# PRESIDENT'S EDUCATION INITIATIVE

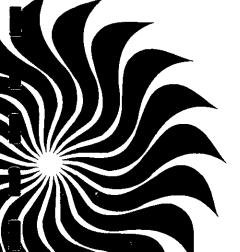
# FINAL REPORT OF PHASE I

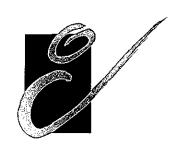
MASHWAHLE DIPHOFA
JUNE 1997

Undertaken by the Joint Education Trust

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## THE PRESIDENT'S EDUCATION INITIATIVE:

## FINAL REPORT OF PHASE I

Mashwahle Diphofa

**JUNE 1997** 

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#### **PREFACE**

In 1994, the new South African government inherited a highly fragmented system of education, with 19 different departments providing education to different race groups and in different provinces. Each of these racially based departments had its own funding levels, which impacted upon the quality of the educational facilities in the department and the number of teachers employed. These differences were evident in per capita expenditure, as well as in the average class sizes which pertained in these departments.

The new dispensation in South Africa is driven by a fundamental commitment to equity. Because human resources are the single largest expenditure item in any education system, attempts to reach equity in education required that standard norms for the provision of educators had to be established. These norms would apply on two levels:

- between institutions within provinces, and
- between the provinces themselves.

The aim of the Minister of Education was to achieve equity within a period of five years by the year 2000. This was to be done using three related mechanisms:

- the redeployment of educators from areas of relative surplus to areas of need,
- a voluntary severance package for those who wished to exit the system and whose departure would create opportunities for redeployment and greater integration of personnel, and
- the retraining of educators who could not be redeployed and wished to remain in the system.

The first two processes are running their course, largely as a management exercise aimed at achieving the guideline ratios in all institutions and provinces. The retraining of educators remains the single largest need at present. This has a number of dimensions, including the following three possible areas:

• Retraining educators to teach school subjects other than the ones for which they were originally trained.

The major focus here is towards Mathematics and Science, in which we have a severe shortage of teachers, and the Humanities and Social Sciences, in which we have an oversupply. The aim is to re-train the humanities teachers by equipping them with the content and skills needed to teach the natural sciences.

#### • Retraining educators for other sectors of the education system

The areas of Adult Basic Education and Training (ABET) and Early Childhood Development (ECD) have long been neglected in our education system, with few specialist teachers working in these areas. The opportunities for teachers in excess to be retrained for employment in these areas serves a narrow employment purpose, but also makes an enormous contribution to the efficiency of the system itself (especially ECD), and to reconstruction and development generally (especially ABET).

## • The general retraining of educators

Because of many new elements which have been introduced in our society and our education system, there is a need for every single teacher to have some form of professional re-orientation. This is driven by a number of factors:

- ♦ a new human rights culture which underpins education, including, for example, the outlawing of corporal punishment, constitutional rights to equality and so on. It is necessary for teachers to understand the importance and effect of these in their teaching;
- ♦ a new curriculum, which is outcomes-based, and which places a whole new set of professional demands upon the teacher; and
- new classroom situations, which tend to be far more complex than they were before. This complexity includes matters like multi-lingual and multi-cultural classes, as well as the increased possibility of multi-grade classes as a result of the new curriculum, which is not age referenced.

All of the above factors compel us to embark upon a massive programme of teacher development, some highly focused towards particular goals, other more general and relating to the overall quality and effectiveness of education. Proposals in this regard are included in this report.

The President's Education Initiative is a broad based intervention, inviting co-operation in the above areas. With the completion of Phase I, the Department of Education is now looking forward to moving into detailed discussions with possible funders on specific projects within the overall framework. Implementation is urgent.

The Department of Education wishes to thank the following for their support of the initiative:

- President Mandela for having initiated the project;
- Numerous international donors for expressing their support;
- the Danish International Development Agency (DANIDA) for their financial support of Phase I, and in principle support for assistance in the management of Phase II; and
- the Joint Education Trust (JET), who have undertaken Phase I of the PEI on behalf of the Department of Education.

**Duncan Hindle** 

**Chief Director: Human Resources** 

**Department of Education** 

#### **ACKNOWLEDGEMENTS**

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• Mr M Bopape (Northern Province)

• Mr M Malaza (Mpumalanga)

• Mr H Mohamed (Gauteng)

• Mr G Mompei (North West)

• Ms V Ntoi/Mr W Mokuena (Free State)

• Ms K Sesenyamotse (Northern Cape)

• Dr J Schreuder/Mr D Shepherd (Western Cape)

• Ms P Msutu/Mr J Bartlett (Eastern Cape)

• Mr S Nadasen (Kwazulu Natal)

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• Prof JP Strauss (Free State and Western Cape))

Mr RM Bergmann (Northern Cape)
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• Dr T Dachs (Kwazulu Natal):

5. Penny Vinjevold for conducting the provincial audits, developing the Western Cape proposal, managing the PEI research and writing up the overview of the research contained in this main report;

6. The consultants who conducted the PEI research. They are: Kholofelo Sedibe; Cheryl Reeves, Penny Vinjevold and the Sacred Heart School Development Project;

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- 14. Dr Nick Taylor for his supportive leadership throughout the project.

Mashwahle Diphofa

Project Manager: PEI Phase I

June 1997

#### 1. BACKGROUND

#### 1.1. Introduction

The present South African government inherited an inequitable education system and this is reflected in the funding levels of the various provincial education departments. The inequities are being phased out by annual shifts in the budgets from the higher-than-average to the lower-than-average funded provinces with the objective of achieving parity in funding by the year 2000.

However, since more than 85% of the education budget for schools and colleges is spent on personnel expenditure, shifting a percentage of the funds from one province to another to achieve parity also implies shifting personnel. An agreement was reached in the Education Labour Relations Council (ELRC) to effect right-sizing of the education establishment. The agreement comprised measures to re-deploy educators together with the alternative of taking voluntary severance packages (VSPs). However, because of the sensitive and complicated nature of the rationalisation process, the implementation of this ELRC agreement has not been without problems.

When the present government came into power, no general criteria for the provisioning of educators existed. A scenario was developed to determine the learner: educator ratios for schools, using variables such as the annual growth rate of learners, the demography of our country, and the economic growth rate. From these, it was estimated that, assuming an average 3% annual growth rate for the next ten years, the most favourable ratios the country can afford are 1:35 for ordinary secondary and 1:40 for ordinary primary schools. The phasing in of equity in the provisioning of staff in line with these projected ratios requires the downsizing of staff complements in some education institutions and up-sizing in others.

It should be noted, however, that the re-deployment of educators in order to effect the equitable provisioning of staff deals only with the quantitative aspect of staff provisioning. Equity in the quality of staff provisioning is a different and extremely important issue. About one third of the teachers in the country are still under-qualified and the performance of various parts of the school sector indicates serious quality problems, including priority areas like science, mathematics and technology. However, the government clearly recognises and accepts the challenges presented by this state of affairs. For instance, in the "White Paper on Education and Training", published in Government Gazette No 16312 of 15 March 1995, the following is stated:

- "The improvement of the quality of education and training services is essential. In many schools serving the majority of the population there has been a precipitous decline in the quality of educational performance, which must be reversed. But quality is required across the board. It is linked to the capacity and commitment of the teacher, the appropriateness of the curriculum, and the way standards are set and met..." (p21)
- "The state's resources must be deployed according to the principle of equity, so that they are used to provide essentially the same quality of learning opportunities. This is an inescapable duty upon government, in the light of this country's history and its legacy of inequality, and it is a constitutional requirement..." (p21)

Re-deployment and down-sizing processes present the education establishment with other challenges, including appropriate teacher development and support. The improvement of

teaching in science, mathematics and technology and the re-skilling of teachers in these subjects remains an overall priority for education in South Africa. However, over and above these aspects attention has to be given to:

- large class teaching, particularly in rural and township schools
- teaching in multi-grade classes particularly in small farm schools; and
- teaching in a multi-lingual environment

These priorities are largely known to donors and have been receiving some funding. Indeed, Appendix C of this report reflects among other things the nature and extent of work already being done by some projects in partnership with donors to address these priorities. However, to date there has not been sufficient coherence and synergy in these areas. The President's Education Initiative presents a good opportunity to achieve this.

## 1.2. Purpose and Focus of the PEI

Given the above needs, problems and guidelines, President Nelson Mandela took the initiative to request assistance from the international community. In his letter to governments of a number of countries, he referred to the upgrading of teachers, especially in science and mathematics, and in teaching large classes. (Although not accepted by these governments, he also raised the question of the financing of VSPs and possible assistance to teachers opting for the package). As a result, the PEI was established to address the following areas with assistance from the international community:

- upgrading and re-skilling of serving teachers in science, mathematics and technology; and
- improvement of the quality of education in schools, including the improvement of teaching in large classes, in multi-grade classes in small farm schools, and in a multi-lingual environment.

To achieve the above, the following activities - grouped into two phases - were planned:

#### Phase I activities

- an audit of all teacher development projects in each province
- a broad evaluation of the work of these projects
- formulating a strategic plan for teacher development for each province
- discussing with donors who have indicated an interest in the PEI to establish their priorities, possible levels of support and funding requirements and mechanisms
- preparing proposals for each province linking the needs and priorities of the province with those of specific donors.
- providing source documents on possible teacher development directions regarding teaching in large classes, multi-grade classes and in a multi-lingual environment

#### Phase II activities

Once the funding proposals developed during Phase I are approved by the respective donors, Phase II will commence. This will entail the implementation and monitoring of the programme plans.

This report focuses on Phase I activities. The Joint Education Trust (JET) was appointed by the National Department of Education (DoE) to manage this phase. In this capacity JET was

accountable to the PEI Executive and Reference Committees. These activities were funded by the Danish International Development Agency (DANIDA).

## 1.3. Structures of Accountability

Two committees were established to serve as a sounding board for and drive the PEI. The first of these, the Executive Committee, was the decision-making authority in the project while the Reference Committee served as a sounding board bringing together a wide range of representatives, including those from provincial education departments. The PEI shared this latter committee with the Teacher Policy Support Project (TPSP), a Heads of Education Departments Committee (HEDCOM) project managed by the National Business Initiative (NBI) and tasked with assisting provinces to develop policy on teacher supply, utilisation and development (TSUD). With the TPSP focusing on teacher education and support from a policy perspective and the PEI focusing on the same niche but from a programme implementation perspective, it was important to have such a shared Reference Committee to ensure sound linkages so that policy and implementation can continue to influence one another. Furthermore, having the same body would be efficient as provinces would then not have to send different representatives to different meetings addressing a common issue. A detailed description of the above PEI structures follows.

