

PRIVATE SECTOR INITIATIVES AND
COMMONWEALTH GOVERNMENT POLICY

L. Logan: Department of Education
The University of Queensland

L. Bartlett: School of Education
University College of Central Queensland

M. Freakley: School of Education
Griffith University

Paper presented at the Annual Conference, AARE, Gold Coast, November 1991.
Private Sector Initiatives and Commonwealth
Government Policy

(Paper presented at the Annual AARE Conference, Gold Coast, November 1991)

Lloyd Logan, The University of Queensland
Leo Bartlett, University College of Central

Queensland

Mark Freakley, Griffith University

Introduction

Since 1973 the Commonwealth has played a significant part in the policy and practice of Australian schooling. The seminal report entitled *Schools in Australia* (1973) drew attention to the need for increased expenditure on schooling as a national priority, and indicated a role for schooling in achieving social change. The themes sponsored by the Commonwealth through the Schools Commission following this report were experimentation, diversity, equity, devolution of responsibility and management, localisation, and cultural pluralism. By the end of the 1970's, the concern for youth unemployment, student retention rates and the relationship between school and work began to emerge as a major priority in the Participation and Equity Program. From the mid 1980s, these recurrent themes of the 1970s were still present but issues of economic concern such as relevance to work, the basics, competencies, the effectiveness of schooling, performance indicators, national curriculum, national assessment, post-compulsory schooling, resource agreements, participation and accountability had colonised policy making. The move from social to economic-social reform in which schools were seen to make a major contribution began in the mid 1980s with the Commonwealth's statement of its objectives for schooling making explicit the articulation between the Commonwealth's agenda for education and its broader agenda for economic restructuring (e.g. Karmel: 1985; Schools Commission: 1987; Dawkins and Duncan: 1989). Two recent statements on directions for education, *Young People's Participation in Post Compulsory Education and Training* (Finn Report 1991) and the Commonwealth's objectives for schooling both re-emphasise these well defined economic priorities.

The study reported here, the Initiatives in Numeracy, Literacy and Science Study (INLS), aimed to provide a descriptive analysis and documentation of significant initiatives in numeracy, literacy and science in Option 2 and Association (Option 1) non-systemic non-government schools. (For full report see *Initiatives in Numeracy, Literacy and Science in Non-Systemic Non-Government Schools in Australia*. Available from DEET). It was a consequence of an agreement between the private sector of schooling and the Commonwealth as set out in the *Commonwealth Programs for Schools; Administrative Guidelines for Schools*, (1989). In that document the Commonwealth explicitly states an intent to gather educational accountability information of interest to it from non-government schools:

The following provides information (*italics added*) that is of interest to the Commonwealth given its operational objectives, for

schooling in Australia. This information may be collected by the Department for educational accountability purposes. Emphasis would be on broad aggregate data, providing information on trends over time, without any identification of individual schools.

School reporting (information), Commonwealth objectives for schooling (objectives for schooling) and resources agreements (educational accountability) are presented together.

The specific brief for the study was the documentation of initiatives in three subject areas so that an assessment might be made about the extent to which schools address Commonwealth objectives especially those dealing with maximising general competencies and increasing student participation in the above key subjects.

Definition of Terms

Competencies

Part of the confusion in a discussion of competencies is often due to the lack of consensus about the narrow and broad meanings of the word. A narrow interpretation of competencies or skills applies to automated activities such as the mechanics of reading, writing and number. A broad definition encompasses highly purposeful, intelligent complex abilities including interpersonal relations skills, life skills and social skills. While the former meaning focuses predominantly on "unthinking" behaviours, the latter activities involve abilities such as knowledge of the social and political structures of the society, the ability to interpret and use scientific information, and the capacity to make judgements.

While these are only two conceptual meanings, it is important to realise that schools have a great degree of liberty in interpreting 'competencies' and in translating them into their curriculum in response to Government policy. Depending on predisposition, some schools appeared to adopt an instrumentalist approach based on behavioural pedagogy; others, a liberal approach attentive to the relationships between will, knowledge and action; and yet others, a critical approach that contextualises skill formation within Australian social life.

Participation

The second principal overall government objective is participation and this term figured prominently in the language of school responses. In general, concerns about levels of participation and retention rates in education and training programs tend to derive from three sources. One is the belief that education is valued culturally for its own sake; a second is the politically sensitive youth unemployment statistic; and the third is concern about the capacity of the nation's workforce to cope with technological, industrial and occupational restructuring (Williams 1987:9). In 1987, the Commonwealth outlined its programs to increase the

level of participation in job related education and training programs in the report Skills for Australia. This package included initiatives to increase the schools retention rate to Year 12 to 65% by 1992 and the policy has been extended in the Finn Report (1991).

However, retention, or student participation rates, is only one aspect of participation. Participation can also refer to the involvement of all the interested parties within a school community: students, teachers, parents and various community groups acting singly and in concert. Equating retention with participation is seductive but simplistic and misleading since it ignores the quality of the experience and thereby the outcomes from retaining young adults in schools. It also limits consideration of means of education other than schooling.

The meanings of competence and participation sketched above all tended to emerge in the present sample study.

