

**Ensuring that all students reach minimum national standards
for literacy and numeracy: What needs to change?**

Max Angus
Edith Cowan University
m.angus@ecu.edu.au

1st National Primary Years Conference, Adelaide, May 2009

The '10 per cent' group

Assessment results over the past decade indicate that about 10 per cent of primary students do not reach national minimum literacy and numeracy standards. This figure has stayed fairly constant notwithstanding the considerable effort that has been made to reduce the size of this group.

The purpose of this paper is to explore why this is the case and to propose what needs to be done by central agencies and by schools.

What is known about the '10 per cent' group?

I will draw attention to four important characteristics of this group.

First, the numbers of students who are unable to perform at national minimum standards vary from school to school. In some schools almost all students are performing at or above the standard. In other schools few, if any, students are able to reach the standard. It would be a mistake to assume that each school has about the same number of struggling students.

Second, students move in and out of the group as they progress through school. Some who begin slowly later zoom ahead. Also, some who perform well in the early years, later fall behind. The statistics should not be represented as though there is a single fixed group whose members can be identified in Year 1 and stays the same in each year of primary school.¹ I will return to this issue later in my presentation,

Third, whatever we have been doing to assist these students in the past has not succeeded in turning this problem around. Table 1 shows the results of national benchmark testing from 2001-2007 for Year 5 reading. In each year slightly more than 10 per cent of the Year 5 cohort did not reach the national benchmark for reading.²

Table 1: Percentage of Australian students reaching the Year 5 reading benchmark, 2001 – 2007

| Year | Yr 5 % |
|------|-----------|
| 2001 | 89.8 |
| 2002 | 89.8 |
| 2003 | 89.0 |
| 2004 | 89.7 |
| 2005 | 87.5 |
| 2006 | 88.4 |
| 2007 | 89.2 |

Source: National Report on Schooling, 2002-2008.

And fourth, the student primary school cohort of 2009 is different from that of 1999. For example, the number of students in regular primary classrooms with disabilities has doubled over the past decade as a result of inclusion policies.³ Research has also

shown that it is becoming progressively harder to engage students with their schoolwork with even primary students giving up and refusing to make an effort without rewards of some kind or other.⁴ Hence, among the students in the '10 per cent' group there is a multiplicity of factors holding them back.

These four points have important implications.

Because the circumstances in schools are so different, and the problems encountered by students and their teachers are so varied, the level of support, and the form of support, needed by schools to make a difference must be tailored to their needs.

Further, simply continuing to do what we have been doing over the past decade seems unlikely to produce a breakthrough. I contend that we are failing to recognise an important flaw in how we have been approaching the problem.

In my view, the core of the problem arises from the way in which resources - funds, school facilities, staff, access to specialist help - are dispersed throughout the system. They are inadequately targeted, and insufficiently concentrated, on those students failing to reach the appropriate standard in their year level. It is much harder than many people realise to concentrate the support these students need on a systematic and sufficient basis.

To put the problem another way, it is easier to allocate resources for the whole system, the whole school, the whole year level, or the whole class rather than target assistance to individual students.

Solving this problem requires central agencies, as well as schools, to change their thinking. It can't be left to schools, systemic schools in particular, since they do not have control over the policy and funding levers.

I now want to briefly explain what the central agencies must do before turning to the implications for primary school teachers.

What must governments and their central agencies do?

Central agencies must make four key changes before there will be any sharp reduction in the numbers of students unable to reach national minimum standards.

1. Make sure that all the school's resources are provided in sufficient quantity, and under conditions that enable them to be concentrated on assisting the students in the 10 per cent, recognising that the profile of what is needed will vary from school to school.
2. Ensure that **all** schools with high concentrations of students in the 10 per cent have adequate access to personnel who can intervene in homes and in communities.

3. Make sure that schools have the capacity to monitor the performance of students in literacy and numeracy and track their progress over the full span of their primary school years.
4. Ensure that the 'built environment' in schools is conducive to individualised teaching and learning.

These problems are easy to list but hard to fix, for reasons that I will explain. But they are problems that central funding agencies, not schools, must solve.

Fixing the system used to resource schools

In an earlier study for the Australian Primary Principals Association, my colleagues and I showed that there is too much 'hit and miss' in the way in which recurrent resources are directed to schools.⁵ The schools with the greatest needs do not always get the most resources. In fact the relationship between the socio-economic status of the school, used as a proxy for school need, and the school's average per student expenditure is almost zero.

