Enhancing the Readiness to Practise of Newly Qualified

Social Workers in Aotearoa New Zealand:

(enhance R2P)

TECHNICAL REPORT ONE

Methods for the creation of Terms for Indexing

Social Work Education in Aotearoa New Zealand

(TISWEANZ)

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Funders

1. Introduction

This document outlines the methods to be used by the enhance R2P (enhance R2P) project to develop a taxonomy of social work education topics. The purpose of the proposed taxonomy is to provide the research team with a common point of reference to support the indexing and analysis of the curriculum documents submitted by the 14 social work education providers in Aotearoa New Zealand. Phase one of the enhance R2P project intends to map the topics included in the social work curriculum of these providers in all of their 19 social work programmes at graduate and postgraduate level. The mapping will be used to explore the commonalities and differences in the Aotearoa New Zealand social work curriculum. In order to do this we have compiled curriculum documents, or course descriptors, used by participants to describe each course in each of their programmes. The analysis of these documents will proceed in three steps. Firstly, we will analyse the course descriptors to identify key educational topics that will be used to create a social work education taxonomy called *Terms for Indexing Social Work Education in Aotearoa New Zealand* (TISWEANZ). Secondly, we will use the taxonomy to index the course descriptors and produce curriculum maps of each institution. Thirdly, we will compare and contrast the resulting curriculum maps and report on the social work curriculum in Aotearoa New Zealand. The remainder of this document explores the method to be used for creating TISWEANZ.

2. Project participants and the core dataset

There are 17 institutions offering programmes recognised by the Social Workers Registration Board (SWRB) of New Zealand. Since some institutions offer more than one recognised programme (a *Bachelor of Social Work* and a *Master of Applied Social Work* for example) there are a total of 22 social work programmes. Fourteen (82%) of the recognised programmes are participating in the enhance R2P study, and between them they offer 19 (86%) of all recognised programmes. Of the 19 programmes included in the study 14 are Bachelor's Degree programmes, two are Bachelor Honours Degree programmes, and three are Master's Degree programmes

The letter of invitation to each participating institution invited them to send relevant curriculum documentation which we defined as:

documents that describe the current curriculum of the programme(s)…The primary

documents of interest are course descriptors that describe each course (including electives)

in terms of their learning outcomes, content, teaching methods and assessment tasks. There

may be other documents that programme contacts consider helpful to the research team

including any documents that describe the relationship between course content and the ten

core competencies of the Social Workers Registration Board. If the curriculum documents

used in your last recognition or re-recognition event are still up to date, this is likely to be

the best source of data.

At the time of writing, over 400 course descriptor documents have been submitted by the tertiary

institutions participating in the enhance R2P study. These documents form the core dataset for

documentary analysis of the *declared curriculum* (this will be complemented by focus groups

designed to explore the *taught curriculum* and the *learned curriculum*). The course descriptors have

been saved in Microsoft Word doc format, labelled with unique file names and ingested into NVivo

for analysis. NVivo will be used to identify key concepts within each document and any synonyms or

equivalent terms used will also be noted. In describing this process Hedden (2016) states that "The

task at this point closely resembles descriptive indexing or cataloguing. In a sense, you are test

indexing the content to see what concepts might be useful for indexing." (p. 83)

3. Developing the taxonomy

In Project Deliverable 2.1 the team scanned the literature on the use of educational taxonomies for

curriculum mapping. In this document we focus on the methods we intend to deploy in order to

create the taxonomy of terms for indexing social work education. We will draw heavily on the *The

Accidental Taxonomist* by Heather Hedden (2016): this is the second edition of a very practical and

widely recognised text on taxonomy development. Hedden (2016, p. 317) suggests that any

taxonomy creation project should address the following questions before it commences: what is the

purpose of the taxonomy? who are the users of the taxonomy? what is the content to be covered by

the taxonomy? what is its topic area, scope and limits? what are the project resources and

constraints? These questions will now be addressed in turn.

Purpose

The primary purpose of the TISWEANZ taxonomy is to ensure the accurate and consistent indexing

of course descriptors with educational topics in order to map, analyse and represent the Aotearoa

New Zealand social work curriculum. However, if developed using a standards compliant format, such as ANSI/NISO Z39.19-2005 (2010), we believe the taxonomy could be used for a wide range of purposes beyond the life of the project, including: the maintenance of programme level curriculum maps, new curriculum research, the administration of social work curricula, sharing of curricular content and the monitoring and improvement of social work curricula.

Users

The primary users of the taxonomy will be the enhance R2P research team indexing and analysing the curriculum documents. However, we intend to publish the taxonomy and make it available to other users. So, secondary users may be other social work educational researchers, social work educators and social work regulators.

