Statistical standard for qualifications

Rationale
Qualifications achieved in education and training are used in combination with other factors in making social comparisons both locally and internationally. The statistical standard for qualifications was developed so that collecting, recording and producing information on qualifications can be consistent for all surveys and administration information. This will mean that qualifications data from two or more sources can be compared. Classifications used to record qualifications in Statistics New Zealand match the classifications of the Ministry of Education, Tertiary Education Commission and the New Zealand Qualifications Authority.

Definition
Qualification
A qualification is:
a formally recognised award for educational or training attainment, where formal recognition means that the qualification is approved by one of the following (or their predecessors):
- New Zealand Qualifications Authority (NZQA)
- Universities New Zealand - Te Pōkai Tara
- Association of Polytechnics of New Zealand Association of Colleges in Education in New Zealand
- approval bodies that have been recognised by NZQA since the release of this standard the recognised overseas authority of a secondary school, profession, academic discipline or trade.

In general, a qualification is defined as requiring full-time equivalent study of three months or greater. Study time is an estimate of the typical time it takes a learner to achieve the learning outcomes of the qualification. This includes direct contact time with teachers and trainers, as well as time spent in studying, assignments and assessment.

Qualification level
A secondary school and post–school qualification must be assigned to one of the 10 levels of The New Zealand Qualifications Framework (NZQF). Secondary school and post–school qualifications can be gained at the same level, for the first four levels, of the NZQF. Levels of qualifications are assigned in two ways: the highest number of credits that are at or above the particular level at which the qualification is awarded for qualifications awarded before the New Zealand Qualifications Framework (NZQF) was introduced the qualification will be assigned to the equivalent level.

Qualification subject
The subject is the main topic or field of study of a qualification. This means that subjects of all courses studied within a qualification are not captured.

'Subject' applies to a post–school qualification, not to a secondary school qualification.

Operational Issues
A qualification that does not meet the minimum three–month full–time study criteria is not included as a qualification for statistical purposes.

Questions for secondary school qualification and post–school qualification must be asked to derive highest qualification.

Qualifications gained overseas or via the Internet
Qualifications gained overseas, or via the Internet, are included if: they are awarded by a recognised authority, and the post–school qualifications meet the minimum three–month full–time study criteria.

Explanatory notes
Explanatory note 1
The definitions used for a qualification in this Standard differ in wording but not intent from The New Zealand Qualifications Framework (NZQF) and The New Zealand Standard Classification of Education (NZSCED) definitions. A requirement of the Standard is to meet statistical reporting requirements which include both the NZQF qualifications and those qualifications awarded before the NZQF was established.

Explanatory note 2
Where qualifications have been granted on the basis of recognition of prior learning, the study time is the amount of time it would have taken a learner to achieve the same level of knowledge through formal study. On–the–job training is counted as study time towards some qualifications, for example, apprenticeships.

Explanatory note 3
Secondary school qualifications can no longer be assumed to be gained at a lower level than post–school qualifications. Levels 1 to 4 of the NZQF are used to classify both secondary school and post–school qualifications.

Explanatory note 4
The highest qualification output is derived from school and post–school qualifications. As the levels for school qualifications overlap with post–school qualifications, there will be no separation of secondary school and post–school qualifications in highest qualification output. However, separate input questions will continue to be used.

Explanatory note 5
There is the possibility of output for post–school qualifications Levels 1 to 3 as three separate categories instead of the one former 'basic vocational qualification' category.

Explanatory note 6
Primary school qualifications are not included as a qualification for secondary school or for highest qualification.
**Classification criteria**
Qualifications are classified by level and by subject.

**Qualification level**
The NZQF qualification level and level criteria can be found on the New Zealand Qualifications Authority's website.

- **Level** http://www.kiwiquals.govt.nz/about/levels/index.html
- **Criteria for level** http://www.kiwiquals.govt.nz/about/levels/leveldescriptors.html
- **NZQA homepage** http://www.nzqa.govt.nz/

**Qualification subject**
Classification criteria used for New Zealand Standard Classification of Education – Field of Study (NZSCED), the subject classification, are available on the Ministry of Education's (MoE) website.