Anyone who examined the adequacy of school funding arrangements in Australia and gave them a pass would have to be in a state of denial. It has been this way for a long time. Governments struggle to ensure that funding, or the resources allocated centrally by system authorities on behalf of schools, is properly targeted and used by the schools to assist the students in the '10 per cent' group.

The problem of targeting resources applies not only to the overall recurrent funding but also to supplementary funding of specific purposes. The funding of literacy and numeracy programs provides a pertinent example.

A 2008 review of the NSW Department of Education and Training's literacy and numeracy programs by the NSW Office of the Auditor General found that although the funding for the programs had trebled over the previous decade there was little apparent improvement in literacy and numeracy results that could be attributed to the additional funding.⁶

More recently, the Victorian Auditor-General noted in his foreword to the 2009 review of literacy and numeracy achievement that notwithstanding \$1.1 billion allocated over the past six years for improving literacy and numeracy in government schools the overall report card was disappointing.⁷

In each of these reports the Auditor-General suggested that poor targeting of the funding was a reason for the weak effects: the interventions that were funded were not sufficiently concentrated on those students most in need of the extra support, nor sustained for as long as the support was needed.

Of course, these reports raise intriguing questions. If the increases in funding that have been allocated to schools over recent decades have not been spent on targeted interventions for the students at risk, what has the extra funding been spent on?

Unfortunately Australian school funding systems lack the transparency that would enable someone to comprehensively answer that question. It would seem that the funding has been spent on improving the education of all students, not just the 10 per cent who are struggling to reach proficiency standards.

The challenges, however, are to make sure that the funding allocated for the '10 per cent' group reaches the schools and that the schools in turn direct as much of the spending as possible on those students with the most to lose. If that doesn't happen then it is unlikely that the results will show much improvement.

System authorities have been reluctant to address this problem because they have inherited an extraordinarily complex system that involves both state and Commonwealth governments. Fixing it would almost certainly cause political fallout, especially if there are perceived to be potential 'winners' and 'losers'.

While this problem is left in the 'too hard basket', other initiatives have a much-reduced prospect of success. This is because supplementary funding provided to assist the literacy and numeracy attainment of students in the 10 per cent, a small amount in relative terms, is layered on top of a core funding regime that is too complex and haphazard. How it should be fixed is the job of central managers and technicians. I don't intend to go into that topic this morning. I just want to emphasise that it must be dealt with.

Strengthen the capacity to intervene in homes and communities

Most primary teachers are fully aware of how events that occur in the homes of children, or in their community, have a huge impact on how the children engage with their schoolwork.

The dire circumstances of some Indigenous communities have drawn attention to the problem and there is an increasing recognition that support from a wide range of agencies must be mobilised. The actions of the Australian and Territory governments in the Northern Territory, while not focused exclusively on schooling, recognises that educational success in school will be a key indicator of the overall success of the government intervention.

Ken Henry, the Secretary of the Treasury for the Australian Government, perhaps the most powerful office in the Australian public service, has written a paper in which he maintains that the many sources of Indigenous disadvantage need to be fixed before expecting education outcomes to be achieved.⁸ He refers, for example, to the protection of families from violence and other forms of harm, access to early childhood education and parental support to promote development at home, adequate primary health services, and job opportunities for family members. While schools can participate in the development of communities, it is not their primary responsibility and most are not resourced to do so.

However, the problem is not confined to Indigenous students living in remote areas. As Mr Henry points out, three-quarters of Indigenous Australians live in cities and regional centres. Nor is the problem of serious disadvantage confined to Indigenous students. Typically, there is a high incidence of educational underachievement in any

community that has a relatively high level of unemployment, many single parent families, and high levels of substance abuse and crime.

Schools systems in Australia and overseas have sought to address the problem by establishing 'full-service' or 'extended' schools in communities where there is poverty and dysfunction. These schools typically have health, welfare and pastoral services based on the school site. As well they may offer child-care, pre-school, and before-and-after-school care services. The full service schools may serve not only the children enrolled but can also operate as a hub from which specialists provide consulting services to other neighbourhood schools. These are referred to as 'wrap around services' – a favourite new term.

If such programs were maintained and extended would there be a noticeable reduction in the numbers of children failing to make adequate progress in literacy and numeracy? Would the '10 per cent' problem morph into a '5 per cent' problem? I have no doubt that they would make a measurable difference.

There are three obstacles, however, that would have to be addressed.

