

Highest Level of Post-School Qualifications
Occupational Major Group by Age
and Total Employed Workforce by Age
– tables downloaded from www.jobmarkets.com.au –

As with the long-term trend for attainment of higher levels of schooling, the levels of post-school qualifications for employed persons have been increasing for many years in all occupational major groups and hence in the total employed workforce. In this paper, tabular analysis of cross-tabulated statistics from the *2021 Population Census* documents the post-school qualifications trend for these aggregates. It gives a comparative backdrop to the analysed statistics on post-school qualifications by selected age-group in each of the more than 1,060 occupations in the *Job Markets Australia* database on www.jobmarkets.com.au.

As shown on page 4, the highest post-school qualification most often acquired by those aged 50 to 69 in the total employed workforce is the Certificate III and IV level, which is primarily held by trades workers, but in the younger age-groups a bachelor degree is the most common post-school qualification, after which is the Certificate III and IV level. In the younger age-groups about two-thirds of those holding the latter qualification are not in the Technicians and Trades Workers major group but in aged care, administration and office work, and other non-trades employment.

The relevant Census question asked respondents to record the level of the highest qualification they had completed, along with the field of study. Statistical analysis of cross-tabulated tables with highest qualification level, the field of study, occupation, and age-group, among other Census variables, would be of great assistance to occupational researchers, careers advisers, and policy makers and, most importantly, for current and future job-seekers and career planners. Unfortunately, it is not included in *Job Markets Australia*, and it has not, to my knowledge, been undertaken and published for the 1,000 plus detailed ANZSCO occupations. The research would be time-consuming and calls for sound understanding of the key variables of occupation and fields of study, as well as usual and frequent career paths by occupation and industry.

Fortunately, there is a research report that makes effective use of the Australian Bureau of Statistics' *Qualifications and Work* survey in 2018-19. The research report, *The stock of qualifications in Australia*, was written by Michelle Hall and John Stanwick and dated 17 June, 2021, 978-1-925717-68-6.

It was accessed at <https://www.never.edu.au/research-and-statistics/publications/all-publications/the-stock-of-qualifications-in-australia> on 20 July, 2023. Whereas the Census qualification questions pertain solely to the highest level attained and the field of study, the 2018-19 survey, a *Labour Force* supplementary survey, and the research report took account of up to five post-school qualifications and the associated fields of study for each survey respondent, and the research also included six handy case studies, five being unit group occupation such as Aged and Disabled Carers and ICT Professionals a sub-major group. These were large enough to permit sufficiently robust survey data.

While the Bureau's online release for the survey considers occupational major groups, the item list for DataLab and TableBuilder Data indicates the considerable potential for more unit group occupations and even detailed (six-digit) occupations to be added, subject to confidentiality, as would commissioned tables. The three-way cross-tabulation would be far more complex, but would very likely yield insights hitherto unseen. The survey is at <https://www.abs.gov.au/statistics/people/education/qualifications-and-work/2018-19>, accessed on 21 July, 2023.

Highest Level of Post-School Qualifications, Occupational Groups and Total Employed Workforce, by Selected Age-Groups, Australia, as at Augsut, 2021

