
Learning

The key indicator of the success of schools is what students learn, both academically and socially.

In recent years it has become possible to compare the performance of primary schools in literacy and numeracy. This has had a significant impact on schools; they now use this information to change teaching practices and identify students who require extra assistance. It was noticeable from school annual reports for 1999 that they have increased their ability to understand and use this data for school improvement. At the State level, the Literacy Review used statistics on those schools that achieved the most improvement as the starting-point to identify best practice from which other schools could learn.

Each school was required to give an account of the academic progress of its students in its annual report. Schools were able to compare their performance with the average results of similar schools.

Most parents were satisfied with their child's progress (77 per cent, up 3 per cent on the previous year). Among students, 71 per cent were satisfied with how well they were learning, unchanged from the previous year.

Improved literacy and numeracy

More than three-quarters of parents were satisfied that their school was developing their child's literacy and numeracy skills.

The Year 2 Diagnostic Net (see figure 11 below) found that the majority of students had satisfactory skills for their age, with 2 to 3 per cent fewer students needing additional support in 2000 than in previous years.

In the higher primary school levels, tests have been operating for only one or two years. Figure 12 below shows that literacy (in reading, writing and spelling) improved by 3 per cent in years 3 and 5 between 1998 and 1999.

Figure 13 shows that year 3 numeracy improved by 4 per cent between 1998 and 1999, but year 5 numeracy declined.

The inaugural year 7 results appeared to show that students were performing below the standard expected. However, a second year of tests is required before drawing conclusions.

Students performed slightly better in spelling than in other aspects of literacy at each year level.

Data for 2000 is not available because the tests are held in the second half of each year.

National comparisons were available for the first time, showing that 82 per cent of all Queensland year 3 students achieved the national benchmark. While this was 5 per cent lower than the national average, the difference is mostly, if not entirely, due to Queensland students being on average a year younger than year 3 students in the rest of the country, apart from Western Australia.

Figure 11: Year 2 students not requiring additional support

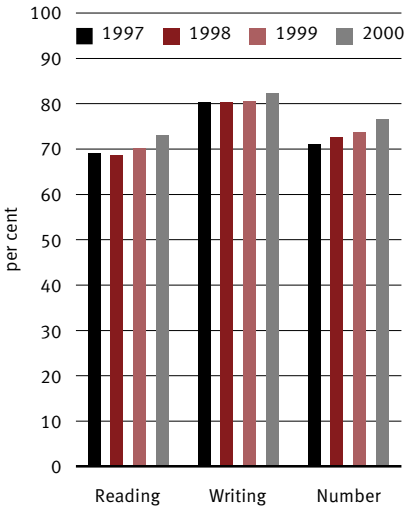


Figure 12: Literacy (unweighted average)

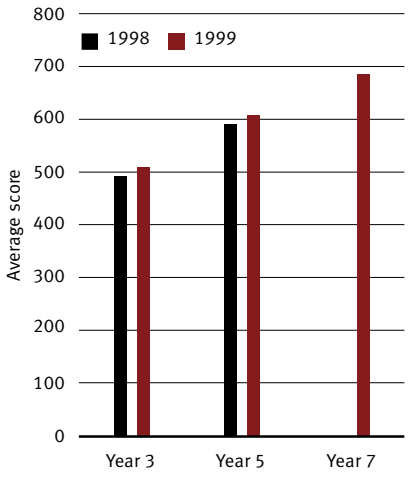
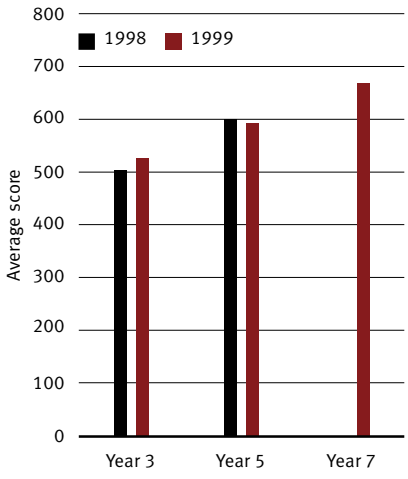


Figure 13: Numeracy (unweighted average)



Note: The tests were designed to expect an average score of 500 in year 3, 600 in year 5 and 700 in year 7.