First, the incidence of family dysfunction is not conveniently concentrated within the intake zones of a small number of schools. Even though some schools have higher concentrations than others, many primary schools enrol children at risk of abuse, tired from lack of supervision at home, hungry because they missed breakfast and cranky because they don't want to be at school.

Second, many out-of-school interventions require the cooperation and active involvement of children and their families, commitments that are hard to achieve and not always forthcoming.

Third, the initiatives need to be adequately resourced. If all that happens is that personnel are moved from central and district offices to school sites, without any real increase in the number of personnel, then it is hard to see how there will be much impact.

Providing schools with this kind of support is a necessary step, a pre-condition, for later school success. The question is whether the services provided by these means can reach the students in the '10 per cent' group and be drawn on for as long as they are needed.

Most school principals report that under present conditions they either have no access, or intermittent access, to these services because they are so tightly rationed or because they are geographically out of reach.

This is another challenging problem that central agencies must solve.

Provide schools with the capacity to track student progress over the full span of their primary school years

Although many teachers may have serious misgivings over how NAPLAN test results are likely to be used, few argue against using appropriate assessment tools to diagnose learning problems and monitor their students' progress.

Most experienced teachers are able to accurately judge the performance of students based on a complex body of observational and assessment data. However, from time to time it is important to acquire independent assessments to ensure that the class as a whole is performing as expected. Standardised tests can corroborate teacher judgments; this is particularly important for students struggling to make progress.

Further, teachers need to be able to detect trends in performance. Sometimes there may be a sharp dip or rise. In other cases a barely noticeable shift each year may accumulate over the course of the student's primary schooling into a large deficit. There is a need to acquire a whole of primary school perspective, partly because for some students their performance may vary from year to year and partly because teachers' standards may also vary.

Consider the figure below showing the variability of student performance as they progress from Year 3 to Year 7.

Figure 1: Trajectories of students on numeracy assessments completed in Years 3, 5 and 7

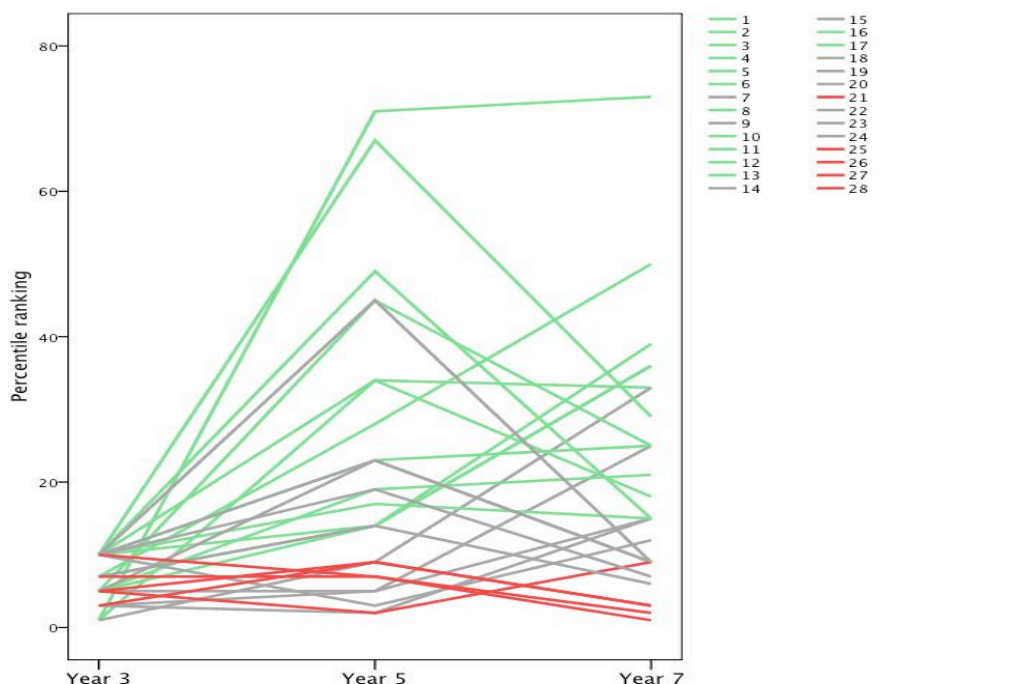


Figure 1 shows the trajectories on national benchmark assessments from Year 3 to Year 7 of 28 students who in Year 3 were in the '10 per cent' group. The results were collected as part of an Edith Cowan University study known as the Pipeline Project and have been converted to percentile rankings. The trajectories coloured red are for students who remained in the '10 per cent' group on each of the assessment occasions. The blue coloured trajectories are of students who performed above the 10th percentile in Year 5 but slipped back in Year 7. The green are of students who improved in Year 5 and continued to perform above the 10th percentile in Year 7.