Content

The content of the taxonomy will consist of key educational topics, of a middle level granularity[1], used by Aotearoa New Zealand tertiary institutions to describe social work education courses.

Scope

The scope of the taxonomy is focussed narrowly on topics taught in the social work education curriculum by recognised programmes in Aotearoa New Zealand. Most terms will be in English but some terms will be in Te Reo Māori. The taxonomy is not, however, a multilingual taxonomy.

Resources

The project is funded by Ako Aotearoa as a three year project with the taxonomy creation scheduled for year one. Our resources include the time of the social work academic researchers and a specialist library and information science research assistant. The project also has funds to commission a database for the analysis of the course documents.

4. Selecting taxonomy terms

A taxonomy comprises a set of terms and relationships between terms. These terms are labels for the objects and concepts described by the taxonomy and a single object or concept may have multiple terms associated with it. In order to identify the *candidate concepts* for the taxonomy (the

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[1] Granularity is a term used to refer to how fine grained or detailed a concept is in relation to other higher level concepts: so, in an educational context, *psychology* is a high level concept; *stress* is a middle level concept; and *fight-or-flight response* is lower level and more fine grained.

concepts that may eventually be included within it) the team will conduct a *content audit* by reading each of the course descriptors submitted by participants in order to identify possible educational topics for inclusion as terms within the taxonomy.

Hedden (2016, p. 86) suggests that the content reviewer must ask themselves the following questions in relation to any candidate concept: Is the concept within the intended subject area scope of the taxonomy? Is the concept important and something users are likely to look up? Is there enough information on the concept? Do users want and expect the concept to be covered?

Topic inclusion criteria

A Canadian medical education project called Terms for Indexing Medical Education (TIME) identified a set of specific *topic inclusion criteria* to guide those selecting and reviewing concepts for their taxonomy (Willett, Marshall, Broudo, & Clarke, 2007). We have used Hedden's questions above to adapt the TIME topic inclusion criteria and develop our own as follows:

1. The topic is part of the social work education curriculum in Aotearoa New Zealand.
2. The topic is significant enough that a social work educator, student or programme quality assessor might want to search the curriculum to discover where that topic is taught.
3. The inclusion of the topic is likely to meaningfully increase the effectiveness and efficiency of the taxonomy as an index of core educational content.
4. Social work educators want and expect the topic to be included.
5. The topic is of medium level granularity, being neither too broad or too narrow in scope.

Some topics may be added as sub-topics of a given topic. That is, instead of being added as unique items, they might be listed in the description field of the topic making the taxonomy more comprehensive, without making it more cumbersome to use.

Preferred and nonpreferred terms

When reading across more than 400 course descriptors submitted by 14 tertiary institutions it is highly likely that different authors will use different terms to refer to the same concepts, and that, sometimes, different concepts may be referred to with the same term. One of the tasks of the taxonomist is to identify the terms used as synonyms for a concept, and to select which of these should be the *preferred term* and which the *nonpreferred term*. Synonyms are not the only kind of equivalences between terms. Some of the terms identified during the content audit may be terms with alternative spellings, or other variants of the concept. The selection of preferred terms has practical consequences when it comes to representing the curriculum since it is the preferred terms

that will be used to express key curriculum concepts. Hedden (2016) offers several criteria for deciding which term should become the preferred term, but the primary criterion is the wording likely to be used by the primary users of the taxonomy, who, in this case, are the enhance R2P team of social work educators.

For example, in the Social Care Online thesaurus (Social Care Institute for Excellence, 2016) the term *child abuse* has several terms related to it: *abuse of children* and *abused children* are both considered to be synonyms of the preferred term *child abuse*. So, whenever content includes the terms *abuse of children* or *abused children* it is classified using the term *child abuse*. As Hedden (2016) argues, in creating terms, the taxonomist actually has two tasks: firstly, to identify the concepts that make up the taxonomy; and secondly, to select the preferred terms for each of the concepts. Hedden (2016) emphasises that in selecting a preferred term it is important to be clear that this is simply an agreed label for the concept in question, it is important not to confuse the label with the concept. Which term in a set of equivalent terms is selected is highly dependent on the context and the scope of the taxonomy. Hedden (2016) advises the taxonomist to ask themselves "Given the scope of the content covered, can the preferred term always be used to mean this nonpreferred term?" (p. 112)

When there is relative consistency in terms used to refer to a concept, across a series of documents, then the preferred term may be easy to identify. However, where documents are created by a number of different authors, as is the case in the enhance R2P project, then inconsistent term usage is common. In this case there are two other key sources of information to assist the taxonomist with preferred term selection: consultation with subject matter experts; and reference to external documentary sources, especially pre-existing taxonomies, controlled vocabularies and thesauri.