> One student scored the highest score in the year 4 UNSW Australian Schools Maths Competition and was awarded a medal. A year 6 student was awarded a medal for gaining the top score in Queensland for the Australian Schools Science Competition.
>
> *(Charleville School of Distance Education)*

Staying on at school

The proportion of students continuing to year 12 was stable at 72 per cent. This is considerably higher than in other parts of Australia (shown by figure 14 below), although this is partly because students who migrated interstate during secondary schooling boosted the Queensland figures.

The completion rate is different to the apparent retention rate (currently 72 per cent) in that the former measures the proportion of 24-year-olds who have completed year 12 or its equivalent, whereas the latter compares the number of year 12 enrolments with the number of year 8 enrolments four years earlier.

Of those reaching year 12, 90 per cent completed the year.

The retention rate for Indigenous students improved by 3 per cent in 1999 to 49 per cent, putting them well ahead of the national average for Indigenous students.

Girls had a retention rate of 78 per cent, considerably more than the 66 per cent of boys.

Achievement in senior years

Year 12 results are critical to students' futures. In 1999, the average level of achievement improved in 17 of the 27 main subjects and declined in only four. The main improvements were in:

- Accountancy — 4 per cent more gained very high achievement;
- Music — 2 per cent more gained very high achievement;
- Film and Television — 4 per cent more achieved sound or better.

Improvements occurred in most subjects in year 10, especially in German, Business Principles and Practice, and Music.

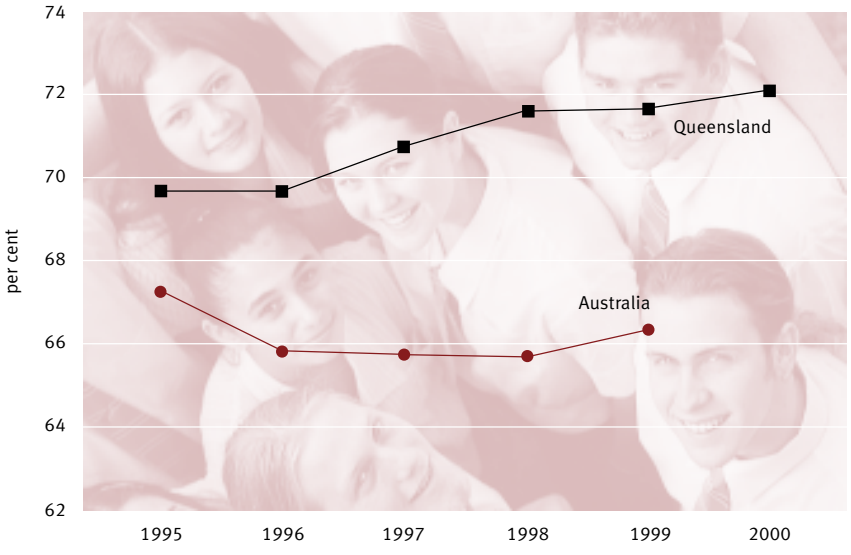
Sixty-six per cent of year 12 students achieved sound or better in three or more subjects accepted for university attendance. Twenty-one per cent achieved Certificate One or higher in one or more vocational subject.

> The school's policy of encouraging students to do their personal best and "break the sound barrier" (target Sound Achievement or better) has paid dividends. There was an increase in the proportion of students achieving C or better on the Queensland Core Skills Test and being awarded OPs of 15 or better.
>
> *(Heatley Secondary College)*

Students performed well in national competitions. In the University of New South Wales English competition, 484 Queensland students achieved high distinctions and more than 4000 achieved distinctions. In the Australian Mathematics Trust national competition, the top three year 12 students in Queensland were from Boonah, Malanda and Mt Gravatt State High Schools.

Twenty-six students won the Australian Students Prize, awarded to the top 500 students in the country. A Kelvin Grove High School student won the Queensland Symphony Orchestra young instrumentalist competition.

Figure 14: Year 8 students continuing to year 12 in state schools (apparent retention rates)



Note: Australian figures for 2000 were not available at time of collation of this report.

Pictured is Palm Beach–Currumbin State High School student Melissa Rollinson, who set a world junior record in the 2000 metre steeplechase at the 2000 Pacific School Games in Sydney in May.

Every student can be a winner

The Department has a strong commitment to equity, to ensuring that every student leaves school with good opportunities.

