

WESTERN AUSTRALIA

Context

In July 1996, some 344,000 students were enrolled at 766 government schools, 154 Catholic schools, 116 other non-government schools, 93 community preschools and 18 independent preschools. In addition, about 900 students received home tuition, subject to Education Department approval, from parents or other providers.

Non-government schools enrolled 26.2 per cent of all students and, while this proportion was less than those in most other jurisdictions, it is expected to reach the current national average of 29.4 per cent by 2000, when the latter is projected to be 31 per cent.

Western Australian schools are characterised by wide disparities in enrolments associated with the commitment of each of the schools sectors to the delivery of educational services in rural and remote areas.

While nine-tenths of the population is concentrated within 400 km of Perth, many Western Australian schools are among the most isolated in the world: the district high schools at Christmas and Cocos Islands, operated under agreement with the Commonwealth, are even more remote. Access to some schools is available only by aircraft, four-wheel-drive vehicle, or, in the wet season, barge. While for these schools isolation is extreme, there are many other schools in rural areas where the cost of living is high and social and professional contact is limited. To provide relevant educational programs is a major challenge.

In 1996, 48 per cent of government schools (37.7 per cent of students), 38 per cent of Catholic schools (24.1 per cent of students) and 27 per cent of independent schools (12.4 per cent of students) were located outside the Perth metropolitan area.

Continuing high rates of population growth and transience led to instances of over- and under-utilised accommodation in government schools, and the development of flexible forms of school in order to respond efficiently to

A covered play area at Halls Creek District High School protects students from the sun.

demographic changes is a continuing priority for the Education Department.

The widely-dispersed nature of the State's population outside the Perth region contributes to high recurrent and capital costs: for example, government country schools are significantly more costly to operate (22.5 per cent in 1995–1996) than metropolitan schools.

This 'tyranny of distance' also adds to the problem of ensuring adequate communication links among schools: in Western Australia, each sector is moving toward establishing its own intranet (as well as ensuring schools' access to the Internet), with associated major capital costs.

Students who are from a non-English speaking background (estimated at 20 per cent of government schools enrolments); students identifying themselves as being of Aboriginal or Torres Strait Islander descent (five per cent); and students subject to physical or intellectual disabilities (two per cent) are also widely dispersed, making service delivery for these students costly and complex.

Finally, the need for special provisions for teachers and students arising from the climate and the harshness of the physical environment (such as air conditioning for schools and teachers' houses in the north, and four-wheel-drive vehicles in rugged remote areas) adds further to the costs of operating the government and Catholic schools systems and, to some extent, independent schools.

School Education Bill

Following the completion in 1996 of a review of the *Education Act 1928*, the Minister for Education is to circulate the draft School Education Bill for public comment during 1997 and it is proposed that the Act come into effect from the beginning of 1999.

The Bill will explicitly recognise non-government and home schooling and reflect four key principles:

- the right of every child to access to school education;
- the right of children and parents to choose the form of education that best suits their needs;
- the need for government schooling to be sufficiently comprehensive to meet the educational needs of all children who select this option; and
- the need for schools and parents to work in partnerships for successful schooling.

Major initiatives

Department of Education Services

In May 1996, State Cabinet approved the establishment of the Department of Education Services, comprising four divisions: the Office of Non-government Education (ONGE), the Office of the Country High Schools Hostels Authority, the Office of Higher Education and the Office of Education Policy and Coordination. The Education Department's responsibilities in relation to non-government schools and fee-paying international students were transferred to ONGE on 1 July 1996.

Curriculum Council of WA

The Interim Curriculum Council (ICC) began development of a Curriculum Framework containing the knowledge, understandings, skills and attitudes that all students in WA are expected to develop as they progress through schooling. The Framework describes the major outcomes of learning for all students and the scope of the curriculum in terms of teaching and learning. It is to be mandatory for all students and will provide schools with clear directions on what is to be achieved by students, while allowing maximum flexibility in the process. It also includes a minimum core of shared values.

The Curriculum Framework comprises an overarching curriculum statement and eight learning area statements.

Each of the latter provides a definition of the learning area and the rationale for its inclusion in the Curriculum Framework; a description of between 10 and 30 major outcomes of study (not necessarily outcomes for the end of year 12, but major overarching outcomes evident throughout K–12); an outline of essential content that maximises students' performance in terms of the major outcomes; links with specific years 11 and 12 courses and programs and links with other learning areas; and an outline of recommended teaching/learning processes, including assessment practices, that contribute to students' achievement.