Subject matter experts

In the enhance R2P project the identification of preferred terms will be undertaken by our research assistant (a library and information science professional). However, other team members (who are all experienced social work educators from five different institutions) will be available for consultation about preferred terms. In addition, a draft version of the taxonomy will be made available to all participating institutions for their comment and feedback before the taxonomy is agreed.

External sources

The project research assistant will also refer to three pre-existing controlled vocabularies as a source of disambiguation: the *Library of Congress Subject Headings*; *Ngā Upoko Tukutuku* (Māori Subject

Headings); and the *Social Care Online thesaurus* (UK). The international standards document ANSI/NISO Z39.19-2005 (2010) *Guidelines for the Construction, Format and Management of Monolingual Controlled Vocabularies* will also be referred to for guidance on the format in which terms are expressed (e.g. grammatical form, singular and plurals nouns, capitalization etc.).

Pre-coordinated terms

Sometimes, in a particular subject area, two concepts are used in combination so often that it makes sense to use them together to index and search for content. For example, the Social Care Online thesaurus includes the terms *challenging behaviour*, *intercountry adoption* and *needs assessment.* When two concepts are combined in this way the terms are described as *pre-coordinated terms*. Our TISWEANZ taxonomy will include pre-coordinated terms when they meet the topic inclusion criteria.

Scope notes

Some taxonomies include *scope notes* that offer a brief description of the preferred term. Scope notes tend to be used for a limited number of terms and are especially useful when an indexer may benefit from some clarification about the term in question to ensure consistent usage. Hedden (2016, p. 100) suggests that scope notes can help: to restrict or expand the application of a term, to distinguish between terms with overlapping meaning (the terms involved may have reciprocal notes), to provide advice on term usage. Where it is deemed necessary to clarify the term, TISWEANZ will include scope notes.

5. Deciding relationships between terms in the taxonomy

We have discussed above the importance of identifying preferred terms and nonpreferred or equivalent terms in a taxonomy. There are, however, three different kinds of relationships between terms included in a taxonomy (Hedden, 2016, p. 105):

- *Equivalence*: between preferred and nonpreferred terms (e.g. *attachment* and *bonding*)
- *Hierarchical*: between broader and narrower terms (e.g. *non-custodial treatment* and *electronic tagging*)
- *Associative*: between related terms (e.g. *grief* and *loss*)

When terms with these three kinds of relationships are included in a taxonomy they are normally denoted (as in the Social Care Online thesaurus) with the following labels:

- *Equivalence*: USE/UF (use/use for, indicating the preferred and nonpreferred terms)

- *Hierarchical*: BT/NT (broader term/narrower term)
- *Associative*: RT (related term)

We have already discussed the value of including preferred and nonpreferred terms as a way of ensuring consistency in indexing. Including hierarchical relationships can also support the indexer in selecting the most appropriate level of granularity when indexing content. In the case of terms with a hierarchical relationship, there are three different kinds of hierarchical relationship that are important to distinguish (Hedden, 2016, p. 121):

- *The generic-specific relationship*: where the narrower term *is a kind of* the broader term e.g. a *nurse* is a kind of *health professional*.
- *The instance relationship*: where the narrower term is *a specific instance* of the broader term e.g. *Child Disability Allowance* is an instance of *benefits.*
- *The whole-part relationship*: where the narrower term is within, or is a constituent part of, the broader term e.g. the *Ministry of Social Development* is a constituent part of *Government*

Classifying terms with associative relationships can be a highly subjective practise, although within a particular subject community there is usually a shared understanding of how terms might be related and the inclusion of related terms can serve as a helpful cross reference to support the most accurate indexing and searching. For example, the Social Care Online thesaurus includes as related terms *professional conduct*, *accountability* and *disciplinary procedure*.

The most basic controlled vocabularies include terms with equivalence relationships, most include terms with hierarchical relationship, and some, but not all, include terms with associative relationships. The TISWEANZ taxonomy will include equivalent terms, and where helpful to the purpose of the project (analysing the social work curriculum in Aotearoa New Zealand), it will also include hierarchical terms. Once the content audit process is complete we will consider whether the use of associative terms would be of value to the purpose of the project.

6. Conclusion

This document has highlighted key steps in the method the enhance R2P team will use to create the social work education taxonomy TISWEANZ, and the criteria we will use for term selection. Adhering to a set of clearly articulated methods and processes, and referring to international standards and

guidelines, will help to ensure that TISWEANZ is as robust as possible. However, the development of a taxonomy that is meaningful and relevant to the social work education community in Aotearoa New Zealand will be a highly iterative process, and one that will require careful negotiation and clarification between team members and with our research participants.

References

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