> 'We halved the number of year 2 children requiring support in Number. A great effort!'
>
> *(Wilsonton State School)*

Students' results showed that Indigenous students were the most disadvantaged group, almost two years behind other students in Number at year 7. This gap was higher than that of the early primary years. However, these students made real progress during the year:

- Indigenous students in year 3 achieved the largest improvement of any group in the State between 1998 and 1999, especially in numeracy.
- Their performance also improved considerably in Reading in year 5.
- At year 10, their average level of achievement improved in nearly every subject and brought them closer to the State average.

> 'This year the Dux of the school identified as an Aboriginal student.'
>
> *(Mt Larcom State School)*

Rural students in years 2 and 3 improved their literacy and numeracy performance relative to other students between 1998 and 1999. However, on average, rural students performed below urban students in literacy and numeracy. In senior secondary schooling, rural students performed better than urban students in some subjects and below in other subjects.

Boys continued to perform below girls, although this difference was not as marked as with Indigenous and rural students. Boys performed below girls in literacy in all year levels, with the gap in year 3 widening, but were ahead in numeracy in years 5 and 7. In senior secondary schooling, boys performed below girls in every subject. Boys' average levels of achievement in a number of year 12 subjects deteriorated between 1998 and 1999.

Students from non-English-speaking backgrounds performed below other students at all year levels, but reduced the gap in year 3 numeracy between 1998 and 1999.

Developing social and sporting skills

Seventy-seven per cent of parents were satisfied that their school was developing their child's social skills.

At present there is no accepted way of tracking the development of students' social skills. Twenty schools trialled ways of doing this.

> The Culture-Free Self-Esteem Inventory was used to test the self-esteem levels of over 100 children in order to observe any changes over an eight-month period. Overall, a mean growth in self-esteem of 3 percentile points was observed.
>
> *(Silkstone State School)*

On the sporting field, Queensland students continued to dominate national competitions, winning 53 championships, coming second 12 times, third 14 times and unplaced 26 times.

Going places after school

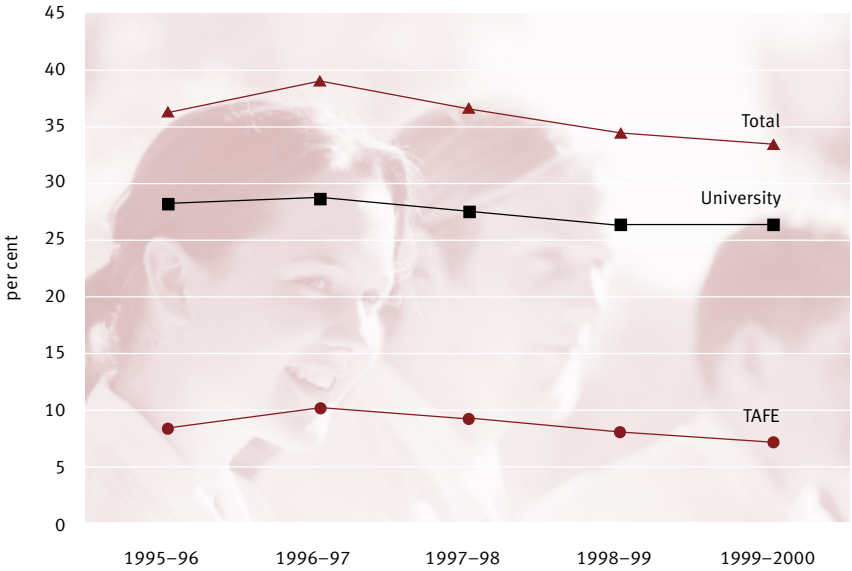
Thirty-five per cent of state school students in year 12 in 1999 progressed to tertiary study in early 2000 — 27.3 per cent to university and 7.4 per cent to TAFE (see figure 15 below). This was a decline of 1 per cent on the previous year. The proportion going on to university remained the same and would have increased but for a 20 per cent increase in the number deferring enrolment. TAFE enrolments declined because the proportion of year 12 students applying for TAFE declined by 8 per cent.

These figures do not include those who start tertiary study later on. Approximately 52 per cent of former year 12 students under 25 years of age are currently undertaking tertiary study.

All schools tracked where their final year students went, in order to gauge their success in preparing students for further study and work.

> Please note the increase in students gaining apprenticeships, traineeships and TAFE courses this year after completion of year 12. It would seem that the curriculum is starting to bite in terms of employment and training.
>
> *(Moura State High School)*

Figure 15: Year 12 students going on to tertiary education in the next year



Outlook

- Further national comparisons on literacy and numeracy will become available over the next couple of years.
- School completion rates are expected to increase by 2 per cent in 2000–01.