- **Descriptions of NZSCED categories all levels** http://www.minedu.govt.nz/index.cfm?layout=document&documentid=4418&data=l
- **MoE website address** http://www.moe.govt.nz/

**Classifications**

**Qualification level**
The New Zealand Qualifications Framework (NZQF) is the classification used to record the level of the qualification. Note: NZREG refers to the classification abbreviation. The classification is a flat classification with 12 categories — excluding residual categories.

Note: The NZQF is a classification developed by the Tertiary Education Commission, NZQA and MoE. Any proposals for change to the NZQF by Statistics New Zealand would need to be made to these agencies.

**Qualification subject**
The New Zealand Standard Classification for Education – Field of Study is a hierarchical classifications of three levels. Excluding residual categories level 1 (broad fields) has 13 categories, level 2 (narrow fields) has 72 categories and level 3 (detailed fields) has 379 categories.

Note: Statistics New Zealand includes macrons for Maori spelling in this classification and these may not appear in other publications of this classification.

The residual categories for both classifications are defined in the Glossary.

**Qualification level**

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**Education field of study**

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**Coding Process**

**Codefile**
A codefile is a comprehensive list of probable survey responses and the classification categories to which they are coded. The qualification level codefile for NZREG contains qualifications such as 'journeyman' and 'Pitman's certificate'. The subject codefile for NZSCED contains subjects such as 'acting' and 'diving'.

**Coding qualification level**

**Secondary school qualifications**
A secondary school qualification completed after leaving school is classified as a secondary school qualification, not a post-school qualification. A secondary school qualification can be awarded for Levels 1 to 4 of the NZQF.

**Post-school qualifications**
A post-school qualification that does not meet the minimum three-month full-time study criteria will be included in the 'no qualification' category.

All levels of the NZQF apply to post-school qualifications.

Overseas post-school qualifications will be coded to equivalent levels of the NZQF.
Where a qualification can be awarded over more than one level of the NZQF the subject needs to be identified for appropriate coding of the level.

Post-school qualifications awarded before the introduction of the NZQF will be coded to equivalent qualification levels. As names of qualifications may be very similar, care is needed when coding written responses. For example, not all diplomas are coded to levels five and six. A 'master' written response may mean shipping master, rather than Masters degree. (examples Appendix 1 level 4).

Insufficient detail may be given about the level of the qualification to allow the NZQF level to be ascertained. The subject of the qualification may help in indicating the appropriate level. A 'certificate' written response does not necessarily indicate unidentifiable, the subject requires checking as it may be able to be coded appropriately. For example, Banking Certificate is coded to level four. (see Appendix 1 for more examples).

Coding of common responses: see Appendix 1 (in draft form awaiting confirmation from approval bodies)

**Coding qualification subject**

Qualification subjects with insufficient detail to code at the lowest level of NZSCED are coded to a 'not further defined' category. For example, an engineering response is not detailed enough to code in a specific engineering category and would be coded to Broad Field 03. At the lowest level, Detailed Fields it is called Engineering and Related Technologies not further defined.

Unless there is something to indicate otherwise the following subjects should be coded as described.

**English**

University qualifications in 'English' should go to field of study 091523 Literature rather than to English language.

**Māori**

Qualifications in 'Māori' should go to 091502 Te Reo Māori rather than Māori customs.

**Nursing**

Qualifications in 'nursing' should go to 060301 Nursing rather than Nursing nfd.

**Retailing**

Qualifications in 'retailing' should go to 080501 Sales.

**Word processing, spreadsheets, database, etc**

Qualifications in 'word processing', 'spreadsheets', 'database', etc should go to 080904 Text Processing and Office Tools.

**Multiple response**

When multiple responses are given to a question asking for highest completed secondary school or post-school qualification, then the highest of the qualifications should be recorded.

**Derived variables**

The variable ‘highest qualification’ is derived from the responses to the highest secondary school qualification and the highest post-school qualification.

**Questionnaire module**

**Requirements**

The essential points from the definition that need to be included in the question are: that a qualification is completed that it meets the minimum three months of full–time study or equivalent, for inclusion.

**Qualification level**

A requirement for the collection of the qualification level is that people identify the level of their qualification(s) or provide detailed information that leads to accurate coding of level. Separate questions are required for the secondary school and the post–school qualification questions. This enables separate output for secondary school qualifications and for post–school qualifications as both can be awarded to NZREG Levels 1– 4.

**Qualification subject**

The questionnaire module needs to clearly indicate that a detailed subject of the post–school qualification is required. For example, a response of 'engineering' to the question is not detailed enough, as the field of engineering is sought, eg 'transport engineering'.