Literacy, Numeracy and Inquiry

While general competencies and participation have been the principal concern within a national educational framework, their expression has had particular application to the areas of numeracy, literacy and inquiry. It is useful to review briefly some of the meanings of these terms since within a schooling context one might anticipate they will have a diverse range of meanings.

Rather than collections of static, measurable skills, literacy, numeracy and inquiry can be thought of as dynamic entities that at once both define and are created by an individual's social constructs. In a basic sense, to be literate is to be able to participate in the information exchanges in symbolic, graphic, pictorial and oral forms of one's culture. Consequently illiteracy and aliteracy limit one's ability to contribute to and to benefit from specific social, professional and economic communities within the society.

A restricted view of literacy focuses curricular, pedagogical and evaluative concerns on the performative and functional capacities of meaning making. This contrasts with a maximal view which includes the informational and the epistemic. To be literate in this latter sense requires the acquisition of a corpus of basic skills to read and write words and numbers plus the capacity to create and communicate meanings which are sensitive to the idioms of contexts by using plural ways of knowing. Some of these ways of knowing are represented in mathematics, english and science; and while there is agreement that every student should be literate in mathematics, english and science, there still remain disparate beliefs about what counts as being literate.

The Commonwealth's document In the National Interest states the following four requisites for the development of literacy (1987:2):

- competence in the basic skills needed for communication, learning and daily living;
- knowledge of the main structures, features and ideas of the society in which we live;
- confidence in one's self worth and right to be involved and respected;
- experience in working with others in creative activity and collective decision making.

Characteristics of School Initiatives

The term initiative in the sample study was taken to refer to any activity undertaken to change some aspect of schooling. Initiatives as school activities were thought to be influenced by people, contexts and the process adopted to undertake the initiative. People influences were seen to be varied and diverse ranging from the disposition of staff, students and parents; their relevant expertise; and their ability to undertake additional work associated with adopting new practices. Contextual influences were assumed to encompass resources, school organisation, administration, timetable, curriculum assessment, and parent support. At a more macro level of policy formulation these same kind of influences could be said to 'frame' and affect initiatives at the micro (school) level of their implementation or enactment. The influences, together with the kind of process adopted to plan, develop and implement activities together resulted in the formulation of eight identifiable characteristics of activities labelled as initiatives. These characteristics were structure, purpose, origin and development, focus, orientation, scale, duration and outcome.

Accountability in the Sample Study

The idea of accountability is quite explicit in the Commonwealth Programs for Schools: Administrative Guidelines. But there are a number of meanings that can be ascribed to the word 'accountability'. While the present sample study comes under the direction of a Program Evaluation Advisory Committee (PEAC), it should not be construed that accountability, which is also a part of the brief, should overlap with evaluation. Such a meaning would require 'accountability' to include not only questions of compliance with institutional obligations and procedures, but also effectiveness (producing required or desired outcomes), efficiency, and beyond these, broader questions of quality. This is the maximal definition to which many sectors of public administration, guided by corporate managerialism have ascribed.

In this sample study, a minimalist view of accountability was adopted. Minimal accountability required schools to keep records and make them open to view (Stake and Kemmis, 1988). The approach recognises a reciprocity of responsibilities, in this instance between the Commonwealth and its public administrators, between public administrators and administrators of non-

systemic schools, and between administrators of non-systemic schools and individual Option 2 and Association (Option 1) schools. This is keeping with the Commonwealth's intent which explicitly states (Administrative Guidelines 1989:9) 'the Commonwealth recognises that non-government schools and systems have their own objectives and priorities.'

This viewpoint led to the possibility of a research emphasis on self-evaluation by schools in the collection of information through self-reports. Schools could therefore treat the sample study as the need to comply with the agreed activity or use the event as an opportunity to self-evaluate and improve their practice or do both.

The Design of the Sample Study

The brief required that the research should provide a descriptive analysis about initiatives in numeracy, literacy and science. This conformed to the Administrative Guidelines for Schools (resources agreement) requirement 'that the emphasis [should be] on broad aggregate data'. Hence, the research was more of the nature of a census survey than a survey analysis which could lead to predictive and inferential statements about initiatives.

The brief for the sample study required minimal intervention in the sample study schools. Under the direction of PEAC, the design and methodology of the research was intended to minimise intervention in schools' activities.

The main elements of the design of the sample study were:

1. Phase one.

Tracer School Studies. Information was first collected in ten tracer schools. The aim of this phase was to:

- (i) assess the nature of initiatives in a number of schools selected for a range of characteristics indicated in the brief;
- (ii) identify issues (something about which people disagree under different conditions) that could influence the research;
- (iii) collect data that could be used in the development of a brochure.

The brochure was intended to convey to schools the purpose of the sample study; the possible benefits of participation, especially the opportunity to self-evaluate initiatives; and to direct schools how to describe the initiative of their choice in one of the areas of numeracy, literacy, science and 'no emphasis'. This latter category was necessary since 23 percent of schools (from the resources agreement's statements) claimed their initiative 'crossed' all three areas.

