

# **ABSCQ MANUAL CODING SYSTEM**

## **PART 1**

### **OVERVIEW**



**CONTENTS**

<b>TITLE</b>	<b>PAGE</b>
<b>1. Introduction</b>	<b>1 – 1</b>
<b>2. The Coding Strategy</b>	<b>1 – 3</b>
2.1 Principles of the Coding Method	1 – 3
2.2 The Coding Index	1 – 3
2.3 Coding Conventions	1 – 4
<b>3. Recommended Data Items</b>	<b>1 – 5</b>



## 1. INTRODUCTION

The Australian Bureau of Statistics Classification of Qualifications (ABSCQ) was initially developed for use in the 1991 Census of Population and Housing. It has now been adopted as an ABS standard for use in the production and analysis of data on post-school educational qualifications. To enhance comparability of educational statistics from different sources, use of the classification by other agencies involved in the production of statistics on post-school qualifications is encouraged.

The classification is designed for use in the collection and presentation of data on qualifications held by the population of Australia at the present time. Although the classification is based on qualifications currently available in Australia, those previously awarded and overseas qualifications may also be classified to the nearest contemporary Australian equivalent.

The Manual Coding System is based on the principles used to code qualifications in the 1991 Census of Population and Housing. The rules and guidelines are designed to assign a code to the highest qualification held. In cases where the highest qualification cannot be identified, the first qualification named is coded. These rules may be modified to suit different data needs, for example, coding the most recent or all qualifications. However, it is important that the fundamental coding principles set out in the manual are retained to maintain consistency with Census data. Please contact the Classifications, Standards and Dissemination Section of the Australian Bureau of Statistics on (06) 252 5589 on how to modify the rules to suit your needs.

For the purposes of the ABSCQ an 'educational qualification' is considered to be an award for attainment as a result of formal learning, from an accredited post-school institution. Such institutions include TAFE colleges, universities and some private education and training providers. Also included are professional bodies which authorise people to work in particular occupations, such as the various medical colleges which provide training in the post-basic medical specialties. Hospital based nursing awards are also included.

The attributes of qualifications which are of primary interest to users of ABS statistics are the level of the qualification and field in which the qualification is held. Therefore the ABSCQ has been designed to classify an educational qualification according to two main elements:

level of attainment; and

field of study.

The **Level of Attainment** is a function of the quality and quantity of learning necessary to obtain that qualification. These are measured operationally in terms of the following three criteria:

- the minimum amount of prior education needed to undertake the course of study at that level; that is, the minimum entry requirements for the course;
- the duration of the course; and
- the theoretical orientation of the course measured in terms of theoretical, factual and practical learning.

The **Field of Study** refers to the subject matter taught in the course of study leading to the award of a particular qualification. Two qualifications belong to the same broad field of study if the theoretical knowledge which underpins the learning is the same. For practically oriented qualifications which do not generally require large amounts of theoretical learning, factual and practical learning are considered. In developing the structure of the Field of Study Classification the criteria used were:

- *Theoretical content* – this is defined as that part of the subject matter which links facts together to explain other facts and predict outcomes;

- *Purpose of learning* – this refers to the skills and knowledge gained from a course of study; that is, the application of the body of theory learnt;
- *Objects of interest* – these are the things or phenomena studied;
- *Methods and techniques* – these are the specific procedures for applying the knowledge gained in a course of study; and
- *Tools and equipment* – these are the instruments and implements used to apply the methods and techniques of a course of study.

The Field of Study Classification has a hierarchical structure consisting of three levels:

**Broad Field** – the broadest level of the classification. Broad fields are distinguished from each other on the basis of the theoretical content of the course and the purpose of learning, and are denoted by a 1-digit code. There are 9 broad fields.

**Narrow Field** – subdivisions of the broad fields. Narrow fields are distinguished from other narrow fields on the basis of the objects of interest, or the main area of concern. They are denoted by a 2-digit code (the relevant broad field code, plus an additional digit). There are 46 narrow fields.

**Detailed Field** – subdivisions of the narrow fields. Detailed fields are distinguished from other detailed fields on the basis of methods, techniques, and tools and equipment. They are denoted by a 3-digit code (the relevant narrow field plus an additional digit). There are 187 detailed fields.