#### 1.3.1. The PEI Executive Committee

The National DoE handled the overall management of the project through the PEI Executive Committee. Meeting once a month to consider progress and discuss the way forward, the committee comprised the following:

- Mr R du Preez (Deputy Director General: Human Resources and Administration)
- Dr T Coombe (Deputy Director General: Education and Training Systems and Coordination)
- Mr D Hindle (Chief Director: Human Resources Development)
- Mr P Benade (Chief Director: Administration)
- Dr C Madiba (Chief Director: Education and Training Systems and Co-ordination)
- Mr K Lehoko (Chief Director: Adult Basic, Vocational and Distance Education and Training)
- Mr G Jeppie (Director: International Relations)
- Dr A Le Roux (Director: Teacher Education)
- Ms N Mahanjana (Director: Human Resources Development)
- Ms P Tyobeka (Director: Culture of Learning and Teaching)
- Mr W Potgieter (Suid Afrikaanse Onderwys Unie)
- Mr PA Pyper (National Professional Teachers Organisations of SA)
- Mr P Njobe (South African Democratic Teachers Union)

The Committee addressed a number of issues, most of which revolved around progress in provinces (particularly where delays were being experienced), and accountability (in particular, planning ways of reporting to the donors, HEDCOM, the Minister of Education and the President).

Perhaps one of the most significant issues the Committee had to deal with was the focus of the project. With the many competing education needs and priorities, the committee had to carefully delineate the scope of the project to ensure that it retained its focus without excluding very crucial elements of the work of the Department. For instance, with educationists throughout the country focusing largely on Curriculum 2005, Education Management Development and Governance training as required by the South African Schools Act, the committee had to consider the relationship between these initiatives and the PEI. In this regard it was decided to provide financial support to Curriculum 2005 and to ensure that although Education Management Development and Governance training may be funded separately, significant synergy exists between their implementation and that of the PEI.

#### 1.3.2. The PEI Reference Committee

This formed the second tier of PEI accountability. The Committee was much broader and comprised DoE officials (national and provincial), representatives of teacher organisations and of some NGOs. These were largely NGOs which conducted the 1995 National Teacher Education Audit commissioned by the Department of Education and which have since participated actively in assisting the DoE to use the outcome of the audit as a basis for initiating processes for the development of teacher education policy. The Reference Committee was primarily established to serve the Teacher Policy Support Project (TPSP). However, as indicated above, it was decided to use this body for the PEI to avoid duplication of processes and to ensure that both the TPSP and PEI informed each other accordingly. The committee thus provided a sound link not only between these two important initiatives but also between provincial and national planning processes.

The committee also met once a month and comprised the following:

- Dr A Le Roux (Chairperson)
- Prof DMD Mahlangu (N Province)
- Dr S Mbokazi and Mr S Nadasen (Kwazulu Natal)
- Dr T Thoahlane (Free State)
- Mr G Mompei (North West)
- Mr J Sibande and Ms T Nkosi (Mpumalanga)
- Mr S Shongwe (Gauteng)
- Mr J Bartlett (Eastern Cape)
- Dr J H Schreuder and Mr D Shepherd (Western Cape)
- Mr E Pratt and Ms Abuys (Northern Cape)
- Mr A Pyper (NAPTOSA)
- Mr P Njobe (SADTU)
- Mr W Potgieter (SAOU)
- Dr J Hofmeyr (National Business Initiative NBI)
- Ms R Jaff (NBI)
- Dr N Taylor and Mr M Diphofa (JET)

- Ms A Arnott (Edusource)
- Mr M Loots (DoE)
- Prof J vd Linde (Research Institute for Education Planning RIEP)
- Ms M Morojele (South African Institute for Distance Education SAIDE)
- Mr Lars Faaborg-Andersen (DANIDA)

The activities of Phase I have been grouped into three main categories, namely,

- PEI Research
- · Donor Consultations; and
- Provincial Processes

#### 2. SUMMARY OF THE RESEARCH

#### a. The purpose of the research reports

The national Department of Education commissioned research on four topics as part of Phase 1 of the President's Education Initiative (PEI): large class teaching, multigrade teaching, multi-lingual teaching and whole school development.

The research reports are intended to inform the work of the PEI as well as national and provincial education departments in their policy and planning for teacher development.

## b. The brief for the research reports:

The brief for each research topic was that the final report should cover:

#### a review of the international literature:

- the countries and writers inducted in the review;
- the findings of the literature reviewed;
- · areas of consensus; and
- areas of disagreement.

#### a review of South African literature on the topic:

- the writers inducted in the review;
- the findings of the literature reviewed;
- · areas of consensus; and
- areas of disagreement.
- past, current and proposed projects in South Africa dealing with the topic:
- the name of the project;
- geographic location;
- the school level:
- scope;
- nature of the project; and

• existence of evaluation or research component.

#### c. The reports:

The following research reports were submitted and have been summarised for this report:

- Class-size and pupil achievement: a literature survey by Kholofelo Sedibe (NBI);
- Teaching in multi-lingual classes: a literature survey by Cheryl Reeves (UCT);
- Teaching in multi-grade classes: a literature survey by Penny Vinjevold (JET); and
- Whole school development and in-service teacher development: prepared by the Sacred Heart School Development Project

The complete research reports are contained in Appendix C.

## 2.1. Large class teaching

## **2.1.1.** Scope of the report

This report covers;

- international literature: grouped into developed and developing countries, with a discussion of areas of consensus and disagreement;
- an outline of the South African context relevant to large classes;
- South African literature: with a discussion of areas of consensus and agreement;
- a survey of South African projects which look at the issue of large class teaching; and
- a brief concluding discussion.

## 2.1.2. Summary of the international literature reviewed

The section on international literature is divided into:

- a. a review of literature from the following developed countries: USA, UK, Japan, Australia and Canada;
- **b.** a review of literature which describes the experiences of developing countries; and
- c. a review of a comparative study of maths and science achievement in both developing and developed countries.

In developed countries the relationship between class size and achievement has been researched predominantly in the USA. With the exception of Japan, research studies in other developed countries have been influenced by the contradictory findings of USA research. Consequently, the summaries on the areas of consensus and disagreement reflect, to a large degree, the USA perspectives on the relationship between class size and achievement.

Despite disagreement on some aspects of the research findings, and criticisms of the methodologies used, research findings suggest the following:

• Small classes are likely to improve the achievements of kindergarten - grade 3 pupils, pupils from economically and educationally disadvantaged backgrounds

and pupils with special educational needs.

- Small classes are likely to produce the greatest gains in achievements in maths and reading in the first four years of schooling.
- Large classes increase the workload of teachers and they affect teacher morale negatively.

There is consensus in the international literature that reductions in class size do not have an automatic impact on pupil achievement. Teacher training and teacher practices are also seen as important in improving the achievements of pupils.

Research studies on class size and pupil achievement also agree that, as reductions in class size are constrained by the availability of resources, it is important to target specific levels of schooling, and subjects most likely to benefit from smaller classes. Moreover, research indicates that class size reduction must not be adopted as a general policy in isolation from social, economic and political circumstances.

Instead of advocating class size reductions as a policy objective in itself, research findings encourage education policy-makers to weigh the cost-effectiveness of alternative quality measures to improve the effectiveness of class teaching.

A central theme of much of the literature is that class size is one of a number of measurable and non-measurable variables that have to be taken into account in any consideration of quality teaching and pupil achievement. Many of the commentators argue that class size alone is not a determinant of pupil achievement.

In developing countries, the issue of class size and pupil achievement has not attracted a great deal of research attention. Educational research and discussion have tended to focus on the effects of the rapid expansion of educational provision and quality improvement. Within these areas, the relationship between class size and achievement is a significant, but relatively small issue. For this survey, the literature has been scanned to isolate discussion on class size and achievement.

The literature dealt with in this section of the report is concerned primarily with the broad issues of expansion and quality. The discussion about class size and pupil achievement which has been extrapolated needs to be read in this context.

Two main areas of agreement have emerged:

- First, investment in education should focus on measures which will improve the
  quality of education. Such measures include the provision of adequate teaching
  and learning materials; the adoption of the double-shift and platoon systems; inservice training of teachers; systematic improvement of the curriculum; and the
  use of instructional technologies, mainly interactive radio.
- Secondly, although it is argued that small classes and high quality buildings affect the morale of teachers and pupils positively, it is not advisable to invest in small classes and high quality buildings because there is little evidence to support the relationship between these factors and school effectiveness and pupil achievement. Investment in small classes and new infrastructure requires more funds than what is affordable. If such investments are made, they preclude the introduction of the quality measures which are discussed above.

No areas of disagreement emerged in the survey, but again it must be stressed that the literature was not concerned primarily with large classes and pupil achievement.

## 2.1.3. Summary of the South African literature

#### The South African context

To understand class size, the report on large class teaching by Sedibe argues that one should look at a range of factors that could impact on it. In the international context, Valerien (1991) states that, in addition to the demand for universal education, class sizes are influenced by such factors as land issues, economic growth and deficit, population density and urbanisation, school size as a determining factor of principals' salaries as well as reduction of teaching duties especially for principals, deputies and heads of departments (HODs), to mention but a few. With this in mind, the determining factors of class size in the South African context are explored in the report.

Class sizes in South Africa are generally large but vary widely from urban to rural areas, township to suburb, and even school to school. This situation is the result of a complex interplay of historical factors, demographic changes, economic factors and policy decisions. Moreover, social attitudes and expectations have also influenced class size.

A survey of all the contributory factors suggests that large classes are a reality in most schools in South Africa and conditions do not exist to address the issue in the near future. However, the public debate indicates that large classes are a contested issue and that popular and teacher perceptions of large classes are generally negative.

#### South African Literature

There is a limited South African literature on class size and pupil achievement. Much of the literature is discursive and argumentative, rather than grounded in empirical research. The question of class size and achievement is generally not considered as a central issue in the discussion about educational quality. From the realisation that "large classes are here to stay", South African authors generally agree that the best way to improve the quality of education and student achievement, with the available limited resources, is to equip teachers with the necessary skills for effective large class teaching and to encourage innovation.

The report suggests that further research is needed into two aspects of this issue in South Africa:

- comparative research on projects which have implemented or tested innovations; and
- empirical or field-based research on innovations by NGOs, teachers and schools.

The emphasis should be on classroom practice and school organisation to support innovations in teaching strategies and assessment strategies.

## 2.1.4. Summary of survey of South African projects

The purpose of this survey was to catalogue existing activities. No attempt has been made to evaluate the projects.

A questionnaire was sent to a number of NGOs known to be working in the area of large class teaching. It was also sent to a limited number of public and private schools which were known to have adopted specific policies/strategies with regard to large class teaching. University faculties of education and in-service teacher colleges were selected randomly and were also contacted. The questionnaire invited respondents to identify any projects known to them, and these suggestions were followed up. Some of the organisations were contacted by telephone, and the questionnaire was used to structure the interviews. Altogether, 110 institutions, organisations and schools were approached.