Most parents (81 per cent) were satisfied with what their child was learning at school, as were most students (72 per cent). This was a slight improvement in parent satisfaction on the previous year.

At the same time, *Queensland State Education — 2010* found that parents, business and the wider community were beginning to explore how the curriculum needs to change to prepare students for future job markets and lives in an information-based society.

Preparing for the future

In response to *Queensland State Education — 2010*, the Department consulted on, designed and began to implement the New Basics in 38 trial schools.

The New Basics is a framework for aligning curriculum, teaching and assessment in years 1 to 9 across the traditional key learning areas: English, health and physical education, languages other than English, mathematics, science, studies of society and environment, technology, and the Arts. The framework focuses on critical thinking, problem-solving and lifelong learning skills and applying them to real-life activities, such as the development of a web page.

The New Basics help students learn, in intellectually challenging ways, the skills that are connected to future employment and citizenship. Teaching practices will be tailored to achieve this, and research will gauge the impact of the program.

Focus on outcomes

Schools commenced implementation of new statewide syllabuses (years 1 to 10) on health and physical education, science and languages other than English. Each of the new syllabuses is designed around outcomes.

> ‘This style of learning focuses on what students know and can do and how it is relevant to real life, rather than the coverage of topics.’
>
> *(Yangan State School)*

The new science syllabus is prompting a major upgrade of science teaching in Queensland primary schools.

Twenty-eight state schools trialled the first-ever technology syllabus for years 1 to 10.

The introduction of the Preschool Curriculum Guidelines helped schools better link their teaching to the early years of school.

Curriculum plans for students with disabilities included more mainstream curriculum and preparation for post-school options.

New subject choices

State secondary schools offered on average 47 year 12 subjects, including vocational subjects.

Most schools offered some subjects for the first time; most frequently these were Computer Studies, Physical Education (replacing the former Health and Physical Education subject), Business Communication and Technologies, English Communication, and Trade and Business Mathematics.

Business Communication and Technologies, a relatively new subject, leapt in popularity, from 3 per cent in 1998 to 15 per cent in 1999 choosing this subject. Five per cent more students studied English Communication. Mathematics A reversed its decline of the previous year.

More than 19 per cent of year 12 students enrolled in at least one information technology subject registered with the Queensland Board of Senior Secondary School Studies. More schools taught computer courses to all their junior secondary students.

Interest in vocational subjects continued to grow, broadening the career opportunities of all students, especially those who might otherwise leave school early. In 2000, 61 per cent of students in state secondary schools were studying at least one vocational subject, up from 48 per cent last year. More than 2200 students combined schoolwork with an apprenticeship, nearly double the number of the previous year.

Research found that variety in subject choice did not necessarily translate into the flexibility required for changing student needs or emerging patterns in the labor market. To help identify what would produce this flexibility, the Department conducted a student pathways project to consult secondary school principals and other government departments on how school programs can better prepare students for subsequent study and work, and prevent early school leaving. It will report next year.

Ten schools trialled the Real Game, a Canadian package that assists students to explore and experience a range of life, career and work roles.

New programs

A number of primary schools introduced phonics programs, which assist learning of literacy.

Many secondary schools increased their time on literacy teaching, to ensure that all students leave school with these skills. Schools expanded their studies of Indigenous culture. Schools also began using a new curriculum-integrated approach to drug education. Most schools reviewed their curriculum.

Enriching and extending minds

Many schools introduced or extended services for students with advanced skills.

Specialist programs allowed students to further their participation in particular subjects or in activities such as chess. More than 20 per cent of students entered national competitions in subjects such as Mathematics.

Student snapshot

Michelle George, Mount Morgan State High School

Budding scientist Michelle George has chosen science as a career because she 'wants to make a difference'.

The year 11 Mount Morgan State High School student has a keen interest in all things science-related, participating in Central Queensland University's Siemens Science Experience and the School's Out, Engineering's In program at Griffith University.

Michelle loves to study and has taken on an additional Mathematics subject by way of virtual schooling, which delivers lessons, resources and teacher feedback through a World Wide Web interface.

'I love to expand my mind and school gives me the opportunity and tools to do that,' Michelle said.