2. Phase two.

The Written Survey. This was developed from the conceptual framework about initiatives indicated in the previous section. The time to complete the form depended largely on the approach that individual schools had taken with respect to the nature of their initiative (for example, whether they used the opportunity the sample study provided to self-evaluate over a longer period of time); and to their willingness to respond which was itself dependant on their knowledge about the purposes of the sample study.

3. Phase three.

Telephone Survey. The purpose of this element of the design was principally to clarify responses in a sample of twenty schools which provided evidence and information about strategies for future sample studies of initiatives.

It should be emphasised again that the INLS survey was not a survey analysis. The data collected were to be documented and the outcomes could not be used for predictive generalisation to other non-government, non-systemic schools.

Verification of school reports was attempted through data triangulation within the survey form; through the inclusion of tracer schools to identify issues to be explored in the written survey; and in the telephonen survey. The research team was not able to verify the content in the reports through the processes of interaction with schools because of a directive from PEAC. Nevertheless, there appeared to be a high degree of internal validity and consistency in the reports.

The research was framed by the requirements of PEAC, not least of which was the specific direction that survey (questionnaire) method was to be the principal data gathering technique in the sample study. PEAC also agreed however that this survey be 'open-ended' and that a context of self-accountability be emphasised. In the conduct of research, minimal (self) accountability did not fit easily with the vernacular of schools especially in a context where the research team were permitted only limited interaction with schools. For example, there were schools that did not see the need or reason to be self-accountable, or indeed the need for the sample study itself. Other schools were either quite oppositional or ignorant about the nature and purposes of the study.

Sampling Procedures.

Two separate populations of schools participated in the sample study. A total of 479 schools were identified initially and, of these, 179 provided information about their initiative in one of the four categories of initiatives.

139 Option 2 schools (30%) were identified in the first sample using information initially provided from the Commonwealth's records of schools' resources agreement statements. The sample was selected on the basis of initiative area; level of schooling, for example, junior secondary (JS); school configuration, that is the different combination of levels of schooling in a school; state and territories; and finally school type, for example, single sex or coeducational.

The brief required random sampling and this was attempted using computerised methods. This procedure enabled a fair selection of schools with a systematic sampling using proportional numbers for each attribute of the population indicated above. No school included in the ACER subject choice study conducted at the same time in Option 2 schools was considered in the final Option 2 school study.

Procedures for the selection of Association (Option 1) schools were quite different. These schools (N=183) from South Australia and New South Wales had provided a group response. This was different from Option 2 schools who indicated individually their chosen initiatives in their resources agreement statement. Of the total number of schools, several were eliminated on the basis of recency of establishment and of access to the research. Systematic random sample procedures were then used to select a 25% sample of 40 schools (N=11 from a total of 35 in South Australia and N=29 from a total of 119 in New South Wales).

Of the total population of schools finally available for the INLS study (N=456), 179 were included in the sample, representing 30% (N=139) and 35% (N=40) of Option 2 and Association schools. The former group of schools was drawn nationally; Association schools were individually drawn from NSW and SA only.

The achieved sample response rate for Option 2 schools was 88% and for Option 1 schools 82%. The achieved sample for schools with initiatives in the three areas was 90% and for schools with no emphasis initiatives the achieved sample was 81%.

The sampling procedures therefore accounted for all factors (with the exception of school type, that is, denomination), required for sampling schools in the study.

Initiatives and Commonwealth Objectives

The sample study undertook to assess the extent to which non-government Option 2 and Option 1 school initiatives were addressing Commonwealth objectives of maximising student competencies in literacy and numeracy, and increasing participation in mathematics and science.

It should be noted that Commonwealth Government objectives are not limited to these two objectives. However the broad general objectives are focussed on the development of general competencies particularly in the areas of

numeracy, literacy and enquiry; hence, the *raison d'etre* in part of this sample study. The Commonwealth objectives are listed as follows:

Commonwealth Government's Objectives for Schooling

1. To prepare students for life in general and full participation in society, including in a skilled and adaptable workforce by:
 - (a) maximising the general competencies of primary and secondary school students in areas such as literacy, numeracy and inquiry skills;
 - (b) improving the participation and achievement of students who are disadvantaged by ethnicity, Aboriginality, socio-economic circumstances, geographic location or physical or intellectual disability;
 - (c) making schooling more relevant to contemporary circumstances and to Australia's Asian-Pacific location;
 - (d) broadening the educational experiences of girls, especially in ways which increase their subsequent education and training and employment options;
 - (e) increasing student participation in key subjects (eg. Mathematics, Science and languages other than English), especially at the upper secondary level;
 - (f) providing better support services and structures (eg. improved career education and counselling); and
 - (g) providing an educational environment that develops self-discipline and respect for the rights of others, is conducive to maximum learning while allowing for different attainment levels depending on ability, and prepares students for the world of work.
2. To promote equity both within schools and within society more generally.
3. To maximise school retention, especially among those groups which currently have low retention.
4. To maximise the competence, efficiency and confidence of teachers through inservice teaching training, improved career paths for teachers and other means.
5. To facilitate the transitions students have to make (eg. the transition from primary to secondary schooling, from one school system to another, from schooling to further education and training or employment) and to better inform them about the range of options available.
6. To provide better feedback on schooling to parents, students, teachers, employers and the general community.

