

The Children's Literacy Success Strategy (CLaSS)

**A Research Report on The First Six Years of a
Large-Scale Reform Initiative**

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EXECUTIVE SUMMARY

Background

The Children's Literacy Success Strategy, or CLaSS, began in 1998 as an initiative of the Catholic Education Commission of Victoria (CECV), and the Centre for Applied Educational Research at The University of Melbourne. The project has been supported with funding from the Commonwealth Government through its literacy strategy. This research report provides an account of the first six years of the initiative.

CLaSS

The main ideas for CLaSS came from the Early Literacy Research Project (ELRP). Key elements adopted as part of CLaSS and also used in the ELRP included a daily two-hour, uninterrupted literacy block; set standards and targets; ongoing monitoring; structured classroom teaching strategies and resources; on-site school-based coordination; off-site professional development for cross-grade teams of teachers; weekly professional learning team meetings for teachers in Years P-2; one-to-one intervention using Reading Recovery; home/school and community links; the use of Facilitators to support groups of schools; and leadership training for principals and school-based coordinators.

CLaSS was developed both as an ongoing research and development program and a system-wide implementation of literacy strategies for improving student outcomes in the early years of schooling. It has made use of a nine-element whole-school design and a six-tier model of professional development.

Participation in CLaSS has been voluntary, beginning with a small intake of schools in 1998 and with additional cohorts of schools commencing in CLaSS each successive year. Each intake has received three years of intensive training and professional development. Beyond the three years, CLaSS schools have received ongoing support through the sustaining phase of the project.

Evaluation strategy

As part of the Catholic Education Commission's broader Literacy Advance Strategy, all Catholic primary schools in Victoria have been required to assess their Year 1 students at the beginning and end of each year using a comprehensive set of literacy measures. These

data make it possible to evaluate the effectiveness of CLaSS by comparing the outcomes of students in the various intakes of CLaSS schools with those in non-CLaSS schools.

Performance against standards

At the commencement of CLaSS, a set of standards and associated targets were established with respect to the reading achievements of students in the first two years of schooling. The standards relate to the Text Level of all students, which is established by taking Running Records using a set of benchmarked levelled texts. For Year 1 students, a minimum standard was set at a Text level of 15+.

Over the past six years, higher proportions of students have met the minimum standard, with 68.1 per cent meeting the Minimum Standard in 1998 and 85.1 per cent in 2003. In each year, CLaSS schools outperformed non-CLaSS schools, with CLaSS schools experiencing a substantial increase in the per cent meeting the Minimum Standard in their first and second years of joining the program.

Effect on overall literacy outcomes

Further analyses were carried out annually to estimate the impact of CLaSS on student literacy outcomes using multi-level regression analysis to adjust for the effects of student background characteristics and prior achievement. All intakes of CLaSS schools recorded effects sizes well in excess of the average effect sizes cited in a recent meta-analysis of the effects of comprehensive school reform in all years except 2002. Moreover, the longer schools were in CLaSS, the larger the mean effect size. This indicates that the impact was cumulative and dividends accrued as the result of a sustained commitment to improvement over time.

Average Effect Sizes for Different Intakes of CLaSS: 1998–2003

	1998	1999	2000	2001	2002	2003	Average
Intake 1	0.651	0.255	0.641	0.35	0.166	0.320	0.397
Intake 2		0.418	0.750	0.229	0.106	0.199	0.340
Intake 3			0.661	0.242	0.057	0.175	0.284
Intake 4				0.451	-0.031	0.178	0.199
Intake 5					0.300	0.255	0.278
Intake 6						0.385	0.385

Accounting for the results

In hypothesising which factors best account for the gains achieved thus far, the following would appear to be the most significant:

1. *Sustained commitment of the system* to pursuing a systemic, evidence-based strategy for improving literacy.
2. *An intelligent systemic change strategy* that promoted ownership of and involvement in the change process at the school level and allowed schools choice regarding the approach to be adopted, evidence to enable them to evaluate the impact of their choice, and encouragement and opportunity to change to a more successful strategy.
3. *A proven and consistent design* that had already been tested and that has remained constant and has not been subject to ongoing change and modification.
4. *A phased roll-out* allowing time to build up the capacity of the system to support a large number of schools in implementing the design, with a relatively small but committed initial intake paving the way for later intakes and ensuring a smoother implementation in succeeding years.
5. *Six-tier professional development model* that places a premium on equipping participants with the knowledge to make sound professional judgments, that operates simultaneously at different levels, right up to the system level, and that focuses on the creation of professional learning teams of teachers within each school.
6. *Initial use of an apprenticeship model for training facilitators* that ensured a deep understanding of the design, a coherent and consistent approach to working with schools and gave focused feedback during the early stages of CLaSS.
7. *The use of data* to drive the improvement of instruction, to establish students' starting points, to reveal areas of strength and weakness and to monitor progress.
8. *Teachers* who were well qualified, receptive to the strategies and approaches promoted through CLaSS and willing to engage in significant, ongoing professional growth and development.
9. *Attention to leadership* especially the instructional leadership role of the principal and the coaching and mentoring role of the CLaSS coordinator in each school.
10. *Changed beliefs and expectations* among participants regarding the importance of early literacy and the moral and economic imperative for all students to achieve high standards.

INTRODUCTION

The Children's Literacy Success Strategy, or CLaSS, began in 1998 as an initiative of the Catholic Education Commission of Victoria (CECV), and the Centre for Applied Educational Research of the Faculty of Education at The University of Melbourne. The project has been supported with funding from the Commonwealth Government through its literacy strategy.

This research report is an account of the first six years of the initiative designed to bring about large-scale, system-wide reform in early literacy. While more remains to be done to institutionalise and extend the reforms that have been commenced, it is clear that the initiative has succeeded in putting into place a process whereby the majority of schools within a large system are able to achieve significant, ongoing improvements in literacy outcomes for their students.

Educators the world over know that literacy, more than ever before, is the key to success at school and beyond. But as test scores show, the goal of universal literacy remains elusive. This is despite massive efforts to improve outcomes. In tens of thousands of classrooms, a daily struggle ensues as teachers seek to ensure that all students become proficient at reading and writing. Many students do acquire these vital skills quickly, and some do so with apparent ease.

At the same time, there is also a large proportion of students who have difficulty getting underway as readers and writers, and who progressively slip further and further behind their peers. These students more typically come from poor families or families in which English is not spoken or is a second language. They are also students who are labelled as 'students with disabilities' and who need additional support and assistance in order to make progress equal to that of other students.

These students experience repeated failure and understandably many become disaffected and drop out of school with no positive record of achievement. As citizens of the information age they are ill equipped for a future in which opportunities go to those who are successful and flexible learners.

For many schools, addressing the needs of these ‘at risk’ students is a continuous struggle. The number of students with little knowledge of formal English and who lack basic concepts about print appears to be increasing rather than decreasing. In addition, there are more anti-educational influences that impinge upon the lives of young people than in the past. Sadly, in the minds of many, failure has come to be tolerated as an inevitable feature of school education.

The Children’s Literacy Success Strategy (CLaSS), the initiative described in this research-based report, rejects failure as an option and affirms that all students can indeed achieve high standards of literacy, given sufficient time and support. Moreover, there is a moral imperative for teachers, schools and school systems to reduce the gap between those who achieve high standards and those who do not.

CLaSS is based on carefully evaluated, multi-site replications across hundreds of primary schools of a comprehensive approach to early literacy that has resulted in substantial improvements in student outcomes. The schools that have achieved these results have not been hand-selected schools. They have been typical schools, many of which serve disadvantaged and struggling communities, but have become extraordinary in promoting learning for all their students.

The reasons behind the success of these schools involve a subtle mixture of familiar and tested methods and entirely new ways of operating that involve a transformation both of the school and the system. CLaSS is not simply about working harder using familiar approaches, although it builds on a great deal of old knowledge about what works and what does not work. It is certainly about working smarter and, in particular, being explicit about *why* things are done in a particular way. It also is about a commitment to investing in capacity building and in developing among participants a deep understanding of learning, teaching, the acquisition of literacy and the process of school reform and change.

IMPROVING EARLY LITERACY OUTCOMES

Literacy is arguably the most important outcome of schooling. High standards of literacy are a pre-requisite for success in school generally and for life outside and beyond school. Literacy has always been the main focus of primary schooling, but in recent years, there has been a renewed focus on ensuring that all students achieve high standards.

The term 'literacy' can be defined simply as the ability to read and write. However, the use of the term has changed considerably over time. In the past, the term was rarely used in referring to schools. Instead the discussion was about the teaching of reading and writing. The term 'literacy' was used almost solely in the context of adult learning (Christie & Misson, 1998).

While literacy is concerned with reading and writing, the development of literacy inevitably builds upon and involves the development of oral language, i.e., speaking and listening. For this reason, literacy teaching is now seen to involve explicit teaching aimed at ensuring that students use spoken language precisely and cogently and that they listen to others and constructively respond and build on their ideas and views.

There have also been marked changes in the way literacy is viewed in schools from 'traditional' approaches (drill and skill, phonics, 'look and say') to 'progressive' approaches (whole language, process writing, etc.), to 'post-progressive' and 'balanced' approaches (Lankshear, 1997). Proponents of these different approaches have engaged in 'ideological' wars that have waxed and waned first in favour of one approach and then another.