> 'Our students have had the opportunity to participate in a Unilink program and research project. This has been vital preparation for university studies.'
>
> *(Woodridge State High School)*

Outlook

- Schools will begin to implement the new syllabus Studies of Society and Environment for years 1 to 10.
- Central office will complete a core curriculum policy for years 1 to 10.
- Schools will achieve a target of 21 per cent of year 12 students studying an information technology subject.
- Education Queensland will become the first Australian education system to introduce the international Advanced Extension Awards, a scheme which allows year 12 students to gain international recognition for academic results.

Teaching is the core activity of the Department. For the past two decades, Education Queensland has focused mostly on curricular and administrative reform. The Department has now begun to focus more on teaching reform.

Changing teaching practices

Now that hardware and Internet connections are in all schools, teachers have adapted their teaching strategies to incorporate the new technology.

> The work done by year 6 and 7 students and teachers on integrating technology into maths was most exciting and sets a challenge for the high school. Together this team advanced the skills of both students and teachers significantly:
>
> - teachers are now making more use of the extensive software packages available;
> - technology skills are incorporated more regularly as part of the curriculum;
> - students have spent much more time on computers, both in groups and individually;
> - many are using the digital camera as part of publishing work.
>
> *(Stanthorpe State School)*

The 38 schools trialling New Basics used productive pedagogies (strategies such as high-order thinking and problem-based curriculum) to focus instruction and improve student outcomes. This approach is based on detailed university research funded by the Department.

Schools tracked student progress more rigorously, and many took steps to ease the transition from primary to secondary schools.

> The Exchange Program was implemented in 1999: our aim — a seamless education for students from primary to secondary school. A class of year 7 students travels to Redcliffe High to perform experiments in our scientific laboratories. At the same time, a Redcliffe High teacher goes to a primary school and engages another class of year 7 students in science activities.
>
> *(Redcliffe State High School)*

An increasing number of schools adopted the following practices:

- team teaching or teachers planning and marking together;
- flexible teaching arrangements, with students grouped according to their learning stage rather than their age group;
- making teaching cater more to students' different learning styles, such as concrete or abstract thinking, alone or with others, in structured or flexible patterns;
- modifying teaching of young adolescent students;
- recognising that parents are a child's first teacher, schools increasingly linked their activities with what parents are doing at home, and involved more parents as volunteers in the classroom.

A new appraisement system to assess support needs for students with learning difficulties and learning disabilities was trialled in volunteer schools.

Getting the foundations right

The Government provided $114 million to improve literacy and numeracy. Students who were identified through the Year 2 Diagnostic Net or Years 3 or 5 Tests as needing special support received additional support, such as individual work with a specially trained teacher or teacher aide. The Reading Recovery program provided daily one-on-one reading instruction to 5044 students, of whom 86 per cent caught up to the average level of their classmates within five months.

Australia's first National Literacy Week was held in September 1999. Garbutt State School won $10 000 for its innovative whole-school literacy improvement program. During the week, a total of 500 teachers shared information on effective practice at 12 statewide seminars.

A literacy review panel, chaired by Professor Allan Luke, consulted 2000 teachers and held meetings in 50 schools. It found that much could be learnt from those schools that had achieved the greatest literacy improvements. It recommended support for dealing with student

diversity, whole-school planning and community partnerships, professional development in the teaching of reading, and reworking school curriculum to include future literacies, for example multimedia.

Why Wait?: A way into teaching critical literacies in the early childhood years was published. New teacher resources on spelling and on measurement, chance and data were developed.

Teachers specialising in second language development as well as literacy and numeracy were placed in 20 schools, at a total cost of $1 million. They will research learning outcomes for students whose home language is not Standard Australian English.

A number of secondary schools introduced after-school tutorials for students seeking extra assistance or stimulus.

Satisfied parents

Most parents (78 per cent) were satisfied with the quality of teaching, an improvement of 3 per cent for the second year in a row. Primary students had similar satisfaction levels. A little under half of secondary students were satisfied with teaching, which was a small improvement on the previous year.

Outlook

Education Queensland will:

- publish and implement a new five-year strategic plan for literacy and fund 40 literacy education and practice (LEAP) schools;
- work with the Smithsonian Institution on the creation of museum magnet schools and a shared web resource on best practices in environmental education and ecotourism;
- expand staff training in teaching skills;
- establish a Council for Educational Renewal.