The preliminary draft of the framework was developed by committees representing all education sectors and systems in consultation with community reference groups. By December 1996, basic documentation for the overarching statement and learning area statements had been completed.

Student outcome statements

The two-year trial of student outcome statements ended in December 1995 and the results were documented in 12 major reports, two surveys of teachers in trial schools and a series of case studies of eight trial schools.

Early in 1996, the senior executive of the Education Department considered the reports and concluded that the statements provided a useful framework for monitoring, assessing and reporting student achievement. It decided, however, that before implementation the statements should be reviewed to reflect the recommendations of trial schools.

In accordance with guidelines developed as a result of the trial, the statements were examined to ensure full coverage of skills, concepts, processes and values central to each learning area. Strands and substrands were reviewed to reduce their number wherever possible. Strand outcome statements were developed to describe the sequence of student learning for each strand and bring together all outcomes within levels as coherent progressions of learning. Student achievement at each of the levels in the strands was comprehensively exemplified. The sequence of outcomes was revised to ensure representation of conceptual and skill development. Pointers and work samples were refined to both illustrate the level of expected achievement within specific contexts and represent a wide range of achievement in diverse contexts. Students with intellectual disabilities, who could have little chance of achieving at level 1, were provided for in the foundation outcomes, which were reviewed and rewritten.

This review and refinement process, which occurred in the context of development of the ICC Curriculum Framework, occupied the remainder of 1996 and will extend into 1997.

Some Catholic schools were involved in piloting aspects of the outcome statements and, although the consultative mechanisms established for the trial formally ceased to operate at the end of 1995, the Catholic Education Office (CEOWA) continued to monitor progress in development of the statements.

The AISWA conducted seminars on the use of outcome statements as a means of writing curriculum and assessing student achievement and, through its membership of the ICC, supported the outcomes basis of the overarching curriculum statement and the learning area statements.

Early childhood education

During 1996, programs for children turning four (K) were available through both the Education Department and Family and Children's Services (FCS). The former provided 8,200 places in pre-primary centres and community preschools where there were insufficient five year olds to ensure the optimum use of resources, while FCS offered 9,000 places in its family centres and supplementary programs. Sessional pre-primary education (P) was available to children turning five through pre-primary centres attached to 425 government primary schools and 54 district high schools and the School of Isolated and Distance Education. In addition, 93 community preschool centres were staffed by Education Department teachers. Three hundred and forty government schools provided 11,300 five year olds with the equivalent of four full days of schooling per week.

By 2000, coordinated and relevant education will be available to all four year olds in K programs. Provisions at local schools will ensure continuity of education in single settings, reduce parents' need to travel, improve resourcing and remove the discrepancies in charges that exist, the only cost to parents being the schools' amenities fees.

Associated with the initiative is the multi-age grouping (MAG) project in 26 schools, where parents are offered the option of P, 1, 2, P-1 or P-2 classes.

Existing programs are also being reviewed to ensure that they meet the developmental needs of all children and, through a cross-sectoral Focus Schools project, new programs and teacher resources will be developed in nine specialist schools, six of them government schools. The project commenced at the beginning of 1996 and will run

for three years. Schools will emphasise best practice in early childhood education, develop new teaching and learning strategies, trial innovations in curriculum and delivery and monitor their application in the classroom. They will also develop resource materials to support teachers and provide opportunities for other schools to observe exemplary practices. Possible links with other providers, such as the Health Department and FCS, will be explored.

Priorities of Focus Schools include the development of programs for Aboriginal students, further implementation of MAG, identification of best practice, timely identification of and intervention with children at risk, the use of information and communications technology, techniques for evaluation and reporting, and strengthening of parent and community participation.

In November 1996, the Minister for Education announced that, in the interests of improving student learning in the early years and achieving greater commonality with other Australian jurisdictions, starting in 2001, the cutoff date for entry to government schools would be progressively changed from 31 December to 30 June, and that K and P programs would be expanded. The new system will be phased in by 2004.

Thirty-five Catholic schools began to provide kindergarten education for four year olds and a further 38 schools plan to do so in 1997.

New school types

Innovative solutions were found to the problem of providing government school accommodation in areas which, although there was a population of school-aged children, would not have been eligible for the construction of schools for a considerable period. Developers cooperated with the Education Department in designing clusters of houses and shopping centres that would provide quality school accommodation. As the populations of these areas reach the level that will permit permanent schools to be built, the leased houses or shops will be returned to the developers and resold for their intended use.