School Responses

The sample study survey (written and telephone) attempted to allow schools

to self-assess their initiatives' relevance and effectiveness to selected objectives. Table 1 shows the relationship between the stated purposes of the initiatives undertaken by schools and the Commonwealth Governments priorities. Table 2 indicates the eleven objectives or categories that were used in the survey and the percent response on the initiatives' relevance and effectiveness to each.

Not unexpectedly perhaps schools indicated greatest relevance and effectiveness to the broad objective of maximising general competencies of students particularly in the subject area of their initiative. The second most highly ranked objective was the provision of educational environments that enabled students greater opportunities to learn with self-discipline oriented to future work. It is also significant that both these objectives had the highest response rate. While it may be argued that both constitute motherhood statements (and responses), nevertheless schools clearly demarcate their interest in these two objectives.

The objective that was scored lowest in both relevance and effectiveness by schools was participation in the key area of science. Its scores on fair and great relevance and effectiveness were 32% and 28% respectively while it also recorded the highest no response rate (40%). This figure should be treated with caution because of the fewer number of initiatives in science (relative to numeracy and literacy). The pattern of no response scores for relevancy to participation in the three subject areas of literacy, numeracy and science (32%, 28% and 40% respectively) was highest of all the scores in this category. Similarly, the non response scores for effectiveness in relation to increasing participation in these areas (42%, 38%, 51%) are also highest relative to other objectives. The data reflect the general pattern in which schools indicated similar patterns of response for relevance as for effectiveness.

The general pattern in Tables 2 and 3 however may be better understood if reference is made to Table 3 where schools indicated that their highest expectations were in the area of improving general competencies. This would be achieved through the provision of conducive teaching and learning environments (see stated purposes Table 1) which would lead ultimately to the outcomes of more desirable attitudinal changes in students, and more effective learning.

Table 1 Stated purposes of initiatives in relation to Commonwealth Government objectives.

STATED PURPOSE

Direct Student Emphasis

- 1 Competence/Competencies
 - a) Specific Group
 - c Underachievers

- Gifted students
- NESB students

- Handicapped

- Girls (gender)

b) Specific Skills &
Knowledge

- Motor skills

- Skills based on Bloom's
Taxonomy
- Literacy
- Numeracy
- Science
- Computing

- Student achievement

- School performance

- Languages other than
English

2 Participation

a) In numeracy, literacy,
science

By gender

b) Through change in attitudes
and perceptions

Self confidence

Perceptions of subject

Perceptions of career options

3 Development of social
skills/
good citizenship

INITIATIVE

Remediation
Extension
ESL

Integration/PMP/Special Ed/ Remediation
Spatial Development Math & Science Curriculum

PMP, Remedial physical activities
Physical activities
Process writing, Reading, Oral language, Problem solving, Number facts,
Geometry, Geology, Primary and secondary science, Extension Computing,
Canteen

Various curriculum and teaching initiatives

LOTE

Family science, FAMPA Spatial development

Girls remediation in math and science

Remediation
Various curricular & teaching initiatives
Canteen, Gardening

Canteen, Gardening, Integration
OBJECTIVE

Conducive environments

Maximising general competencies
Participation and achievement of the disadvantaged

Equity

Education of girls

Maximising general competencies

Participation in key subjects Schooling relevant to contemporary
circumstances

Participation

Participation in key subjects

Education of girls

Participation in key subjects
Education of girls

Conducive environments

Self discipline and respect for others.

Table 3 continued:

STATED PURPOSE

Indirect Student Emphasis

4 a) Improve Curriculum

- ◌ More relevant, enjoyable,
interesting useful
(preparation for technological
world)
- ◌ More integrated
 - ◌ across levels
 - ◌ across areas
- ◌ Compliance

b) More Effective

- ◌ Teaching/Learning
- ◌ Response to new educational
knowledge

- ◌ Involve students and parents
- ◌ Improve assessment
procedures
- ◌ Motivate and educate staff

- ◌ Improve resources

5 Facilitate Transition

- ### 6 Provide better support/guidance

INITIATIVE

LNS Curriculum Task Centres

Computers

P-10, K-12 etc.

Whole Language

Thematic Science

Curriculum per BOSSS, VCE, etc

Vertical semester system

Streaming

Class sizes

Peer tutoring

Individualised instruction

Learning centres

Problem solving

Computers

FAMPA, Family science

Self assessment

Inservicing

Computers, Library

Integration: school and TAFE Pastoral care

OBJECTIVE

Schooling more relevant Participation in key subjects

Education of girls

Conducive environments

Facilitate transition

General competence

Conducive environment

Equity
General competence

Feedback to parents and students

Increase competence and confidence of teachers
Conducive environments

Facilitate transition

Better support

Table 2 Percent response for relevance and effectiveness of initiatives in
relation to government objectives. *

RELEVANCE
EFFECTIVENESS

No
Response

1

2

3

4

No

Response

1

2

3

4

Participation of disadvantaged students

7

19

25

13

36

25

6

15

32

22

Improving achievement levels of disadvantaged students

9

17

21

20

33

26

5

17

34

18

Maximising general competencies

6

3

7

26

58

14

2

9

42

33

Broadening educational experiences of girls

15

18

20

19

28

29

11

13

24

23

Improving student participation in:

Literacy

32

12

8

13

37

42

7

7

19

25

Numeracy

28

14

12

16

30

38

10

10

19

23

Science

40

15

13

12

20

51

7

14

10

18

Promoting equity in the school

16

13

14

21

36

27

8

14

28

23

Maximising competence of teachers

13

24

18

27

18

24

15

21

27

13

Providing conducive environments

8

3

7

27

55

15

3

8

40

34

Better feedback to students, parents community

12

22

21

24

21

25

14

21

23

17

* [1 = little or none, 2 = some, 3 = fair amount, 4 = great amount]

Table 3 Percent response for effectiveness of objectives seen as fairly and greatly relevant. *

(Rank order in brackets)

Objective

Fair and greatly relevant Whole sample

Fair and greatly

effective

Whole sample

Effectiveness of initiatives perceived as fair and greatly relevant

No response

1

2

3

4

Participation of disadvantaged students

49 (6)

54 (3)

9

0

9

41

41

Improving of achievement levels of disadvantaged students

53 (4)

52 (4)

11

0

11

47

31

Maximising general competencies

84 (1)

75 (1)

8

0

6

48

37

Broadening educational experiences of girls

47 (7)

47 (6)

11

1

5

37

46

Improving student participation in:

Literacy

50 (5)

44 (7)

12

0

5

34

49

Numeracy

46 (8)

42 (8)

8

0

4

39

48

Science

32 (11)

28 (11)

12

0

10

28

50

Promoting equity in the school

57 (3)

51 (5)

6

1

10

47

36

Maximising competence of teachers

45 (9)

40 (9)

7

1

13

54

25

Providing conducive environments

82 (2)

74 (2)

8

1

4

46

41

Better feedback to students, parents community

45 (9)

40 (9)

8

0

13

44

35

* (Nil response includes initiatives in which effectiveness has yet to be assessed.)

Table 4 Percent frequency of expected outcomes for initiatives in each (focus) subject area.

Expected Outcomes

Whole sample

n=154

Literacy

n=57

Numeracy

n=51

Science

n=24

No Emphasis

n=22

Student Emphasis

Competence

83

85

87

75

74

Attitudinal/Change

60

48

67

75

56

Participation

12

12

10

15

17

Social Skills

7

12

1

0

17

Learning Environment Emphasis

29

30

30

25

30

One further comment may be made about the data in Tables 1 and 2. The percent response scores on equity, girls and disadvantage were relatively high. This reflects comments by schools in other sections of the data in which they recognise the fact of disadvantage and the limited opportunities to learn for some students. But schools also generally believed they were catering for this disadvantage and more generally for equity issues in their programs. While there was evidence to suggest this was so, further 'finer-grained' research would be necessary to confirm it.

Another observation that may be made about objectives oriented to equity, girls and disadvantage issues in the sample study schools is reflected in the occurrence of remedial work in schools to 'counterbalance' disadvantage at Junior Secondary levels of schooling. The data suggest that greatest concern (that is, schools' perceptions of the relevance of an objective)

for gender is delayed until later secondary years of schooling. However, this interpretation must be treated cautiously in view of the very limited sample at this level ($n=5$). While the improvement of general competencies and creation of conducive learning environments tended to be emphasised in primary schooling, the relevance of equity issues like gender issues tended to be relegated to the secondary sector.

When objectives were analysed by subject areas for fair or great amount of relevance, the general pattern revealed by the entire sample showing high relevance of initiatives to maximising general competencies and creating environments conducive to learning, was repeated for all subject areas as well as initiatives with no particular emphasis in one area.

In relation to government objectives correlated with equity and the disadvantaged, initiatives in literacy were accorded the highest scores for their relevance to increasing equity and improving the participation and achievement of the disadvantaged, while science initiatives scored lowest. Numeracy initiatives were perceived as being of greatest relevance to gender issues.

Participation

Initiatives were perceived as having high levels of relevance to increasing participation within their own subject area. No emphasis initiatives were rated highly on their relevance to increasing participation in literacy.

Schools with a science initiative were distinguished by the fact that all perceived that their initiatives were relevant to increased participation in science. Not unexpectedly, for each initiative increased participation within one subject area was also accompanied by low participation in other subject areas.

These high scores on participation compared with low scores for participation as an expected outcome. It seemed evident that this low score was a response by schools to the Commonwealth Government's conception of retention and participation in terms of numbers continuing at school and how this was reflected in subject enrolment statistics.

The free-write data showed that sample study schools thought that increased participation was best achieved through strategies to increase student involvement; and then to a much lesser extent through organisational changes such as increasing the time allocation to specific activities or making the subject compulsory.

The data on increasing student involvement refer to student on-task behaviours, their commitment to tasks and the attitudinal dimension. The response on involvement is relatively higher for numeracy and literacy than it is for science although the latter figure is confounded by a low number ($n=21$) of initiatives worked in this area.