<i>Managers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	9,015	57,040	67,641	65,774	199,470	8.5%	17.7%	18.9%	17.0%	17.0%
Graduate Diploma or Graduate Certificate Level	2,812	14,520	20,451	25,113	62,896	2.7%	4.5%	5.7%	6.5%	5.4%
Bachelor Degree Level	48,665	135,369	137,140	117,555	438,729	46.1%	42.0%	38.3%	30.4%	37.4%
Advanced Diploma or Diploma Level	15,789	52,450	65,666	83,747	217,652	15.0%	16.3%	18.4%	21.6%	18.6%
Certificate III or IV Level	29,139	62,507	66,789	94,904	253,339	27.6%	19.4%	18.7%	24.5%	21.6%
Certificate I or II Level	33	74	93	178	378	0.0%	0.0%	0.0%	0.0%	0.0%
All Post-School Qualifications	105,453	321,960	357,780	387,271	1,172,464	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Professionals</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	89,554	216,054	161,021	152,464	619,093	18.4%	27.0%	25.6%	22.7%	24.0%
Graduate Diploma or Graduate Certificate Level	21,089	59,882	55,841	71,236	208,048	4.3%	7.5%	8.9%	10.6%	8.1%
Bachelor Degree Level	332,786	442,826	324,112	308,252	1,407,976	68.5%	55.4%	51.6%	45.9%	54.5%
Advanced Diploma or Diploma Level	22,873	50,532	59,245	100,037	232,687	4.7%	6.3%	9.4%	14.9%	9.0%
Certificate III or IV Level	19,447	29,575	27,916	39,366	116,304	4.0%	3.7%	4.4%	5.9%	4.5%
Certificate I or II Level	32	36	42	112	222	0.0%	0.0%	0.0%	0.0%	0.0%
All Post-School Qualifications	485,781	798,905	628,177	671,467	2,584,330	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Technicians or Trades Workers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	6,585	13,137	7,235	4,998	31,955	2.4%	4.0%	3.0%	1.7%	2.8%
Graduate Diploma or Graduate Certificate Level	897	2,345	2,245	3,199	8,686	0.3%	0.7%	0.9%	1.1%	0.8%
Bachelor Degree Level	31,879	43,746	28,755	23,163	127,543	11.7%	13.5%	12.0%	8.1%	11.3%
Advanced Diploma or Diploma Level	26,979	45,177	35,556	40,236	147,948	9.9%	13.9%	14.8%	14.0%	13.2%
Certificate III or IV Level	204,877	220,296	166,306	215,717	807,196	75.5%	67.8%	69.2%	75.0%	71.8%
Certificate I or II Level	170	162	147	190	669	0.1%	0.0%	0.1%	0.1%	0.1%
All Post-School Qualifications	271,387	324,863	240,244	287,503	1,123,997	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Community or Personal Service Workers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	11,216	19,964	10,783	7,744	49,707	4.7%	8.6%	5.6%	3.3%	5.5%
Graduate Diploma or Graduate Certificate Level	10,083	10,996	9,082	10,358	40,519	4.3%	4.7%	4.7%	4.4%	4.5%
Bachelor Degree Level	64,590	64,596	44,276	37,315	210,777	27.2%	27.9%	22.8%	15.7%	23.4%
Advanced Diploma or Diploma Level	61,009	68,648	62,498	74,917	267,072	25.7%	29.6%	32.2%	31.6%	29.7%
Certificate III or IV Level	90,168	67,229	67,385	106,476	331,258	38.0%	29.0%	34.7%	44.9%	36.8%
Certificate I or II Level	173	159	175	404	911	0.1%	0.1%	0.1%	0.2%	0.1%
All Post-School Qualifications	237,239	231,592	194,199	237,214	900,244	100.0%	100.0%	100.0%	100.0%	100.0%