While some of the variability shown in Figure 1 is due to measurement error, it is clear that student progress does not follow a smooth course and that some students

show little improvement, some make substantial gains, whereas others improve but later regress.

If schools are to concentrate effort on the students in the '10 per cent' group then it is essential that they have the means of mapping progress so that they evaluate whether their interventions are having a positive effect.

Some state systems have developed software and assessment tools for teachers that enable them to tailor the assessment and to administer the tests when the teacher deems assessment to be appropriate. Students could be tested several times during the year, or not at all. Teachers make the decision. Further, a comprehensive profile could be compiled over the course of the students' primary education. These are promising developments.

In other words, governments need to make sure that schools have a robust means of monitoring and diagnosing the individual performance of a student. The tools that are being used for accountability purposes are inappropriate and off-putting to teachers. Teachers need better than that if they are to effectively tackle the '10 per cent' problem.

Design new schools, and modify existing schools, so that they facilitate individualised teaching

In the 1970s primary educators sought to design primary schools that could better cater for the individual differences among children than the 'egg crate' schools that lumped 30 students into rectangular boxes called classrooms. The new open plan schools had 'quiet areas' where teachers, or their helpers, could retreat with a small group of students, wet areas, folding partitions that enabled teachers to share classes, and so on.

The whole idea was to break down the pattern of whole-class teaching where the teacher worked from the front and children sat facing the blackboard.

The open plan design was intended to give teachers many more options for grouping students and simultaneously undertaking different kinds of activities than were passible in a single classroom full of desks and bounded by four walls.

Over several years versions of open plan schools became the norm for new schools in Australian states.

It soon became obvious that an open plan environment could be a very unproductive environment for teachers; they could be noisy and sometimes chaotic. They suited some teachers and not others. But school systems were unable to staff schools according to teacher preferences.

The open plan experiment failed because teachers who were inclined to teach in ways that suited the new designs often could not get an appointment to open plan schools and others who preferred more traditional ways of teaching were dragooned into them. The centralised staffing system was very dysfunctional in this respect.

I led a national evaluation of open plan schools in the late 1970s and we found that students taught in open plan school performed less well, on average, than those taught in the 'egg crate' schools.⁹ How much this was due to the design, and how much due to other factors was hard to nail down but by the time the report was published feedback from teachers had already led school authorities to adopt more conservative designs.

What has this to do with the '10 per cent' problem? The main point is that the open plan schools were a serious attempt to provide an environment in which teachers could better individualise instruction. If you read the design briefs it was clear that the schools were meant to enable cross-grading, cross-setting, vertical grouping, team teaching and pedagogies which promoted students working independently while teachers concentrated on students who were struggling to grasp a key construct or master an important skill.

The view that open plan schools were a bold experiment that failed became the conventional wisdom.

Although there are still elements of open planning in contemporary school design the educational thinking that was behind the open planning – the focus on individualised teaching - disappeared from sight.

I think we have to re-open the topic of primary school design if we are to make headway with the 10 per cent problem. We need an enhanced primary school building complex that provides principals and teachers with more options for intensive work with struggling students.

What must primary schools do?

The problems that schools must address are different though, in their own way, equally challenging. The three most critical challenges are to:

1. Find time so that all students in the '10 per cent' category receive systematic and sustained instruction, preferably one-on-one, either
 - during regular lessons in the classroom
 - during regular lesson time but withdrawn from the classrooms, or
 - before or after school
2. Provide this concentrated support over as many years as it is needed
3. On a whole school basis, case manage students in the 10 per cent while having access to specialist expertise as well as personnel who can intervene in the home or community.

Find time for systematic and sustained instruction, preferably one-on-one

(a) During regular literacy and numeracy lessons

Research in the UK has shown that individualised teaching declined over the two decades between 1976 and 1996. Teaching in 1996 was more likely to involve

more whole-class interactions and fewer interactions between the teacher and individual students.¹⁰

The decline was attributed in part to the pressures on teachers that arose from an overloaded curriculum and the growing need to attend to classroom management issues. While it is unclear how far these findings apply to primary classrooms in Australia it seems likely that they do. Conditions in Australia have changed over time and I believe teachers now find it more difficult than in the past to concentrate extra effort on individual students during regular lessons.