Impacting on teaching

> The adoption of technology is transforming the delivery of curriculum.
>
> *(Kawana Waters State High School)*

This year many schools moved from a concentration on getting computers installed and connected to having every teacher use computers in their teaching to prepare students for the information age. While there is still a distance to go, there was major progress during the year.

> Technology Skills Profiles were developed for all children, indicating progress and learning development in the usage and application of computers.
>
> *(Amiens State School)*

Schools used computers for word processing, spreadsheets, design, digital photos and educational software programs. As well as learning computer skills as a subject, students used computers as an aid for subjects from Art to Physics. Students with disabilities benefited from adaptive technology, such as touch screens.

> This school achieved an Apple Distinguished Schools Award 1999 to 2001 for implementation of learning technology across the curriculum. To date, we are the only Australian special school to achieve this award.
>
> *(Darling Point Special School)*

Most school libraries automated their catalogues, which allowed students to access the catalogue from their classrooms.

The Department established an electronic curriculum exchange, through which teachers can access teaching tips, 850 reviewed Internet sites and reference materials.

> "How do whale calves drink milk from their mums without sucking in sea water?" was a question when reading from a book about mammals to year 2 students. Within a few minutes with links to an expert on the whale family we had the information we required. The Internet can provide a treasure trove of information.
>
> *(Teacher, Yangan State School)*

Project Atmosphere, an online weather program for schools developed by staff and schools in the Murrumba district, was a finalist in the international Stockholm Challenge Awards for information technology.

Year 11 students in remote and small schools benefited from a new virtual schooling service. An initial 123 students in 26 schools studied four subjects with teachers via the Internet.

Over 19 per cent of year 12 students enrolled in at least one information technology subject registered with the Board of Senior Secondary School Studies.

Equipment getting better

The number of computers in schools continued to increase, reaching the statewide target of one per 7.6 students. Many schools upgraded their machines to increase memory. Parents and citizens' associations contributed to many school purchases.

> 'During 1998 the P & C Association and the school negotiated a loan from the Queensland Treasury Corporation for $250 000 in order to enhance technology. This was as a result of the 1997 School Opinion Survey in which both parents and students expressed concern that access for students to advanced technology was limited. During 1999, this technology has been accessed very heavily.'
>
> *(Kenmore State High School)*

Local area networks were in 74 per cent of schools, an increase of 428 schools. Many classrooms can now access the Internet and email.

Internet traffic tripled and email traffic increased sevenfold during the year; 448 schools now have their own website.

The three-year, $80 million *Schooling 2001* project finished. It successfully moved information technology in schools from the margins to the mainstream. In 1999–2000, learning technology grants of $23.5 million were provided to schools for maintenance and purchase of computers, training and software.

New telephone switching systems were installed in 70 schools.

A $1.7 million project updated many systems and ensured that there was no disruption when the year 2000 began (addressing the so-called Y2K bug — see page 53 for more information).

Skilling teachers

Information technology is one of few areas where students often know more than their teachers. The challenge for teachers who grew up in a pre-computer society is to upgrade their skills and make use of student skills in the classroom. Teachers in every school trained to gain the minimum standard in teaching of information technology. By 30 June, 43 per cent of teachers were accredited, four times the figure of a year before, but behind the target of 55 per cent by the end of 1999. Many schools bought laptops for teachers to learn on at work and at home.

Many schools appointed specialist support staff, including information technology trainees. Schools gained support from 39 education advisers (learning technology) and 53 district systems technicians.

Parent satisfaction improving

Sixty per cent of parents were satisfied with their children's learning of computer skills and access to computers. Among students, 57 per cent were satisfied with the skills learnt, and 51 per cent with their access to computers. These ratings were a substantial improvement on the previous year, but were still not as high as for other aspects of schooling. Further improvement in these areas is required.

Outlook

Education Queensland will:

- reach a new target of one computer per five students in years 3 to 12, to be achieved by 2004;
- install local area networks in the remaining schools by late 2001 (costing $6 million in 2000–01);
- accredit all teachers in information technology by December 2001, at a cost of $2 million;
- double the size of the virtual schooling service.

A healthy school environment helps students to concentrate on their learning.

Safe schools

Most students thought they were safe at school and their parents agreed (70 and 86 per cent respectively, an improvement in parent satisfaction levels on the previous year).

