PRIORITISING ETHNIC DATA FROM SCHOOLS: WHO ARE WE MISSING? A RESEARCH NOTE.

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Abstract

This note reports on research investigating whether the ethnic groups of young adolescent New Zealanders are fully represented when data are prioritised so that only one ethnicity per person is counted. Prioritised data reported from the school sector are compared with non-prioritised reported data from the 2006 census, and also with census data when prioritised. The research clearly indicates that the prioritising of data leads to significant understatements in the reporting of proportions of Pacific and Asian domestic students enrolled in our schools.

BACKGROUND

It is not uncommon, in both the media and official reports, to read sentences such as "16% of the students at the local school are Pasifika". Although this statement seems straightforward, it is not. It depends on which data are being used. Schools record up to three (or more) ethnicities for each student at the time of enrolment, but the collector of official education statistics, the Ministry of Education, reports ethnicity based on only one per student, following a system of prioritisation that used to be used by Statistics New Zealand but which it no longer recommends. Under this system, for example, at the broadest level "Pacific peoples" comes second to "Māori", so that a student who identifies as Pacific peoples /Māori is reported only in the Māori category. So although schools may have a complete count of all students who include Pacific peoples as an ethnicity, reported national education statistics do not. Without further information (which is sometimes, but not always, provided in fine print), it is simply not clear whether the 16% is based on the complete school count or on a count based on the prioritised list.

This research note draws on a longer technical working paper³ that considers the reporting of ethnicity for New Zealand's school students (Leather 2009). The wider paper examines 2006 data for ethnic groups as categorised by the Ministry of Education at the broadest level – European/Pākehā, Māori, Pasifika, Asian and Other – as well as specific Pacific and Asian ethnicities where data are available. A number of associated issues are discussed, including "New Zealander"-type responses being observed in census collections (see Kukutai and Didham 2009). In this note, however, I focus on the findings for the three ethnic groups Māori, Pacific peoples and Asian in order to present the effect of the continued use of prioritised ethnicity data. The system of ethnic prioritisation, including why it was introduced, what may be wrong with it and alternative ways of counting, is described in other papers in this collection in Issue 36 of the *Social Policy Journal of New Zealand*.

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¹ I would like to thank the Foundation for Research, Science and Technology for funding this research.

² The Ministry of Education often uses the term "Pasifika", while Statistics New Zealand uses "Pacific peoples". In this note I primarily use "Pacific peoples".

³ A number of people reviewed the working paper. I would like to thank them all for their assistance. Any errors in that paper or in this research note are entirely my own.

One way of assessing the impact of reporting based on prioritisation is to compare census data with national school roll data. Census ethnicity data can be reported in a variety of ways (see the other papers in this collection), but in this note the two systems used, both based on the "usually resident" count, are:

- new (2005) statistical standard multiple responses
- old statistical standard prioritised to one response in order to match the method of reporting ethnicity data used in the school roll return.

There are acknowledged limitations to a comparison between the census and the national roll return, and the main paper presents a detailed discussion on possible differences between these data sets. Key points include, first, that in order to have a standard five-year age band where all are of compulsory school age⁴, the comparison is made using data for 10–14-year-olds, hereafter called "young adolescents". It is worth noting that in 2006 this group made up over 40% of the total school roll return and are therefore likely to provide a reasonably representative estimate for the school population. Second, there is a time difference between the reporting of the data sets: the census was carried out on 7 March 2006 and the relevant roll return on 1 July 2006. Overall, reasons for possible differences between the two data collections include:

- data supplied by different people
- people absent from one dataset
- people eligible to be included in only one of the data sets
- data collected at different times

communication, April 2009).

- possible changes in ethnic self-identification between the two data sets
- reporting of up to six responses per person in the census compared with just one response per person from schools.

Because people may identify with more than one ethnicity, the recommendation in the 2005 standard is that all official collections of statistics be capable of capturing six ethnicities per person; and if that is not yet possible then capture at least three. In the census, as many ethnicities are collected as individuals wish. Then total counts based on up to six ethnicities per person⁵ are reported, with people counted in every category they have indicated. The Ministry of Education also uses the definition of ethnicity given in the 2005 standard and states that schools should allow for collection of up to three self-identified ethnicities per student; however, they are instructed to count only one of these for the formal roll return⁶ (Ministry of Education 2008: 23, 24), following prescribed priorities (see Table 1). The example given in the opening sentence of this research note is explained by following this table. A student who identifies as Tongan/Māori, for example, will be reported as Māori.