The following example illustrates these conventions:

<i>Category</i>	<i>Code</i>	<i>Title</i>
Broad Field	4	Society and Culture
Narrow Field	48	Visual and Performing Arts
Detailed Field	486	Drama and Dance

Information on both the Level of Attainment and Field of Study can be provided in the one 4-digit code. The first digit in this code indicates the level of attainment and the last three indicate field of study.

The conceptual basis and the structure of the Classification are discussed in greater detail in the *ABS Classification of Qualifications (ABSCQ) (1262.0)*. For further information about this publication and related floppy disc products contact the Classifications, Standards and Dissemination Section of the Australian Bureau of Statistics on (06) 252 5589.

## 2. THE CODING STRATEGY

The *ABSCQ Manual Coding System* is designed to code both level of attainment and field of study. The coding strategy is designed such that field of study is determined first, then the level of attainment. To ensure that the coding of qualifications data is carried out accurately and consistently, the coding strategy uses a two-stage process.

In the first stage, responses are coded according to a set of formal rules. These coding rules are based on distinguishing **basic, qualifying and level of attainment** words from any given response. The rules are designed to enable the coder to process the data without an in-depth knowledge of the classification structure.

The second stage is applied when data cannot be coded using the first stage principles, i.e. when a response is vague, ambiguous or incomplete. These are known as *queries*. Such responses are referred to query resolution procedures where the coding rules are progressively relaxed. When resolving queries it is necessary to refer to the conceptual basis of the classification, and the level of attainment and field of study definitions, which are found in the *ABS Classification of Qualifications (ABSCQ) (1262.0)*. It is essential to have a good understanding of these definitions, and the classification structure, in order to assign codes to queries.

### 2.1 Principles of the Coding Method

Codes are assigned to qualifications on the basis of the information given in response to questions on the level and field of study of qualifications held. Information about the institution from which a qualification was gained may be used in some cases, particularly where research has shown that this may assist in assigning the most accurate code for the level of attainment. Information on occupation is not required in the coding of qualifications, and should not be used to impute detail about a qualification where a response is ambiguous or incomplete. To do so would introduce bias into the coding process.

The fundamental principle of the coding method is that information from responses can be sorted into **basic, qualifying and level** words, and that these can each be matched with specific parts of an index entry. To reduce the number of queries, specific index entries have been constructed to deal with responses that are not strictly qualification titles, but which are commonly used by respondents. Entries have also been constructed to deal with responses where the information is vague or incomplete.

### 2.2 The Coding Index

The coding index is a comprehensive list of Australian qualifications, and was used to code qualifications data in the 1991 Census of Population and Housing. The wording of the index is based on language commonly used by people to describe their own or other people's qualifications. The index itself is structured such that the basic, qualifying and level words can be easily identified. An example of the index structure is illustrated below:

3121	Systems	, Information	/ management	/ <u>Bachelor</u>
<i>code</i>	<i>basic word</i> (exact match)	<i>, qualifying word</i> (exact match)	<i>/ qualifying word</i> (close match)	<i>/ level</i> (exact match)

The rules governing exact and close matching are described in *Part 2, Section 2.2 Matching Rules*.

For the purposes of coding, the index has been sorted in two ways. *Part 3 Coding Index* of this manual is an alphabetical index which is used for first stage coding procedures. *Part 5 Coding Index: Numerical Order* is a numerically sorted index which is useful when resolving queries.

### 2.3 Coding Conventions

The ABSCQ uses a 4-digit code which is structured so that:

- the 1st digit indicates level of attainment;
- the 2nd digit indicates the broad field of study;
- the 2nd and 3rd digits indicate the narrow field of study; and
- the 2nd, 3rd and 4th digits indicate the detailed field of study.

Example:

A Certificate in Panelbeating has the code 7673.

The first digit indicates the level of attainment; i.e. Level 7 Basic Vocational Qualifications.

The 2nd digit indicates the broad field of study; i.e. Broad Field 6 Engineering.

The 2nd and 3rd digits indicate the narrow field; i.e. Narrow Field 67 Automotive Engineering.