In the survey of South African projects, respondents made several recommendations concerning large class teaching:

- standardised learning materials;
- modular work and modular/rotational assessment;
- space management and redesign of learning spaces;
- timetable innovations/adjustments;
- teacher aides;
- technology-enhanced learning;
- peer (co-operative) teaching and/or monitoring systems; and
- theme teaching and group work/team teaching.

#### 2.1.5. Conclusions

Although the issue of class size and pupil achievement is a matter of popular debate, there is, perhaps surprisingly, little research literature devoted to the relationship between the two. Those specific research projects which have been conducted, have been criticised because of the methodologies they have used, and many of the papers and reports cited in this survey have recommended the need for more systematic research.

Based on the literature survey, the following concluding comments are presented:

- There is no simple and clear-cut correlation between class size and pupil achievement.
- Pupil attainment is affected by several factors, and there is a complex relationship between a range of variables.
- Attitudes towards class size are shaped by teachers' perceptions and experience.
- Large classes pose greater challenges for teachers, and can affect morale adversely.
- With classes of 20-50 pupils, there is little evidence that marginal reductions in class size will affect pupil performance in a positive way.
- Pupil achievement is influenced more by effective teaching than it is by the number of pupils in a class.
- Reductions in the numbers of children in classes will require additional teachers; this is beyond the resources of many countries, and a higher priority should be given to alternative strategies instead of reducing class size to improve pupil performance.
- Where smaller classes might be feasible, they should be targeted at younger children and those with learning difficulties.
- Experience in different parts of the world suggests that policy responses to the issue of large classes have tended to be ad hoc, and have not been underpinned by rigorous empirical research and/or coherent policies. International best practice suggests that the most cost-effective interventions are those which revolve around assisting teachers to be more effective, rather than class size reductions.
- A number of factors have influenced class size in South Africa and will continue to do so. Realism suggests that large classes will be a feature of most primary and secondary schools for the foreseeable future. Improvements in quality, and in pupil achievement,

will need to be sought through the provision of adequate teaching and learning materials, improved training for teachers, and strategies to improve classroom management and teaching practices.

 Within South Africa, special factor that will need to be accounted for in policy formulation relates to physical resources, and particularly the size and capacity of classrooms. There is a need to consider not only additional construction, but also more imaginative use of space.

## 2.1.6. Implications for teacher development

The suggestion from the literature review that the most cost-effective measure to improve the pupils' achievement to improve teachers' attitudes to large classes and introduce teachers to strategies for dealing with them, has considerable implications for teacher development at a variety of levels.

## **Management Training of Principals**

Management training for principals should include a substantial element on time-tabling which should focus on:

- innovative time-tabling arrangements which allow for team teaching with theme lectures to larger groups and tutorials with smaller groups;
- special tuition for small target groups who can be temporarily removed from their ordinary classes;
- redesign and innovative use of physical space/facilities;
- an appropriate balance between contact time with large classes and time for preparation and marking;
- maximising teaching/learning time in the annual school calendar and the time-table; and
- effective administration of text book loan systems.

#### **INSET for Teacher Educators**

Inservice education for teacher educators should aim to inculcate positive attitudes to the reality of large classes in teacher educators. Training in effective strategies for dealing with large groups of learners should be developed. These could include:

- teaching/learning strategies based on co-operative learning;
- resource-based learning:
- independent work;
- a range of assessment strategies like self-evaluation;
- peer evaluation;
- high-level multiple choice tests and portfolio assessment; and
- classroom management strategies which facilitate efficient use of class time and promote time-on-task.

Moreover, these strategies must be sensitised to the special challenges of multi-lingual and multi-cultural large classes.

Once they have acquired the necessary skills, teacher educators will be able to train student

teachers to develop them.

#### **PRESET** for Student Teachers

Pre-service teacher education should include components which develop positive attitudes to large class teaching through the findings of international research and the comparative study of countries like South Korea and Japan.

Student teachers should be taught the same management, teaching/learning and assessment strategies as teacher educators. Moreover, courses in teaching multi-lingual and multi-cultural classes should be offered to student teachers. In addition, students should be given the opportunity during their practical teaching experience to teach large classes which will increasingly have these characteristics.

## **INSET for Serving Teachers**

Similarly INSET should be provided for serving teachers with focus on attitudinal change, appropriate management, teaching/learning materials and assessment strategies for large classes as well as appropriate methodologies for dealing with large, multi-lingual and multi-cultural classes.

#### **Teaching/Learning Materials**

Effective large class teaching depends on the availability of adequate teaching and learning materials. Provincial departments must make every effort to ensure that every child has access at least to basic text books. In addition, user-friendly teaching/learning materials should be developed to facilitate group learning and independent study.

## 2.2. Multi-lingual classes

## 2.2.1. Scope of the report

This report begins with brief overviews of:

- language-in-education policies in apartheid South Africa
- South Africa's new constitution and a new language-in-education policy
- language policy options for multi-lingual education in South Africa and the implications for teacher development

#### The report includes:

a. A survey of the international and South African literature on key studies into bilingualism; bilingual educational programmes; and case studies of effective pedagogical practices in multilingual classes.

The main focus of the survey is on research into bilingual educational programmes, in particular on the effectiveness of the three main models for bilingual education in compulsory primary and secondary schooling. The review also includes research studies which provide insights into relevant and effective strategies and methodologies for teaching in linguistically diverse classes.

Relevant international and local research findings and theories on bilingualism which appear to have implications for the type of bilingual programmes run in schools have been included in the survey.

- **b.** A review of some of the South African organisations which provide support or resources for in-service teachers in multilingual classes.
- c. A short, concluding discussion which focuses on the implications which international and local research findings have in terms of planning for teacher in-service development in South Africa.

## 2.2.2. Summary of the international literature

The report reviews pre- and post- 1960s approaches to research into bi/multi-lingualism as well as international research into bilingual educational programmes in developed and developing countries.

With regard to international research into bilingual educational programmes in developed countries three models are evident from the literature:

- an immersion or straight-for-target language model where the entire school curriculum is taught through the medium of the target language;
- subtractive/transitional language-in-education model (where the learners' first language is either gradually or abruptly replaced by the target/dominant language). Two variants of this model are the early-exit model when sudden/ gradual transition takes place in the first/second year of schooling and the late-exit model when sudden/gradual transition takes place after the third year of schooling; and
- additive bilingualism where a second language is acquired without any loss or weakening
  of learners' first language, for example, through dual medium programmes where half of
  the curriculum is taught in one language, the other half in another language, or when two
  languages are used interchangeably in each lesson, as needed. In other words, there is no
  question of there being an exit point from the first language, as the goal is proficiency in
  two languages.

The survey on bilingual educational programmes in developing countries reveals that there is some overlap with developed countries in that there are usually language/s which enjoy enormous prestige or status in developing countries (such as English in South Africa). Most contemporary critique focuses on the failure of subtractive/transitional bilingual programmes in Third World contexts.

## 2.2.3. Summary of the South African literature

The review of South African literature reveals that there have been a number of significant South African research initiatives which have tested the local relevance of international theories and findings in terms of bilingual education. Most South African studies of language issues in education have been conducted in one of the following three contexts:

- Afrikaans/English bilingual/dual medium programmes in 'white' schools in the 1930s and 40s;
- subtractive/transitional bilingual programmes in African schooling in the 1980s; and
- assimilationist processes in non-racial private/Model C schools in the 1990s.

# 2.2.4. Summary of South African projects involved in multilingual teaching

There are many national and regional projects in South Africa which give support or provide resources for teachers in multilingual classrooms. Although the majority of these initiatives operate on a fairly small scale and do not have the capacity to cater for the large-scale needs of teacher training, a number of fully fledged teacher-training programmes which cater for teaching multilingual and/or bilingual classes do have the capacity for expanding their provision.

Two such programmes are the Project for the Study of Alternative Education in South Africa's (PRAESA)/UCT's accredited Further Diploma in Education (F.D.E.) in multilingual education; and the English Language Teaching Information Centre's (ELTIC) distance education courses for "individuals who teach in multilingual contexts".

Almost all the projects reviewed offer non-accredited short courses or workshops for teachers of multi-lingual and bilingual classes.

## 2.2.5. Conclusions

The report concludes that international theories and research findings on bilingualism indicate that, although there is a positive link between bilingualism and cognitive functioning, the positive effects of bilingualism cannot occur until a particular level of language proficiency is attained.

Findings in the review of international research conducted into bilingual educational programmes indicate that:

- Immersion or straight-for-target language programmes are successful only when there is very strong support for learners' home language at home, in the media and society in general. These programmes are also most effective with those who come from middle class professional or highly literate homes; are secure in their ethnic and linguistic identity; and most in need of knowledge about other ethnic and linguistic groups.
- Subtractive/transitional-language in education programmes where the first language is
  initially used but is gradually or abruptly phased out are successful only when the
  optimal supporting conditions for the acquisition of the target language are in place (for
  example, when learners are immersed in a dominant language environment and when
  teachers are highly competent in both the learners' first language and the target
  language).
- When optimal supporting conditions do not exist, immersion and subtractive/transitional bilingual programmes may appear viable for the first four years of schooling. However, once school work becomes more conceptually challenging (for example in Std 2), most learners do not have the SECOND LANGUAGE skills to cope.
- Additive bilingual programmes, where a second language is acquired without any loss or weakening of learners' first language, appear to be not only beneficial for first language maintenance but also the best possible approach to second language acquisition.

South African studies conducted into Afrikaans/English dual medium schools in the 1930s/40s indicate that bilingual schools facilitate second language learning and encourage communication and cultural exchange, and that children in dual medium classes show better progress than children who are taught through one medium only.

Research on subtractive bilingual programmes in 'black' schools in South Africa in the 1980s (where learners in most Department of Education and Training (DET) schools were instructed in the first language until Std. 3 and then suddenly expected to cope with the demands of learning all their subjects through the medium of English) indicate that learners resorted to rote learning content which they did not understand and failed to achieve adequate levels of academic language proficiency in both their first language and English.

Research into assimilationist processes in non-racial private/Model C schools in the 1990s indicates that English SECOND LANGUAGE speakers and their teachers experience discouragement over learners' inability to cope with the academic and linguistic demands of English medium of instruction. (This may also be the case in former House of Delegates and House of Representatives schools).

The literature on classroom practice which can assist pupil performance in multilingual classrooms suggests that student performance can be improved through

- improved teacher-learner interactions;
- the use of well-designed, cognitively demanding and contextually embedded tasks;
- the development of school-type/task-related discourses;
- linking subject specific vocabulary/words to concepts and other networks of words to 'create a web of understanding';
- making explicit what counts as legitimate or important knowledge within particular school disciplines/ subjects; and
- allowing room for conversation/ interaction/ 'negotiated talk' between teachers, texts and learners and between groups of learners so that learners can draw on constructions from 'out of school' discourse as a way into the dominant discourse.