We do know from our recent research that the number of students with disabilities in regular classrooms has doubled over the past decade as a result of government inclusion policies.

We also know from a recent study that primary teachers report that about 40 per cent of their students behave in ways that impede their academic progress and about half that number have serious behaviour problems that have a serious impact on their learning. This was the case in classrooms that were studied from Years 2 to 7.¹¹

I'm referring not only to aggressive, oppositional behaviour. This is only a small part of the problem – the tip of the iceberg so to speak. The much more prevalent behaviour follows a pattern of what is usually referred to as academic disengagement – low effort, lack of motivation, inattentiveness and unresponsiveness. These students have been shown on average to perform at lower levels on literacy and numeracy assessments than students who are engaged.

Unproductive classroom behaviour produces a double-barrelled problem for teachers wanting to find time to work with students in the 10 per cent.

Where a teacher is solely responsible for a class that contains a relatively large proportion of students with behaviour and learning problems, it is difficult to individualise teaching. Yet, these are likely to be the classes that have the largest numbers of students not reaching national standards.

Also, some of the students whose behaviour is a problem are proficient in literacy and numeracy yet they demand the individual attention of teachers – the squeaky wheel gets the grease. Some of the students in the 10 per cent group are not disruptive, just disengaged. They may have to be ignored since maintaining order in the classroom is a higher priority.

As a result it is getting harder to expect teachers to concentrate their time on one-on-one interactions with a student during a regular lesson in literacy and numeracy, particularly if the teacher is the only authoritative adult in the classroom.

Some commentators believe that digital technology will provide the answer; student can use laptops to work on stimulating literacy and numeracy programs that have graduated levels of difficulty. There is a high level of hyperbole on this

topic fuelled in part by the digital technology industry. The jury is still out on the general applicability of this solution.

Under the circumstances that I have described teachers do their best to keep their eye on the students who are struggling but the attention that these students receive is far from optimal. In my view, teachers with even a handful of students who have fallen behind their peers need, at the very least, a competent teacher assistant so that between the two of them students can get the focused instructional attention they need in regular classrooms.

(b) Withdrawing students in the 10 per cent so they receive systematic and sustained instruction, preferably one-on-one

An alternative to providing concentrated support for struggling students during regular lesson is to provide support by withdrawing them from the classroom for expert tuition. Reading Recovery is a good example.

Reading Recovery is widely regarded as a successful form of intervention to assist students who are struggling to develop language skills during the first year of schooling. However, this reading pedagogy is costly because it involves specially trained teachers working with small numbers of students, preferably one-on-one, every school day. Presumably, in schools which offer this kind of intervention, students in the 10 per cent group would have access to it, or some variant that employs a withdrawal system in order to provide intensive instruction.

There are cases where student progress in reading has stalled because the student has failed to master a particular skill or conceptual understanding. However, not every struggling student has the same problem. In some cases, the factors that are retarding students are complex and the performance of students who may have made progress after a year of such tuition, lapses when the individualised assistance is withdrawn. This may be because the student did not internalise what was necessary or it may be because other factors that impede learning come into play, particularly behavioural and interpersonal factors.

Most schools can afford to offer Reading Recovery for only a finite period. The scheme is based on an assumption that once the student's reading problem has been identified it can be fixed in a year. Afterwards the student is expected to progress at a normal rate.

The main constraint on expanding the number of students who have access to Reading Recovery, or some variant of it, is cost. We were told by principals in our earlier studies that they could identify many more students who would benefit from such a reading scheme but that they could not afford to extend the program.

Another constraint is that some teachers have mixed feelings about withdrawal programs since students who participate in them miss the regular lesson and either must catch up or miss out. While withdrawal can be scheduled for some time in the school day when a 'non-essential' subject is taught, nevertheless there is a cost. Also the specialist and the classroom teacher must work collaboratively

to scaffold the learning program for the student. And the classroom teacher usually is under pressure to cover any material that was taught while the student was absent. Finally, the whole exercise places an organisational burden on teachers. It is understandable that some teachers may prefer to retain the student in the classroom and provide assistance in moments when there is a lull in whole-class activity.