The literacy debates continue to this day, but increasingly two forces are operating that appear to be driving towards a new consensus. The first is the realisation that good teaching requires a mix of both traditional and progressive approaches. There are times when students need to focus on learning specific skills that enable them to process the texts that they read and write. But, at the same time, they need to be able to use these skills in an integrated fashion across a variety of genre in order to comprehend texts and be able to construct comprehensible texts as they write. In other words, the teaching of literacy is now recognised as involving both deconstructing and constructing; both part

and whole learning. The issue is thus one of achieving an appropriately ‘balanced’ and comprehensive approach.

The second force for creating a new consensus regarding best practice in early literacy has been a new emphasis on evidence rather than ideological preferences for informing practice. This has been a feature of the National Literacy Strategy in the United Kingdom that is very much a ‘data-driven’ strategy. It has also been evident in the United States of America, where panels of experts have been convened to review research findings regarding best practice in literacy (e.g. Snow, et al., 1998), and where legislation has been passed that ties access to federal funds to scientifically-based evidence of the effectiveness of programs.¹ While there have been debates as to what constitutes ‘scientific’ evidence and how much reliance should be placed on particular kinds of studies, the use of evidence to drive practice is a trend that is moving decisions about best practice beyond ideological preference.

While debate continues on matters of pedagogy in teaching students to become literate, the real challenge has been not so much about how to teach students, but in how to bring about widespread change and improvement in practice. While most systems have retained or re-centralised responsibility for setting the curriculum and determining standards, and have put in place processes for holding schools publicly accountable for the extent to which their students meet these standards, they have largely left it to schools to decide how teachers in classrooms will implement the curriculum. In other words, systems have retreated from direct involvement in what goes on in classrooms to bring about learning (Elmore, 2000).

This is now changing. Rather than viewing classroom teaching as a matter of individual preference exercised by teachers acting independently of each other and of the school as a whole, there is a trend towards adopting a common approach embedded within a systematic, whole-school design in which all key elements that contribute to successful learning are considered and chosen carefully and put together so that they reinforce each other (Hill & Crévola, 1999). Such an approach requires teachers to work together as a team that supports one other and shapes the way in which all members of the team operate. It is an approach that very much reflects modern practice in other fields, including business, industry, health and the training of services personnel.

As a consequence, the landscape of early literacy teaching is very different today from what it was a decade ago. It is now much easier to identify a robust technical core to literacy teaching and learning in schools and that core is becoming increasingly more certain and scientifically-based. In the field of comprehensive school design, which has brought together research into teaching and learning, program evaluation and broader decisions about instructional strategies and school organisation, there has been a steady convergence over recent years on a set of model designs that share a high proportion of common elements. Systems have begun to promote the widespread adoption of such designs as a way of improving practice and focusing support for schools.

Systems are now realising that they too need to change. The traditional mission of school systems has required them to focus on issues of provision, or on what we might call educational ‘inputs’. The modern mission is very much about guaranteeing educational outcomes. The problem is, systems inherit personnel, policies, structures and processes that were not selected or designed with the new mission in mind (Hill, 2003). They therefore need to undergo reforms that parallel those they have begun to promote at the school level: reforms that ensure that the ‘horizontal alignment’ that designs have effected within schools is reinforced by ‘vertical alignment’ between schools and the system (Tucker, 2003).

The CLaSS initiative reflects the above trends, particularly in-so-far as it seeks to:

- clarify a robust technical core of pedagogical content knowledge regarding early literacy teaching;
- specify a whole-school design approach to improving early literacy outcomes;
- change the way in which teachers operate and create a learning culture within schools focused on professional learning teams; and
- make changes to the system itself and how it operates to support changes at the school level.

The following chapters describe in more detail the CLaSS initiative and its impact on student learning.

¹ The *No Child Left Behind* legislation uses the term ‘scientifically-based’ 111 times.

A SYSTEMIC REFORM STRATEGY

Research-based Approach to Change

The Children's Literacy Success Strategy (CLaSS) was conceived at a time when there was mounting interest in generating fresh approaches to improving early literacy in schools. The 1990s in Australia were a time of renewed concern regarding standards of literacy and calls were being made for high standards for all students, regardless of background. In 1993, *The Literacy Challenge* (House of Representatives Standing Committee on Employment, 1993) drew attention to inadequate levels of literacy among significant numbers of students and suggested a need for early literacy intervention for up to 20 per cent of primary school students. This alarming statistic prompted calls for new kinds of research-based initiatives to improve literacy outcomes. By 1998, the year in which CLaSS was initiated, there was agreement by all States and Territories within the Commonwealth of Australia to a national goal 'that all students commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years'.

In response to an emerging national policy focus on literacy, the Catholic Education Commission of Victoria initiated in 1997 a strategy for improving literacy outcomes known as 'Literacy Advance'. This strategy included both primary and secondary schools, but gave particular attention to literacy in the early years.

As part of Literacy Advance, Catholic primary schools selected from one of six defined approaches to literacy, one of which was CLaSS.² No matter which approach was

² Two of the six approaches involved a whole-school approach to improving literacy, namely the **Early Years Literacy Program** (EYLP) and the **Children's Literacy Success Strategy** (CLaSS). A third approach was **Western Australian First Steps** (WAFS), which focused on developing individual assessment continuums for each student as the first step in selecting strategies to promote student progress. Schools could also nominate their own locally-developed **Approved School Design** (ASD). Finally, there were two other options offered to schools, namely the intervention program **Reading Recovery** (RR) and a teacher professional development program for teachers of second language learners known as **ESL in the Mainstream** (ESLM).

selected, two aspects were common to all: the appointment of a full-time or part-time literacy coordinator and the systematic monitoring of student progress. All schools were required to participate in assessment of the literacy achievements of Year 1 students at the beginning and end of each year. In addition, the Australian Council for Educational Research (ACER) was commissioned to evaluate the impact of Literacy Advance, including the effectiveness of the different approaches selected by schools.

The main ideas for CLaSS came from the Early Literacy Research Project (ELRP), which was initiated in 1995 to study ways of improving literacy in Victorian government primary schools. The ELRP was a joint project of the Victorian Department of Education and the Centre for Applied Educational Research (CAER) of The University of Melbourne. An initial evaluation of the impact of the ELRP whole-school approach indicated substantial gains in student literacy in the trial schools (Crévola & Hill, 1998).

Key elements adopted as part of CLaSS and also used in the ELRP included a daily two-hour, uninterrupted literacy block; set standards and targets; ongoing monitoring; structured classroom teaching strategies and resources; on-site school-based coordination; off-site professional development for cross-grade teams of teachers; weekly professional learning team meetings for teachers in Years P–2; one-to-one intervention using Reading Recovery; home/school and community links; and leadership training for principals and coordinators.

Systemic Capacity Building

In a review of the literature on systematic reform Ainley and Fleming (2000) provide evidence to support the premise that ensuring lasting outcomes for all students requires a cohesive and systematic approach to instruction within the classroom, as well as wider reforms aimed at aligning a number of essential elements across schools, and not just within schools.

Elmore (1996), refers to systemic reform as involving the orchestration of a range of system-wide policies around a common set of purposes. Fullan (2000), argues that there is a greater appreciation of the complexity of the task and that it is now widely accepted

that there needs to be detailed attention to the strategies that accompany programs of change. Ainley and Fleming (2000) refer to three broad bands of large-scale reform, namely: whole-school reform, school district reform, and state or national reform involving all schools in a school system.

Fullan (2000) goes on to argue that there are a number of ingredients that are essential to the success of all large-scale reform initiatives. These are:

- the strength of the system's infrastructure
- the coherence among the elements of the reform
- creating links between the components of the system
- generating identity with the reform across the system, rather than sub units within the system

The quality of the curriculum and the availability of resources are also cited by Fullan as being paramount, along with the integration of 'pressure and support' mechanisms (accountability systems) and ownership at the local level.

Elmore (1996), notes that in moving from small- to large-scale implementation, a lot of the impact can be lost because of the lack of the supports that were available on a small-scale and that are no longer intact when moving to a large-scale. Change requires external structures, a focus on motivation, intentional replication processes and on-going support for new learning.

The Children's Literacy Success Strategy (CLaSS) was developed by the authors in collaboration with the Catholic Education Commission of Victoria. It was conceived as a means of both improving literacy outcomes across a large number of schools and of building the capacity of the system. The strategy was developed both as an ongoing research and development program and as a system-wide implementation of literacy strategies for improving student outcomes in the early years of schooling. It uses a whole-school design approach in which the participating schools have continued involvement with the researchers who developed the design as well as with system support personnel who are in regular contact at the school and classroom level.

A system-wide support structure was established for CLaSS prior to its implementation in January, 1998. During 1997, the Catholic Education Office Melbourne (CEOM) and participating dioceses of Ballarat and Sandhurst, selected a group of seven CLaSS facilitators who were to work with the CLaSS Trainer, the first author of this report, who coordinated and trained the team of facilitators. A senior officer based in the central office of the CEOM supported the Trainer and the facilitators.

The facilitators initially met weekly during late 1997 and began training in the CLaSS Design. In 1998, the team began working with an initial intake of 39 schools. In each of the subsequent years a new intake of schools joined CLaSS, leading to a total of 295 schools in the project by 2003. Initially each facilitator was assigned a group of between 10–25 schools that they would be responsible for during a school's intensive three-year training. Over time as well as an increase in the number of schools joining CLaSS, new challenges emerged as schools moved beyond the three years' intensive phase of the project. In 2002 a consultation process took place with schools that had completed the initial three years of CLaSS (intensive phase): a professional development model for the Sustaining Phase was developed and implemented from 2003.

Over time the facilitator group has changed and there have been several changes in the person occupying the position of Trainer and Coordinator.