Most of the international and South African literature supports the view that adopting an additive model for bi-lingual education is the most effective way of ensuring the effective implementation of a new language-in-education policy where bi-lingualism is valued.

However, even in the absence of comprehensive additive bi-lingual programmes, the survey indicates that the implementation of a bi-lingual language-in-education policy will have implications in terms of

- pre/in-service teacher training and development;
- the development of multilingual classroom-based resources and textbooks; and
- terminology development in African languages, particularly in the areas of mathematics, science and technology.

## 2.2.6. Implications for teacher development

The survey highlights the need for pre-service teachers who are both well-trained and bilingual and for in-service teachers in all subjects to be involved in ongoing professional development which assists them to cope with linguistically diverse classes or/and bilingual teaching through:

- adapting both the school curriculum and their schools as institutions to the changing linguistic and cultural needs of their learners;
- understanding the relationship between language and learning;

- adopting multi/bilingual pedagogies which allow all learners to use all their linguistic resources to facilitate cognitive development;
- using language across the curriculum methodologies;
- improving their pedagogical understandings and practices;
- improving their knowledge and understanding of learning strategies;
- using and designing appropriate (cognitively demanding and contextually embedded) tasks;
- making task-related or discipline specific discourses explicit;
- improving their personal understanding of baseline concepts and subject specific knowledge;
- improving their own knowledge and use of English and/or African languages; and
- becoming involved in the development of appropriate terminology in African languages.

## 2.3. Multi-grade teaching

The report on multi-grade teaching defines multi-grade classes as those in which students from two or more grades are taught by one teacher in one room at the same time. This system of teaching is also referred to in the literature as multi-age, multi-level, multiple class, composite class and, in some countries such as Colombia, one-teacher schools are known as 'unitary' schools.

This is to be distinguished from multi-age within grade teaching which occurs when there are wide variations in age within the same grade. This is common in South Africa where the age of school entry varies and there is a high incidence of grade repetition or drop out.

## **2.3.1.** Scope of the report

The literature reviewed for the report on multi-grade teaching revealed that, while there was extensive literature from developed, and less from developing countries, there was very little South African writing on the topic. In addition, communication with provincial education departments, non-governmental education organisations and university education departments indicates that there are no local projects or programmes dealing specifically with multi-grade teaching. The report therefore focuses almost exclusively on the international literature on multi-grade teaching.

The literature surveyed can be divided into:

- literature on developed countries and developing countries;
- literature on schools or classes where multi-grade classes are a reality of small, isolated communities; and
- literature in schools which choose multi-grade classes as an alternative to mono-grade because of the advantages they offer.

The report concentrates on the research undertaken in rural multi-grade classes in developing countries. However, the literature from developed countries, which looks at both enforced and chosen multi-grade classes, provides important insights and has been reviewed.

The multi-grade literature is mainly concerned with primary school education. Only two studies in the survey focused on multi-grade teaching at high schools. When multi-grade teaching is discussed in the report, it therefore relates to primary education.

The report first describes the extent of multi-grade teaching in developed and developing countries and government policies concerning multi-grade classes. The report then considers the circumstances and conditions which contribute to successful multi-grade teaching. It concludes with the implications of the literature for teacher development.

## **2.3.2.** Summary of the literature

## Extent of multi-grade teaching

The literature surveyed illustrates the extent of multi-grade teaching in both developed and developing countries. For example, 61% of primary schools in India have only one or two teachers and 22% of Mexican primary schools are one-teacher 'unitary' schools which offer six grades; in Sweden, Norway and Wales more than 30% of schools have multi-grade classes.

The literature reviewed also indicates that the number of children in multi-grade classes is increasing. In developed countries, this is primarily because of population movement. In addition, developmental learning theories and learner-centred approaches have resulted in schools, particularly in the USA, choosing to implement multi-grade classes because of the benefits they are perceived to offer. In developing countries, the increase in multi-grade classes has been the result of attempts to increase access to primary education by bringing schools closer to rural communities.

## Government policies on multi-grade teaching

Despite the widespread nature of multi-grade schools and classes, very little attention has been paid to this sector of schooling by policy makers, ministries of education, administrators and teacher education institutions. Standard texts on curriculum development point to the assumption that most teaching is single-grade. Writers from a range of countries claim that very few teacher education institutions provide pre-service and in-service education programmes for multi-grade teachers. Even in a country like Norway where small rural schools have always been an important part of primary education, teacher training and teaching materials are generally aimed at the single-grade situation.

Despite this general neglect of multi-grade teaching and learning, the literature suggests that in recent years there has been a change in attitude to multi-grade classes. While they were previously viewed as a deficit form of provision, there is now a growing view of multi-grade classes as a legitimate model to provide access to education in circumstances of low population concentration. This change of attitude is most noticeable in the work of UNESCO, the World Bank and other international and national agencies. In addition, in recent years legislators in a few countries, notably in Asia, have moved towards identifying multi-grade as a form of primary education requiring legislative, regulative and policy support. There are several examples of special policy treatment with regard to the employment of multi-grade teachers. Nepal and Indonesia make provision for the faster promotion of multi-grade class teachers. Pay incentives are offered to teachers of multi-grade classes in Vietnam and Senegal and provision of teacher housing is a fairly common incentive offered to rural teachers. Teaching and learning materials for multi-grade classes are provided free of charge in such countries as Indonesia and Vietnam.

In South Africa, the White Paper on Education and Training identifies the marginalisation of rural and farm schools as an issue which needs to be addressed. In addition, concern to provide support to rural schools is seen in the policy and planning documents of several provincial education departments and in the commissioning of this report on multi-grade teaching by the national Department of Education.

#### Multi-grade classes as a system of education provision

The literature on multi-grade teaching stresses the benefits of the multi-grade class. An explanation for this is that those who have written on multi-grade teaching view this system as a legitimate and viable model of education provision. It is possible that researchers in describing the lack of resources of rural schools, consciously or unconsciously assume multi-grade classes to be amongst the disadvantages faced by these schools. If this is the case then the international literature reviewed for this report (and the South African literature on rural schools) suggests that they do not provide criticism of multi-grade classes in any detail.

In general, the literature reviewed does not provide systematic analyses or documentation of the problems of multi-grade classes but only alludes to them while suggesting solutions. The three most commonly mentioned disadvantages are:

- the expense of multi-grade schools;
- the limited curricular and extracurricular activities that can be offered; and
- teacher dissatisfaction.

The positive features of multi-grade classes most frequently cited in the international literature are:

- increased access to primary education;
- social benefits for small communities; and
- their pupils and psychological benefits.

The literature is inconsistent and inconclusive on the impact of multi-grade teaching on academic achievement. The majority of studies conducted in North America and Europe to assess the effect of multi-grade instruction on academic achievement, claim that there are no significant differences in overall student achievement between multi-grade and single-grade classrooms. Studies in developing countries show that pupils in multi-grade classes that are supported by programmes involving teacher training, learning materials and government support, result in multi-grade pupils outperforming pupils in single-grade classes; pupils in multi-grade classes which do not adopt suitable teaching practices and have few learning materials fare considerably worse than their single-grade peers.

Although the literature on multi-grade teaching in developed and developing countries is generally positive concerning the benefits of this organisation of learning, teachers and education officials, with some exceptions, tend to view multi-grade classes negatively. There are two reasons for this. Many officials and teachers regard single-grade teaching as the norm and therefore see multi-grade as a deficit form of provision. In addition, teachers experience multi-grade teaching as time consuming and requiring huge amounts of preparation. There are a number of studies which point to stress and burnout among multi-grade teachers.

#### Conditions for effective multi-grade teaching

The literature supports three minimum requirements for effective multi-grade teaching:

- teacher training;
- the provision of teaching and learning resources; and
- external support from communities and/or government.

#### Teacher training

There is widespread agreement in the literature on the need for specialised education programmes for teachers in rural and isolated areas. The two broad areas of preparation recommended are:

- preparation for teaching multi-grade classes; and
- preparation for working and living in isolated, rural areas.

The literature asserts that special skills are required by the effective multi-grade teacher. Instruction and classroom organisation and management in the multi-grade classroom are complex and demanding. In practical terms teachers of multi-grade classes need to be prepared for more subjects, more grade levels and more extracurricular activities. Some of the suggested ways in which teacher preparation programmes can help prospective teachers prepare for the breadth of responsibilities expected in multi-grade schools are to:

- increase the number of content areas in which students specialise;
- develop students' skills in integrating the curriculum and planning;
- prepare future teachers to work with broader age ranges;
- provide a strong background in teaching reading:
- provide training in utilising rural community resources for classroom enrichment;
- develop diagnostic and planning skills to identify and meet pupil needs; and
- prepare for school record maintenance.

For many international researchers of multi-grade teaching this means a completely different approach to teaching. A multi-grade class requires teachers to consider the learning cohort as individuals, each with his or her own continuum of learning and to structure learning as activities to meet the needs of individuals rather than to teach the middle of the class. The international literature repeatedly identifies self-directed learning, and to a lesser extent peer tutoring, as the most effective of the multi-grade teacher's practices.

Studies from developed and developing countries agree that preparation for multi-grade-teaching is not sufficient preparation for teaching in isolated or rural schools. Teachers also need to be prepared for the cultural, social and economic conditions of the school's environment. The difficulties of living and working in rural areas include inadequate knowledge of the situation, inadequate resources, professional isolation, social and cultural isolation and being expected to participate in community activities. In Norway, decentralised teacher training for adults from areas with a history of teacher shortages is provided. This programme has proved relatively effective in recruiting a stable teaching force in out-lying small rural schools. The study reports other benefits of using local adults as teachers in rural communities.

## Teaching and learning resources

Self-directed learning is identified in the international literature as a central feature of effective multi-grade teaching. In this situation teaching materials and equipment are essential. The following teaching and learning resources are recommended in the international literature:

- self-directing materials;
- a library;
- teacher aides/paraprofessionals; and
- flexible learning space.

#### External support

Several studies point to the benefits of external support in providing effective multi-grade teaching. Some studies describe local communities as important contributors to the success of multi-grade programmes. Local or regional pedagogic and administrative support is also seen as important for effective multi-grade teaching. Training pedagogical advisers in multi-grade instructional methods and materials and the use of local teaching centres are recommended. The literature also suggests that support for multi-grade teachers in rural areas is best achieved through a decentralised education system with clear incentives and accountability. Finally, much of the recent literature on multi-grade classes points to the importance of national policy in delivering effective multi-grade teaching. National policy decisions are necessary with regard to:

- the creation of a decentralised administrative system;
- provision of teacher training in multi-grade techniques;
- recruitment and support of multi-grade teachers;
- · curriculum adaptation; and
- development and allocation of resources to multi-grade schools.