The high perceived relevance of initiatives to increasing participation reflects schools' understanding of participation as a change in the attitudinal and behavioural dimensions not as a change in the numbers of persons participating. Schools acknowledged the latter but assumed the former to be of greater significance to their initiatives.

It should be noted however that while this interpretation by schools of participation in terms of the quality of student involvement was particularly relevant for the compulsory subject areas of literacy and numeracy; schools did see the relevance of participation as retention more predominantly in the science area (Table 5). Overall, 12% of schools made specific reference to having increased retention. There was a relatively higher response in science (25%) where the concern was for subject choice, compared with literacy (9%) and no emphasis initiatives (14%) whose concern was post-compulsory retention, and numeracy (9%) which broached both these aspects of retention. Furthermore, science respondents saw that this would be achieved best through a dual attack on both student involvement (50%) and rearrangement and reorganisation of the science curriculum (48%).

Table 5 Percent schools for responses to the question "How did your initiative increase participation?". *

Whole sample

n=154

Literacy

n=57

Numeracy

n=51

Science

n=24

No Emphasis

n=22

Retention/subject participation

12

9

10

25

14

Organisation

15

7

10

48

14

Involvement

68

79

71

50

54

Nil Response*

16

14

18

4

32

* Multiple responses from schools are included in the table. The nil response includes initiatives yet to be assessed.

As the response to this question generally reflects the methodology for increasing participation, increased attention to retention, timetabling and curriculum and a lesser emphasis on increased involvement does not imply reduced concern for students attitudes in science. In fact, the data on purposes and outcomes suggest the opposite. Rather, it may indicate the beginnings of a revision of the status of science within the curriculum or simply an expression of science respondents' thinking style, their 'mind set' toward quantification.

The following comments relating to involvement as a form of participation were representative of schools' responses.

Students are now more confident in tackling tasks.

The initiative created the environment where most of the children felt comfortable about joining in discussions.

... improved student attitudes to mathematics with subsequent gains in achievement areas and secondary gains in other related subjects such as physics and chemistry.

Once motivation has been tackled, we found that students as a natural consequence improved in participation; also a positive staff relationship works towards this end.

Some comments on retention were:

Retention rates have improved concurrently with the initiative but statewide improvements have also occurred simultaneously. In 1984, 60% of our students completed Year 12 and 54% studied Mathematics. In 1989, the figures were 88% and 59% respectively. In absolute terms, the number of Year 12 Mathematics students increased by 60% during this period.

There is now a higher participation rate in the physical sciences at Year 11 with seventy-five girls choosing to study chemistry - (a 25% increase), and forty, physics (a 33% increase). Many more girls are proposing engineering as their future career with 15 Year 11 girls vying for five places at an engineering seminar.

To conclude, the sample study schools' understanding of participation as

involvement was consistent with their emphasis on attitudinal change and learning environments reflected in responses about purposes and outcomes. This understanding contrasted with the 'statistical retention' conception of participation which was seen to have low frequency in schools' stated purposes and outcomes.

General Competencies

Schools appeared to use two approaches, commonly in combination in order to maximise the acquisition of general learning competencies; firstly, through increased intensity of teaching/learning activity, and secondly through activities designed to improve the quality of the learning environment. Typical examples of how schools increased the intensity of the learning situation were; individual and small group tutoring, lower teacher-pupil ratios, increased practice time for skill acquisition, use of mastery learning programs, increase in on-task behaviour and parent involvement (for example, family science nights). Activities designed to improve the quality of the learning environment included integrating learning across the curriculum in a systematic manner, decreasing competition among students, increasing the perceived relevance of tasks to students and to their home environments, giving more attention to students' interests and perceived needs, raising student awareness of further study for employment and providing novel environments. Selected comments by schools included:

An increased emphasis on a more active and integrated approach produced improved process skills and knowledge of content. A greater variety of teaching strategies encouraged students to develop greater co-operativeness, independence and responsibility as well as increased success.

By raising the image of science and concentrating on the quality of experiences provided - we have seen a much more positive attitude towards science, an improvement in science skills, research skills and thinking skills.

Mainly through greater teacher confidence which then carried over to the children.

The children are obviously more on task and my role has changed from being a director of whole-class activities to being a facilitator of self-directed learning...now every child is challenged.

Predominantly the schools based their claims on informal evidence in outlining the effectiveness of their initiatives in improving general competencies. The data collection and analysis process tended to occur as an aspect of teaching. Informal observation was the most commonly cited process. Data deliberately sought through activities explicitly designed to collect information for evaluative purposes (eg standardised tests, examinations, teacher set assessment) was a less commonly cited formal means of collecting evidence. (Table 3).

Selected comments included the following.

Teachers and laboratory assistants have observed a general increase in the competencies during class work. The quality of work submitted in projects and standard tests has improved. The standard of entries in the Science Talent Search which all students enter has, in general, increased. The number of students/parents concerned about progress in science has decreased. Results obtained in the National Schools Science Competitions have in general increased.

It is not possible to cite specific evidence to support an increase in general competencies but there is an observed increase in enthusiasm for reading and writing and a heightened awareness of mathematics other than textbook computations.

There is a noted improvement in reading and writing abilities of some children but we cannot relate this directly to the initiative.