A CLaSS Management Group, with representation of all concerned parties, was established to oversee the implementation process. This group met once a month in the initial year and then reduced the meetings in the fifth year to one per quarter as CLaSS became institutionalised and there were fewer issues to address.

A SIX-TIER MODEL OF PROFESSIONAL DEVELOPMENT

For change to be deep and lasting, it is necessary to develop and extend the beliefs and understandings of all participants (Crévola, 2000). Teachers need their practice to be one of reflection and refinement, based upon the needs of their students. This requires on-going, on-site coaching and support to enable teachers to acquire new and complex teaching strategies, and to successfully transfer them to their teaching repertoire. (Joyce & Showers, 1996).

Barth (1990) argues, ‘Probably nothing in a school has more impact on students in terms of skills development, self-confidence, or classroom behaviour than the personal and professional growth of their teachers’ (p. 49). To maximise this impact it is necessary to transform schools into learning organisations in which lifelong learning incorporates both the adults and the students (Stoll & Fink, 1996).

The key characteristics of the professional learning model designed and implemented in CLaSS are as follows:

1. the use of data on student learning outcomes to drive teaching and learning (*data driven improvement*);
2. a focus on change and development in the beliefs and understandings of teachers as the key to effective teaching (*teachers as learners*);
3. the embedding of professional learning within a whole-school design for improving student learning outcomes (*building learning organisations*);
4. achieving systemic change (*systemic scale-up*) through a six-tier model of professional learning and school improvement in which the tiers are:
 - *the student* as the beginning and end point of professional learning;
 - *the classroom teacher* as the person with the greatest capacity to impact on student progress;
 - *the professional learning team*, including the role of the coordinator as an ‘internal’ change agent;
 - *the school*, including the role of the principal as the instructional leader;
 - the ‘project’, including the *role of the facilitator* as an ‘outside’ agent of change; and

- *the system*, including support structures, funding arrangements, and accountability systems (Crévola, 2000).

The CLaSS professional learning model is based on the premise that teachers who are at the same time learners, construct a language to talk with each other about their work and to create a learning community. As Fullan & Hargreaves (1992) comment:

As individuals, [teachers] must therefore take responsibility for improving the whole school, or it will not improve. If they don't, their individual classroom will not improve either, because forces outside their classroom heavily influence the quality of classroom life: forces like access to ideas and resources, timetabling arrangements, and sense of purpose and direction. (p. 11)

As noted above, the model has six tiers. These are described in detail in the CLaSS overview document (Crévola & Hill, 2005 *in press*).

Tier 1: The Student

The impact of the school improvement process must be measured first and foremost by the extent to which it impacts on student learning. In effective schools, teachers monitor and measure what is important as it relates to student learning outcomes.

In CLaSS, pre- and post-testing of all students was established as a non-negotiable component of the design from the beginning. The resulting data have provided CLaSS schools with valuable information that has enabled teachers to assess where they are, determine areas for improvement and, having addressed these, evaluate whether they have made the intended progress. An emphasis has been placed on ensuring that all CLaSS teachers appreciate the significance of the detailed information collected for each student in their class. Each CLaSS school has had to identify individual learning goals for each student and set 'instructional targets' for each year level.

Tier 2: The Teacher

While the outcome of the educational process is student learning, a major contributing factor in improving student learning is teacher learning. Teachers need to increase their knowledge base in order to be more effective. The success of educational reform depends

on the extent to which changes are supported by ongoing, structured staff development (Showers & Joyce, 1996).

Teacher participation in professional learning has been shown to have a significant, positive effect on their professional self-perception (i.e. energy and enthusiasm) which, in turn, has a strong, positive influence on students' attitudes, attentiveness in the classroom, and on their learning outcomes (Rowe, 1995).

In bringing about change in classroom practice, it is inevitable that professional development must attend to giving teachers skills in the use of various teaching techniques and strategies. The CLaSS model of professional development recognises this need, but strongly asserts the critical importance of developing teachers' beliefs and understandings.

Tier 3: The Professional Learning Team and the Coordinator

The CLaSS professional development model seeks to achieve a balance between work-based (on-site) and outside-provided (off-site) learning opportunities for learning teams. The off-site and on-site combination addresses the problem of poor transfer to the classroom inherent in traditional approaches to professional development. While teaching approaches are introduced to the teachers at CLaSS professional development sessions (off-site), teachers learn about the new strategies as they practise, discuss, modify and refine them with their peers and coordinators in the school environment (on-site).

In CLaSS the establishment of professional learning teams has been critical to 'de-privatising' teaching (Wehlage & Stone, 1996, p. 300) and to creating both a culture and a process for ongoing improvement in the quality of teaching in schools. As members of professional learning teams, teachers increasingly assume joint responsibility for the learning outcomes of *all* the students in their section of the school so that successful learning becomes a *shared* responsibility, not just a responsibility of the individual classroom teacher. They also assume responsibility for *each other's* professional learning and growth so that successful teaching is a shared responsibility in which the team provides individual members with both the pressure and the support to improve.

The key role in ensuring the success of the professional learning teams is the on-site literacy coordinator. In CLaSS, the coordinators are seen as the ‘lead-learners’ and/or ‘linkers’, whose role it is to establish the ‘big picture’ of early literacy in their schools. The coordinator ensures that mentoring, peer coaching and modelling (Showers & Joyce, 1996) operate consistently throughout the year. The coordinator also sets the agenda and chairs weekly meetings of the professional learning team.

Tier 4: The Principal

To bring about significant change in schools, it is vital that school principals are accorded a prominent position in the overall professional development model. They play a critical role in initiating, implementing and institutionalising change and need to have an understanding of both the change process and the changes themselves. More significantly, because they are being asked to exercise strong instructional leadership in improving student outcomes, they need to develop capacities that they may have never had to exercise in the past, which implies an understanding of the nature of instructional leadership generally and of their role in the specific context of improving early literacy outcomes.

CLaSS, as a whole-school design, makes significant demands on principals as leaders and thus it is important that they occupy a prominent position in the professional development model.

As Fullan (1991) notes:

The role of the principal is not in implementing innovations or even in instructional leadership for specific classrooms. There is a limit to how much time the principal can spend in individual classrooms. The larger goal is in transforming the culture of the school. (p. 161)

Principals in CLaSS are guided to have a general conceptual understanding of the instructional strategies used by their teachers, to engage in ‘principal walks’ on a weekly basis and to meet weekly with the CLaSS coordinator to debrief on the instructional program’s progress. Over the years of CLaSS the interactions both personal and in journal reflections by the CLaSS coordinators have provided a wealth of anecdotal

evidence indicating that teachers look to principals for support in the following four areas:

- intellectual leadership by interpreting, translating and articulating policy changes and mandates;
- cultural and emotional leadership by building supportive, humane school cultures that encourage collaboration and risk taking;
- aligned management by procuring and providing the necessary materials and human resources to facilitate the change efforts; and
- instructional leadership by establishing an ethos in which the bottom line is student learning and in which all decisions are taken on the basis of what needs to happen to improve learning outcomes.

During the intensive phase (the first three years) of CLaSS, principals attend four four-hour sessions a year with their literacy coordinator. These sessions are designed to provide familiarity with the design as a process and to explore the kind of leadership needed to improve literacy outcomes for all students. The purpose of having the literacy coordinator at these sessions is to build that notion of a 'leadership team' and to ensure shared understandings. There are many issues that the literacy coordinator struggles with that need the understanding and support of the principal. Data form the cornerstone of all leadership sessions, especially examination of pre- and post-test results. In addition to the four four-hour compulsory training sessions, a number of leadership seminars have been organised, all of which have been supported by participating CLaSS principals.

Tier 5: The Facilitator

CLaSS is based on the premise that ongoing improvement requires schools to function as learning organisations. Processes for generating powerful organisational learning are built into the CLaSS design, including the daily work of the CLaSS coordinator; the weekly professional learning team meeting; the weekly leadership meeting (principal and CLaSS coordinator), and; off-site training days for principals, coordinators and teachers. Another process is the ongoing support provided by CLaSS facilitators.

A team of facilitators employed across three dioceses was appointed at the commencement of CLaSS to provide external support to schools and to ensure that what

is learned in off-site professional development sessions is implemented successfully at the school level. Twice a year, in the intensive phase, every school is visited by the CLaSS facilitator who spends time observing the classroom practices and routines, demonstrating teaching approaches, talking with individual teachers, the coordinator and the principal, and conducting a formal team meeting to discuss team concerns and issues.

Within CLaSS, the role of the external facilitator during 1998–2000 was to provide a judicious mixture of both pressure for change, and support to enable change to happen. Above all, the role involves working with staff in schools, and especially with the principals and CLaSS coordinators in these schools, to build communities of learners who are able to digest, understand and develop commitment to the CLaSS reforms.

While there has been a long history of advisory and support staff within the Catholic education system, the role played by the CLaSS facilitator in the first few years of CLaSS was a more focused and direct role than that to which schools and the system had been accustomed. During the first three years, facilitators met weekly to train for the role. They were trained according to an ‘apprenticeship model’ based on the highly successful Reading Recovery training model. This was in contrast to many other programs in which a ‘train-the trainer’ model is used to achieve large-scale implementation. While the apprenticeship model used in the early years of CLaSS was resource intensive, it ensured a greater depth and consistency of beliefs and understandings among the facilitators and thus greater integrity and consistency in the implementation of the design across the school system. The CLaSS facilitators were initially all new to CLaSS and so the role of the CLaSS trainer was one of training and shaping the CLaSS team. In more recent years, CLaSS facilitators have been recruited from CLaSS schools and hence have very different starting points. The focus of their professional development is now more on peer support and a team approach.