## 2.3.3. Implications for teacher development

When considering the implications of the multi-grade literature for teacher development, it is necessary to take into account that in South Africa:

- large numbers of primary school teachers teach multi-grade classes but have no preservice or in-service training in dealing with such classes;
- the number of teachers who teach multi-grade classes will increase with population movement and the implementation of the new teacher:pupil ratios;
- the teachers of multi-grade classes are generally in under-resourced schools;
- the schools with multi-grade classes are difficult to access both in terms of distance and in terms of infrastructure such as roads, telephones, faxes etc.;
- teachers view multi-grade teaching negatively;
- teachers in rural schools where multi-grade classes are most common have the lowest academic and professional qualifications of the teacher cohort;
- there are currently no teacher training courses aimed specifically at multi-grade teaching; and

• provincial education departments have limited financial resources at their disposal.

Perhaps the most important finding of the literature reviewed is that, while the international literature promotes multi-grade teaching as a means of improving access to primary education, studies in developing countries suggest that pupils in multi-grade classes are disadvantaged compared to their single-grade peers if multi-grade teachers are not appropriately trained and supported with learning materials.

Policy makers also need to note that there is widespread consensus in the literature from developed and developing countries that multi-grade teaching:

- is complex and demanding;
- · requires high levels of organisation and planning; and
- requires large amounts of learning resources especially self-directed learning material.

An implication of these findings is that multi-grade classes are not suitable for underresourced situations. Addressing the needs of multi-grade teachers is therefore not easily accomplished, especially in a country such as South Africa which has limited resources. In such a situation the needs of multi-grade teachers have to be weighed against the many other demands faced by education departments. In South Africa provincial education departments will have to consider their redress priorities. It is possible that the education departments of the Western Cape and Gauteng, with relatively few rural schools, will not wish to re-direct precious resources to multi-grade teaching requirements. However the Northern Cape and Free State which have large proportions of teachers teaching multi-grade classes will see this as a priority.

A second implication of the multi-grade literature is that education departments face a difficult choice concerning the teachers who are employed to teach multi-grade classes. The literature suggests that these teachers require special skills and training. They should be highly conscientious and resourceful and have excellent planning and organisational skills. It is unlikely that teachers with these attributes will be found in rural areas. On the other hand, the studies reviewed indicate that teachers deployed to rural areas almost inevitably face social and professional isolation which results in a high turnover rate. Teachers recruited from rural communities would not face these problems but would require extensive training and support to develop the skills required for effective multi-grade teaching.

Other implications of the multi-grade literature for teacher development are:

- primary school in-service providers should be encouraged to offer courses in multi-grade teaching techniques. This would require in-service training for teacher educators.
   Teachers with experience and expertise in multi-grade teaching would be useful resources in developing and presenting such courses;
- pre-service providers should be encouraged to provide students with practical teaching experience of multi-grade classes; and
- materials developers should be encouraged to produce high quality, low cost self-directed learning materials.

In addition to the above, there seems to be a strong case for all in-service and pre-service providers offering courses in multi-grade teaching techniques and classroom management. The reason for this is that:

• all teachers confront mixed levels in their classes;

- many teachers in urban and rural settings face considerable age ranges in their classes;
- the multi-grade teaching curriculum and approaches are compatible with those advocated for outcomes-based education (OBE) such as the integrated curriculum, pupils working at their own pace at various levels etc.

In this context the development of teacher training courses and learning materials suitable for multi-grade classes would benefit all teachers especially those with mixed ability levels and ages. The current development of new curricula and materials for OBE provides an opportunity for (i) the development of teacher training courses which focus on teaching in multilevel classes and (ii) the production of materials which promote self-directed learning.

## 2.4. Whole school development

## 2.4.1. Scope of the report

The report is divided into two parts. Part A reviews international and local literature on school effectiveness, school quality development and whole school development, with particular reference to in-service teacher development (INSET).

The section on international literature on school change includes:

- the effective schools approach;
- the school quality improvement approach including school development planning and whole school development;
- approaches to INSET and INSET policies; and
- research in developing countries.

The review of South African literature on school change includes school effectiveness, school quality, and whole school development. It also covers documentation from the work of three NGOs on whole school development. The report ends with an overview of the literature on INSET and school development in South Africa.

Part B provides information on projects in South Africa adopting a whole school development approach and concluding comments. Two sets of initiatives on whole school development (WSD) in South Africa were surveyed: NGOs and provincial education departments.

Nine NGOs were consulted concerning WSD programmes they run, or will run. All provincial education departments were asked to provide information on WSD projects they are running. In some cases, provincial education departments have formed partnerships with various NGOs, and these are considered together.

The report contains tabulated information concerning each initiative which includes the location of the project, school level, nature, scope, evaluation and/or research and future plans. In each case the table is followed by a summarising comment.

## 2.4.2. Review of international literature on school change

The report asserts that the Whole School Development approach to education quality has emerged from two main approaches to educational quality in the international literature. These approaches are:

- the effective schools approach; and
- the school and classroom quality improvement approach (including school development planning).

## 2.4.2.1. Effective Schools Approach

The school effectiveness literature developed in response to work done in the USA and Britain concluded that schools alone had little influence on learners' life choices. Researchers then began to pay more attention to what happened in schools. A number of studies concluded that schools do have a significant effect on learners. Researchers began to explore the characteristics of effective schools, and what type of interventions could help less effective schools become more effective. The school effectiveness literature has concentrated mainly on secondary schools, and defines effectiveness in terms of student results.

Researchers, using the school effectiveness approach, have compiled different (though similar) lists of characteristics of effective schools and have applied these criteria to schools to judge the level of their effectiveness. Researchers in this approach hold that less effective schools may become more effective if they begin to display these criteria.

However, critics regard school effectiveness indicators as limited, and argue that they neither measure nor explain overall school success. Research into school effectiveness has shown how difficult it is to define clear and precise indicators of effectiveness in multifaceted and complex institutions like schools.

Despite criticisms of the school effectiveness literature, the report highlights the usefulness of this research. First, the research has shown that schools and teachers do make a difference to pupils and therefore the school and the teachers are at least partly responsible for learners' successes or failures. Secondly, the research points to important issues of school performance.

## 2.4.2.2. School Quality Improvement Approach

In the school and classroom quality improvement approach, the focus is on the quality of what happens inside schools rather than on pupil performance. School improvement literature looks at the process through which successful change is introduced to schools.

Key themes have been identified by the main researchers as crucial for school development. These key themes include:

- effective leadership;
- shared vision-building and support throughout the organisation both at school and district level:
- commitment and acceptance of school improvement efforts;
- active initiation and participation;
- · changes in behaviour and belief;
- collaborative planning and decision-making;
- organisational policies, support for action and pressure for improvement;
- staff development and resources assistance;

- · monitoring efforts of accountability and improvement; and
- · recognition for jobs well done.

An important thrust within school quality approaches is school development planning. Development planning is a process involving all stakeholders from a particular school in assessing the situation within that school, with an aim to change. The change is not only decided on by the school, but planned for, implemented and evaluated by the school. School development planning involves the combination of curriculum change with modifications to the school's governance and management arrangements.

As an approach to school change, WSD, as its name suggests, approaches the school holistically. Whole school improvement is seen as an approach to educational change which is concerned with process as well as outcomes. In other words, whole school improvement is concerned with strategies to enhance the teaching and learning process and the conditions which support it. The importance of academic outcomes is taken seriously in WSD, but the argument is that looking at the picture of the entire school places policy makers in a better position to make informed judgements about where and how to intervene.

Experience in school development points to critical factors for successful school change. Fullan (1992) mentions that INSET and professional development as support mechanisms are two indicators of successful school change. He suggests that staff development as a part of institutional development should be directed towards:

- classroom improvement;
- the teacher as learner; and
- school improvement.

WSD programmes aim to impact in all these areas. This implies that teachers should view professional learning as key to the development of curricula, and as a significant means by which the quality of education offered to learners is improved. This form of improvement needs to take place in the context of whole school improvement which provides an enabling environment wherein teachers can improve the quality of education.

## **2.4.3.** Research in developing countries

In a comprehensive review of literature on school effectiveness and school improvement, including a survey of World Bank projects, Heneveld and Craig (1996) comment that:

- in terms of school effectiveness studies, the quality of the school appears to influence pupil achievement more in developing countries than in industrialised countries, where family background overshadows school effects;
- from school improvement studies, the literature does not provide an adequate basis for drawing conclusions about what processes can effectively induce change in schools in Sub-Saharan Africa; and
- in developing countries, cultural and social norms influence the schools' functioning even more than in the industrial countries.

The literature on developing countries also points to a wide range of national policy initiatives that have been directed towards improving the quality of schooling in African countries but have yielded disappointing results. These include changes:

• to the number of years of primary school;

- to languages of instruction; management structures;
- of textbooks; in-service training; and
- · to subjects taught.

The literature concludes that state policy is necessary but not sufficient for the improvement of educational quality and suggests that schools, in all their complexity, need more attention in the planning and evaluation of educational quality.

Finally, the research in developing countries suggests that the 'checklist' approach which gained popularity in developed countries is generally unsuccessful in underdeveloped countries.

## 2.4.4. Review of South African literature on school change

The WSD movement in South Africa is relatively new, and has developed from the international research on school effectiveness and school change. The South African literature focuses on the information required by policy-makers for improving the quality of schooling. Jansen (1995), for example, argues that in-depth qualitative investigations of what happens inside classrooms should be the basis for policy and planning. The PEI WSD report concludes that research which is both qualitative and quantifiable is of most use to policy-makers.

Some South African NGOs have undertaken WSD work in schools but little of this work has been systematically documented. An exception is the report on the pilot Matlafalang Project of the Education Support Project. This report emphasises that the choice of school development approaches must be made by teachers themselves and that staff development demands the recognition that schools are the central participants in that development. The Education Quality Improvement Programme (EQUIP) of the Education Policy and System Change Unit (EDUPOL) intends to systematically document its work in Gauteng, Kwazulu Natal and the Western Cape. EQUIP has identified certain key factors for effective schooling in South Africa.

A number of case studies on school effectiveness have been conducted in South Africa. In one study school level variables were identified and used to measure the effectiveness of five township schools by collecting data from principals. The five schools selected were judged effective by the then Department of Education and Training (DET) in 1992, in terms of matriculation results. Another study used guidelines extrapolated from international literature on school effectiveness to develop ethnographic accounts of school effectiveness. A third study was conducted in 1996 of 32 South African schools that were `succeeding against the odds', and managing to continue operating under difficult circumstances. This research points to a number of interrelated features of resilience in schools, but cautions that these take different forms and should not be read as a checklist of discrete characteristics that can be simply transferred to other schools.

## 2.4.5. South African projects dealing with WSD

The report comments that if the aim of the many pilot studies conducted by NGOs is to find a replicable model that can be taken to scale, then partnerships or links with the government education departments are crucial. The report claims that the process of establishing links between NGOs and provincial departments is a well constructed one and should be developed further but cautions that if provincial departments of education wish to follow a

WSD approach, then the infrastructure which could facilitate the process needs to be put into place.

