

Australian Council for Educational Research (ACER)

ACEReSearch

2005 - Using data to support learning

1997-2008 ACER Research Conference Archive

2005

An evidence-based approach to school improvement: A case study of the Victorian Catholic Education Office, Melbourne

Teresa Angelico

Catholic Education Office, Melbourne

Follow this and additional works at: https://research.acer.edu.au/research_conference_2005



Part of the [Educational Assessment, Evaluation, and Research Commons](#)

Recommended Citation

Angelico, Teresa, "An evidence-based approach to school improvement: A case study of the Victorian Catholic Education Office, Melbourne" (2005).

https://research.acer.edu.au/research_conference_2005/10

This Conference Paper is brought to you by the 1997-2008 ACER Research Conference Archive at ACEReSearch. It has been accepted for inclusion in 2005 - Using data to support learning by an authorized administrator of ACEReSearch. For more information, please contact repository@acer.edu.au.

An evidence-based approach to improvement: A case study of the Victorian Catholic Sector



Teresa Angelico

Catholic Education Office

Dr Teresa Angelico is Assistant Director in Policy and Governance at the Catholic Education Office Melbourne with a responsibility for the processes of policymaking, governance, knowledge management, legal services and communications. Teresa has a background in primary teaching and in higher education through her involvement in a range of areas of study in education and sociology. She has had extensive experience in the provision consultancy services to schools assisting them to improve educational outcomes for students living in poverty. She has a strong interest in school improvement and effectiveness, in particular ways in which research can inform policy development. Her doctoral thesis explored this relationship.

The evidence based approach is integral to efforts by the Victorian Catholic sector to continually improve its effectiveness. There has been a concerted effort in the Victorian Catholic sector to broaden the professional experience and judgement of system personnel, school leaders and teachers by locating it within the available evidence and generating research studies to continually explore and test it. Evidence generation and transfer have been instrumental in shaping the design of literacy and numeracy programs. There is an increasing emphasis on using evidence as a tool for professional learning and to inform decision making related to improving the overall performance of schools. In addition to using evidence to facilitate reform within the sector, the Catholic sector system authority has used evidence to make a case for improving the level of financial support provided by the State Government for Victorian Catholic schools.

There are 483 Catholic primary, secondary and special schools representing over 180,000 student enrolments in Victoria. A key priority for the Victorian Catholic sector system authority over the last decade has been the building of capacity for the system, schools and classrooms to continually improve their effectiveness. A critical feature of the capacity building agenda has been the centrality of evidence as the basis for decision-making and action. The impetus for this has been the evidence-based movement in education defined by Whitehurst (2001) as the integration of professional wisdom (which is acquired through experience and consensus) with the best available

empirical evidence in making decisions about how to deliver instruction.

There has been a concerted effort in the Victorian Catholic sector to broaden the professional experience and judgement of system personnel, school leaders and teachers by locating it within the available evidence and generating research studies to continually explore and test it. This paper illustrates the instrumental role of evidence generation and transfer in shaping the design of literacy and numeracy programs, informing the content of professional learning initiatives, and informing decision-making related to improving the overall performance of schools and the system as a whole.

Literacy and numeracy program development

The systemic approach to the collection of student and teacher data through the Literacy Advance research project provided schools with evidence about the impact of various literacy programs on student achievement. The data collected included students' literacy assessment and information about schools, classes, teachers and students. The strong performance of students attending schools where the Children's Literacy Success Strategy (CLaSS) program was being implemented led to an increase in the number of schools implementing the program. Ainley and Fleming (2003, pxi) indicate an increase from 11 per cent of schools in 1999 to 79 per cent in 2002. The key elements of the CLaSS approach include the following: the importance of designating a literacy coordination position in the school; the provision of a designated

time for literacy in the daily timetable; and the opportunity for students to have access to intervention program support.

The two-year longitudinal study showed that the CLaSS program delivered positive benefits for students in the Catholic sector (Ainley & Fleming, 2000). Five years on, the longitudinal study highlighted the importance of a good foundation to literacy beginning in the preparatory year. Enjoyment of activities is a further element vital to continued growth in literacy, pointing to the importance of providing literacy activities and processes that engage and motivate students at different year levels. A challenge remains to find effective strategies with which to assist students who are experiencing difficulties in literacy beyond Year 1, and to lessen the widening gap between students with differing abilities (Ainley & Fleming, 2003).