Results of above state averages in all public examinations or academic competitions. The success of students of tertiary study.

Observation of the children. Their greater interest in what is around them and their ability to intelligently discuss things.

Evidence is mostly anecdotal but there is a measurable improvement in the care and attention being paid to written work. Homework is of a much better standard and parents report a marked increase in the enthusiasm shown for school.

Parental feedback, for example, parents noticing more frequent and accurate use of more sophisticated language. Feedback from the community - It is often remarked upon by the people with whom our students come into contact, how proficient they are in written and oral language skills. For example - when our students enter competitions or write letters to the business community etc.

Discussion

This section comments on the general nature of the initiatives reported by the schools before addressing their relationship with general competencies and participation.

The Nature of Initiatives

The purpose of this sample study was to describe initiatives in three designated areas of the curriculum. Schools were left to self-assess what they understood by the term initiative and during the conduct of the study several meanings of the word could be detected.

Schools regarded initiatives as activities that formed part of the ongoing 'life' of the institution. In a number of instances, it was evident that initiatives had an accommodating or assimilative character. Initiatives also had an incremental character in that they were introduced gradually into practice. Hence, the initiatives reported in the sample study did not have a transforming effect on schools. One good effect of the study however could be that through the requirement of self-assessing and reporting, schools would orient future activity to a national emphasis on maximising general competency and participation. This is not to say that this was not already happening, but sample study effects (and the effects of later studies) could act as an encouragement and stimuli to establish a pattern in schooling directed toward the national interest.

It has already been seen how schools' definitions of initiative resulted in a wide range of meanings related to different attributes of curriculum, teaching and student learning. While schools appeared to be able to see and label an activity and call it an initiative, they appeared to be less able to measure the latter. This is reflected, for example, in schools' apparent inability to discriminate between the relevance and effectiveness of an initiative. There are undoubtedly complex reasons for the kinds of self-assessment of initiatives by the schools in the study (if only because initiatives were considered relevant and effective because they were self-reports of ongoing practice). A proposition could be made from the study that schools generally are not skilled in reporting and that they need support in this area.

Sample study schools while addressing general objectives in the broadest sense conceived of their initiative in the narrower sense as an 'in-school' activity; and as a response to the immediacy and demand (either externally imposed or self-generated) for a change in practice. The data revealed what is currently understood about schools; that they are places of busywork; and that there are considerable demands made on them. Until these demands from contexts outside schools are understood in the context of what actually happens inside schools, it is likely that the schools' definitions of an initiative will remain narrow and that initiatives may result in nominal rather than real change.

General Competencies

In describing their initiatives, it has already been noted that sample study schools tended to use a broad definition of competency. They were concerned with a notion of competency which related to the provision of environments conducive to learning and that fostered enabling conditions for the development of positive attitudes, self-responsibility, self-esteem and self-direction in their students. While the focus was on competencies for learning, especially learning related to state curriculum requirements, the idea of competency was extended to include life and social skills. Schools tended to indicate a belief in the more broad, complex and liberal meaning of competency rather than the narrow more instrumentalist

orientation. Hence the sample study schools' ideas of competency should be interpreted in the broadest sense.

Maximising competencies was achieved through establishing the kind of learning environment and enabling conditions mentioned above. Schools tended not to see their chosen initiative and the general competencies being developed in isolation from other activities (which might also be labelled initiatives) or from the conditions under which the development was possible.

Schools also tended not to differentiate between the coupling of numeracy-mathematics, literacy-english and science-inquiry. They responded in terms of school subjects, namely mathematics, english and science, and the more traditional terms reflecting their adherence to subject definitions of state curriculum requirements. The term inquiry was rarely used despite an emphasis in recent years on "inquiry approaches" in mathematics and science. This may indicate either that the term is not included in the discourse of schools or that inquiry is not part of schools' recurring pedagogy.

Participation

There was evidence to suggest that schools viewed participation in several ways. They were aware of participation as retention probably because of the government's concern in recent years for retention as an outcome of schooling. The principal emphasis however was on participation as a form of involvement by students and parents (albeit to a limited extent) and as improving the school and its learning environment with a view to developing general competencies.

Hence, few schools (6%) indicated increased participation as retention, as the purpose of their initiative. Increased participation was perceived as more attainable through strategies that emphasised student involvement and to a much lesser extent, through organizational change such as changing school timetables or increasing subject choice. Finally, participation as involvement tended to be seen as effective whenever it was assessed as relevant. The response for increased involvement tended to be higher for numeracy and literacy than for science although schools did see a greater relevance for participation as retention in the latter area.

Finally, sample study schools indicated their implementation of equity considerations in three ways. First, there was a great range and diversity of schools in the sample study in terms of period of establishment, size, urban character and type (single-sex, denomination). The diversity in schools might itself reflect a response to the range of educational needs of communities from the least to most advantaged or disadvantaged and hence open the way to addressing equity issues. Second, schools tended to adhere to a broader definition of participation which made members, (including those who had little opportunity to have their say) of the school community more inclusive. The focus was on participation of students within schools

and not involvement of the wider community and parents. Finally, participation and equity considerations were addressed by the sample study schools with their emphasis on remediation in learning in the three subject areas. While numeracy and literacy had remediation as a specific purpose of introducing an initiative, there was no science initiative that addressed remediation as its specific purpose.