Many WSD initiatives, both NGO and departmental, follow the route of school development planning and the establishment of mandated committees briefed to put the plan into action. However, few acknowledge that the actual implementation and then evaluation of these plans is fraught with difficulties. It appears that school development planning, in many instances, remains at the level of the actual plans themselves, rather than implementation.

The survey of South African WSD projects concludes that it is imperative for initiatives to approach WSD in such a way that schools are provided with a range of activities designed to address the needs of each school in an integrated and complete way.

## 2.4.6. Inset and school development in South Africa

The central challenge facing INSET, internationally as well as in South Africa, is to provide teacher learning that improves classroom practice. International and local experience shows that this is a complex challenge. Experience in South Africa and elsewhere suggests that the link between teacher learning and actual classroom change is not automatic and may, in fact, be hard to achieve.

In South Africa, an additional challenge facing INSET policies is the need to support and develop teachers to play a part in the reform of the education system. Thus, implicit in the policy recommendations of the 1997 National Policy on Teacher Supply, Utilisation and Development (NPTSUD) is that INSET needs to be envisaged and linked to other strategies for change in schools. This suggests that it is important for policy-makers to be aware of the strengths and limitations of what this document loosely terms 'whole school development'. WSD in the report refers to a range of interventions in schools which take as their starting point a set of assumptions, including:

- schools are complex social organisations which need sustained efforts to change; and
- change needs to encompass a range of activities which address the school as a whole, rather than as a set of discrete parts.

The report points out that in the past much of the INSET provided in South Africa has taken the form of short courses and workshops with little follow-up in the schools. This form of INSET is internationally regarded as ineffective. In Britain and the USA, dissatisfaction with such course-based INSET led to a change of focus to school-based INSET in which schools became involved in developing their own staff development programmes and in conducting their own needs analyses through school development planning. The NPTSUD report claims that only a few NGOs are involved in institutional development and advocates a deliberate move towards whole school development.

## 2.4.7. Implications for teacher development

The report concludes that there are a number of points to note about approaches to INSET in the South African context in relation to the issues of large-class, multi-grade and multilingual classrooms.

Firstly, it is important to note that the challenges posed by teaching in large classes, teaching of multi-grade classes and teaching in a multi-lingual environment are whole school problems; they are not likely to affect only some teachers in some parts of a school. This

itself suggests that for INSET to address these issues, it should be located within the context of whole school development.

Secondly, research on the culture of learning and teaching in South Africa indicates that the problems facing schools are complex and multifaceted. The Report of the Gauteng Committee on the Culture of Learning and Teaching sets out a number of interrelated issues contributing to the collapse of schooling. These conditions are:

- infrastructure (school buildings, facilities and resources);
- · leadership, management and administration;
- relationships between principals, teachers, students and parents; and
- relationships with education departments.

An implication of this research is that INSET which targets teachers' skills without addressing these wider school issues is not likely to succeed in rebuilding a culture of learning and teaching in dysfunctional schools. Taking this further, Christie (1997) has argued that the organisational failure of these schools contributes to the breakdown of their 'real work', namely teaching and learning. This implies that organisational development needs to accompany other INSET strategies addressing teaching and learning.

At the same time, it is important to recognise that courses for school leadership, though important in establishing enabling environments in schools, will not necessarily themselves change teaching and learning practices. Leadership courses also need to have a wider focus than school principals and deputies, and need to keep the central goals of schools in mind, namely teaching and learning.

Similarly, approaches to school improvement through development planning or governance may be very important in binding those stakeholders together to develop common purposes and procedures, and a sense of responsibility within the school. However, development plans and governing bodies themselves need not necessarily lead to improvements in teaching and learning. Again, it is important that interventions in these areas are mindful of the importance of teaching and learning in improving the quality of schooling. This in itself suggests the benefits of a WSD approach to school improvement.

Thirdly, the current South African education reform agenda will place continuing demands on teachers, who will need to develop their own competencies in a career of lifelong professional development. This suggests that long-term, continuous 'teacher learning' has a central role in building a professional community.

It is not enough for teachers to hear about new ideas on teaching; these ideas need to be located firmly within the context of the curriculum, the classroom and the school itself. INSET needs to be attached to classroom life, and teacher learning needs to be supported within the culture and daily practices of the school. In this conception, teacher development is central to the restructuring of schools.

Fourthly, an important approach to school development in the South African context is to build responsibility at the school level. It is important to break a logic of 'compensation' through INSET, and to build relationships of collaboration and ownership among school stakeholders. In this model, improving teachers' competence is not simply about building individual capacity; rather it is about building institutional capacity; and INSET is not merely about developing and building institutional capacity for its own sake, but building it in relation to teaching and learning as the central activities of the school.

Finally, support from education departments is crucial for INSET to be successful in terms of whole school development, but most importantly the support needs to come from the departmental section which has direct contact with schools themselves. Outside agents like NGOs also have an important facilitating role to play. The key to success seems to be linked to the integrated planning of all aspects of INSET.

## 3. DONOR CONSULTATIONS

Table 1 below lists the donors who expressed an interest in the project and summarises their respective positions on the project. In a number of cases amounts were given to illustrate the possible scope of funding. However, since the final donor allocation will depend on the actual programmes presented for consideration, the illustrative amounts have not been included in this table.

To begin a process of eliciting information on the potential contribution of each donor, a questionnaire addressing the following issues was drafted and sent to all of them:

- areas of support (e.g. management training, materials etc.);
- provinces to be supported;
- programmes currently supported;
- possible areas of involvement in PEI;
- projected levels of support; and
- funding requirements and mechanisms.

The questionnaire was followed up with one-on-one consultations with the donors. The consultations took place between December 1996 and February 1997 and were organised through the Directorate of International Relations. Where there is no information in the columns corresponding to a given country, this is because although the country had initially expressed an interest in the project, no decision to contribute had been taken at the time of writing.

Table 1

Donor/Country	Flow of Funds	Preferred Province
Germany	decide on a project by project basis	WC/MP/NP/EC and GP
Ireland	not prescriptive but have always	NP and others
	worked outside government	
EU	NGOs	all
New Zealand	not prescriptive	EC
Netherlands	Dept of Finance and NGOs	not specified
USAID	SABER, through NGOs	EC/NC/NP/
		KZN
Canada	Canadian Executing Agency + South	GP/FS/MP
	African Counterpart (usually an NGO)	
Norway	DoE	any
France	not specified	GP/KZN/WC/
		EC
Denmark	NGOs and provincial governments	NW/WC/KZN/GP/National
Japan	AGRP - recipients	MP/EC/NP
	GGS - government	
Sweden	NGO	NC/national
Switzerland	Dept of Finance	EC/national
UNESCO	not specified	not specified
Italy	International Agency (e.g. UNICEF)	not specified
Taiwan	Dept of Finance	not specified
Finland	not specified	not specified
DFID ( Formerly	NGOs	EC
ODA)		

## 4. PROVINCIAL PROCESSES

According to the original plan, each province would appoint a Departmental Liaison for the PEI with whom JET would link up to plan and carry out project activities in the respective province. The first of these activities would be a PEI consultative meeting where the project concept would be discussed with a provincial stakeholder group and arrangements for an audit of existing and planned teacher development initiatives would be made. The consultative meeting would then be followed by a provincial Prioritisation and Action Planning workshop where a draft report of the audit would be presented and specific priorities for the PEI in the province would be identified. Once identified, the priorities would then serve as a focal point for the development of provincial PEI proposals for submission to the donors.

However, during the implementation of the above plan a number of delays were experienced. For instance, in some provinces, the appointment of PEI contact people was delayed until April 1997, thus making it almost impossible to establish any meaningful contact with stakeholders and to plan and execute the project activities adequately. In the same vein, consultative meetings and prioritisation workshops could not always be held timeously. Indeed, the last of these workshops was held only on 27 May 1997, when all funding proposals were supposed to be almost ready for submission. Possible explanations for these delays in provincial processes may include under staffing, too many competing priorities and lack of capacity. Whatever the reasons, it is largely against this background that the provincial reports contained in Appendices A and B reflect unevenness in the quality of interaction, consultation as well as information provided.

The provincial reports detail among other things the priorities identified by the provinces. It is worth noting that three key priorities ranked high on the lists of almost all the provinces, namely:

- Implementation of Outcomes-Based Education;
- Training in Education Management; and
- Training in School Governance.

These were largely seen as providing a framework within which all other development and support activities should be located. Perhaps this should not come as a surprise because the PEI comes at a time when these three areas have been afforded high priority status in the education establishment as a whole and when the departments have already initiated considerable planning processes in this regard. Indeed, successful implementation of sound and well-considered plans in these three areas could provide fertile ground and the much needed capacity to sustain school development activities. The Audit report of the national DoE (Appendix A) provides a detailed description of these three priorities.

#### 5. SUMMARIES OF PROVINCIAL PROPOSALS

According to the brief, Phase I of the PEI was to culminate in the development of provincial proposals which would be considered for funding. The detailed proposals are appended as part of the provincial reports but have been summarised below for easy reference. The proposals are all summarised in table form except for the national DoE's proposal, which, it was felt, should be presented in text form. Some of the proposals are relatively in an early stage of development and would thus still need more work before reaching the

implementation phase. Also, note that there is unevenness across provinces with regard to the scale of the proposed initiatives as well as the number of priorities identified. For instance, some of the provinces have singled out one or two major areas as the focus of the proposals whilst others have spread the proposals over a number of areas. However, a common thread that runs through all of them remains the core PEI activity of the development and support of serving educators. Pre-service activity is included only in those few areas that are regarded as special cases in view of the huge skills shortages that characterise them.

What the PEI has achieved is to precipitate a movement from both government and stakeholders to concentrate on developing a comprehensive plan for educator development and support in each province. This is perhaps the most significant achievement of the project and it is a prerequisite for building sound educator programmes in the provinces.

#### 5.1. The National DoE

#### Introduction

The proposals for the National DoE are not presented as detailed business plans in this report, but rather as indicative descriptions of the area of work. These include the objectives of the programme, as well as an indicative budget. Subject to interest from donor countries, bilateral interaction with the relevant officials of the Department would be convened in order to develop detailed business plans for each project area.

#### **5.1.1. PEI Programmes**

Five areas of assistance have been identified:

- Curriculum 2005;
- SYSTEM / Technology 2005;
- Technology Enhanced Learning Initiative (TELI):
- Radio and Television Programmes for Maths and Science teaching and Culture of Teaching and Learning; and
- Overall Management of Phase II of the PEI

A summary of each of these follows, but a full copy of the proposal can be found in Appendix A.