Decisions informing the design of numeracy programs have been based on evidence arising from three major research initiatives undertaken in partnership with a team of researchers associated with the Australian Catholic University (ACU). The Early Numeracy Research Project (ENRP), implemented from 1999 to 2001, developed a hierarchical framework to monitor children's understanding and development of mathematics called *growth point*. This framework allows teachers to track children's mathematical advancement through the use of a clinical interview. The Middle Years Research Project (MYNRP), implemented from 2001 to 2002, was instrumental in informing the development of a tool called *Rich Assessment Tasks* to track students' understanding. Finally, the Researching Numeracy Teaching Approaches in the Primary School Project, implemented

from 2001 to 2003, developed twelve effective scaffolding approaches (Lewis & Lindsay, 2005).

The performance levels of students enrolled in schools participating in these projects were measured through the use of clinical interviews. Student data was collected at the beginning and the end of the project and compared to students enrolled in non-participating schools to test the effectiveness of curriculum and assessment approaches and instruments.

At the end of 2004, a research study was commissioned to identify factors affecting high student achievement at the VCE level. The research undertaken by Kaye Stacey (University of Melbourne) identified a number of variables that are positively correlated with high performance such as a larger student cohort; a broader range of mathematics subject offerings; high quality program provision for all students; a culture of high achievement; and the capacity to attract and retain quality teachers. A seminar was held on 3 June 2005 for the purpose of reflecting on the research evidence emerging from these research studies. Participants identified a number of strategies for supporting high achievement in mathematics education in the Victorian Catholic sector. Suggestions arising from this seminar will be published in a Seminar Series Paper and school personnel will be invited to respond. Suggestions include the importance of making student performance data accessible and the provision of professional development support.

Professional learning

Given the importance of combining professional wisdom with empirical evidence, the Catholic sector is faced with an ongoing challenge to find

effective and efficient ways of improving leader and teacher quality. Over the past years, there has been a concerted effort to increase the level of confidence and skills of personnel working at both the system and school level through a range of professional learning activities, including sponsorship to undertake accredited courses. There is a heightened awareness of the need to incorporate data literacy in the range of professional learning initiatives.

For instance, the collection of documented evidence, as part of the development of a Professional Portfolio is central to the Leadership Standards initiative which is designed for teachers aspiring to work towards formal leadership positions and undertaken in partnership with the Australian Council for Educational Research (ACER). Participants are required to document an initiative in which they managed and lead a change effort with colleagues in their school, providing both quantitative and qualitative evidence to support the attainment of standards for practice related to five areas of school life and operations. The five areas include the following: the Faith Community; A Vision for the Whole School; Teaching and Learning; People and Resources; and Pastoral and Community.

Project participants record action taken, and evidence of professional growth includes elements such as content and practice of teaching, communication and interpersonal skills, assessment and reporting, evidence of professional reading and contribution to the profession. Reports from participants indicate that the documentation is facilitating learning as it provides a basis for analysis of practice. Through this analysis, participants acquire a heightened awareness of their strengths and weaknesses. As one teacher notes,

the documentation 'made me think about the possible impact of my teaching and leading, and how I must plan for this in advance' (Audley & McDonald, 2005).

School improvement

Data collection is central to the overall process of school improvement. Schools use a range of data sources to inform the identification of priorities for the school as a whole, for the professional learning of not only the staff as a whole but also of the individual members. Data is collected through external system-based sources and through school-level initiatives.

According to Pascoe and Jane (2005), all Victorian Catholic principals and staff members have access to the *Catholic Education Victoria Network (CEVN) Information and Support* portal which has been created to support school improvement. This site provides online dynamic resources including directories, document repositories, profiles and reports of personnel, finance and student outcomes data, professional development programs and links to support programs.