Future Research on Initiatives

Some comment needs to be made on the narrow and broader context within which the study can be located. Both contexts work actively for and against each other and any study must consider both. Hence, in the INLS study, individual schools provided data, with varying degrees of willingness. In the conduct of the research, policy directives that had already been enunciated at a macro (national) level, for example, resources agreements and national objectives, clearly influenced the research process.

The gathering of information (in this study through self-reporting) was related to "the Commonwealth [and] its operational objectives for schooling" and "for educational accountability purposes" (p.2). There is a three way relationship involved here (Figure 1), but the nature of this relationship remains unclear and unspecified. But that it affected the INLS study is clear in the responses of informants. Hence, while the brief assumed that the research was a "neutral" activity, the majority of non-systemic, non-government schools saw the research as a political activity. While the research did not attempt to assess the degree to which the outcomes of the study were affected, never-the-less it was clear that the political context of the study affected participants' willingness to respond, the nature of their responses (evidence to be interpreted), their interpretation of their initiatives and outcomes, and the directives given by management to some groups where a formal or quasi-formal organizational arrangement existed. It was made clear during the study that sections of executive management regarded the study as superfluous in a situation where they regarded themselves already accountable by virtue of the fact that the resources agreements existed.

This situation is understandable in a context where the Commonwealth seeks to align schools nationally with its operational objectives for schooling but where its agenda (which we define elsewhere as corporate federalism which is 'driven' by an amalgam of beliefs involving economic rationalism, corporate managerialism, human capital and neocorporatism) is quite unclear. It should also be remembered that while this agenda had been emerging over a period of time the study was the first occasion such information was required.

There was also the ideological context to be addressed in the conduct of the study which challenged the relationships between economy and culture; between the right of government to specify directions 'in the national interests' through objectives, and the role of culture (schooling) in

relations to those interests.

Self-reports

Resources
Agreements

Accountability

Commonwealth
Objectives

Figure 1: The macro context of the sample study

The design of the study attempted to consider aspects of these contexts. Hence, accountability was interpreted in the genre of self-evaluation or minimal accountability. Many schools for whatever reasons grasped the opportunity to serve their own purposes relating to school improvement and at the same time provide information for the Commonwealth so that it could assess and monitor the general direction and progress of non-systemic schools in relation to its electoral mandate to guide schooling. But there was an equal if not larger number of schools who were less willing to respond or who supplied information reluctantly.

Conclusion

It was evident in the study that many schools had little clear understanding of the purposes (or legitimacy) of the exercise; that the agenda of the Commonwealth was not similar to the agenda of non-government schools or their management; and that there was a lack of communication across macro (national and executive) contexts and micro (individual school) contexts.

In one sense, the attempt to address the political contexts and nature of the study through a design of minimal accountability failed. The attempt to collapse the self-reporting process with system accountability requirements was not effective because the Commonwealth failed to make explicit the purposes of accountability; even to indicate the purposes to which the information from schools would be put. The political nature of accountability in whatever form (self, peer or system) cannot be dichotomised from the event of information collection.

In another sense, the context of the INLS study demonstrated the need for future studies of this nature to address these issues; to make contentious issues more explicit; and to recognise the politics of research. Hence, in a situation where excessive demands are already being made by various authorities, demands that infringe on the daily lives of teachers and students, there is a need to:

- a) foster commitment through negotiation and collaboration in aiming for greater understanding about purposes of schooling that serve the national interests;
- b) respect the independence of each school in their establishment of partnerships with the Commonwealth;
- c) recognise publicly that the national interests might be served in diverse ways; that is, which acknowledge that shared ends (Commonwealth objectives for schooling) do not imply common means;
- d) accept the politics of accountability by making more explicit each group's understanding of intention, process and outcome as an inherent part of each school's partnership with the Commonwealth;
- e) acknowledge the different time frames and procedures of each school in its development of initiatives and to use this as a basis for negotiation in any reporting process.

While 'rich description' provided by schools may be useful, only schools in partnership with the Commonwealth can assess how initiatives relate to national objectives for schooling. More adequate methods other than those prescribed by the reference group in the conduct of this study need to be implemented in future research.

References

- AEC (1991) Young People's Participation in Post-compulsory Education and Training (The Finn Report). Canberra. AGPS.
- Commonwealth Schools Commission (1987) In the National Interest. Canberra. AGPS.
- Dawkins, J.S. and Holding, A.C. (1987) Skills for Australia. Canberra. AGPS.
- Dawkins, J. and Duncan, P. (1989) Better and Fairer Achievements in Employment, Education and Training. Canberra. AGPS.
- DEET (1989) 1989-90 Programs: Department of Employment, Education and Training. Canberra. AGPS.
- Karmel, P. (Chair) (1973) Schools in Australia. Canberra. AGPS.
- _____ (Chair) (1985) Quality of Education in Australia. Canberra. AGPS.
- Williams, T. (1987) Participation in Education. Melbourne. ACER.