The 2nd, 3rd and 4th digits indicate the detailed field; i.e. Detailed Field 673 Panel Beating.

Codes ending in '9' are allocated to known fields of study which may belong to a particular broad or narrow field of study but which are not common enough to form a distinct narrow or detailed field of study. These are the 'other' or 'not elsewhere classified (nec)' categories. These categories should not be used to code responses which are inadequately described or ambiguous.

Codes ending in '0' are assigned to responses which cannot be coded to the most detailed field of study, but which can be coded to the narrow field of study. Codes ending in '00' are assigned to responses which can only be coded to a broad field of study. Both are described as 'not further defined' (nfd) codes. Codes ending in '000' are assigned to responses where there is absolutely no information about the field of study.

Codes commencing in '0' are assigned to responses which contain no information about the level of attainment of a qualification. Such responses may, however, contain information about the field of study. This information can be legitimately coded.

Codes commencing in '8' are assigned to responses where the information about the level of attainment is not sufficient to assign a code, i.e. the level is *uncodable*. Similarly when the information on field of study is missing or insufficient to code properly, then a code of '888' is assigned to the field of study.

A qualification is defined as an award of attainment from an accredited post-school institution as the result of formal learning. If a response does not meet this definition then it is not within the scope of the classification. Such responses are assigned the code '9989'. Qualifications such as Higher School Certificates and Senior Certificates are out of scope, as are hobby and personal enrichment courses. As information about such qualifications are frequently given by respondents in statistical collections, entries are included in the ABSCQ Coding Index to facilitate the efficient assignment of 'out of scope' codes.



### 3. RECOMMENDED DATA ITEMS

To ensure accurate and consistent coding it is recommended that the following four data items be collected:

- the name of the qualification;
- the main field of study for that qualification;
- the institution from which the qualification was gained; and
- whether the qualification is a trade qualification.

Other information, such as occupation, should not be used in the coding process as there may be no direct correlation between it and educational qualifications.

Information on qualifications can be reported in many different ways. The following are a sample of the different ways it can be reported.

- |    |                        |  |
|----|------------------------|--|
| a) | Name of Qualification: | Associate Diploma in Business Management |
|    | Field of Study:        | -----                                    |
|    | Institution:           | TAFE                                     |
|    | Trade Qualification:   | No                                       |
| b) | Name of Qualification: | Bachelor Degree                          |
|    | Field of Study:        | Geography                                |
|    | Institution:           | Uni of Canberra                          |
|    | Trade Qualification:   | No                                       |
| c) | Name of Qualification: | Certificate in fitting and turning       |
|    | Field of Study:        | fitting and turning                      |
|    | Institution:           | -----                                    |
|    | Trade Qualification:   | Yes                                      |
| d) | Name of Qualification: | Bachelor of Mathematics                  |
|    | Field of Study:        | Linear Algebra                           |
|    | Institution:           | Uni of Newcastle                         |
|    | Trade Qualification:   | No                                       |

It can be seen that sometimes the actual name of a qualification contains both the level of attainment and field of study information, as in examples a), c) and d). In some cases, the level of attainment and field of study information may be reported separately, as in example b). It is also possible that field of study information may be given in both the name of the qualification and the field of study questions, as in examples b), c) and d). There may also be additional level information given as in example c), i.e. it is a trade qualification.

#### Institution Information

Collecting the name of the institution is useful for coding some qualifications. In some instances the name of qualifications from different institutions may appear to be similar but are assessed, according to ABSCQ criteria, as being different levels of attainment. Some index entries include institution words to facilitate accurate coding of such qualifications. Information about the educational institution is also helpful when resolving queries (those responses that cannot be coded using basic procedures).

**Trade Qualification Information**

Collecting specific information about a trade qualification, or asking whether the person has completed an apprenticeship, assists in coding the type of qualification correctly. The term *certificate* is often used in a very general sense when referring to a qualification and to code all *certificates* to either Level 7 Basic Vocational Qualifications, or Level 6 Skilled Vocational Qualifications, would be incorrect. To overcome confusion and inaccurate coding, it is necessary to ascertain whether a certificate is a *trade* qualification (or whether the person has completed an apprenticeship). Many users of qualifications data also require specific information on trade qualifications.