(c) Providing support out of regular school hours

This third option is to provide additional support out of regular school hours. One way is to extend the hours of instruction by providing special classes for students unable to make satisfactory progress. This strategy of extending the school day has been employed in numbers of Australian primary school and is widely advocated in the US and UK.¹²

A key problem with this strategy is that many of the students most in need of the support are unwilling to attend such sessions while attendance is voluntary. Some may be ‘school avoiders’ with records of extensive absenteeism.

Another strategy is to provide students with access to individualised tutoring. Concerned parents able to pay the fees have traditionally sought professional support for their children who are not making satisfactory progress at school. Some report that diagnosis and tuition by educational psychologists and other experts have made a difference. The previous government made funding available to parents of students failing to teach national benchmark standards. Known as ‘An Even Start’, this program is currently being evaluated and may not continue.

Finding time for systematic and intensive teaching of students in the 10 per cent group is a serious problem in many primary schools, especially those that serve communities with high levels of socio-economic disadvantage. A school system could in theory sort out the problems to which I have already referred but if teachers in regular classrooms are unable to engage students in purposeful learning then it is unrealistic to expect improvement.

Provide concentrated support for as long as it is needed

In general, the gap in performance between those doing well and those doing poorly widens as students progress through school.

Hence, the investment strategy to pack additional resources into the early years may be misguided and based on a myth that most learning and behaviour problems are fixed in those years.

It is hard to reconcile the practice of withdrawing support at the point when the gap is widening – at the end of the early years. It is also the point at which performance of all students tends to flatten out.

It is interesting to note in a recent OECD study that Finland, the country that excels on international assessment provides additional assistance to more than 30 per cent of students in regular classrooms in the first year of school and that level of support

gradually tapers off to about 16 per cent by the end of primary school – this is the country with the outstanding results for 14 year olds on the PISA tests.¹³

Case manage students in the ‘10 per cent’ group

The grouping of students into classes by year levels according to the age of students has been an enduring, taken-for-granted feature of primary schools. It seems such a logical practice that it is seldom questioned. Experiments with non-graded schools during the 70s and 80s petered out. The primary school composed of classes grouped by year levels stands supreme.

In February each year, students are assigned to a class and meet their teachers under whose care they will spend the school year. The following February the process begins again. The progression through school is divided into discrete, annual stages. Not surprisingly, academic progress is mainly construed as progress during a single school year.

What is being asserted here is that the systems that are in place generally revolve around annual cycles. This encourages teachers to focus on the wellbeing of their students mainly while they are in their classroom, making it hard for them to adopt a long-term perspective.

While most teachers are interested in their students’ futures, they have little time to invest in following up and the administrative structures that are in place in most primary schools militate against that kind of continuing involvement.

Further, there is a belief that it is often in a student’s interest that he or she makes a fresh start each year with a new teacher. Teachers do their best to help all their students reach proficiency standards and in the following year it is another teacher’s turn.

It is uncommon, in my experience for student progress to be tracked and *trends* reported over the full course of a student’s primary or secondary schooling. This may partly be due to the annual cycles to which I have referred. It may also be due to the ‘fresh start philosophy’ to which I have also referred. I think there is a third reason: many schools do not have the means of mapping student progress.

Primary schools are not designed, or staffed, to support genuine case management approaches. Hence in a school with more than 100 students in the 10 per cent group, for example, case management is a hugely resource-intensive enterprise. It may require access to expert advice from psychologists, speech therapists, welfare officers and other non-teaching specialists. Home visits or parent meetings at school may be required. Instruction may need to be modified. Tutoring arrangements may need to be put in place. Special assessments may need to be undertaken. Student progress needs to be reviewed. Records need to be kept. Time is needed for meetings of relevant staff members to consider cases.

Some of this currently occurs when schools require an Individual Education Plan to be developed for students. However, in my experience, IEPs are often limited in scope and rely on the classroom teachers to modify their pedagogy: what is provided is insufficient.

It should also be clear that the performance of students should be tracked across the primary years so that assistance speedily can be made available to those who have begun to fall behind.

Some systems are making user-friendly student information systems available to classroom teachers and tests that can be tailored by teachers to measure individual progress.

Summary of the obstacles that need to be removed

I have sought in this paper to explain why primary schools find it difficult to concentrate the effort that would be needed to lift the performance of the students in the '10 per cent' group. Some of the obstacles lie outside the school and some are found inside the school.

One external obstacle is that school finance systems are unable to track funding and account for expenditure except in the most global and incomplete terms. There is a high probability that the funding that government officials think is being spent on shrinking the '10 per cent' group is not reaching the schools with the largest incidence of these students, and in cases where it does, the funding is being used for other purposes.