Information technology

The Education Department is progressively extending its wide-area network EdNet throughout the State to link all 800 sites and provide access to technology and software that at first will simplify administrative procedures and later deliver a range of electronic services.

A three-year \$21 million Computers in Classrooms program involves the following initiatives:

- Technology Focus Schools: 23 schools are providing models for the use of information technology as a teaching/learning resource, to enhance the learning environment and add to teachers' repertoires of teaching methods;
- innovations in the classroom: 60 primary and 30 secondary teachers are developing innovative strategies for using information technology in the classroom to improve student outcomes;
- the Internet in the curriculum: all government schools are being assisted in the purchase or lease of new multi-media computers to promote use of the Internet in the curriculum; and
- satellites in schools: digital satellite telecommunications receivers and decoders are to be installed in 200 rural and remote schools.

As the biggest State government employer, the Education Department has always managed personnel processes from the central office, but from 1996, under the Personnel 2000 project, schools began to take responsibility for matters such as leave and teacher relief.

Catholic secondary schools have traditionally used information technology in computer studies courses but are now attempting to broaden its use across the curriculum, while primary schools are employing information technology to enhance the curriculum. The Internet is being used to improve curriculum outcomes and connections are expanding rapidly.

In August 1996, the draft report of a technology and education consultancy, entitled *Setting New Directions*, was presented to an internal reference group and to the School Resources Committee of CEOWA. The Catholic Education Commission prepared a response for circulation among all Catholic schools in conjunction with the consultant's report. One of the main recommendations of that report was the establishment of a permanent reference group to monitor major technology issues and their possible impact on Catholic schools and Catholic education. The group will also assist with the overall implementation of the other recommendations approved by the Commission and address associated resourcing and equity issues.

The integration of information technology into independent schools' operations is accelerating and many schools are moving toward whole-school LANs and in-house training to ensure that teachers are capable of fully

utilising the potential of these networks. Electronic data collection and requests for funding of targeted grants are being established and teachers can now apply electronically for positions at AISWA schools.

Collaborative learning

The CEOWA primary curriculum and teaching team completed a two-year pilot project in collaborative learning in 22 Catholic schools and, according to an evaluation by Edith Cowan University, very positive outcomes were achieved for both teachers (who exhibited growing confidence in their expertise in cooperative classroom principles and collaborative management practices) and students (who showed marked improvements in oral communication and teamworking skills). A three-year implementation plan has been developed and a further 18 schools will introduce collaborative learning environments in 1997.

Commonwealth-funded capital projects

Commonwealth funds applied to Education Department capital works in 1995–1996 totalled almost \$21 million, apportioned as shown in Table 87.

In the Catholic sector, Commonwealth capital grants for metropolitan primary schools (\$2.2 million) assisted the construction or upgrading of learning areas, libraries and other facilities to improve student outcomes in key learning areas, broaden girls' educational experiences by increasing

Table 87. Commonwealth-funded capital projects, government schools, Western Australia, 1995–1996

<i>Project type</i>	<i>Amount (\$)</i>
Agricultural colleges	480,000
Air-cooling temporary classrooms	400,000
Automatic reticulation	823,371
Communication upgrades	350,000
District high schools	1,273,364
Primary schools	7,380,000
Secondary schools	9,454,720
Security alarm systems	250,000
Toilet replacement	500,000
Total	20,911,455

Source: Education Department of WA

their participation and achievement in mathematics, science and technology and enhance teachers' efficiency and confidence (\$5.26 million). Total capital expenditure on country primary schools projects was \$3.29 million of which the Commonwealth provided \$1.99 million. Particular attention was given to improving the participation and achievement of disadvantaged groups, notably Aboriginal students.

Capital works projects at three secondary schools (\$2 million) involved schools' contributions of \$1 million and were intended to encourage higher retention rates to year 12.

Just over \$4 million was provided by the Commonwealth towards capital projects in AISWA Capital Grants Association member schools, including \$0.821 million to help broaden the secondary curriculum and implement recommendations of the Finn and Carmichael reports (QCATS).

The 21 capital projects completed included primary and secondary learning areas, technology resources and networks, boarding facilities, administration areas, staff and student amenities, and technical areas and workshops.