Schools maintained this environment of safety by checking visitors during school hours. Over $1.5 million was spent to improve school security equipment. Three security advisers assisted 120 schools to prepare security plans.

During the year, every school trained its staff in child protection procedures. The Department also developed new guidelines for schools on identifying their students on Internet sites.

New out-of-school-hours care services opened at five schools, bringing the total hosting this service to 279.

Well-behaved students

Every school had a behaviour management plan, developed with parents and reviewed each year. Most schools had a staff committee to monitor behaviour and the effectiveness of their plan.

> ‘Proston’s Behaviour Management Plan is based on rights and responsibilities of all school community members. It is based on the three R’s; Respect Yourself, Respect Others and Respect Property. The school also has a three-step plan, which the students are required to follow: Ignore, Tell them to stop and Tell the teacher. A Guidance Officer visits the school one day per week.’
>
> *(Proston State School)*

Student snapshot

Nelson Carucci, Mareeba State School

What year 1 student Nelson Carucci likes most about school is the circus — and his parents could not be happier.

The Mareeba State School student enjoys working with computers and the 'Maths Circus' is his favourite program.

His teacher Linda Scott said Nelson's mum and dad are over the moon at his progress since he began school.

'Nelson was very timid and quiet when he started school but by trying out different programs himself, he has found his own way to improve his reading, sounding, blending and writing skills,' Linda said.

Each child in Linda's class has their own Internet password and computer working folders where they can save work as well as educational games like the Maths Circus.

Many schools trained students as peer mediators, who help other students resolve disagreements, and developed buddy programs between older and younger students.

Schools also used student councils and other leadership programs to advise on student behaviour and to develop the skills and attitudes that support good behaviour.

School curriculum in human relationships education taught students social skills and acceptance of others.

The Department introduced five new alternative education programs for persistently difficult students, who participate in the programs for a period of one to 18 months.

Funding of up to $17 million for behaviour management supported specialist staff, training and improved strategies in schools.

Parent satisfaction with both student discipline and behaviour improved on the previous year by 5 and 7 per cent respectively, bringing them to 71 and 59 per cent.

Pastoral care

> A caring staff that treat children with respect. Everyone is a "somebody special".
>
> *(parent comment in a school survey, Charleville State School)*

Classroom teachers, year coordinators, guidance officers, chaplains and the whole school community support students.

During the year, many schools adapted policies and procedures to deal with inappropriate behaviour. In line with this, Queensland led a national project on bullying.

> After careful consideration of bullying, we have decided to implement a pastoral care system in years 6 and 7 and implement Peace Builders in our school.
>
> *(Wilsonton State School)*

Twenty-one guidance officers were trained in suicide prevention.

Looking after everyone

Education Queensland has a strong commitment to equity.

Indigenous teacher aides, parent committees, homework centres and tutors continued to support Indigenous students. A major review of Indigenous education resulted in a new Partners for Success strategy, which encourages

schools to develop compacts with local Indigenous communities to improve the academic results of their children. Eight community partnerships officers and a new statewide Indigenous education advisory committee were appointed. The connections between education and other services to Indigenous people were recognised: hearing health services in schools expanded. Education Queensland was singled out by the volunteer team leader for Cape York partnerships as the best supporter in government of the plan for self-determination in the Cape York region.

An increased number of schools developed strategies to help boys match girls in academic performance. Strategies included the use of new software, new class topics, single-sex classes and male role models in middle primary school classes.

An additional 193 teachers and 101 (full-time equivalent) teacher aides supported students with disabilities in mainstream schools. The number of students with disabilities requiring support in all schools increased by 17 per cent to 10 426. Over the last five years $17 million has been spent on facilities for students with disabilities.

Sixteen secondary schools started special education programs.

The Department increased emphasis on developing better ways of using the investment of $0.9 million for gifted and talented students, and schools increased their support for these students.

Suitable facilities

Over three-quarters of parents and nearly 60 per cent of students were satisfied with school grounds and buildings, a slight improvement on the previous year. Nearly 70 per cent of parents were satisfied with school equipment.

Outlook

Education Queensland will:

- double the number of school security advisers and complete security plans for all schools;
- provide $1.3 million for alternative education centres;
- support the trial Indigenous community partnership agreements of 35 schools;
- provide an additional $15 million for staff and $1.2 million for transport arrangements to support students with disabilities, plus an additional 20 special education programs;
- produce a new strategy to improve learning outcomes for students at educational risk.