**Highest qualification**

No direct question is asked for 'highest qualification'. The highest qualification is derived from the responses to the secondary school and post–school questions.

**Example**

The questionnaire module below is an example that meets the requirements documented in this statistical standard. Other questionnaire modules may vary in format but should conform to the requirements contained in this statistical standard.
Minimum requirement for collection

The collection of qualifications to the level of detail required by the NZQF classification may not be achievable for some surveys. A minimum requirement for collection of post-school qualifications levels of the NZQF is:

No Qualification
Levels 1-3
Standard output
Standard output will be used for the Census of Population and Dwellings and other large surveys where there is sufficient data for each of the NZQF categories.

NZREG
Standard output for post-school qualification
Level 1 Certificate
Level 2 Certificate
Level 3 Certificate
Level 4 Certificate
Level 5 Diploma
Level 6 Diploma
Bachelor Degree & Level 7 Qualification
Postgraduate & Honours Degrees
Masters Degree
Doctorate Degree
No Qualification
Not Elsewhere Included

A footnote to explain what qualifications are contained in the Level 1 to 6 categories may be required (footnote to be included once confirmed with stakeholders).

Alternate standard output for post-school qualification
Level 1
Level 2
Level 3
Level 4
Level 5
Level 6
Level 7
Level 8
Level 9
Level 10
No Qualification
Not Elsewhere Included

Standard output for secondary school qualifications
Fifth Form Qualification
Sixth Form Qualification
Higher School Qualification
Overseas Secondary School Qualification
No Qualification
Not Elsewhere Included

Alternate standard output for secondary school qualifications
Level 1 Certificate
Level 2 Certificate
Level 3 or 4 Certificate
Overseas Qualification
No Qualification
Not Elsewhere Included

Standard output for highest qualification
Level 1 Certificate
Level 2 Certificate
Level 3 Certificate
Level 4 Certificate
Level 5 Diploma
Level 6 Diploma
Bachelor Degree & Level 7 Qualification
Postgraduate & Honours Degrees
Masters Degree
Doctorate Degree
Overseas Secondary School Qualification
No Qualification
Not Elsewhere Included

Alternate standard output for highest qualification
Level 1
Level 2
Level 3
Level 4
Level 5
Level 6
Level 7
Level 8
Level 9
Level 10
Overseas School Qualification
No Qualification
Not Elsewhere Included

**Aggregated levels for survey output**
Categories may be combined for output when there is insufficient data to output all of the NZQF categories for highest qualification and post-school qualifications. This output will be compatible with ISCED requirements.

Level 1 – 3 Certificate
Level 4 Certificate
Level 5 & 6 Diploma
Level 7 Bachelor Degree
Level 8 & 9 Postgraduate Degree
Level 10 Doctorate Degree
Overseas Secondary School Qualification
No Qualification
Not Elsewhere Included

For some sample surveys, output may need to be further aggregated for confidentiality and data quality reasons. Where possible the standard output should be used.

**NZSCED**

**Standard output for post–school qualification subject**
Natural and Physical Sciences
Information Technology
Engineering and Related Technologies
Architecture and Building
Agriculture, Environmental and Related Studies
Health
Education
Management and Commerce
Society and Culture
Creative Arts
Food, Hospitality and Personal Services
No Qualification
Not Elsewhere Included

Note: NZSCED Category 12 Mixed Field Programmes is not used to code qualifications and so is not standard output for qualifications. This category is used to describe courses for social and employment skills.

The residual categories may be output separately or combined. Where a combination item of residuals is to be used in output, this item should be labelled ‘not elsewhere included’ and should have a footnote indicating its composition.

The residual categories for both classifications are defined in the Glossary.

**Related classifications and standards**

**New Zealand**
The New Zealand Qualifications Framework (NZQF) was developed by the New Zealand Qualifications Authority and the Ministry of Education. Statistics New Zealand has adopted this level of attainment classification to be in line with the education sector.

When the qualification level output is required by subject, the subject classification, NZSCED, is linked to the level of attainment classification, NZREG.

The New Zealand Qualifications Framework (NZQF) can also be used as a codefile for currently registered qualifications, for both level and subject.