The complexity of the problem constitutes a second factor. No single factor explains why all the students in the '10 per cent' group have been unable to make progress. Indeed there has been no thorough investigation into the profile of the students who fall into this group. We can assume that some students have been handicapped by events occurring outside the school and which the school, as distinct from other agencies, is powerless to address. Further, in some cases, a student's progress may be impeded by a set of factors. This means that no single intervention, whether launched from inside the school or from outside, is likely to sort the problem out.

A third obstacle is that the students in the '10 per cent' group are dispersed across most of the seven-and-a-half thousand primary schools, albeit that some schools have much higher concentrations than others. Further, there is no straightforward method of identification other than performance on the NAPLAN tests. This means that it is hard to distribute funding or other resources at the right level to the right schools.

A fourth obstacle is that schools may need a mix of resources though not necessarily all at the one time. There may well be a *series* of problems that need to be solved in a necessary sequence. For example, if there is a high rate of absenteeism, then measures must be taken to improve attendance before expecting teaching and learning programs to have a positive effect. This can be difficult for central and curriculum professional development agencies that tend to roll out new programs and apply them across the system. Under some circumstances the new programs may actually increase the burden on schools that are not ready to take them up.

A fifth obstacle is that there is no certainty about which kinds of interventions work best even though some pundits make out that it is all pretty straightforward. While education authorities urge that schools use 'evidence-based' methods to assist

students in the '10 per cent' group, too often the evidence that is cited to support a particular intervention has been 'cherry picked' by partisan enthusiasts. I base my view on the judgments of eminent researchers who have spent a lifetime investigating these issues rather than the opinions of 'op ed' columnists who confidently espouse a particular solution and whose main purpose is to simplify the issues or provoke a response from readers.¹⁴

The obstacles make it unlikely that central agencies can develop specific plans to improve literacy and numeracy that cover what needs to be done by all schools. Ideally, the central agencies should concentrate their efforts on solving the problems that only they can solve, while at the same time providing schools with as much capacity as possible to mix and match the resources that they receive to their particular circumstances. This is not an abrogation of central responsibility.

Schools, therefore, should not be held accountable for solving all the problems that stand in their way of addressing the needs of the '10 per cent' group. It should be made clear in any accountability regime that they are not expected to do so. They are reliant on support services provided by government and non-government agencies.

However, some responsibility does lie with schools as I have tried to point out. Some of the obstacles in schools, over which the principal and teachers largely have control, arise from the ways in which their schools are organised and priority that they give to the problems faced by this group of students.

I have no doubt that the majority of teachers put in a tremendous effort to assist these students. But it is an individual teacher's effort rather than the concentrated effort of the whole school staff over seven years to ensure that by the time a student makes the transition to high school, he or she is proficient and, if not, there is a well documented record of the intervention that have been tried.

This requires schools to have in place a system of case management. In a school with barely a handful of students who are in the '10 per cent' group, this is relatively easy to accomplish. For schools with 20 per cent or more of its enrolments in the '10 per cent' group, the resources made available to the schools may need to double or treble, otherwise so called case management becomes an empty system of record keeping, devoid of a genuine capacity to intervene. The proviso must be that the additional funding is used to acquire support that is concentrated on the struggling students, rather than absorbed into the school's overall operating costs.

The risks

There are risks associated with what I have proposed.

There is a danger than in focusing so steadfastly on the students in the '10 per cent' group, teachers lose sight of the other 90 per cent. Most teachers in my experience have a strongly developed sense of equity and would be well aware of the dangers of disregarding the needs of any particular group of students in their class. However, the case for attaching a higher priority to the '10 per cent' group ultimately rests on an appreciation of the consequences for students who leave school without functional literacy or numeracy skills.

Some people may read into my conclusions an argument for greater central control and greater prescription in regard to how the resources allocated for the ‘10 per cent’ group are used. This would be a mistake and potentially make things worse. Central agencies cannot take into account the myriad of factors that differentiate schools – the systems are too big and diversified and the central managers are too far removed from classrooms. The job of central managers is to provide schools with the resources they need to genuinely case manage the students in the ‘10 per cent’ group.