Focus areas

Focus area 1 – Students' attitudes as they apply to the social objectives of schooling

Some useful information about attitudes and perceptions was provided in responses from government schools students in years 7 and 11 to a 1996 customer survey, suggesting generally positive attitudes toward schooling, although there was some evidence of less-favourable views among older students.

Western Australian Catholic schools have a history of placing the highest priority on the development of the whole person within a particular tradition. From this basis, each student's skills are developed in order to enable him or her to become an inner-directed, contributing member of society at a number of levels. Emphasis is placed on the care of the individual through pastoral care programs and the integration of a values dimension across the curriculum. This enhances the development of each student in the social, emotional, physical, academic, aesthetic and spiritual dimensions.

In independent schools, students' skills in relation to social needs and issues are generally highlighted and promoted. The nature and philosophy of independent education enhances the development of the whole student, as distinct from focusing solely on academic achievement. The diverse range of integrated programs now offered through such areas as literacy and language development, pastoral care, cultural and heritage projects, numeracy, and personal development, provides students with a sound basis for the development of their own life skills and values.

Schools and teachers are recognising that outcomes are being achieved through changes in attitudes, actions and behaviours of students in their care. Despite these outcomes not being formally assessed, teachers are monitoring and evaluating students' capacity to demonstrate, rather than their formal commitment to, particular values positions or life skills. Individual students' self-esteem, respect and acceptance of themselves and others appear to be growing as a result of programs being offered by independent schools.

Focus area 2 – Geographically isolated students

During 1996, Education Department initiatives in support of geographically isolated students, schools and communities included:

- development of a multi-campus secondary school in Geraldton, and consultation on similar provisions at Albany and in the Pilbara. The Minister for Education accepted a proposal for the amalgamation of the two existing senior high schools in Geraldton, with years 8 and 9 to be located on one campus and years 10–12 on the other. Establishment of the single secondary college is expected to yield additional teacher time through the creation of more viable class sizes, a wider choice of vocational and academic courses for students, a reduction in the number of split classes, greater emphasis on academic excellence through enhanced competition and increased access for mature-aged and part-time students;
- establishment of an Aboriginal K–2 school in Bunbury in consultation with the Aboriginal community;
- expansion of the application of telecommunications technologies to distance learning in country schools; and
- structuring of teaching programs to meet local needs in remote community schools by taking advantage of the

flexibility provided by the collective workplace agreement for staff in the RTS.

The Catholic Education Commission developed an expanded remote areas package to attract quality principals and teachers to its more isolated schools.

National Strategy for Equity in Schooling

Students with disabilities or learning difficulties

A multi-function team model was further developed for the provision of visiting teacher services to government school students with disabilities or vision impairment. This model facilitated the generalisation of team members' knowledge while retaining essential specialist skills, and improved the effectiveness and efficiency of the distribution of resources.

The national movement toward the education of students with intellectual disabilities in their local schools was reflected in the continued trialling, in collaboration with the Disabilities Services Commission, of support strategies for a small number of these students. Data gathered will provide information about the processes and structures needed to support schools, teachers and other students in inclusion.

Support for students with special learning needs (namely, those who are apparently unable to learn despite the absence of evidence of any intellectual disability) was another area of concern.

The process of implementing of most of the recommendations of *The Education of Students with Disabilities and Learning Difficulties*, the report of a 1993 Ministerial taskforce, continued during 1996 and central initiatives included:

- the allocation of \$998,663 in seeding grants to schools and district offices for policy and professional development;
- encouragement of the increased use of individualised educational planning in regular schools;
- the provision of professional development support for teachers of students with learning difficulties;

- the continued employment of additional visiting teachers of students with disabilities in remote districts;
- the provision of a freecall telephone service in the central office for parents, teachers and community members with concerns or questions about the education of children experiencing difficulties with learning; and
- the dissemination of successful practice from seeding grant projects throughout the State.

In Catholic schools, special education consultants assisted principals, teaching staff and school communities in meeting the needs of approximately 1,000 students through support services that included professional development programs, individual education plans and visits to schools.

Provisions for students with disabilities remained a growth area in the independent sector and, although not all schools were funded to the levels they had sought, available funds were deployed effectively in the provision of aides, one-to-one teaching, computer software and hardware, resources, facilities modification, and general equipment. The trend toward the integration of these students into mainstream schooling is placing a greater reliance upon this source of funding.