An important feature of the *CECV Information and Support* portal is the online *School Profile Report (SIR)* which provides a one-page summary for each school and a link to a suite of School Improvement Reports that school leaders can use to inform their own planning for ongoing school improvement. Data are dynamically drawn from the system database to provide up-to-date reports to users providing schools' individual and comparative data and indicators of their attainment of system-wide targets. Currently, reports are provided for six key dimensions of school programs:

student enrolments; student learning outcomes; Religious Education; school finances; school facilities; and personnel. Further reports will be developed over time including in a seventh area of Student Wellbeing.

The School Improvement Reports provide schools with summative reports of their own data over time as well as comparisons with all Victorian Catholic Schools and Like Schools (by enrolment bands, funding category, language background or socioeconomic status). The development of additional reports and enhancements to existing reports will be informed by the recommendations from a recent trial and review of the information system. Another initiative to be released later this year is an extensive online reporting system for literacy assessments in primary schools and a detailed financial report. Professional development and consultancy services are provided to strengthen school leaders' capacity to analyse their own data and use it in their planning for school improvement.

Catholic schools also access the Victorian Certificate of Education (VCE) Data Service, providing them with information about their students' performance in any studies or in all studies offered by their school. The service allows schools to extract information about performance over time and in specific assessment tasks. For instance, data has been used at Presentation College Windsor to enhance the effectiveness of VCE study periods and had led to the development of a formal trial exam program, with the English exam being assessed externally to provide feedback to students and their teachers on areas for improvement (McGurn & Farrar, 2005 forthcoming). The interpretation

of this data depends on professional judgement. As McGurn and Farrar (2005 forthcoming) indicate there is a need for careful reflection about contextual factors impacting on results and a need to consider results over a period of time.

In addition to systemic information services, Catholic schools also collect data at the local level. Evidence about school climate and community member perceptions are collected through attitudinal surveys. O'Donnell (2005 forthcoming) principal of St Gregory the Great Primary Doncaster, outlines a number of survey instruments that will be implemented every two years. The staff surveys include *The School as a Workplace* and the *Psychological Health of Staff*. The student data survey focuses on *social outcomes* and the *Parent Opinion* survey collects data about perceived teaching quality, academic rigour, customer responsiveness and general satisfaction.

Schools recognise the importance of using data to build individual student profiles in order to support them in their learning. Presentation College Windsor (in McGunn & Farrar, 2005, forthcoming), is currently drawing together information from AIM testing, primary school reports, transition interviews and student absenteeism in the middle and senior years. The school is also devising a survey designed to track students' movements from school with a view to supporting students in making decisions about course options and pathways from schooling. Data on students' part-time work habits will also be collected with a view to integrating the teaching of time management skills. The school is interested in finding out whether part-time work and heavy involvement in extra-curricular activities has the potential to adversely affect

student performance.

Systemic improvement

The need for well-grounded empirical evidence to support the case for increasing the level of funding from the State Government to Victorian Catholic schools led to the commissioning of three research studies in 2004 by the system authority (these can be accessed at www.cccv.melb.catholic.edu.au). A case for change could not be made on the basis of perceptions and judgements of personnel working within the Catholic sector. *The Affordability of Catholic Schools in Victoria* undertaken in partnership with Monash University, showed that Catholic schools are becoming less affordable and with fewer lower income families able to attend. *The Welfare Needs of Victorian Catholic Schools*, undertaken in partnership with the University of Melbourne, indicated that students and parents are seeking help from schools in a range of welfare areas as schools are becoming the point of care for the local community. Many principals report that they and their staff are under-resourced to deal with the range of needs encountered.

Finally, *The Contribution of Catholic Schools to the Victorian Economy and the Community*, undertaken in partnership with Victoria University, shows that in 2002 the per pupil Victorian Catholic school recurrent expenditure for primary schools was 21% lower than the average Government school and 31% lower than the average Independent school. For secondary

schools, the recurrent expenditure was 6% lower than the average Government school and 33% lower than the average Independent school. The study also shows that Catholic schools achieve better than average educational outcomes on a range of measures, with the increment over average outcomes being particularly pronounced for students from lower socioeconomic backgrounds. Social capital is identified as a factor in achieving higher than average educational outcomes at lower costs.

