

## Skill within ANZSCO

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The Australian and New Zealand Standard Classification of Occupations (ANZSCO) is a skill-based classification of jobs in Australia and New Zealand. As skill is used to form occupation groups<sup>1</sup>, it is important to ensure this aspect remains relevant in an ever-changing labour market.

ANZSCO is applied to a range of data sets within the ABS, including the Census of Population and Housing and the Labour Force Survey. It is also used to inform policy driven decisions by governments in areas such as skilled migration, apprenticeship incentives and funding for education and training.

### **Skill, skill level and skill specialisation**

ANZSCO defines skill 'as a function of the range and complexity of the set of tasks performed in a particular occupation. The greater the range and complexity of the set of tasks, the greater the skill level of an occupation.' It is a function of both skill level and skill specialisation.

#### *Skill level*

Skill level is measured by evaluating the following

- ✓ the level or amount of formal education and training
- ✓ the amount of previous experience in a related occupation, and
- ✓ the amount of on-the-job training

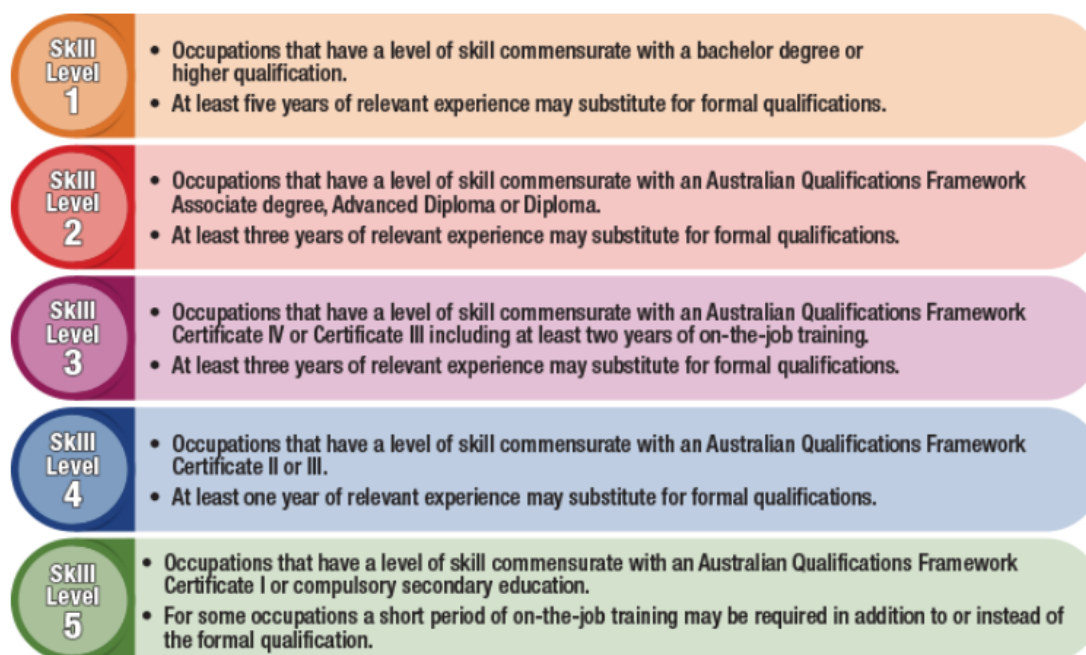
to competently perform the set of tasks required of that occupation. Each occupation in ANZSCO is assigned one of five skill levels. The skill level is centred around the occupation and not the individual undertaking the occupation.

There are five skill levels within ANZSCO (Diagram 1), and each occupation is assigned only one skill level. In Australia, skill level is defined by the Australian Qualifications Framework (AQF) and years of relevant experience. The assignment of skill level to an occupation is based on advice from employers, industry training bodies and professional organisations.

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<sup>1</sup> Skill (defined as skill level and skill specialisation) is the criteria which distinguishes a Chief Executive Officer (part of the first occupation group, in Major Group 1) from a Trolley Collector (part of the last occupation group, in Major Group 8).