In accordance with Commonwealth priorities, AISWA's NEPS advisory committee funded the needs of students with severe and profound disabilities in preference to the less disabled to enable their integration into mainstream schooling. However, no school with a student with an assessed level of mild disability failed to be provided with some support. In addition to direct grants to schools, funding was also continued to enable a special education consultant to provide advice to any independent school enrolling students with disabilities.

Gifted and talented students

During 1996, government school-based provisions were assisted by the Commonwealth-funded Teaching TAGS (Talented and Gifted Students) project, which focused on the identification and encouragement of these students by all teachers P-7. It included a range of strategies to enrich classroom learning and nurture creativity, independent learning, thinking skills and problem-solving abilities among both mainstream and social justice target students.

Education districts were resourced to deliver supplementary programs to exceptional students in years 5 to 7, mostly through Primary Extension and Challenge (PEAC) centres. The Secondary Special Placement Program (SSPP) supported

750 academically-talented students at ten senior high schools, while 400 places were provided in visual arts at three schools, 300 in dance (four schools), 100 in theatre arts (one school), 150 in LOTE (two schools) and 500 in specialist music (one school). Some programs which had previously been available only to metropolitan students were provided by means of telematics.

Within the languages and country areas elements, independent schools developed programs to extend students in specific languages, creative writing, mathematics and peer support.

Gender equity

In the government schools sector, a training program was developed for Equal Opportunity Contact Officers (EOCOs), who deal with staff and student sexual harassment and provide information about the Equal Opportunity Act to all staff in support of the Education Department's *Student Sexual and Sex-based Harassment Policy and Guidelines*. Information brochures about sexual harassment for students and parents were distributed to district education offices and schools.

School-based Gender Equity Contact Officer networks operated in six districts and usually meet once a term to discuss issues relevant to gender equity in schools: the focus of meetings during 1996 was *Gender Equity: A Framework for Australian Schools*.

In Catholic schools, awareness-raising activities with students, parents and staff focused on gender equity issues and both school-based professional development and inservice training by CEOWA were intended to maintain attention to these issues.

For independent schools, the trend, particularly in country areas, was toward encouraging participation by girls and boys in all activities: girls currently appear to have a broad range of educational options, possibly wider than those available to boys.

Students from non-English speaking backgrounds

Initiatives in government schools included:

- a visiting teacher service for mainstream metropolitan schools for Stage 2 ESL primary-age students unable to access specialist support programs;
- the ESL in the Mainstream teacher development course in five primary, three secondary and two district high schools;

- a collaborative review of all components of the ESL program; and
- a born in Australia early intervention program for at-risk students who were born in Australia and are entering their first year of compulsory schooling.

In the Catholic sector, two primary schools and one secondary school in the Perth metropolitan area provided intensive language centres for new arrivals, while support in other schools and in country areas was delivered according to need. In addition, general support programs for permanently-resident students who were either born in Australia or had been resident for more than a year operated in 69 primary and secondary schools.

Following the training of two ESL consultants as presenters of ESL in the Mainstream, it is being progressively implemented and it is intended that school-based ESL teachers trained by CEOWA will deliver the course to their colleagues with assistance from the consultants.

The need for support in ESL in independent schools appears to be growing, as individual schools experience increased numbers of students and several respondents reported up to half their enrolments being composed of students from non-English speaking backgrounds.

In 1996, an ESL Support Unit was funded in conjunction with the Anglican Schools Commission (ASC) to assist targeted schools with small numbers of students enrolled in mainstream classes. The unit was staffed by an ESL specialist with 0.5 time support for non-ASC schools.

The 11 Aboriginal schools funded under the General Support Element achieved substantial improvements in effectiveness in establishing English as a second language. They focused on language and literacy teaching and this will continue in 1997 with the full-time appointment of the ESL support teacher for the sector (1996 Support Unit 0.5 time). Geographic isolation is still a critical issue for many such schools, severely limiting professional development and networking opportunities. As such, resourcing, planning and programming are often undertaken by teachers in isolation.

Students at risk

Twenty-nine projects/programs operated in 21 Education Department districts and involved 26 primary schools, 37 secondary schools and two district high schools. Thirteen of the initiatives were supported by Commonwealth funds.