Tier 6: The System

Systems need to learn and to develop capacity and may need external support to do so.

The initial decision to implement CLaSS was an indication that the Catholic Education Commission of Victoria had embraced, at the highest level, core values that reflected a

belief in the possibility of all schools getting all students to high standards through an ongoing process of organisational learning, capacity building and improvement. Furthermore, it implied that the resources of the system, and particularly its discretionary funds, would be aligned with their mission statement and core values. But how does a system translate this high-level commitment into roles and responsibilities of system leaders, and how does it provide high-level executive development and other management changes to enable it to bring about sustained school improvement?

At the commencement of CLaSS, these questions had not been addressed properly. Over time, however, some tentative answers have emerged. Moreover, it has become clear that the importance of this sixth level of the professional development model cannot be underestimated and that the horizontal alignment of all the elements comprising the design in individual schools needs to be reflected in vertical alignment of these elements between schools and the system in order to ensure successful, sustained change. In brief, learning at the system level must parallel learning at the school level.

How does this learning occur? The answer is complex, but it is possible to point to the following concrete actions that have been pursued within CLaSS as catalysts for system-level learning:

1. Regular formal meetings between system personnel and the CLaSS trainer to monitor implementation and address issues as they arise.
2. Frequent informal contact between system leaders and the design team.
3. The preparation and consideration of progress reports and annual reports that present analyses of data on the progress of the initiative.
4. The planning of professional development activities that involve both schools and system personnel.
5. The creation of dedicated senior positions to oversee and manage the reform process.
6. System responsiveness to the changing needs of schools as they move beyond the initial three years of intensive engagement in CLaSS.

In all of the above, leadership, commitment, continuity of policies and mutual trust have emerged as major factors in sustaining the reforms and allowing system-level learning and development. But the most important factor has been data and ongoing evidence of the impact of the reforms at the school level. In other words, the sixth tier in the CLaSS professional development model is very much driven by the first tier with its emphasis on the student and data on student performance.

THE DESIGN

As mentioned earlier, CLaSS utilises a whole-school, design approach to improving early literacy. The CLaSS design has nine elements, namely:

1. Beliefs and understandings
2. Standards and targets
3. Monitoring and assessment
4. Classroom teaching strategies
5. Professional learning teams
6. School and classroom organisation
7. Intervention and special assistance
8. Home/school/community partnerships
9. Leadership and coordination

Figure 1 summarises the design elements graphically.

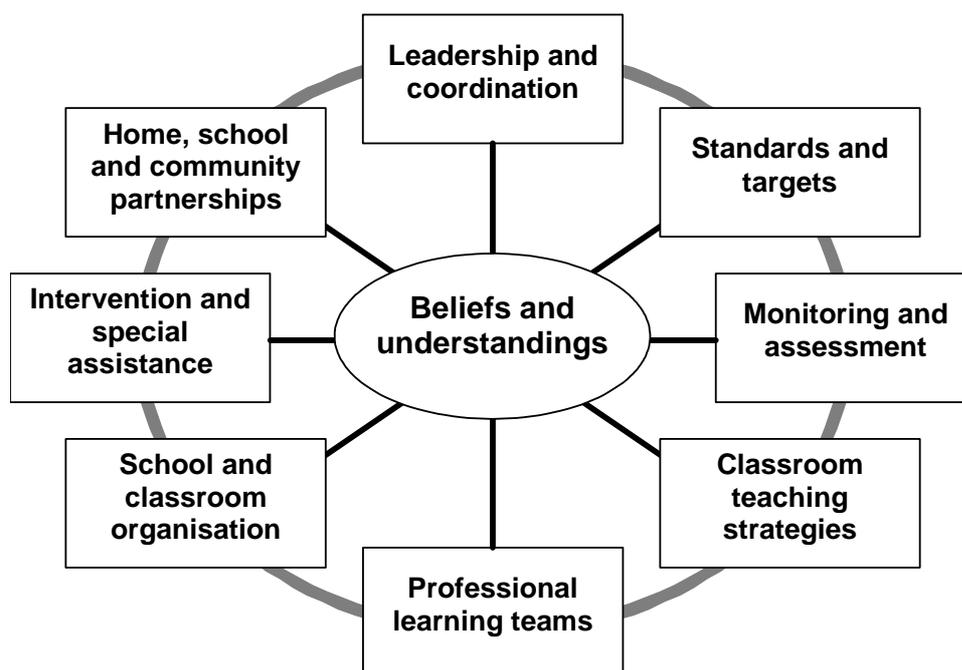


Figure 1. Design elements of CLaSS (Hill & Crévola, 1997)

For a more detailed description of CLaSS, the reader is referred to *Children's Literacy Success Strategy: An Overview* (Hill & Crévola, 1998, 2001, 2005 *in press*).

Beliefs and understandings

Beliefs and understandings about teaching and learning occupy the central position in the design summarised in Figure 1. This is meant to convey the notion that decisions about all other aspects of teaching and schooling are made on the basis of these core beliefs and understandings.

At the highest level, they involve a belief in the capacity of all students to achieve high standards given sufficient time and support, and a complementary belief in the capacity of all teachers to teach to high standards given the right conditions and assistance. They also involve an understanding of how students learn and become literate and of the characteristics of effective pedagogy.

Standards and targets

High expectations of student achievement need to be reflected in explicit standards that have been ‘benchmarked’ against those of other systems to ensure that they reflect ‘best practice’. Standards and associated targets constitute the starting point for re-focusing the mission of schools and re-designing how they operate so that meeting the standards comes first in everything that schools do.

At the commencement of CLaSS, a set of standards and associated targets were established with respect to the reading achievements of students in the first two years of schooling. Subsequently, an additional set of standards and targets was established for Year 2. Standards were implemented in terms of the Text Level of students, which was established by taking ‘running records’ using a set of 28 unseen graded ‘benchmark’ texts. Two standards were identified, namely a minimum standard and a target standard. These targets and standards are summarised in Table 1.

Table 1. Standards and Associated Targets for CLaSS Schools

	Target %	Minimum Standard	Target Standard
Year P	80%	Level 1 Text	Level 5+ Text
Year 1	98%	Level 15 Text	Level 20+ Text
Year 2	98%	Level 26 Text	Level 28+ Text

These have been found to represent a set of challenging but achievable targets during the first six years of CLaSS. They represent overall targets for the system: for individual schools and classrooms, they need to be modified to reflect the starting points of students so that they are valid within each context in which they are being used. In the future, they may need to be augmented with additional standards and targets relating to reading comprehension and to writing.

Monitoring and assessment

Monitoring and assessment are important to establish whether targets have been met and progress made towards ensuring that all students meet the set standards. But there is much more to monitoring and assessment than establishing how far students have travelled. It is critical in establishing starting points for teaching and driving classroom instruction.

The focus of assessment within CLaSS is on making teaching data driven. Assessment is used to guide decision making with respect to the identification of and intervention for ‘at risk’ students and to ensure that instruction is related directly to their learning needs. It is also used to evaluate the effectiveness of the overall program and to track change over time.

Detailed, systematic observation of each child is carried out at the beginning and end of each year, based on Clay’s *Observation Survey of Early Literacy Achievement* (Clay, 1993) and *Record of Oral Language* (Clay, Gill, Glynn, McNaughton & Salmon, 1983). While this is initially a time-intensive process, it ensures that there is a detailed diagnostic profile of each student compiled by the classroom teacher that provides the information necessary for matching teaching to the needs of each student. The use of this information coupled with the regular on-going monitoring procedures introduced in CLaSS ensure that all students are being matched to their levels of need. The initial information becomes outdated very quickly as young children progress rapidly once put on the path to matched instruction. The ongoing monitoring schedules and tools used by CLaSS teachers ensure that the academic information available on all students is always up-to-date and informs their instruction.

Classroom teaching strategies

Effective teaching is structured and focused on the learning needs of each student in the class. This constitutes the most difficult challenge faced by teachers, particularly given the wide range of needs and abilities within the typical classroom. It requires teachers to have a detailed understanding of how children learn and a well-developed classroom routine, structure and organisation for small-group instruction. It also requires teachers to motivate and engage students using a range of classroom practices and strategies.

Within CLaSS, teachers combine the following strategies within their daily literacy programs:

- oral language
- reading to children
- language experience (reading)
- shared reading
- guided reading
- independent reading
- modeled writing
- language experience (writing)
- shared writing
- interactive writing
- guided writing
- independent writing

The classroom literacy program consists of a reading and writing workshop conducted within a two-hour teaching block. Each session begins and ends with a teacher-directed ‘whole class’ focus. The main part of each workshop consists of activities that have a ‘small-group’ focus.

Professional learning teams

As described in the previous chapter, CLaSS makes use of a six-tier model of professional development. This model is based on the belief that the majority of teachers are able to improve their effectiveness as professionals, given the right conditions and support. In particular, the model adopted in CLaSS is based on the premise that professional learning is most powerful when teachers work as a member of a team and in pursuit of specific learning outcomes for students.

School and class organisation

CLaSS schools are required to ensure that within the timetable for the early years there is an uninterrupted daily two-hour block scheduled during the morning session and built-in time for regular team meetings. Teachers adopt simple rules and conventions to minimise interruptions to scheduled lesson time. In addition, they are expected to generally form a minimum of four flexible instructional groups and use these groupings as the chief means for focusing their teaching on the needs of all students. These groups do not remain the same but vary according to the needs of students, the focus of the instruction and its expected outcomes.

Intervention and special assistance

Even with the very best classroom teaching some students fail to make satisfactory progress.