Diagram 1: ANZSCO's five skill levels



### *Skill specialisation*

Skill specialisation is defined as a function of the following

- ✓ **field of knowledge required** – this refers to the subject matter knowledge that is essential to undertake the tasks associated with the occupation competently.
- ✓ **tools and equipment used** refers to all forms of plant, machinery, computer-based equipment or hand tools used to undertake the tasks associated with the occupation. This includes intellectual tools such as personal interaction, and art or design techniques.
- ✓ **materials worked on** refers to both tangible and abstract in nature which are extracted, processed, transformed, refined or fabricated as an essential part of the tasks performed.
- ✓ **goods and services produced or provided** refers to the end product of the performance of the task of an occupation, this includes physical goods, personal, or other services or products such as software application or statistical information.

By way of example, occupations with skill level 1 are assigned to Major Group 2 (Professionals) if their field of knowledge relates to one of thirteen fields of knowledge<sup>2</sup>. All other occupations with skill level 1 are assigned to Major Group 1 (Managers).

### **The use of skill within international occupation classifications**

ANZSCO is based on the International Standard Classification of Occupations 2008 (ISCO-08). The ISCO-08 is a skill-based classification which seeks to provide a basis for international comparison of occupation

<sup>2</sup> arts, media, business, design, engineering, the physical and life sciences, transport, education, health, information and communication technology, the law, social sciences and social welfare

(<https://www.abs.gov.au/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/2021/browse-classification/2>)

statistics. The examples of United Kingdom, United States, and Canada are described below and suggest skill is not universally used to form occupation groups.

The United Kingdom's Standard Occupational Classification is also based on the ISCO-08. Its occupation groups are based on skill level and skill specialisation, but it only utilises four skill levels. Skill is determined by how long it takes a person to become fully competent to undertake a given task. This includes the time it takes to gain necessary qualifications or on the job training to undertake the role competently. Skill specialisation is also used to form occupation groups.

The United States occupation classification is also based on the ISCO-08. Occupations are based mainly on work performed, and at times, skills, education, and training required to perform a task. Skill is not always utilised to classify occupations and the Standard Occupation Classification (SOC) covers all workers who work for pay or profit. Skill is only used when workers have more than one occupation and are therefore classified to the occupation that requires the highest level of skill. If there is no measurable difference in the skill required to undertake both jobs, they are then classified to the occupation in which they spend the most time.

Canada's National Occupation Classification (NOC) originally formed occupation groups in a similar manner to ANZSCO. In 2021, the NOC was redesigned and moved away from the traditional skill classifications. The original NOC contained four skill levels, however stakeholders indicated these created confusion. The current NOC forms occupation groups based upon six categories which attempt to capture differences in occupational requirements. These categories are based on the degree of training, education, experience, and responsibilities.

## **Reviewing ANZSCO's reflection of skill**

The ABS has received feedback that the current reflection of skill within ANZSCO does not meet all requirements of stakeholders. The five key areas of concern identified to date:

1. The pace of movement in the labour market and changes to skill (including de-skilling of some occupations) means skill assigned to many occupations within ANZSCO does not reflect the current labour market.
2. Micro credentials, prior on-the-job training, "employability skills", and other training outside the AQF are not adequately reflected in ANZSCO.
3. ANZSCO currently describes tasks using non-uniform language and inconsistent terminology. These do not map directly to skills identified in other frameworks such as the Australian Skills Classification.
4. Occupations with similar underlying skills cannot be identified as skills lack visibility within ANZSCO. ANZSCO does not ably support identification of job pathways or mobility across occupations based on skill.
5. Skill level and skill specialisation lack sufficient detail to reflect the range of skills and competencies required to undertake a particular occupation.

The ABS is consulting with stakeholders to determine whether ANZSCO reflects the skill required to undertake occupations in the modern workforce. The ABS has received feedback that some recent changes to an occupation's requirements cannot be easily reflected within the current classification. An example is an occupation which requires micro credentials in 2022 but had no formal education

requirements in 2006<sup>3</sup>. Other challenges include reflecting increased automation of tasks and/or use of artificial intelligence within ANZSCO's definition of skill specialisation.

The ABS is also consulting to determine whether other frameworks for skill should be reflected in ANZSCO. An example is the Australian Skills Classification compiled by the National Skills Commission. This classification is intended to be a 'common language' for skills which provides ways to explore the connections and transferability of skills between jobs. The Australian Skills Classification currently relates to a subset of ANZSCO's occupation and is being developed by the National Skills Commission to achieve full coverage.

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<sup>3</sup> ANZSCO was first published in 2006.

