About the research

Linking NAPLAN scores to the Longitudinal Surveys of Australian Youth

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No single data source in Australia currently provides comprehensive longitudinal data on young people's trajectories from early childhood to tertiary education and entry into the labour market. Linking data from the Longitudinal Surveys of Australian Youth (LSAY) with external data sources would improve the breadth of information available from the survey, without adding burden to respondents.

The primary aim of this project is to assess the feasibility (and practicability) of linking National Assessment Program — Literacy and Numeracy (NAPLAN) scores to LSAY data (which contain data from the Organisation for Economic Co-operation and Development's (OECD) Programme for International Student Assessment (PISA)). A second aim is to determine the similarity between NAPLAN and PISA in measuring underlying academic achievement and whether the two measures rank individuals similarly across the distributions of NAPLAN and PISA.

The NAPLAN tests were first implemented in 2008, which means that the LSAY 2009 commencing cohort (Y09) is the only LSAY cohort to date to have had the opportunity to participate in NAPLAN testing. The analysis undertaken in this paper is restricted to Y09 respondents who participated in the LSAY 2014 survey wave and provided consent to link to NAPLAN.

Key messages

- The project demonstrated that it is technically feasible to link NAPLAN scores to LSAY records; a linking rate of 98% was achieved for consenting LSAY participants.
- It is important to consider more effective strategies to maximise the pool of LSAY respondents available for data linkage. The following strategies are suggested:
 - consider obtaining approvals through existing national governance processes established to support the work of the Commonwealth Government's Education Council rather than separately for each state and territory, with the Commonwealth playing a key role in coordinating changes to the current agreements and existing protocols to support this.
 - obtain consent at the earliest possible time to maximise the number of records available for linking (which also helps to remove bias).
 - avoid the use of written methods in obtaining consent where possible. Telephone and online methods provide better rates of consent.
- The statistical analysis of the NAPLAN and PISA scores showed that there is a reasonable level of agreement between the two measures.
- Expanding the data linkage exercise by joining to multiple years of NAPLAN results would increase
 the power of the LSAY data by enabling research into the influence of early education outcomes on
 young people's transitions from school to post-school education and the labour market.

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