**International**

**Qualification subject**
The New Zealand Standard Classification for Education – Field of Study NZSCED is the result of a combined development effort between the MoE, SNZ and the ABS. This classification is matched with the ABS's ASCED – Field in the top level categories, Broad Field and Narrow Field, and in all but a few of the lowest level categories.

**Qualification level**
NZREG is comparable for post-school qualifications with both ASCED – Level and ISCED – 1997.
Note: NZREG is not comparable for all ASCED school levels. ASCED – Level contains school and preschool levels that have no New Zealand equivalents. ASCED also provides a separate category for non-award and not identifiable responses. These responses are placed in 'no qualification' and 'not identifiable' in the NZREG classification.

Glossary

Residual categories

Not elsewhere classified classification category
A ‘not elsewhere classified’ (nec) qualification category contains qualification responses that are infrequent or unanticipated. These categories never appear within classifications as stand-alone descriptors, but are combined with descriptors, often taken from a higher level in the classification. For example, BSc Environmental Biology would go to Biological Sciences nec. Not further defined classification category
A ‘not further defined’ (nfd) category contains responses that cannot be coded to the most detailed level of the classification but can be coded to a higher level of the classification. For example, computing is a broad subject area and would go to 020000 Information Technology nfd.

Don’t know
The use of this category is necessary when the person is unsure of their qualification or writes this in as a response.

Refused to answer
This category is only used when it is known that the respondent has purposefully chosen not to respond to the question. Use of this residual category in processing is optional. Its use is most applicable in face–to–face or telephone interviews, but may be used in self–completed questionnaires if the respondent has clearly indicated they refuse or object to answering the question.

Repeated value
This category is used when a respondent has given two responses that have the same code. This may be two written responses, or one tick box response and one written response. For example, if a tick box question is used, someone may tick the Bachelor Degree tick box and write in ‘Level 7 graduate diploma’.

Response unidentifiable
This category is used when there is a response given, but: the response is illegible it is unclear what the meaning or intent of the response is – this most commonly occurs when the response being classified contains insufficient detail, is ambiguous or is vague the response is contradictory for example, ‘no qualification’ is indicated as well as a qualification given.

Response outside scope
This category is used for responses that are positively identified (ie the meaning and the intent are clear) but which clearly fall outside the scope of the classification/topic as defined in the standard.

Not stated
This category is only used where a respondent has not given any response to the question asked; that is, it is solely for non-response.

Concordance
A file that matches the categories of one classification to another. The concordance enables comparison of data between different classifications.

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<td>ASCED</td>
<td>Australian Standard Classification of Education (ASCED) 2001</td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education –1997</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>National Qualifications Framework</td>
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</table>

References

Appendix 1 – coding common responses, by level and qualification

**Coding by level**

**Level 10**
PhD, Surgeon, Physician, Fellow of the Royal Australasian College (Ophthalmology, Surgeon), FRACS, FRACP, FRNZGP, FRANZCP, FRCOG, FANZCA, DPhil are coded to level 10.

**Level 9**
MA, MBBS, LLM, MEd, MPhil, Masters and MBA are assigned to level 9.

**Level 8**
LLB Hons, BA Hons, BSc Hons, BCA Hons, MRCGP, and Post-graduate are coded to level 8.

**Level 7**
Chartered Accountant, Civil Engineering, Degree, University Degree, Dental Surgery, BA, BSc, ACA, BCA, BEd, BBS, BDS, BFA, BCom, BVSc, MBChB are coded to level 7.

**Level 6**
Technician Certificate (in any subject), Advanced Trade Certificate, NZIM Certificate, Registered Electrical Technician, Associate of Management Institute NZ, Marine Engineer Class 1, Engineer First Class, QTA, ANZIM, HNC, and NCB are assigned to level 5.

**Level 4**

Note: Modern apprenticeships (from 2000) can be awarded at level 3 and level 4.

