoises
</rdf:value>
</dcterms:title>
<dcterms:subject>
      <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/13300">
        <rdf:value xml:lang="en">Cetacea</rdf:value>
      </rdf:Description>
      <rdf:Description
rdf:about="http://vocabulary.curriculum.edu.au/scot/1296">
        <rdf:value xml:lang="en">Marine habitats</rdf:value>
      </rdf:Description>
    </dcterms:subject>
```

Appendix B. MARC 21 examples

```
5.
Title:       What size is it?
Subjects:    650 _7 $a Size. $2 scot
             650 _7 $a Measurement. $2 scot
6.
Title:       Cansmart [website] : steel can recycling
Subjects:    610 27 $a Steel Can Recycling Council. $2 scot
             650 _7 $a Steel. $2 scot
             650 _7 $a Containers. $2 scot
             650 _7 $a Recycling. $2 scot
7.
Title:       Cars, trucks & trains
Subjects:    650 _7 $a Cars. $2 scot
             650 _7 $a Trucks. $2 scot
             650 _7 $a Trains. $2 scot
8.

Title:       Fairness [chart] : Jane Saville, race walker, Athens bronze
             medallist.
Subject:     650_7 |a Walking. |2 scisshl
             650_7 |a Fairness. |2 scisshl
             650_7 |a Books and reading. |2 scisshl
             650_7 |a Walking. |2 scot
             650_7 |a Athletics. |2 scot
             650_7 |a Fair play. |2 scot
             650_7 |a Books. |2 scot
             653__ |a Race walking
```

Appendix C. LOM examples

The Metadata Application Profile: ANZ-LOM is available from NDLRN website (Education Services Australia, 2012).

```
 9.

- <metadata>
  <schema>IMS Content</schema>
  <schemaversion>1.3</schemaversion>
- <lom xmlns="http://ltsc.ieee.org/xsd/LOM">
- <general><title>
  <string language="en">Life sciences</string>
 -</title>
- <description>
  <string language="en">Includes: organisation, origin and diversity of life,
cells, physiology, anatomy, reproduction, genetics, heredity, evolution,
ecosystems, behaviour, biochemistry.</string>
  </description>
</general>
- <classification>
- <purpose>
  <source>LOMv1.0</source>
  <value>idea</value>
  </purpose>
- <taxonPath>
- <source>
  <string language="en">Schools Online Thesaurus (ScOT)</string>
  </source>
- <taxon>
  <id>http://vocabulary.curriculum.edu.au/633</id>
- <entry>
  <string language="en">Life</string>
  </entry>
  </taxon>
  </taxonPath>
   </classification>
  </lom>
</metadata>
```

Appendix D. Australian Curriculum example

IN this example only the ScOT identifiers are included in the asn:conceptTerms tag. The preferred labels are not themselves stored in the curriculum element record.

```
<rdf:Description
rdf:about="http://rdf.australiancurriculum.edu.au/elements/2012/08/1fbfbead-
cf12-48b9-8a4c-9e4600a2dbbf">
<rdf:type rdf:resource="http://purl.org/ASN/schema/core/Statement"/>
<educationLevel xmlns="http://purl.org/dc/terms/"
rdf:resource="http://vocabulary.curriculum.edu.au/schoolLevel/6"/>
<description xmlns="http://purl.org/dc/terms/" xml:lang="en-au">The growth
and survival of living things are affected by the physical conditions of
their environment</description>
<isPartOf xmlns="http://purl.org/dc/terms/"
rdf:resource="http://rdf.australiancurriculum.edu.au/elements/2012/08/593bf4
94-a404-4057-8cb2-9e4600a2dba8"/>
<statementLabel xmlns="http://purl.org/ASN/schema/core/" xml:lang="en-
au">Content description</statementLabel>
<statementNotation xmlns="http://purl.org/ASN/schema/core/" xml:lang="en-
au">ACSSU094</statementNotation>
<conceptTerm xmlns="http://purl.org/ASN/schema/core/"
rdf:resource="http://vocabulary.curriculum.edu.au/scot/1248"/>
<conceptTerm xmlns="http://purl.org/ASN/schema/core/"
rdf:resource="http://vocabulary.curriculum.edu.au/scot/2500"/>
<conceptTerm xmlns="http://purl.org/ASN/schema/core/"
rdf:resource="http://vocabulary.curriculum.edu.au/scot/4966"/>
<conceptTerm xmlns="http://purl.org/ASN/schema/core/"
rdf:resource="http://vocabulary.curriculum.edu.au/scot/6736"/>
<conceptTerm xmlns="http://purl.org/ASN/schema/core/"
rdf:resource="http://vocabulary.curriculum.edu.au/scot/6739"/>
</rdf:Description>
```