#### 5.1.1.1. Curriculum 2005

Because of the urgency of implementation of Curriculum 2005 the Department of Education has already submitted a Business Plan for Phase 1 which has been approved by the PEI Executive and submitted to the Department of Finance for the release of funds already received. Plans for further Phases will be submitted for consideration by funders. These will include:

- Training for teachers in pilot schools;
- Printing and distributing "Illustrative Learning Programmes" to pilot schools;
- Printing and distributing Learner Support Materials to pilot schools; and
- Extending training and materials to all schools, based on provincial needs.

#### **5.1.1.2. SYSTEM / Technology 2005**

Under these two projects, the Department of Education have submitted proposals in respect of

- Recovery Programmes in Science, Mathematics and Technology;
- Pre-Service and In-Service Training in these fields for teachers and teacher trainers, and
- Curriculum Research and Development in Mathematics, Science and Technology.

Technology 2005 has a budget of R5.593m, while SYSTEM has indicated a funding requirement of R25.862m for 1998 and R31.7 m for 1999.

Sub-programmes in each of these areas can be identified for particular support.

#### 5.1.1.3. Technology Enhanced Learning Initiative (TELI)

The TELI programme involves six lead projects:

- supporting curriculum development;
- delivering technically oriented vocational training;
- developing an information literacy course;
- professional development of educators in regard to the use of technologies;
- training and supporting managers of learning centres; and
- running a provincial pilot to test strategies for the introduction of technology to support the management and administration of education.

The latter three projects listed above could be regarded as falling within the domain of the PEI, and various enabling projects have been identified to inform the development of the lead projects. A summary budget of R71 million has been prepared for the entire initiative between now and 2001, from which certain components can be ids-aggregated on request. Programmes 4-6 have a combined budget of R11.227million for the same period.

# 5.1.1.4. Educational Media Programmes: Science And Technology And The -Culture Of Learning And Teaching

This proposal seeks to develop radio and television programmes to assist learners and teachers through low cost technologies. A television drama series will focus on the importance of science, mathematics and technology, and 39 content-specific programmes will be produced. These will be adapted and translated into all 11 languages for radio broadcast. The management of the project will reside jointly within the Department of Education and the SABC.

A budget of R11.763 million has been prepared, with an equal split between the Science and Technology and the Culture of Learning and Teaching aspects.

### 5.1.1.5. Managing The President's Education Initiative (Phase II)

A proposal has been prepared in respect of developing the capacity of the Department to manage Phase II of the President's Education Initiative. This will involve the appointment of professional and support staff to a "Teacher Development Centre" in the Human Resource section of the Department, to, *inter alia*,

- consider matters of equity in the allocation of funds to provinces and projects;
- develop synergy between projects, where possible;
- ensure delivery of the initiative in provinces;
- undertake monitoring, evaluation and reporting functions;
- facilitate replication by communicating "best practice"; and
- manage the disbursement and control of PEI funds

### 5.2. Eastern Cape

Project Structure:

Two tiers:

- a. Planning and Design comprising a Design Team to produce curricula framework; a Management Committee (DoE and stakeholders) for on-going direction, oversight and evaluation; and a Resource and Development Unit for the day to day management of the project including organising the other teams, providing support and advice to international counsel and "best practices".
- b. Implementation comprising chosen service providers (universities, colleges and NGOs)

Projects	Objectives	Outcomes	Time frame	Budget
Upgrading teacher qualifications	decrease the number of un- and underqualified teachers	<ul> <li>revised curricula for teacher education</li> <li>relevant materials</li> <li>5000 subsidies of R500 each over a period of 3 years for teachers to upgrade their qualifications through an approved course</li> </ul>	3 years	R10m
Continuing professional development for inservice teachers	strengthen the infrastructure at district level, in terms of resources and effective management capacity, to facilitate s system of decentralised INSET to ensure that each district has resource centre to facilitate INSET	<ul> <li>20 centres, evenly distributed throughout the province, resourced with books, science kits, and materials for making teaching aids</li> <li>a programme of education management and management of conceptual change implemented for district centre staff, EDOs, subject advisors and school managers</li> </ul>	3 years	R12m
Professional development of teacher educators	<ul> <li>develop and articulate a provincial professional knowledge-base in teacher education</li> <li>build skills and practices in teacher education to carry forward this professional knowledge base</li> <li>create a group of teacher educators with skills in organisational leadership and change</li> <li>develop and implement a professional development programme to facilitate the above</li> <li>negotiate accreditation for this programme</li> </ul>	<ul> <li>a group of teacher educators who: understand and can implement the reforms in education; can shape policy and practice in their institutions; are conversant with models and examples of 'best practice'; and are skilled facilitators of educational change</li> <li>an accredited development programme for teacher educators</li> <li>transformed curricula and educational processes at teacher education institutions</li> <li>better prepared teachers who are able to respond to learner needs</li> </ul>	3yrs	R10m
TOTAL				R32m

### 5.3. Free State

Project Structure: Unspecified

Projects	Objectives	Outcomes	Time frame	Budget
Multi-grade/Multi-age programme for farm schools	to equip farm school educators with the necessary skills and resources to handle multi-grade/ multi- age classes	<ul> <li>80 schools are identified and equipped to serve as resource centres for 1600 schools</li> <li>1600 farm schools receive support through the 80 centres and local mentors trained for the purpose</li> </ul>	2-3 years	R787 200
INSET for Secondary Science and Maths Teachers	<ul> <li>to help teachers master the experimental teaching method for science and maths</li> <li>to enable teachers to teach new subject knowledge and use new approaches to implement OBE</li> </ul>	improved exam results of pupils	3 years	R 10, 85m
Bursaries for Further Education in Maths and Science (accredited FDEs offered by universities in the Free State)	to improve the qualifications of practising educators and promising students who have completed their final year of training	60 practising educators obtain the FDE     30 promising students obtain the FDE	2 years part time for practising teachers     1 year full time for students	R300 000 for teachers R240 000 for students
Training of Science and Maths College Lecturers	to improve the pre-service training of Maths and Science educators and assist lecturers in the training of pre-service Maths and Science students	not specified	not specified	R267 480
Professional development of educators for Curriculum 2005	to prepare particularly primary school teachers to teach in a multi-cultural and multi-lingual class with an OBE approach	successful implementation of OBE	1 year	R386 000
Development of Technology	<ul> <li>to introduce technology at colleges of education</li> <li>to create an opportunity for College students to become entrepreneurs in the technological field</li> </ul>	not specified	1 year	R 800 000
Education Leadership and Management	to train principals as educational leaders	competent educational leaders who manage schools efficiently	3 years	R 3, 46
Total				R 17, 09m

## 5.4. Gauteng

Project Structure: Each programme to have a steering committee

Projects	Objectives	Outcomes	Time Frame	Budget
Educator Development for Outcomes Based Education (OBE)	to enable GDE District officials working in the Teaching and Learning Units (TLUs) to provide effective and efficient educator development in the field of curriculum development and the implementation of OBE	2-day TLU orientation programme completed     2-week TLU professional development programme completed     10 pilot schools selected and 6-months pilot completed     12 month large scale programme completed     outcomes-based distance education learning resource pack produced	2-5 years	approx R12m
Educator Development for Redress:  1. Learners with Special Education Needs (LSEN)	to enable GDE District officials to provide effective and efficient educator development in LSEN	• 2-day LSEN orientation programme	2-5 years	approx R1,9m
Adult Basic Education and Training (ABET)	to enable GDE District officials to provide effective and efficient educator development in ABET	2-day ABET orientation programme completed     2-week TLU professional development programme completed     10 pilot schools selected and 6-months pilot completed     12 month large scale programme completed     outcomes-based distance education learning resource pack produced	2-5 years	approx R1,9m
3. Early Childhood Development (ECD)	to enable GDE District officials to provide effective and efficient educator development in ECD	2-day ECD orientation programme completed     2-week TLU professional development programme completed     10 pilot schools selected and 6-months pilot completed     12 month large scale programme completed     outcomes-based distance education learning resource pack produced	2-5 years	approx R4,02m

4. Out-of-school children and youth	to enable GDE District officials to provide effective and efficient educator development for out-of- school children and youth	2-day orientation programme completed     2-week TLU professional development programme completed     10 pilot schools selected and 6-months pilot completed     12 month large scale programme completed     outcomes-based distance education learning resource pack produced	2-5 years	approx R4,02m
Educator Development for School Governance and Management	to enable GDE District officials to provide effective and efficient educator development in the field of school governance and management (SGM)	2-day SGM orientation programme completed     2-week TLU professional development programme completed     10 pilot schools selected and 6-months pilot completed     12 month large scale programme completed     outcomes-based distance education learning resource pack produced	2-5 years	approx R1,9m
Educator Development for Maths, Science and Technology	to enable GDE District officials to provide effective and efficient educator development in the field of maths, science and technology (MST)	<ul> <li>strategic intervention designed after research on options is completed. Then:</li> <li>2-day MST orientation programme completed</li> <li>2-week TLU professional development programme completed</li> <li>10 pilot schools selected and 6-months pilot completed</li> <li>12 month large scale programme completed</li> <li>outcomes-based distance education learning resource pack produced</li> </ul>	2-5 years	approx R4,02m
TOTAL				approx R29,76m

### 5.5. Kwazulu Natal

Project structure:

Projects	Objectives	Outcomes	Time Frame	Budget
Teacher Morale Task Team	to establish an 18 person task team to:  design a means of assessing the state of teacher morale within the province  develop data-gathering instruments for the above and administer them  visit a sample of schools of contact with teachers  analyse findings and report	a comprehensive report on the findings.	not specified	R1,2m
OBE: Colleges of Education	not specified	not specified	not specified	R1,2m
OBE: School Teachers	not specified	not specified	not specified	R1,4m
Governance, management and Leadership in Education	not specified	not specified	not specified	R3,7m
Re-orienting Colleges of Education	not specified	not specified	not specified	R1,2m
Teaching in a Multi- cultural, multi-lingual, multi-grade environment	not specified	not specified	not specified	R3,5m
Distance Teacher Education centres	to establish 25 teacher development centres (some attached to existing colleges) where distance education students can gain access to resources and meet tutors and other students and other forms of teacher development can be made available to local teachers	not specified	not specified	R2,1m
TOTAL				R14,3m

### 5.6. Mpumalanga

Project Structure: Existing Departmental lines of accountability, i.e. the appropriate Directorate manages implementation and reports through the normal channels of Chief Director, Head of Education and the Minister.