**Coding of multilevel qualification titles**

**City and guilds**

**Level 2**
City and Guilds Alcoholic Beverages Certificate
City and Guilds Waiting Table Certificate
City and Guilds Certificate

**Level 3**
City and Guilds Catering Certificate
City and Guilds Cookery Certificate
City and Guilds Cooking Certificate
City and Guilds Baking Certificate

**Level 4**
City and Guilds Metal Fabrication
City and Guilds Steel Making
City and Guilds Trade Certificate
City and Guilds Craft Certificate

**Level 5**
Advanced City and Guilds Certificate

**Pitman's certificate**

**Level 2**
Pitman's Typing Certificate
Pitman's Typing and Shorthand Certificate

**NZ certificate**

**Level 1**
Caregiver Family Day Care NZ Certificate

**Level 3**
Office Systems NZ Certificate

**Level 4**
Engineering Workshop Practice NZ Certificate
Science Intermediate NZ Certificate
Level 6
NZ Certificate is coded to level six if the subject is a science, architectural draughting or an engineering field, including electro-technology but excluding engineering workshop practice. 'Intermediate NZ Certificates' are not coded to this level.

National certificate if no level is given
Level 2
National Certificate in Computing
National Certificate in Business Administration and Computing
Level 4
National Certificate in Horticulture

Coding by qualification
ACA (L7)
Advanced Diploma in Teaching (L6)
Advanced Trade Certificate (L5)
Agriculture Diploma (L6)
ANZIM (L5)
Apprenticeship (gained before 2000) (L4)
Associate of Management Institute NZ (L5)
Automotive Engineering (L4)
BA (L7)
BA Hons (L8)
Banking Certificate (L4)
BBS (L7)
BCA (L7)
BCA Hons (L8)
BCom (L7)
BDS (L7)
BED (L7)
BFA (L7)
BSc (L7)
BSc Hons (L8)
Business Studies Diploma (L6)
BVS (L7)
Chartered Accountant (L7)
Civil Engineering (L7)
Civil Engineering Certificate (L4)
Comprehensive Nursing Diploma (L6)
Craftsman Plumber (L4)
Degree (L7)
Dental Surgery (L7)
Early Childhood Education Teaching Diploma (L6)
Education Diploma (L6)
Engineer First Class (L5)
Engineering Electro-Technology NZ Certificate (L6)
Enrolled Nurse (L4)
FANZCA (L10)
Farm Management Diploma (L6)
Fellow of the Royal Australasian College (Ophthalmology, Surgeon) (L10)
Fine Arts Diploma (L6)
Fitting and Turning (L4)
Foreign Going Master (L4)
FRACP (L10)
FRACS (L10)
FRANZCP (L10)
FRCOG (L10)
FRNZGP (L10)
General and Obstetric Nurse (L6)
Graduate Diploma (L7)
Higher Diploma Teaching (L6)
HNC (L5)
Home Science Diploma (L4)
Horticulture Diploma (L6)
IATA UFTAA Diploma (L4)
Intermediate NZ Certificate in Science (L4)
Journalism Diploma (L6)
Karitane Nurse (L4)
Legal Executive Certificate (L4)
LLB (L7)
LLB Hons (L8)
LLM (L9)
MA (L9)
Marine Engineer (L4)
Marine Engineer Class 1 (L5)
Master Builder (L4)
Master Mariner (L4)
Masters (L9)
MBA (L9)
MBBS (L9)
MBChB (L7)
MEd (L9)
Motor Mechanic (L4)
MPhil (L9)
MRCGP (L8)
National Diploma in Business Computing (L6)
NCB (L5)
Nursing Diploma (L6)
NZ Coastal Master (L4)
NZ Diploma (L6)
NZ Diploma Business (L6)
NZ Kindergarten Teaching Diploma (L6)
NZ Library Studies Certificate (L4)
NZIM Certificate (L5)
Occupational Therapy Diploma (L6)
Pharmacy Diploma (L6)
PhD (L10)
Physician (L10)
Physiotherapy Diploma (L6)
Post-graduate (L8)
Professional Cookery Certificate (L4)
QTA (L5)
Qualified Butcher (L4)
Register Builder (L4)
Registered Electrical Technician (L5)
Registered Electrician (L4)
Registered Midwife (L6)
Registered Nurse (L6)
Registered Plumber (L4)
Registered Surveyor (L4)
School Dental Nurse (L6)
Secretarial Diploma (L4)
Social Work Diploma (L6)
Supervisory Management Certificate (L4)
Surgeon (L10)
TCB (L4)
Teacher’s Certificate (L6)
Teaching Diploma (L6)
Technician Certificate (in any subject) (L5)
Trade Certificate (L4)
Trained Primary Teacher (L6)
Trained Teacher’s Certificate (L6)
Travel and Tourism Diploma (L6)
University Degree (L7)
University Diploma (L6)