<i>Clerical or Administrative Workers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	12,078	35,050	23,620	16,968	87,716	7.4%	14.1%	10.5%	6.6%	9.8%
Graduate Diploma or Graduate Certificate Level	3,532	8,102	8,697	11,847	32,178	2.2%	3.3%	3.9%	4.6%	3.6%
Bachelor Degree Level	70,156	86,279	71,021	63,132	290,588	43.1%	34.8%	31.7%	24.5%	32.5%
Advanced Diploma or Diploma Level	25,843	52,064	59,564	82,485	219,956	15.9%	21.0%	26.6%	32.0%	24.6%
Certificate III or IV Level	51,017	66,564	61,221	83,089	261,891	31.4%	26.8%	27.3%	32.2%	29.3%
Certificate I or II Level	50	112	107	360	629	0.0%	0.0%	0.0%	0.1%	0.1%
All Post-School Qualifications	162,676	248,171	224,230	257,881	892,958	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Sales Workers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	9,678	12,922	5,993	3,804	32,397	7.8%	13.3%	8.2%	4.5%	8.5%
Graduate Diploma or Graduate Certificate Level	1,428	1,776	1,647	2,314	7,165	1.2%	1.8%	2.3%	2.7%	1.9%
Bachelor Degree Level	44,520	32,673	20,940	18,620	116,753	35.9%	33.6%	28.6%	21.9%	30.8%
Advanced Diploma or Diploma Level	23,471	21,210	19,371	23,824	87,876	18.9%	21.8%	26.5%	28.0%	23.2%
Certificate III or IV Level	44,673	28,587	25,060	36,222	134,542	36.0%	29.4%	34.3%	42.6%	35.5%
Certificate I or II Level	219	105	92	223	639	0.2%	0.1%	0.1%	0.3%	0.2%
All Post-School Qualifications	123,989	97,273	73,103	85,007	379,372	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Machinery Operators or Drivers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	6,507	6,555	3,062	1,989	18,113	10.5%	8.0%	4.6%	2.1%	5.9%
Graduate Diploma or Graduate Certificate Level	465	786	720	1,040	3,011	0.7%	1.0%	1.1%	1.1%	1.0%
Bachelor Degree Level	13,908	16,481	10,550	11,176	52,115	22.3%	20.0%	15.9%	11.7%	17.0%
Advanced Diploma or Diploma Level	10,370	16,545	11,177	14,359	52,451	16.7%	20.1%	16.8%	15.0%	17.1%
Certificate III or IV Level	30,864	41,862	40,743	66,917	180,386	49.6%	50.8%	61.3%	69.9%	58.8%
Certificate I or II Level	131	189	172	283	775	0.2%	0.2%	0.3%	0.3%	0.3%
All Post-School Qualifications	62,245	82,418	66,424	95,764	306,851	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Labourers</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	8,666	8,594	3,230	2,281	22,771	8.0%	8.8%	4.4%	2.2%	5.9%
Graduate Diploma or Graduate Certificate Level	1,020	1,276	882	1,586	4,764	0.9%	1.3%	1.2%	1.5%	1.2%
Bachelor Degree Level	28,784	25,549	14,653	15,594	84,580	26.4%	26.1%	19.8%	15.2%	22.0%
Advanced Diploma or Diploma Level	18,525	17,262	14,085	18,709	68,581	17.0%	17.6%	19.0%	18.2%	17.9%
Certificate III or IV Level	51,461	44,795	40,900	64,032	201,188	47.3%	45.8%	55.2%	62.3%	52.4%
Certificate I or II Level	415	392	398	606	1,811	0.4%	0.4%	0.5%	0.6%	0.5%
All Post-School Qualifications	108,871	97,868	74,148	102,808	383,695	100.0%	100.0%	100.0%	100.0%	100.0%

<i>Total Employed Workforce</i>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>	<u>15 to 29</u>	<u>30 to 39</u>	<u>40 to 49</u>	<u>50 to 69</u>	<u>All Ages</u>
Postgraduate Degree Level	155,702	374,331	286,056	258,834	1,074,923	9.9%	16.8%	15.2%	12.0%	13.7%
Graduate Diploma or Graduate Certificate Level	41,655	100,532	100,492	127,827	370,506	2.6%	4.5%	5.3%	5.9%	4.7%
Bachelor Degree Level	643,220	858,125	659,145	601,363	2,761,853	40.7%	38.4%	35.0%	27.9%	35.2%
Advanced Diploma or Diploma Level	207,663	328,820	331,860	443,922	1,312,265	13.1%	14.7%	17.6%	20.6%	16.7%
Certificate III or IV Level	529,741	571,300	504,951	717,851	2,323,843	33.5%	25.6%	26.8%	33.4%	29.6%
Certificate I or II Level	1,243	1,243	1,247	2,377	6,110	0.1%	0.1%	0.1%	0.1%	0.1%
All Post-School Qualifications	1,579,224	2,234,351	1,883,751	2,152,174	7,849,500	100.0%	100.0%	100.0%	100.0%	100.0%

Source: 2021 Population Census, original data from TableBuilder, analysis done for the www.jobmarkets.com.au website.