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⁴ Standard five-year age bands used by Statistics New Zealand are 0–4 years, 5–9 years, 10–14 years, and so on. Children aged less than six or more than 15 do not have to be enrolled in a school; it is possible to get an early leaving exemption from the age of 15 years (Education Act 1989, ss 20, 22).

⁵ There is a process for selecting the six ethnicities to be recorded when more than six are given (Statistics New Zealand 2005, Appendix 2).

⁶ These formal Roll Returns are paper-based; ethnicity data are aggregated. Schools that use a computerised student management system (SMS) are strongly encouraged to submit their non-aggregate associated data file with their Roll Return. Both these SMS data files and the new national electronic enrolment system for schools, ENROL, contain information on individual students, including all of their recorded ethnicities. (The March 2009 Roll Return for primary and intermediate schools was done from ENROL.) (Ministry of Education, personal

Table 1 Ethnic Group Reported in Roll Returns (current students)

Students are reported in one group only		
To determine which ethnic group to report for a particular student, start at the top of the		
left-hand list and use the first ethnicity that applies to this student		
New Zealand Māori	(Māori)	
Tokelauan		
Fijian		
Niuean		
Tongan	(Pasifika)	
Cook Islands Māori		
Samoan		
Other Pasifika		
Southeast Asian		
Indian	(Asian)	
Chinese	(Asiali)	
Other Asian		
Other (this group includes Not Stated)	(Other)	
Other European	(European/Pākehā)	
NZ European/ Pākehā		

Source: Ministry of Education 2008:24

Advantages and disadvantages of the two methods of reporting have been discussed in a number of settings (e.g. Leather 2009, Callister 2004). In brief, allowing all self-identified ethnicities for each person to be reported, as in the census, means people are represented as they wish, but one outcome is that when all ethnicities are considered the sum of the percentages of people identifying with each will be more than 100. Allowing only one ethnicity as reported by the Ministry of Education does provide a one-to-one matching between the total ethnicities reported and the total number of people involved, so that the sum of the percentages of people identifying with each ethnicity will be exactly 100. However, for a student with multiple ethnicities, under this practice only one of these is reported at the national level. While this need not directly affect the student, as all their ethnicities can be recognised and acknowledged within the school, indirectly they are being denied the opportunity to fully contribute to the pool of national knowledge based on education ethnicity data.

DATA COMPARISONS

The main comparison presented in this note is based on two data sets for young adolescents, ranked at level 1 in the Statistics New Zealand hierarchy of ethnicity. These are:

- all responses to the ethnicities Māori, Pacific peoples or Asian recorded for the 2006 census (this is a total count where no prioritisation occurs)
- prioritised responses to the ethnicities Māori, Pacific peoples or Asian reported in the 2006 roll return.

A second comparison is also presented using census data that have been prioritised following the system used in the roll return.

In all, there were 306,009 young adolescents counted in the census, but the number of their responses to the ethnic question was much higher; for example, when all ethnic groups at

level 1 are considered,⁷ there were a total of 357,669 responses. There were 303,434 young adolescents included in the roll return⁸, and because reported ethnicities are prioritised, there were also 303,434 responses (Table 2). When the census data were similarly prioritised, there were 306,009 responses.

Table 2 Number of Young Adolescents and Number of Reported Ethnicity Responses, Census and Roll Return, 2006

	Numbers of young adolescents (population)	Numbers of responses reported*
Census	306,009	357,669 (level 1, not prioritised)
School roll	303,434	303,434
Difference	2,575	54,235

Sources: Ministry of Education 2007:57, Statistics New Zealand 2006a.

FINDINGS

Māori

Unlike other level 1 ethnicities in both the census and the roll return, prioritising the data does not affect the number of responses reported for Māori, because this ethnicity heads the prioritisation list. All who chose Māori as an ethnicity are included in both populations. The census data reported here indicate that of the young adolescent New Zealand population, 21.8% self-identified Māori as an ethnicity. Relative to this proportion, the roll return reported about 3% more young adolescents of Māori ethnicity (see Figure 1).