The outcomes for 1996 appear less satisfactory than those for 1995. There are several probable explanations for this. Firstly, as it seemed likely that Commonwealth funds would cease at the end of 1996, programs focused on schools and districts acquiring the responsibility, knowledge and skills required to work with the target group. Consequently, staff in many programs worked directly with the difficult students and provided consultancy support to assist school staff working with the less alienated. The reported results reflect this shift in focus, both in the reduced numbers receiving direct support and the reduced gains. Outcome data on the success of consultancy support (outreach) services are not available, but anecdotal evidence from the field indicates heightened awareness of and increased activity for the target group across all districts.

Secondly, as attendance, behaviour and academic progress data are not centrally collected and analysed, there is no way of knowing if the trend was consistent for all students.

Lastly, in earlier years programs/projects submitted as baseline data the previous year's attendance figures, whereas for 1996 comparisons could only be made between semester 1 and 2 results. It is possible that, compared with the previous year, the attendance of more students improved than is indicated by the results reported here.

Regardless of these considerations, the 1996 figures showed that programs were targeting a very high-risk group of students, and that considerably more work needs to be done to improve the educational outcomes of this group.

The CEOWA was allocated funding for 14 school-based projects: one involved providing support for an effort by Aboriginal women to address problems relating to the sexual abuse of girls in their local community.

The eight independent schools funded under this element mainly addressed the needs of students from low SES backgrounds.

Students from low socioeconomic backgrounds

In WA, the Commonwealth's DSP operated as the Priority Schools Program (PSP) in those government schools in which the students experienced educational disadvantage as a result of low SES backgrounds. The most significant funding areas were social skills development and literacy, with other major foci being curriculum practices, numeracy, organisational skills and health.

The DSP supported Catholic schools throughout the State in the areas of literacy, numeracy, pastoral care, technology and enterprise, music appreciation, collaborative learning, the arts, computer-assisted learning and health education. Staff were provided with wider access to resources to improve students' cultural opportunities and learning outcomes.

Eight independent schools were eligible for DSP funding. Sixty per cent of students funded were of Aboriginal background and 50 per cent also received ESL support funding.

Aboriginal students

Retention, participation and achievement remained matters for concern in all sectors. While 82.3 per cent of Aboriginal students were retained to year 10 in government schools, 93 per cent in Catholic schools and 85.1 per cent in other non-government schools, the respective rates to year 11 were 39.6, 48.3 and 93 per cent and, to year 12, 15.8, 17.8 and 20.5 per cent. Participation in post-compulsory schooling thus remained at an unsatisfactory level, as did performance in terms of external assessments, including MSE and the TEE. Until teaching strategies and forms of assessment fully acknowledge the learning styles and needs of Aboriginal students, further significant improvement is unlikely, despite the range of initiatives mounted in each of the school sectors in recent years to address the educational recommendations of the Royal Commission into Aboriginal Deaths in Custody and the Task Force on Aboriginal Social Justice.

Of 14,612 Aboriginal students in government schools in August 1996 (11,313 in P-7 and in 3,299 in years 8-12),

Tug-of-war in the playground at Jigalong Remote Community School, Western Australia.

9,958 were in country districts, where they comprised some 12 per cent of all enrolments and 94 per cent of enrolments in remote community schools.

Priorities included providing support for teachers of Aboriginal studies, cultures and languages; developing partnerships with key agencies to improve student outcomes; increasing the participation of Aboriginal parents in their children's education; developing cross-cultural awareness; and delivering professional development for staff working with Aboriginal students.

Systemic initiatives included the Aboriginal Support Network, with Aboriginal liaison officers supporting schools with Aboriginal student enrolments; Aboriginal Student Support and Parent Awareness (ASSPA) program committees, which facilitated Aboriginal parents' participation in school communities; support for Aboriginal preschool centres for four year olds; and the Aboriginal Education and Training Awards, intended to acknowledge outstanding achievement and generate support in the Aboriginal and broader communities.

In independent schools, Aboriginal education strategies included the provision of Aboriginal studies in the curriculum, involvement of school staffs in cross-cultural awareness professional development initiatives and the provision of scholarships in a number of schools. The sector includes independent P-10 Aboriginal community schools and in 1996 12 such schools operated in remote areas of the State, with a further two in Perth enrolling 203 students.

Learning areas

Focus area 3 – Student outcomes in numeracy

In 1996, the emphasis of FSIM was to be on development, with a project coordinator and 17 support teachers being appointed and Murdoch and Edith Cowan universities providing consultant support. Fifty-seven schools were chosen to trial curriculum support materials and a professional development framework.