As a precondition for participation in CLaSS, schools are required to implement the Reading Recovery one-to-one tutoring program. The Reading Recovery program must operate five days per week and with a minimum of four children per day. Reading Recovery is thus a key element of the literacy program in CLaSS schools for Year 1 students 'at risk'. For students who continue to experience difficulties beyond Year 1, CLaSS specifies the development of individual learning plans devised in consultation with the school principal, the classroom teacher and parents or care-givers. This may include referral to outside agencies.

Home/school/community partnerships

Linking with the home and the community is important at all levels of schooling. There is a strong body of research to show that when parents, care-givers and the community are supportive of the work of the school and involved in its activities, students make greater progress (Booth & Dunne, 1996; Cairney, Ruge, Buchanan, Lowe, & Munsie, 1995; Epstein, 1991). But to be effective, it is not enough to establish links with the home: what is needed is comprehensive and permanent programs of partnerships with families and communities.

In CLaSS, schools are encouraged to be proactive in establishing home–school–community partnerships. This involves assessing the situation within the local school community and devising action plans to address the most pressing problems.

Leadership and coordination

Leadership and coordination are critical ingredients in the general design summarised in Figure 1. In CLaSS, three processes are used at the school level to promote leadership and coordination. The first, as described in the previous chapter, is to develop the principal’s capacity to exercise leadership through a professional development program explicitly targeted at principals. The second is to appoint and provide training and development opportunities for literacy coordinators with a 0.5 to 1.0 full-time equivalent position, depending on the size of the school. The third is to encourage distributed leadership by ensuring that teachers, as members of professional learning teams, have responsibility for specific tasks.

Integrating the nine design elements

If one considers each of the design elements of Figure 1, it is evident that many if not most schools display aspects of all nine elements. But often, the various elements are poorly developed and there are disconnections between them. In other words, most schools have a design, whether consciously or not, but it is a disconnected one. School design is about ensuring that each element is given careful attention, is fully implemented and is aligned with all other design elements. When this occurs, there is a synergy arising from the fact that everything that happens in the school is supporting everything else, nothing is out of place and everything that is needed has been attended to.

Ensuring full implementation of the design takes time. It also takes understanding of the significance and nature of all design elements and strong leadership to bring about the necessary changes to put them into effect. For example, research into the impact of the New American Schools comprehensive school reform models (Berends, Bodily & Nataraj Kirby, 2002) indicates that after two or three years, only about half of the number of schools implement at a level consistent with expectations. In other words, the

fundamental problem is not so much the nature of the reform but how to achieve full implementation in schools.

Does it matter that schools do not always implement school designs fully? The answer appears to be 'Yes'. There is substantial research evidence to support the notion that improvement is more likely to occur in schools that implement reforms as designed. Analyses of the ELRP data revealed a correlation of 0.62 between school-level covariance adjusted post-test scores and a 7-point rating of degree of implementation in ELRP trial schools, indicating a strong relationship between implementation and student outcomes.

For this reason, the CLaSS professional development program has laid great stress on understanding the interconnections between and rationale for various elements and schools have been encouraged to ensure full and conscious implementation of the design as a whole.

RESULTS: 1998–2003

Evaluation strategy

At the commencement of CLaSS, decisions were made about an ongoing approach to evaluating the impact of the initiative. These were as follows:

1. All schools participating in CLaSS would conduct pre- and post-testing of students in Years P to 2 using detailed, systematic observation of each child based on Clay's *An Observation Survey of Early Literacy Achievement* (Clay, 1993) and *Record of Oral Language* (Clay, Gill, Glynn, McNaughton & Salmon, 1983). Tests were to be administered by classroom teachers except for the *Record of Oral Language* which was initially administered by coordinators. These results were to be analyzed and reported back to schools by the design team (Centre for Applied Educational Research, The University of Melbourne).
2. As a condition of funding for Literacy Advance, all Catholic primary schools in Victoria not participating in CLaSS were required to engage in pre- and post-testing of their Year 1 students using Clay's *An Observation Survey of Early Literacy Achievement* (Clay, 1993). Once again, processing of these data was the responsibility of The University of Melbourne team.
3. The Australian Council for Educational Research (ACER) would be contracted to carry out a research project, the Literacy Advance Research Project, using a sample of CLaSS schools and a sample of non-CLaSS schools and making use of data collected by The University of Melbourne team and some additional measures collected by ACER.

In this section, results from the first two of the above processes are presented. In other words, the focus is on data collected by the design providers from both CLaSS and non-CLaSS schools over the period 1998–2003. Results from the third process are presented in three ACER reports *Learning to Read in the Early Primary Years* (LARP) (Ainley & Fleming, 2000), *Three Years On: Literacy Advance in the Early and Middle Primary Years* (Ainley, Fleming & McGregor, 2002), and *Five Years On: Literacy Advance in the Primary Years* (Ainley & Fleming 2003).

Data collection

CLaSS commenced in 1998 with a group of 39 schools, referred to as Intake 1. In each of the following years a new intake was added. Figures 2a and 2b below present the numbers of students and schools for whom post-test data were obtained in each year since 1998.

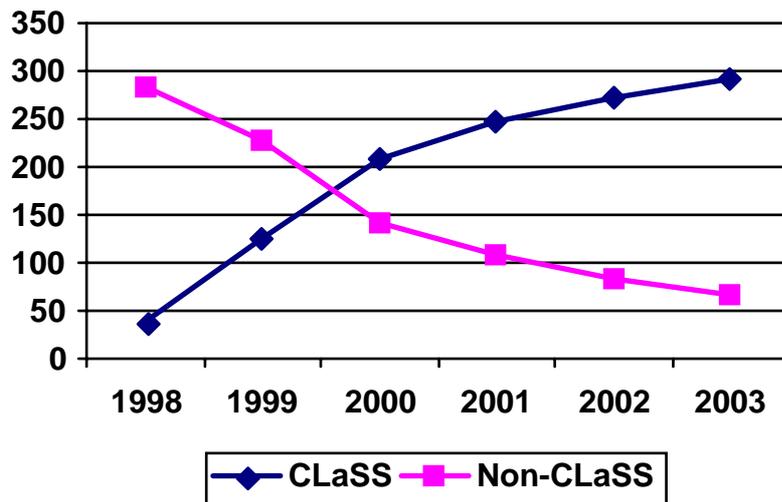


Figure 2a. Number of schools with post-test data: 1998–2003

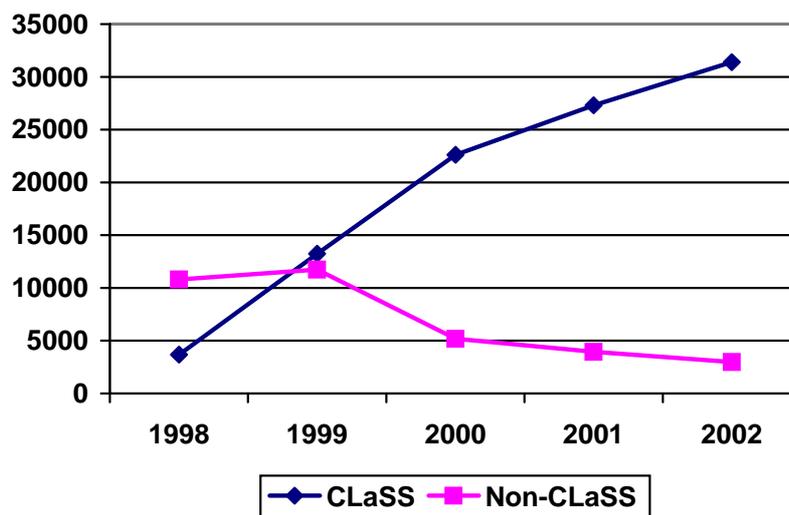


Figure 2b. Number of students with post-test data: 1998–2003

As can be seen from Figures 2a and 2b, the number of CLaSS schools providing data increased each year from 39 in 1998 to 293 in 2003. At the same time, the number of non-CLaSS schools providing data as part of the Literacy Advance program declined from 283 in 1998 to 67 in 2003 as more of these schools became CLaSS schools. The number of students tested as part of CLaSS rose more steeply than the decline in numbers of non-CLaSS students tested, because in CLaSS students are tested in Years P–2, whereas in non-CLaSS schools testing was predominantly in Year 1 only. (Some non-CLaSS schools shifted to P–2 testing over time.)

The data collected changed little over the six years of the initiative. Schools were required to record information on students using a Student Achievement Record (SAR) on the following variables:

Identifier and Demographic Information	Student Achievement Information
1. School	1. Oral Language (CLaSS only)
2. Class	2. Burt Word Test
3. Student	3. Text Level
4. Sex	4. Letter Identification*
5. Year Level	5. Concepts about Print*
6. Non-English Speaking Background	6. Word Test*
7. Education Maintenance Allowance	7. Writing Vocabulary*
8. Koorie (Aboriginal and Torres Strait Islander)	8. Dictation Task*
9. Integration (Special Education)	9. Peters Spelling in Context [#]

* Years P and 1; Year 2 if Text Level was in the range 0–15

[#] Year 2 only

It will be noted that the demographic data include an indicator of non-English speaking background; of poverty (Education Maintenance Allowance); of Koorie or Aboriginal and Torres Strait Islander; and whether or not the student had been classified as a special education student and was integrated into a regular classroom (Integration). Of the achievement measures, all except the Burt Word Test and the Peters Spelling in Context are taken from the Clay Observation Survey and Record of Oral Language.

Student demographics

Figure 3 summarises differences in the demographic characteristics of the different intakes of CLaSS students and of non-CLaSS students as measured by the indicators of language other than English background and poverty (NESB and EMA). The data are for the 2003 school year. While there have been some changes in demographics over the period 1998–2003, the variation has been small.