Pacific Peoples and Asians

As expected, Figure 1 shows that prioritising data does affect the number of responses reported for both Pacific peoples and Asian. Census data indicate that, of the young adolescent New Zealand population, when the data are not prioritised (2005 standard) 10.4% self-identified Pacific peoples as an ethnicity. Relative to this proportion, the prioritised census data show an understatement of 22% and the roll return indicates an understatement of about 16%.

Census data indicate that, of the young adolescent New Zealand population, when the data are not prioritised (2005 standard), 9.1% self-identified Asian as an ethnicity. Relative to this proportion, the prioritised census data show an understatement of 6%, and the roll return indicates an understatement of about 16%.

⁸ However, there were 3,782 children aged 10 to 14 who were known to be officially not attending a school on 1 July 2006 (information released by the Ministry of Education under the Official Information Act).

^{*} Includes "ethnicity not stated".

⁷ Level 1 ethnicities: European, Māori, Pacific peoples, Asian, Middle Eastern / Latin American / African, Other ethnicity, Not elsewhere included (Statistics New Zealand 2005).

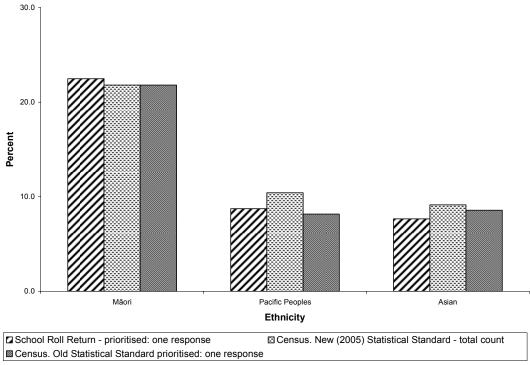


Figure 1 Māori, Pacific Peoples and Asian 10–14-year-olds, School Roll Return¹ and Census,² 2006

1 Source: Ministry of Education 2007:57. Denominator: total school roll return for 10–14-year-olds 2 Source: Statistics New Zealand 2006a. Denominator: census population count for 10–14-year-olds

SUMMARY TABLE

Table 3 Indicative Understatements¹ of Ethnic Populations, 10-14-year-olds, when Data Are Prioritised

Percentage Understatements of Prioritised Data compared with Total Count Data			
	Census 2006	Roll Return 2006	
Māori	0%	[3% "overstatement"] ²	
Pacific peoples	22%	16%	
Asian	6%	16%	

¹ The table shows proportions based on prioritised data relative to proportions based on Census 2006 total count data. Percentages are rounded to the nearest whole number

CONCLUSION

Earlier research from Statistics New Zealand, based on ethnicity data from the 2001 census, shows that when these data were prioritised for the group of all people aged under 15, there was a 29.5% understatement for Pacific peoples and a 10.5% understatement for Asian (Statistics New Zealand 2006b). For the research presented here, although there is no immediate explanation for the higher understatement for the Asian group in the roll return compared with the census, when data are prioritised the presence of understatements for 10–14-year-old Pacific and Asian people is clear, and the Statistics New Zealand results suggest that this is a trend that will increase as the younger age groups age.

² Given the differences between the data sets, as previously described, this 3% difference is negligible.

The analysis of data presented in this research note clearly indicates that the prioritising of data leads to significant understatements in the reporting of proportions of Pacific and Asian domestic students enrolled in our schools. As indicated in other papers in this collection, ethnic counting is fraught with challenges. The number of students counted in each ethnic group depends on a range of factors, including how questions are asked, who asks them and who answers them, when they are asked, and how the data that are recorded are then reported. This research note has concentrated on the last of these influences; that is, on recording and reporting.

We live in a country where increasing numbers of children affiliate with more than one ethnicity. A system that allows just one ethnic group may well be problematic, not only for these children but, in the context of this research note, for schools. Further, ethnicity information based on this system is undoubtedly (albeit unintentionally) inadequate for those undertaking research and policy development.

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