Projects	Objectives	Outcomes	Time frame	Budget
LSEN	<ul> <li>to develop a college-level course, suitable for both primary and secondary teachers, in identifying, diagnosing and assisting Special Ed Need learners in the mainstream classroom</li> <li>to train a cadre of 5 lecturers at each of the Colleges as LSEN specialists</li> <li>to train an initial cadre of 480 student-teachers in SEN and at least the same number each year thereafter</li> <li>to develop short INSET courses for LSEN which can be presented through teachers' centres attached to the colleges of education</li> </ul>	<ul> <li>training (in-service) of 20 college lecturers as trainers</li> <li>pre-service training of 480 student teachers per year in LSEN</li> <li>reduced costs of LSEN as more such learners are accommodated in mainstream schools</li> <li>reduced failure and drop-out rates for SEN learners</li> <li>capacity building in Colleges</li> </ul>	3-5 years	DoE: R6,2m ( posts for trainers and teachers undergoing Inset; training venues and facilities, subsidies for College students etc.) Donor/s: R 2,4m
PVET	<ul> <li>to develop a programme for Inset in Professional and Vocational Education and Training (PVET) subjects</li> <li>in the pilot phase, to train and re-skill 60 teachers in the PVET field</li> <li>to expand the pilot and retrain a further 120 teachers per year for at least 2 years thereafter</li> </ul>	<ul> <li>Training of trainers for teacher training</li> <li>establishment of industry- and business-related internship</li> </ul>	3-5 years	DoE R20,7 m Donors R8,3m
TOTAL				R10,7m (excluding DoE costs)

### 5.7. North West

Project structure: not specified

Projects	Objectives	Outcomes	Time Frame	Budget
An integrated Teacher/College subject support service (1)	<ul> <li>the development of a comprehensive Teacher Support Service which integrates the functions of pre-set, in-set and curriculum development</li> <li>the need to integrate and support professional development of all role players around OBE</li> </ul>		3 years	R27,5 for projects 1 and 2
Curriculum Development Training (2)	<ul> <li>the development of curriculum materials which support activities in classrooms and colleges related to delivery of OBE</li> <li>the trialing of activities and materials in the learning areas of maths, science and languages.</li> <li>to provide a process that allows feedback and support for the further development of curriculum resources</li> </ul>	<ul> <li>confident and professionally competent primary teachers, subject advisors and college lecturers in OBE curriculum development</li> <li>school-based resource material for supporting OBE methodologies in the classroom</li> <li>an improvement in the processes involved in the co-ordination of collaborative effort across different institutions, districts and directorates</li> </ul>	3 years	
Distance Education OBE materials	<ul> <li>introduce an open learning series on teaching in a competence-based education system in 7 colleges of education as a preservice course for student teachers and college lecturers</li> <li>link the lecturer involvement of curriculum development in these pre-set courses with the trialing of maths, science and language material development by primary teachers and subject advisors</li> <li>develop both teacher/lecturer guides and pupil/student materials around the learning areas of maths, science and languages in an open-learning format</li> </ul>	<ul> <li>change in college lecturers' teaching methodologies related to OBE styles of learning</li> <li>creation of appropriate materials and resources</li> <li>distance education support resources that facilitate OBE implementation in the more remote areas</li> <li>systemic intervention spread across the rural/urban divide and province wide.</li> </ul>	3 y ears	Approx R400, 000

Whole school/College Management	<ul> <li>the development of primary school/college management skills for educational change</li> <li>the training of primary subject advisors in effective school management competencies</li> <li>the development of strategic plans or long term objectives required to build institutional vision and consequent mission</li> <li>the creation of whole school/college development plans which focus on specific initiatives which will contribute to longer term strategic plans</li> </ul>	<ul> <li>re-orientation of district level support services to empower schools to manage educational change</li> <li>re-orientation of schools/colleges to manage education change with a whole institution effect</li> <li>more effective schools with better human and resource management</li> </ul>	3 years	R2,7m
TOTAL		·		R30,5m

# 5.8. Northern Cape

Project Structure:

Projects	Objectives	Outcomes	Time Frame	Budget
Curriculum Development: Teacher Development and Support	<ul> <li>to train teachers in methods of developing learning programmes, and learning and support materials.</li> </ul>	<ul> <li>teachers in the Northern Cape will be trained in methods of developing learning programmes and learning and support materials</li> </ul>	3 years	R6m
Further Education: Capacity Building for Educators and Staff	<ul> <li>to build professional capacity among further education staff and educators and develop materials and programmes to successfully implement the new further education system</li> </ul>	<ul> <li>professional staff and educators that are capable of implementing a new approach to further education</li> </ul>	3 years	R4,5m
Rural Education: Improving Education delivery in Farm Schools	<ul> <li>to provide teachers in farm and rural schools with improved professional skills to teach more effectively in their unique situations</li> </ul>	teachers who are able to teach multi-grade classes in isolated locations with limited resources	3 years	R4,5m
Teacher Development: Learners with Special Education Needs	<ul> <li>to develop capacity within the education system to meet the diverse needs of SEN learners.</li> <li>to develop expertise in rural areas where there is lack of professional services.</li> <li>to provide on-going INSET to build professional capacity to cope with SEN learners in the classroom.</li> </ul>	needs of LSEN pupils	3 years	R3m
Capacity Building: School Governing Bodies	to empower school governing bodies to establish governance systems that enhance teaching and learning	improved quality of teaching and learning in the classroom through the effective administration and governance of schools	3 years	R 2m
Establishment of Regional Science Centres	to upgrade the teaching of science in schools by providing teachers with improved skills to teach science and by providing learners with the opportunity to explore basic scientific principles	the programme will improve the quality of education in the classroom by building teacher confidence that will enable them to utilise those resources available in schools and to make better use of science textbooks	3 years	R1,5m
TOTAL				R21,5m

### 5.9. Northern Province

Project Structure: PEI Executive Committee chaired by the DDG and comprising representatives from relevant Directorates and linking up with co-ordinators of respective programmes. EXCO to link up with a broader Project Steering Committee comprising departmental officials and other stakeholders and looking at all departmental projects (not PEI only)

Projects	Objectives	Outcomes	Time frame	Budget
Management Programme	to equip managers with knowledge and skills for project planning and management and to enable them to manage finances, conflict, change, resources and to engage in strategic planning	<ul> <li>Competent managers of the bureaucracy and education institutions in changing contexts</li> <li>Sound EMD model for the province.</li> </ul>	3 years	approx R5,4m
Training in Outcomes- based Education	to equip educators with skills to develop learning programmes and materials	<ul> <li>learning programmes and materials for grades 1 and 7</li> <li>trained teachers who can develop, trial and use the OBE materials competently</li> <li>evaluation/research results which inform further development of learning programmes and support materials as well as teacher training</li> <li>sound model for developing programmes and materials in OBE mode.</li> </ul>	3 years	approx R6,5m
General INSET	not specified	<ul> <li>teachers with skills to teach in large classes, multi-grade classes and in a multilingual environment</li> <li>teachers who can adapt to new changing contexts</li> <li>teachers with skills to develop curricula and materials for their contexts</li> </ul>	3 years	approx R6,9m
TOTAL				approx R18,8m

### 5.10. Western Cape

Project Structure: unspecified

Projects	Objectives	Outcomes	Time frame	budget
Professional development of educators towards Curriculum 2005	<ul> <li>to introduce OBE and related concepts to teachers, principals, departmental officials, parents and the general public</li> <li>to train teachers in pilot schools to implement and develop learning programmes and provide feedback to the LACs</li> <li>to train all educators in the new teaching approach (OBE) and develop classroom management skills</li> </ul>	not specified	not specified	R12m
Education Management and Leadership Development	<ul> <li>to train novice principals and provide ongoing support</li> <li>to facilitate the professional development of Circuit Managers</li> <li>to orientate all principals in the management of Curriculum 2005</li> </ul>	not specified	not specified	R474 330
TOTAL				R12,5m

#### 6. NEXT STEPS

The submission of the provincial programme proposals is only a step in the process of programme planning and implementation. While much remains to be done in developing some of the national and provincial proposals into implementable business plans, this can be achieved in a relatively short time, given the degree of mobilisation amongst both government and other stakeholders generated by Phase I.

It is crucial that mechanisms are put in place to ensure that the preparatory work that has been done with provinces is consolidated and built on to maximise the chances of success in the implementation process. In particular, the national DoE should play a central role in terms of overall co-ordination and support of provincial processes lest the PEI loses its identity and momentum. In order to achieve this, the following recommendations should be considered:

- Establishment of provincial PEI Management Committees to take charge of overall provincial planning, monitoring, evaluation and support. These should mainly comprise departmental officials whose directorates relate directly to the work of the project. The major teacher unions should also be represented on the committee. The committee should preferably be chaired by a senior departmental official (Chief Director and/or above) who will be responsible for: overseeing the development of implementation plans within the parameters of the provincial project proposals; establishing criteria for appointing service providers; allocating specific project management responsibilities within directorates (e.g. one per cluster of PEI programme elements); reviewing plans, and monitoring and evaluating progress; overseeing sound financial management; and driving the process of accountability to stakeholders (donors; provincial and national DoEs; local stakeholders).
- Appointment of an agency to serve as national PEI Co-ordinator. Ideally, co-ordination should be located within the national DoE to ensure sustainability and the building of internal capacity. Indeed, the summary of proposals of the National DoE in this report includes the establishment of a Teacher Development Centre (TDC) to oversee the implementation of the PEI. Subject to Departmental endorsement, the TDC could actually serve as the beginning of a Teacher Education and Training Unit proposed in the DoE's Red Book (An Agenda of Possibilities: National Policy on Teacher Supply, Utilisation and Development: 1996). The Red Book proposes the establishment of a unit to "provide overall management and administrative functions for the teacher development system" and to serve as "...as a centre for information on teacher development ..." (p59).

If properly conceptualised, the PEI's TDC could thus begin to trial a model for Departmental management of teacher development and support in the country. It is however recognised that the TDC may take several months to establish, staff and get running. It is against this background that the appointment of an external co-ordinator is recommended as an interim measure. The co-ordinator will be accountable to the national DoE and will report to a national PEI Executive Committee. Its responsibility will be to provide back-up support to the provincial management structures, ensuring that feasible targets are identified and monitored and that there is sound financial accountability to the Department and the donors.

The national Co-ordinator will also prepare regular reports for the national DoE on overall PEI progress. Central to the work of the Co-ordinator would be cross-pollination

of provincial experiences to ensure that implementing teams continue to learn from one another. Once established and running, the TDC will gradually absorb most of these responsibilities.

With regard to the management of provincial PEI projects, it is possible that a Managing Agent identified jointly by the provincial DoE and a donor (or a consortium of donors) committed to the respective province for Phase II, will be contracted to assist the Provincial DoE.

• Establishment of a small PEI Research Fund to generate useful data for the project as a whole. The Fund would be used for research and evaluation tasks such as: small project activities to establish/pilot good practice in the implementation of Curriculum 2005, large class teaching, multi-grade class teaching, etc. and researching options regarding the reskilling of educators into areas like science and maths. Indeed the PEI research reports (Appendix C) point to a number of critical research areas that will need further exploration and the Fund will be useful in this regard.