The research findings were disseminated to politicians, senior public servants and academics involved in the high level discussions. A seminar was held to provide researchers with an opportunity to present their findings, and responses were invited. Seminar Reports were developed and published in hard copy and online. In addition, the print media was invited to a briefing and provided with a media release statement and the full report and, as a result, all projects received coverage. Catholic school communities were invited to regional briefings to respond to and discuss the research evidence. In communicating research findings in the public arena, the Catholic sector has been able to more clearly articulate a discourse about Catholic schools that emphasises their contribution to the achievement of public goals of excellence and equity.

The research findings are currently informing strategic and policy development processes with a view to supporting the overall process of

improvement and effectiveness. The priorities underpinning the development and review of a number of the strategy and operational plans¹ are reflecting issues arising from the research studies². For instance, the needs-based formula³ used to allocate funding to schools was reviewed and a new policy is being developed on schools fees which is designed to encourage schools to keep fees at affordable levels.

Most importantly, the research evidence has been instrumental in supporting the campaign to increase the level of State Government funding for Victorian Catholic schools. The campaign has been successful in bringing about an improvement in funding for not only needy Catholic schools but also a number of needy Independent schools. Increased support for needy non-government schools evident in the 2005–06 State Budget was provided as part of the overall budget for social disadvantage. On 18 May 2005, the Catholic sector signed a landmark agreement with the State Government for a four-year period.

Conclusion

The evidence-based approach is integral to efforts by the Victorian Catholic sector to continually improve its effectiveness. Evidence generation and transfer has been instrumental in shaping the design of literacy and numeracy programs. There is an increasing emphasis on using evidence as a tool for professional learning and to inform decision-making related to

¹For example, the strategy plan for the Archdiocese of Melbourne the 2006–10 plan, the communication strategy and the policy reform strategy.

²For example, the centrality of pastoral care in Catholic schools, the sponsorship of accredited training in welfare studies and the support for specific innovative practices.

³The existing formula allocates recurrent government grants on a 'needs-based' formula that favours low socioeconomic school communities. It is intended that the review process will result in a strengthened weighting of grants to lower socioeconomic regions and schools.

improving the overall performance of schools. In addition to using evidence to facilitate reform within the sector, the Catholic sector system authority has used evidence to make a case for improving the level of financial support provided by the State Government for Victorian Catholic schools.

The reliance on evidence underpins the long-standing practice of forging collaborative partnerships with a wide range of personnel associated with research organisations such as the Australian Council for Educational Research (ACER), the University of Melbourne, Australian Catholic University (ACU), Victoria University, and Monash University. These partnerships have been significant in ensuring that data collection, analysis and reporting methods have been of high quality. In addition, system efficiency is enhanced through the promotion of system-based data services.

References

- Audley, P. & McDonald, A (2005). *The Professional Standards of Practice for Leaders in Catholic Schools Learning Matters Vol 10. No. 2*. Forthcoming Melbourne: Catholic Education Office.
- Ainley, J. & Fleming, M. (2000). *Learning to read in the early years*. Catholic Education Commission of Victoria, Melbourne.
- Ainley, J., & Fleming, M. (2003). *Five years on: Literacy advance in the primary years*. Melbourne: Catholic Education Commission of Victoria
- Lewis, G. & Lindsay, S. (2005). *Playing the Numbers Game Learning Matters Vol 10. No.2*. Forthcoming. Melbourne: Catholic Education Office.
- McGurn, K. & Farrar, P. (2005). *Turning Data Analysis into Classroom Outcomes Learning Matters Vol 10. No.2*. Forthcoming. Melbourne: Catholic Education Office.
- O'Donnell, D. (2005). *Using Attitudinal Surveys to Inform Policy, Planning and Teaching Learning Matters Vol 10. No.2*. Forthcoming. Melbourne: Catholic Education Office.
- Pascoe, S. & Jane, G. (2005). *Radical Innovation in Education*. Paper delivered at the International Congress for School Effectiveness and Improvement (ICSEI) Conference, Barcelona.
- Whitehurst, G. (2001). *Educational research and improvement*. Washington: United States Department of Education.