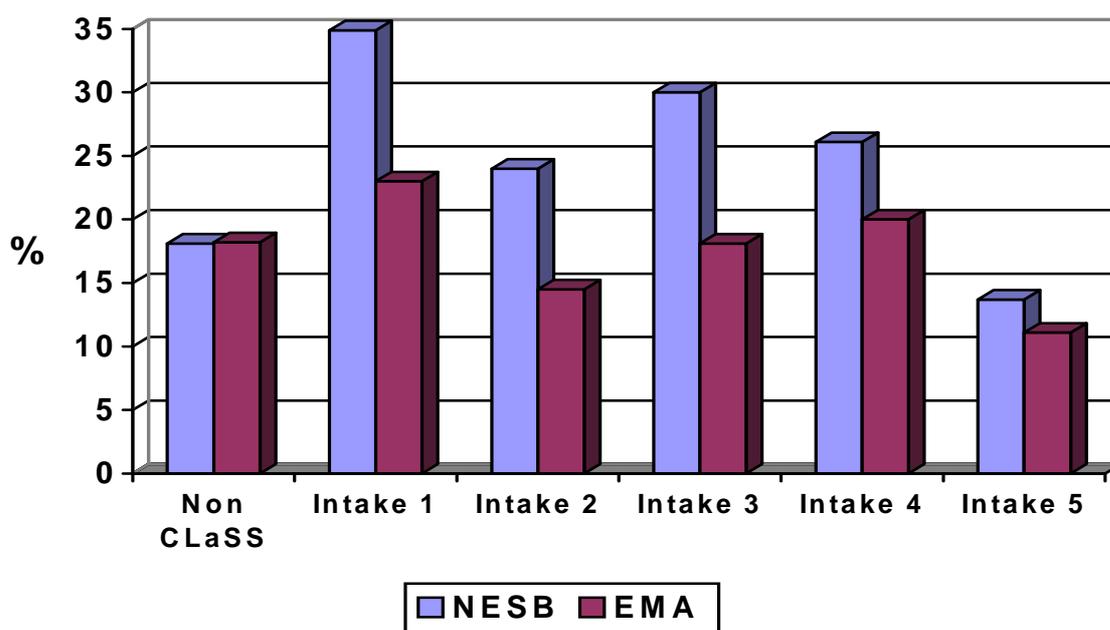


Figure 3. Demographics of students in different intakes of CLaSS schools and in non-CLaSS schools: 2003

It can be seen that CLaSS Intake 1 schools have been the most disadvantaged of the six groups of schools. The next most disadvantaged cohorts were Intakes 6 and 4 schools.

Progress towards meeting targets

As noted earlier, at the commencement of CLaSS, a set of standards and associated targets were established with respect to the reading achievements of students in the first two years of schooling. The standards relate to the Text Level of all students, which is established by taking Running Records using a set of benchmarked levelled texts. The standards and targets are set out in Table 1. The progress of different intakes of CLaSS, non-CLaSS schools and All schools over the six years 1998–2003 towards meeting the Minimum Standard (a Text Level of 15 or above) is summarised in Table 2. Yellow

shading is used to indicate years in which different intakes of schools participated in the intensive phase of the CLaSS program. Thus, Cohort 1 is shown as participating in the CLaSS program of professional development over the three years of initial implementation (1998–2000). Intake 2 joined CLaSS in 1999, Intake 3 in 2000, and so on. Non-CLaSS schools are those schools that did not participate in CLaSS at all over the period 1998–2003. The identity of the schools in each of the six intakes of CLaSS and of the non-CLaSS group of schools was not known in advance, since they self selected into each of these six groups. In other words, at the end of the five years of the initiative, the data constitute a ‘natural experiment’ with the non-CLaSS schools being the control group.

**Table 2. Per cent of Year 1 Students Meeting the Minimum Standard
(Text Level = 15+)**

Intake	1998	1999	2000	2001	2002	2003
Intake 1	75.3	84.5	85.0	87.2	87.8	86.7
Intake 2	71.1	81.6	86.6	89.1	86.7	87.7
Intake 3	66.9	74.7	82.6	89.1	88.1	85.8
Intake 4	57.2	66.8	70.5	83.2	85.0	83.2
Intake 5	72.1	76.7	78.0	80.0	88.9	89.9
Intake 6	68.6	75.6	69.5	71.7	76.1	80.7
Non-CLaSS	61.2	73.7	72.7	80.3	81.1	79.0
All	68.1	77.6	79.1	85.4	85.9	85.1

It can be seen that there is an overall trend towards higher proportions of students meeting the minimum standard over time, with 68.1 per cent meeting the Minimum Standard in 1998 and 85.1 per cent in 2003. In each year, CLaSS schools outperformed non-CLaSS schools. There is evidence of an appreciable increase in the proportions meeting the Minimum Standard in the first and second years of becoming CLaSS schools.

Figure 4 summarises the differences between CLaSS and non-CLaSS schools in standards of reading of Year 1 students at the end of 2003, the sixth year of CLaSS. Comparisons from one year to the next are problematic given the changing composition

of the non-CLaSS schools. In addition, over time the non-CLaSS schools have implemented many of the elements found in the CLaSS schools. However, Table 2 (above) and Figure 4 indicate the relative superior performance of CLaSS schools in meeting minimum standards.

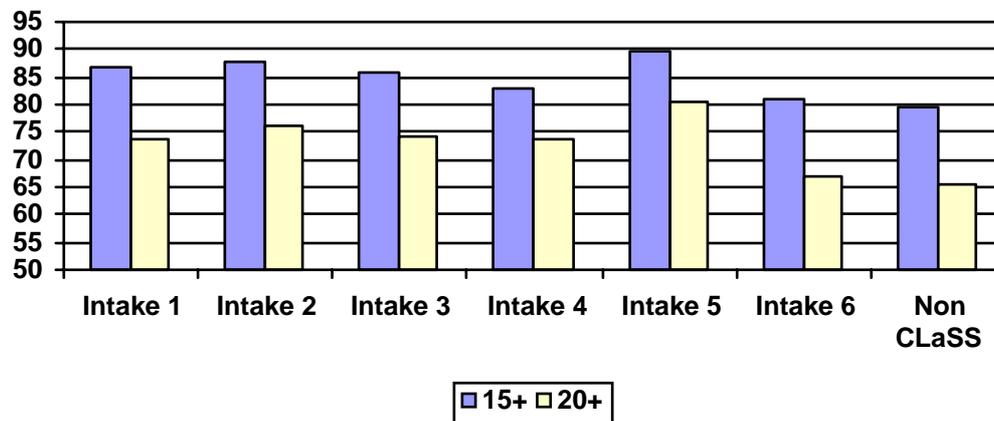


Figure 4. Per cent of Year 1 schools meeting Minimum and Target Standards, 2003

Table 2 and Figure 4 present raw or adjusted percentages of students meeting Minimum and Target Standards. They involve no adjustment for the different demographic characteristics or different starting points of students across intakes or groups of schools. A fairer comparison is provided by Table 3 (below), which gives probabilities of meeting the Minimum Standard for students with nominated starting points as measured by their Pre-test scores.³ More specifically, Table 3 gives probabilities for students at the 10th, 25th, 50th, 75th and 90th percentiles, who were at average levels on all other indicators. Separate probabilities are given for students in Intake 1, Intakes 2–6 and in non-CLaSS schools in 1998 (the first year of implementation by Intake 1 schools) and in 2003.

Focusing on the top part of Table 3, which gives probabilities for 1998, the first year in which CLaSS was implemented, it can be seen that irrespective of the category of school, if students had high Pre-test scores, their probability of meeting the Minimum Standard at the end of the year was very high indeed. Thus, for example, a student at the 75th percentile on the Pre-test and at average levels on all other intake measures, had a 98% probability of achieving a Text Level of 15+ at the end of the year in an Intake 1 school, a 95% probability in those schools that in subsequent years became Intakes 2–6 schools,

and a 90% probability if a member of that group of schools that in 2003 were still non-CLaSS schools.

Table 3. Probability of Year 1 Students with Different Starting Points at the Beginning of the School Year Meeting the Minimum Standards (Text Level 15+) at the End of the School Year

1998	10 th %-ile	25 th %-ile	50 th %-ile	75 th %-ile	90 th %-ile
Intake 1	32%	66%	91%	98%	100%
Intakes 2-6	16%	45%	80%	95%	99%
Non-CLaSS	9%	28%	66%	90%	98%

2003	10 th %-ile	25 th %-ile	50 th %-ile	75 th %-ile	90 th %-ile
Intake 1	62%	89%	98%	100%	100%
Intakes 2-6	52%	84%	97%	100%	100%
Non-CLaSS	33%	72%	94%	99%	100%

On the other hand, if students had low Pre-test scores, their probability of meeting the Minimum Standard varied considerably depending on whether they were in the first intake of CLaSS schools (Intake 1) or in other schools. A student at the 10th percentile on the Pre-test and at average levels on all other intake measures had a 16% probability of meeting the Minimum Standard in those schools that would later become CLaSS schools (Intakes 2–6) and a 9% probability if in non-CLaSS schools, but a 32% probability if in CLaSS Intake 1 schools. The differences were equally dramatic for the student at the 25th percentile on the Pre-test. Six years later, probabilities had improved considerably for students in both CLaSS and non-CLaSS schools, although they remained more favourable for students in CLaSS schools.