Third, some schools might conclude that a return to streaming by ability is the only way forward. In my view this would be a retrograde step. There is a large literature on the negative effects of ability streaming and recent OECD research suggests that it does not lead to better overall results. Hence, the challenge for primary teachers and principals is to provide the support these students need without resorting to permanent ability groupings that lower expectations and damage the self-esteem of these students.¹⁵

Conclusion

I have argued that if there is to be any significant reduction in the numbers of students failing to reach minimum proficiency standards then there must be an improvement in the capacity of the school system to ensure that these students receive intensive, individualised support.

The delivery of this support needs to become

- More **systematic** and less haphazard
- More **sustained** and less intermittent or ad hoc
- Better **targeted** and less dispersed

This can only happen if there is a thoughtful alignment between the strategies over which central agencies have control and those over which schools have control. I have tried to explain how the problems facing schools are no less difficult to resolve than those facing central agencies.

It would be a mistake if central planners thought that the alignment could be forged by them and mandated to schools. The old model of central agencies describing the problem in terms that imply the problem resides with schools won’t do.

Just suppose that you agreed with my line of argument. Then what? It is clear that making the kinds of changes that I have proposed couldn’t be achieved over night.

I have not attempted to describe a ‘model school’ because I doubt if there is a single best model, a ‘one size fits all’ solution. As I have pointed out earlier, the size and nature of this problem varies considerably from school to school.

However, in schools with large numbers of their students in the ‘10 per cent’ group I believe that the schools need a robust system of case management. All the students who are being case managed should be known to all the teachers. There is a whole

school commitment to providing the support they need to catch up. The case management I am referring to isn't an empty term but is backed up with the range of services that have a good prospect of alleviating the problem. To my knowledge few primary schools currently have such a system or have access to that scale of support.

In conclusion, I pose a challenge. Set aside the problems that I have indicated must be solved by central agencies. Consider the school site over which you and your fellow teachers have control. Imagine your class contained a large number of students struggling to reach the minimum standard for their year level. What changes to the school's organisation and to your pedagogy would be required so that you were able to provide the necessary support?

References

-
- ¹ Angus, M., McDonald, T., Ormond, C., Rybarczyk, R., Taylor, A. & Winterton, A. (2009). *Trajectories of classroom behaviour and academic progress: A study of engagement with learning over time*. Edith Cowan University: In press.
- ² SCRGP (Steering Committee for the Review of Government Services Provision). *Report on Government Services 2003, 2004, 2005, 2006, 2007 & 2008*. Canberra: Productivity Commission.
- ³ Angus, M., Olney, H. & Ainley, J. (2007). *In the balance: the future of Australia's primary schools*. Canberra: Australian Primary Principals Association.
- ⁴ Angus, M., McDonald, T., Ormond, C., Rybarczyk, R., Taylor, A. & Winterton, A. (2009), *op cit*.
- ⁵ Angus, M., Olney, H. & Ainley, J. (2007), *op cit*.
- ⁶ Audit Office of New South Wales. (2008). *Improving literacy and numeracy in NSW public schools: Department of Education and Training*. Sydney: Audit Office of New South Wales
- ⁷ Victorian Auditor-General's Office. (2009). *Literacy and numeracy achievement*. Melbourne: Victorian Auditor-General's Office.
- ⁸ Henry, K. (2007). Addressing extreme disadvantage through investment in capability development. Closing keynote address to the Australian Institute of Health and Welfare Conference, "Australia's Welfare 2007". Canberra, 6 December, 2007.
- ⁹ Angus, M., Beck, T., Hill, P. & McAtee, W. (1979). *Open area schools: An evaluation study of teaching and learning in primary schools of conventional and open area design in Australia*. Canberra: AGPS.
- ¹⁰ Galton, M., Hargreaves, L., Comber, C., Wall, D. & Pell, A. (1999). *Inside the primary classroom: 20 years on*. London: Routledge.
- ¹¹ Angus, M., McDonald, T., Ormond, C., Rybarczyk, R., Taylor, A. & Winterton, A. (2009), *op cit*.
- ¹² Bodilly, S. & Beckett, M. (2005). *Making out-of-school-time matter: Evidence for an action agenda*. Rand Corporation Santa Monica, California.

¹³ Organisation for Economic Co-operation and Development. (2007). *Students with disabilities, learning difficulties and disadvantages: politics, statistics and indicators*. Paris: OECD.

¹⁴ Hill, P. (2008). Spending money when it is not clear what works. *Peabody Journal of Education*, 83(2), 238-258.

¹⁵ Organisation for Economic Co-operation and Development. (2007). *PISA 2006: Science competencies for tomorrow's world. Volume 1: Analysis*. Paris: OECD.