

# The Future of CensusAtSchool in New Zealand

Lesley Hooper

*Product Development & Publishing Division, Statistics New Zealand*

*85 Molesworth St, PO Box 2922*

*Wellington, 6001, New Zealand*

*Lesley.hooper@stats.govt.nz*

## 1. Introduction

*CensusAtSchool* is an on-going project intended to enhance statistical literacy among 8 to 15 year olds. Its dual thrust is to “enliven data handling activities in the classroom while also educating students about the principles and processes involved in conducting a census,” (Connor, 2002). In August 2003, *CensusAtSchool NZ*, hosted by the University of Auckland, rolled out the project to New Zealand schools. Over 18,000 students from 400 schools took part in the on-line survey. Students and teachers were highly motivated by the project; it received national media interest and has provided a rich dataset for the teaching of statistics.

## 2. The link between *CensusAtSchool* project and Statistics New Zealand

Statistics New Zealand is committed to making official statistics accessible across all user groups. Statistics must be locatable; presented in an easily understood manner; accessible through user-friendly portals; and of relevance to users. To achieve this, there is an assumption that users will have some level of statistical literacy. In their paper *Educational Products of Official Statistics Agencies: A Landscape View*, Gal and Ben-Zvi talk of statistics agencies playing a unique role in helping to improve statistical literacy and the statistical knowledge of students and adult learners who are outside the reach of formal educational systems (Gal, 2004).

The *CensusAtSchool* project provides Statistics New Zealand with the opportunity to support the development of students’ statistical literacy and thinking skills, and raise their awareness of the 2006 Census of Population and Dwellings. The United Kingdom Office of National Statistics saw the *CensusAtSchool* project as “a superb way of publicising the adult census in a fun and non-threatening way. They also saw potential to get the census message into households where English was not the adult language via their UK educated children, a group historically nervous of censuses,” (Connor, 2002).

## 3. The link between *CensusAtSchool* project and the New Zealand Curriculum

Current discussions around the changes to the New Zealand Curriculum are centred on the need to move to a thinking-focused curriculum. The emphasis should be on learners thinking, rather than mastering procedures and learning facts without being aware of their relevance. Statistical literacy and statistical thinking will have much greater importance in future curriculum developments. To achieve this, classroom activities for data handling should use real data, have a context that is understandable and interesting for students, and involve them fully, while giving them opportunities for both statistical discussion and using statistical techniques. “The *CensusAtSchool* project provides an excellent focus within which children can experience the excitement of discovery, as well as achieve the aims and objectives of national curricula. It can help them realise the need to become statistically literate, and help them get used to making evidence-based decisions,” (Connor and Davies, 2001).

## 4. The future of *CensusAtSchool* project in New Zealand

Statistics New Zealand, the Ministry of Education and the University of Auckland have worked collaboratively to ensure a *CensusAtSchool* survey will take place in August 2005. The

three organisations have a strong commitment to developing primary and secondary students' statistical literacy and statistical thinking skills. The outcomes for the project are:

- Improved student learning and achievement in the statistical strand of *Mathematics in the New Zealand Curriculum*, particularly in statistical literacy and statistical thinking; and data interrogation and statistical reporting across several Essential Learning Areas of the New Zealand Curriculum.
- Teachers, students and families have a greater understanding of the 2006 Census of Populations and Dwellings.
- Greater use of Information Communication Technology based statistical tools for data interrogation and reporting.

Evaluation of the 2003 project highlighted primary teachers need for help with the teaching of statistics and the need for simple guidelines on using the data in the classroom. In 2005 the project will make available an easily accessible dataset with appropriate activities for students.

For Statistics New Zealand it will provide an opportunity to raise the awareness of the 2006 Census. For the first time, people will be able to complete their census form on-line. *CensusAtSchool* will model this process. The form will include questions that from the 2006 Census, and students will be able to complete the form in English or Māori. Statistics New Zealand will work with Auckland University to develop classroom resources based on *CensusAtSchool* data and 2001 Census data.

The Ministry of Education will incorporate *CensusAtSchool* data in various resource development projects for the teaching of statistics, for example the Numeracy Project, Maths Week and nz maths ([www.nzmaths.co.nz](http://www.nzmaths.co.nz)).

## 5. Beyond 2005

The introduction of the new curriculum, with its emphasis on statistical literacy and statistical thinking, provides an opportunity for *CensusAtSchool*. The dataset collected provides a unique resource for teachers and students. The Ministry of Education, Statistics New Zealand and the University of Auckland partnership can build on the 2003 and 2005 experiences and plan for another survey in 2007. They can explore the possibility of applying for a Royal Society Teacher Fellow for 2006 to develop resources based on the dataset, and to encourage resource providers to use *CensusAtSchool* data in their resources.

## 6. Conclusion

The *CensusAtSchool* project provides an exciting opportunity for Statistics New Zealand, the Ministry of Education and the University of Auckland to work together to make a difference. As Connor and Davies say “the possibilities of further initiatives stemming from *CensusAtSchool* are very promising indeed,” (Connor and Davies, 2002).

## REFERENCES

Connor D (2002). *CensusAtSchool 2000: Creation to Collation to Classroom*, CD of the Proceedings of the Sixth International Conference on Teaching Statistics, Cape Town, July 2002.

Connor D and Davies N. *An International Resource for Learning and Teaching*, <http://www.censusatschool.ntu.ac.uk/files/TSpaper2.pdf> [28 November 2004].

Gal I and Ben-Zvi D (2004) *Educational Products of Official Statistics Agencies: A Landscape View*. International Conference: ICME-10, Berlin, July 2004, <http://www.icme-organisers.dk/tsg11/Papers/Gal%20&%20Ben-Zvi.doc> [28 November 2004].

## RÉSUMÉ

*Statistics New Zealand, in collaboration with the Ministry of Education and the University of Auckland, is working to maintain the CensusAtSchool project in New Zealand. A new curriculum*

*focussed on thinking, and Statistics New Zealand's aim for everyone to have access to data should help the project succeed in the classroom.*

*Statistics New Zealand soutient, en collaboration avec la Ministère de l'Éducation et l'Université d'Auckland, le projet CensusAtSchool en Nouvelle-Zélande. Grâce à l'appui d'un nouveau programme d'études fondé sur la réflexion et à Statistics New Zealand, qui a pour but de généraliser l'accès aux données, ce projet devrait réussir dans la salle de classe.*