Performance of students by background characteristics

To understand the extent to which there were achievement gaps for different groups of students, the data were analyzed by students with different background characteristics, namely gender, non-English speaking background, poverty and special education. The results are displayed in Figure 5.

³ Probabilities were computed by fitting 4 two-level logistic regression models to the data. Parameter estimates are given in Appendix 2.

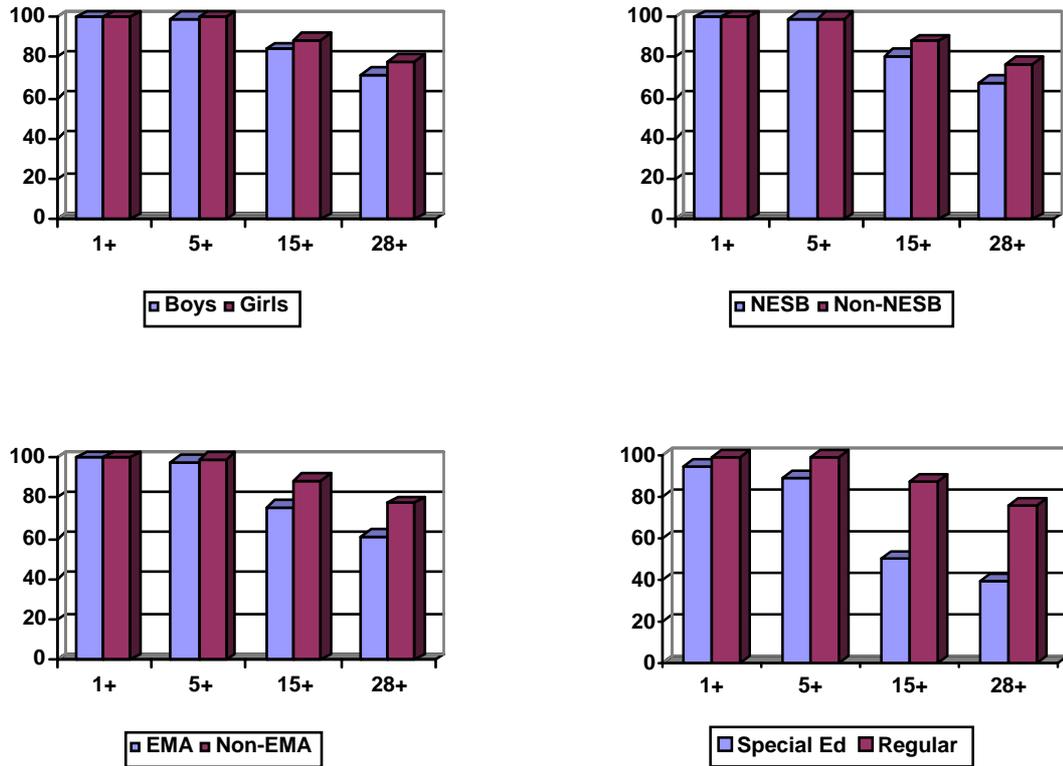


Figure 5. Per cent of Year 1 students in Literacy Advance schools meeting different Text Levels: 2003

The graphs show that girls perform at a higher level than boys, especially at the higher levels. Students from non-English speaking backgrounds (NESB) and students living in poverty as measured by the Educational Maintenance Allowance (EMA) had similar levels of disadvantage, although the effect of poverty appears to be slightly greater than that of coming from a non-English speaking background. The graphs also reveal the predictable extent of the disadvantage experienced by special education students. On the other hand, it is also evident that many of these students were able to perform at higher levels than is often assumed.

Once again, the graphs of Figure 5 make no adjustments for other background characteristics of students in a given group. To obtain a more accurate picture of the influence of background characteristics, a further set of analyses was undertaken to estimate the probability of Year 1 students from different backgrounds meeting the Minimum Standard, namely a Text Level of 15 or better, but at average levels on all other background measures.

Table 3. Probability of Achieving the Minimum Standard (Text Level of 15+) for Different Groups of Students in Literacy Advance Schools in 2003

Group	Probability (%) of achieving a Text Level of 15+	
	1998	2003
Boys	65%	83%
Girls	71%	88%
Non-English speaking background	65%	84%
Students on EMA	62%	80%
Special education students	35%	57%
NESB Boys	62%	81%
NESB Girls	68%	87%
EMA Boys	59%	76%
EMA Girls	66%	83%
NESB and EMA students	59%	77%
ESB and EMA students	64%	81%
NESB Boys on EMA	56%	73%
NESB Girls on EMA	62%	81%

For a Year 1 boy in a Catholic primary school in 1998, with average values on other background characteristics, there was a 65% probability that he would meet the minimum standard, compared to a 71% probability for a girl with the same background characteristics. The probability for non-English speaking students with average values on other background characteristics, interestingly was also 65%, while for EMA students it was 62%. It was lower, however, for special education students (35%) and for non-English speaking boys in receipt of EMA (56%). Five years later, for all groups of students there had been around a 15–20% increase in the probability that a student in a particular group with average values on all other indicators would meet the minimum standard. This indicates substantial improvement in student outcomes for all students across all Catholic primary schools.

Effect on overall literacy outcomes

The above analyses focus on Minimum Standards as defined by students' Text Levels. To estimate the impact of CLaSS on student literacy achievement, analyses were undertaken of the data for both CLaSS and non-CLaSS schools. It will be recalled that data were available only for Year 1 students in non-CLaSS schools and so it was not possible to undertake similar analyses for Years P and 2.

The aim of these analyses was to estimate the effect of the CLaSS program on each cohort of CLaSS schools using the non-CLaSS schools as the control group. It has to be remembered, however, that both the CLaSS schools and the non-CLaSS schools changed each year as more schools became CLaSS schools. Thus, the analysis in each year involves different permutations of schools. The analyses estimate the effect of the CLaSS program on Year 1 students, having statistically adjusted Post-test scores for the effects of:

- the gender of the student
- whether the student was from a non-English speaking background
- whether the student was in receipt of the Educational Maintenance Allowance
- whether the student was a special education student
- the starting point of the student as measured by their Pre-test score at the beginning of Year 1

For the purposes of these analyses, an overall measure of literacy achievement was generated for each student, based on factor score coefficients which indicate the extent to which each of the separate measures contribute to an overall measure of literacy. The regression coefficients and other estimates for the model used to estimate the effects of CLaSS are summarised in Appendix 1.

Caution needs to be exercised in interpreting these analyses. The data available for analysis are for Year 1 students, but CLaSS commences in the Preparatory Year (Year P). Therefore, if the program is working effectively, the starting points of Year 1 students in CLaSS schools will be relatively higher than those in non-CLaSS schools. These higher starting points in turn mean that students in CLaSS schools have to perform at even higher levels than their counterparts in non-CLaSS schools to demonstrate the same

results when adjustments are made for students' scores as measured during pre-testing at the beginning of Year 1. For this reason, measures of the effect of CLaSS on student outcomes based on these analyses are likely to be understated for all years except the first year, since Year 1 CLaSS students joining a new intake have not had the benefit of CLaSS in Year P.

With this caveat, Table 4 presents effect sizes for each cohort over the period 1998–2003. In interpreting these effect sizes, it is relevant to note that the upper estimate of the mean effect size for all studies of comprehensive school reform model designs in the USA, as computed in a meta-analysis by Borman, Hewes, Overman and Brown (2003), is 0.15 of a standard deviation in test scores. As can be seen from Table 4, all intakes of CLaSS schools recorded effects sizes well in excess of the high-end estimate of 0.15 in all years except 2002.

Table 4. Average Effect Sizes for Different Intakes of CLaSS: 1998–2003

	1998	1999	2000	2001	2002	2003	Average
Intake 1	0.651	0.255	0.641	0.35	0.166	0.320	0.397
Intake 2		0.418	0.750	0.229	0.106	0.199	0.340
Intake 3			0.661	0.242	0.057	0.175	0.284
Intake 4				0.451	-0.031	0.178	0.199
Intake 5					0.300	0.255	0.278
Intake 6						0.385	0.385

Table 4 also indicates that the longer schools were in CLaSS, the larger the mean effect size. This indicates that the impact is cumulative and dividends accrue as the result of a sustained commitment to improvement over time. Once again, it needs to be stressed that these effect sizes almost certainly underestimate the true effects of CLaSS for the reasons stated earlier.

ACHIEVEMENTS AND SUCCESS FACTORS

CLaSS was initiated in the wake of an agreement by all States and Territories within the Commonwealth of Australia to a national goal ‘that all students commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years’. The CLaSS initiative was part of the CECV’s Literacy Advance Strategy which was a direct response to that challenge. It was predicated on the belief that achieving national goals for literacy required a concerted effort to raise literacy performance in the first 2–3 three years of schooling. Schools were given the option of implementing CLaSS or one of a number of other approved approaches. However, they were required to collect pre- and post-test data on all their Year 1 students to enable evaluations to be carried out of the effectiveness of the various designs. Over time, the majority of Catholic primary schools in Victoria opted to adopt CLaSS as their preferred design.

The data for the first six years of the Literacy Advance Strategy indicate that Catholic primary schools in Victoria have achieved substantial and sustained improvements in early literacy outcomes across the system and that these improvements have been especially marked in CLaSS schools and among low-achieving students. They also indicate that there is still some way to go in meeting Target Standards and that a renewed effort may be needed to achieve further improvements.