Implementation was scheduled for 1997, but it has been decided to delay the process to coincide with the release of the Curriculum Framework and learning area statements and the Education Department's student outcome statements. Scheduled professional development did not therefore proceed and 12 support teachers returned to teaching positions. The remaining personnel will complete the

research and development phase by December 1997. A particular emphasis will continue to be given to developing understandings about identifying and supporting students at risk, notably Aboriginal students, students with learning difficulties and education support students.

Refinement of student outcome statements was largely completed during 1996. Many of the revisions reflected the advice received from teachers and schools during the 1994-1995 trial, as well as information obtained through FSIM research. The essential structure and key ideas within each strand remained unchanged, although some modifications were made to the substrands, including a reduction in their number, a key recommendation of the trial.

The use of graphics calculators has been approved by the Secondary Education Authority from the 1998 TEE in all mathematics courses, physics and chemistry. While the decision acknowledges the essential role of technology in education, the issues that arise include ensuring that all students will have equitable access and teachers appropriate professional support. The State Government is providing \$0.6 million, mostly to schools in the form of direct grants based on student numbers and location, to assist the purchase of class sets of calculators, supporting hardware, training materials and staff training. A small amount will be retained centrally to facilitate training through interactive television for isolated teachers, produce video, print and Internet resources for teachers and students and support workshops providing technical training in the use of the calculators and developing teaching methods in mathematics and science.

Fifty-six Catholic schools completed two- or three-day inservice training programs for FSIM, which was followed up at the school level with support for individual teachers and mathematics coordinators, many of whom sought assistance in updating their mathematics resources and in informing parents about modern approaches to learning in mathematics. A cooperative approach was used to determine school needs and to plan for expenditure in the longer term.

Almost all responding independent schools indicated that they were seeking to improve participation and achievement; two-thirds proposed increasing the time allocation for mathematics; and one-third sought to implement professional development on numeracy-related topics, to recruit teachers with specialised numeracy skills or to develop new teaching strategies. Several explored alternative assessment methods or the use of graphics calculators.

Most pursued at least one initiative during 1996 aimed at raising the profile of mathematics in the school community.

Focus area 4 – Science

Although the Science Project focused more directly on government primary schools, in secondary schools, curriculum leaders trained in 1995 were offered additional professional development in 1996. Experienced teachers and heads of department participated in separate programs. Each provided the participants with support in initiating curriculum change consistent with best practice, providing professional development for other teachers and becoming leaders in science education.

English

The English student outcome statements were revised in accordance with the recommendations of the trial report and consultation process. The most significant change was the separation of reading and viewing into two distinct sequences of outcomes. Other modifications included rewriting the strategies substrand to better reflect meta-linguistic understandings; review of all pointers and work samples; development of strand-level statements; and introduction of foundation outcome statements to provide for students with intellectual disabilities.

Early literacy grants were not made to independent schools in 1996. Instead, these funds were used to continue an early literacy project conducted by a full-time specialist, who assisted 20 target and additional non-target schools. Professional development programs were delivered to teachers and information on best practice disseminated.

Technology and enterprise

A CD-ROM was developed for distribution to all schools offering postcompulsory technology and enterprise

courses, with the aim of assisting teachers to understand the outcomes approach and its implications for effective teaching and learning.

Following consideration of the results of the trialling of the outcome statements, refinement activities included minor adjustments to the outcomes to simplify the language, rewriting of pointers, development of further work samples, the writing of strand-level statements to assist teachers' judgements, provision of a glossary of terms to help clarify concepts and assist teachers' understanding of language specific to technology and enterprise, and more explicit reference to the concept of enterprise throughout.

Health and physical education

Physical Steps initiatives for 1996 focused on the train-the-trainer program and district support strategy; the development of teacher resources for P-10, including fundamental movement skills screening and assessment materials; a model for early childhood physical education; dance studies materials for years 11 and 12 and postcompulsory vocational programs; promotion of best practice through Physical Education Week and Physical Education Awards; review of the organisational guidelines for physical and outdoor education and the design brief for school physical education facilities; and development of a corporate health package for administrators' use in schools.

The Western Australian Schools Sports Association, which is contracted by the Education Department to provide competitive school sport programs, managed the highly-successful Pacific School Games in Perth in December 1996. The Games involved athletics, swimming, diving and gymnastics for 3,000 students, including those with disabilities, from Pacific Rim countries and Australian States and Territories.