At this stage, however, it is relevant to focus on those factors that account for the gains achieved thus far. The following would appear to be the most significant:

Sustained commitment of the system

The long-term commitment of the CECV to pursuing a systemic, evidence-based strategy for improving literacy has clearly been a key factor in the improvements in literacy outcomes for both CLaSS and non-CLaSS schools. This commitment has included a very significant allocation of resources to ensure the success of the strategy. It has also meant some realignment of the system to fit with the new priorities and goals. Long-term system commitment is a rare asset. So many systems suffer from constant turbulence, high turn-over of leaders, changes of direction and lack of focus.

An intelligent systemic change strategy

A key factor in promoting ownership of and involvement in the change process at the school level has been the use of a strategy that allowed schools choice regarding the approach to be adopted, evidence to enable them to evaluate the impact of their choice, and encouragement and opportunity to change to a more successful strategy. It has been a strategy that has both granted a measure of autonomy and yet has demanded a level of accountability for professional choices and actions, with student outcomes as the deciding criterion. It has been a strategy that has facilitated the progressive adoption of CLaSS by increasing numbers of schools.

A proven and consistent design

CLaSS schools have been able to achieve significant short-term gains because they were able to implement a design that had already been tested through the ELRP. It was also a design that has remained constant and has not been subject to ongoing change and modification. This has meant consistency in the professional development and in the messages that different cohorts of schools have received.

Phased roll-out

The policy of allowing schools to opt into CLaSS over a number of years has meant that there has been a gradual increase in the number of CLaSS schools from 39 in 1998 to 273 in 2002. The gradual scale-up of CLaSS has proven a distinct advantage in that it has allowed time to build up the capacity of the system to support a large numbers of schools in implementing the design. In addition, the initial intake, that was relatively small but highly committed, has functioned as the pioneer intake that has paved the way for later intakes and ensured a smoother implementation in succeeding years.

Six-tier professional development model

The adoption within CLaSS of a six-tier professional development model (Crévola, 2000) focusing on deepening the beliefs and understandings of all key players in the change process has been a critical component of CLaSS. First and foremost, it is a model that places a premium on equipping participants with the knowledge to make sound professional judgments: it is not primarily training to perform specific tasks, although there is a component of that in the training. The CLaSS professional development sessions are derived from the analysis of the student data, not on generic perceived needs

of the teachers. Secondly, it is a model that operates simultaneously at different levels, right up to the system level, thus ensuring both vertical and horizontal alignment of design elements. Thirdly, it is a model that focuses on the creation of professional learning teams of teachers within each school that are able to achieve so much more than can be achieved by teachers operating individually.

Model for training facilitators

An important factor in the success of CLaSS is the CLaSS facilitator who is the person who interfaces with CLaSS schools on an ongoing basis. The use of an apprenticeship (working alongside a ‘more knowing other’) model to train the CLaSS facilitators was critical in the initial phase of CLaSS so as to ensure a deep understanding of the design and a coherent and consistent approach to working with schools to bring about change. It allowed both the time and opportunity for new facilitators to develop and mature in the role and to receive focused feedback during the early stages of being a facilitator. This model has developed into a peer support model within a team approach. CLaSS facilitators have continued the growth of CLaSS into the sustaining phase which builds on the firm foundations established at the inception of the project.

Use of data

The use of assessment to drive the improvement of instruction has been a component of the design that has deepened substantially over time. This has allowed participants to establish students’ starting points, to reveal areas of strength and weakness and to monitor progress. Teachers have become better at using data and more ‘literate’ in the use of assessment data. While there is still further to go, the changes made already have been powerful in instituting a more data-driven approach to teaching as opposed to a curriculum-dominated approach. The former begins and ends with the student and his or her performance and leads to more focused teaching.

Teacher quality

In the final analysis, the success of the CLaSS schools is attributable to effective teaching. In this regard, it needs to be acknowledged that Catholic primary schools in Victoria are staffed with well-qualified teachers. The quality of teachers within the system, their receptivity to the strategies and approaches promoted through CLaSS and

their willingness to engage in significant, ongoing professional growth and development have been significant factors in the success of CLaSS.

Distributed leadership

Leadership is a key ingredient in bringing about change and improvement. In CLaSS, leadership is exercised by key system officials, the CLaSS facilitators, school principals and literacy coordinators. Considerable time and effort have been devoted to leadership development and to exploring what it means to be an instructional leader. For many individuals, CLaSS has required them to reconceptualise their role and to work in very different ways than they have hitherto. For others, CLaSS has been a confirmation of an approach to leadership that they had already begun to adopt. Particularly significant has been the emergence of the CLaSS coordinator with a strong coaching and mentoring role. This is a relatively new role within the system but one that is increasingly being seen as key to ongoing improvement of teaching.

Changed beliefs and expectations

The emergence within the education community at large of a strong conviction about the importance of early literacy and of the moral and economic imperative for all students to achieve high standards of literacy have been both outcomes of participation in CLaSS and a reason why CLaSS has been able to operate successfully. Without question, beliefs and attitudes have changed dramatically among teachers and administrators to the extent that propositions that were quite novel and challenging when CLaSS was first implemented are now accepted without question. While it may not amount to a paradigm shift in thinking, it is probably part of such a shift and signals a new determination to ensure high standards for all students.

These are some of the significant factors that account for the gains achieved to date. There are others, such as the role of particular individuals, the unique combination of timing, circumstance and opportunity that provided a context for the introduction of CLaSS. It is virtually impossible to determine with any precision the significance of each factor. It is clear, however, that CLaSS has been a highly effective project with six intakes of schools over time, indicating that the success is replicable. The challenge is to sustain and deepen the initial success to the point at which the changes are irreversible and system-wide.

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Appendix 1: Parameter Estimates from Fitting Three-Level Regression Models to Estimate the Impact of CLaSS, 1998–2002

	1998		1999		2000		2001		2002		2003	
	Est.	se	Est	se	Est	se	Est	se	Est	se	Est	se
Intercept	-0.067	0.018	-0.081	0.021	-0.277	.028	-0.086	0.024	-0.174	0.046	-.092	.029
Gender (female)	-0.002	0.010	-0.008	0.010	0.024	0.008	-0.036	0.008	0.140	0.017	.002	.008
NESB	0.032	0.014	0.018	0.015	0.002	0.011	0.056	0.012	-0.045	0.026	.054	.013
EMA	0.013	0.012	0.001	0.013	-0.022	0.010	-0.000	0.011	-0.199	0.024	-.017	.012
Koorie	0.053	0.131	-0.152	0.130	0.050	0.102	0.111	0.126	-0.854	0.227	.153	.074
Special Education	-0.222	0.031	-0.290	0.043	-0.292	0.036	-0.272	0.038	-1.074	0.069	-.249	.034
Pre-test	0.829	0.008	0.804	0.008	0.957	0.010	0.854	0.006			.865	.006
CLaSS Intake 1	0.308	0.044	0.129	0.043	0.279	0.045	0.152	0.044	0.239	0.074	.086	.037
CLaSS Intake 2			0.212	0.034	0.327	0.039	0.099	0.035	0.201	0.062	.080	.038
CLaSS Intake 3					0.289	0.038	0.105	0.035	0.188	0.061	.077	.044
CLaSS Intake 4							0.196	0.044	0.085	0.074	.110	.052
CLaSS Intake 5									0.188	0.089	.166	.057
											.865	.005
Variance of school residuals	0.040	0.006	0.034	0.006	0.024	0.003	0.030	0.004	0.071	0.011	.026	.004
Variance of class residuals			0.036	0.004	0.053	0.005	0.033	0.003	0.069	0.009	.027	.003
intercept	0.035	0.004	-0.001	0.002	-0.015	0.003	-0.005	0.002			.005	.001
intercept/slope	0.002	0.002	0.018	0.002	0.043	0.004	0.015	0.002			.013	.001
slope	0.025	0.002										
Variance of student residuals	0.220	0.003	0.258	0.004	0.190	0.002	0.188	0.003	0.822	0.011	.186	.003

* Statistically significant estimates shown in bold ($p < 0.05$)

Note: The above three-level regression models, with students nested within classes within schools, were fitted using MLn (Rasbash, et al., 1996). Effect sizes can be computed estimated using the formula: Effect Size (Δ) = dummy coefficient/ $\sigma_e = \beta_1/\sigma_e$. Thus, for example, the effect size for Cohort 1 in 1998 = $0.308/\sqrt{0.220} = 0.656$.

Appendix 2: Parameter Estimates from Fitting Two-Level Binomial Regression Models to Estimate the Impact of Background Factors, Prior Achievement and CLaSS, 1998 and 2003

Parameter	1998			2003		
	Proportion	Est (se)	Est (se)	Proportion	Est (se)	Est (se)
Cons		0.776 (0.061)	0.650 (0.158)		1.765 (0.060)	2.707 (0.157)
Gender	0.490	0.287 (0.044)		0.491	0.442 (0.054)	
NESB	0.286	-0.192 (0.060)		0.221	-0.221 (0.076)	
EMA	0.237	-0.326 (0.053)		0.174	-0.527 (0.068)	
Koorie	0.002	-0.212 (0.545)		0.004	-0.527 (0.408)	
Special Ed.	0.027	-1.401 (0.132)		0.017	-1.546 (0.153)	
Pre-test		--	2.347 (0.051)		--	2.653 (0.064)
Intake 1	0.173	--	1.611 (0.237)	0.173	--	1.194 (0.247)
Intakes 2–6	0.682	--	0.730 (0.177)	0.682	--	0.757 (0.170)
var u_i		0.637 (.068)			0.615 (.068)	
Students		10007			11967	
Schools		285			356	

* Statistically significant estimates shown in bold ($p < 0.05$)

Note: The above two-level binomial logistic regression models, with students nested within schools, were fitted using MLn (Rasbash, et al., 1996).