ADVANCING GIRLS' EDUCATION IN ZAMBIA

A REPORT ON THE PILOT PHASE OF THE PROGRAMME FOR THE ADVANCEMENT OF GIRLS' EDUCATION (PAGE)

1996 - 1998

Prepared by the University of Zambia. School of Education PAGE Monitoring and Validation Team for the Ministry of Education September, 1998

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ACKNOWLEDGEMENTS

The University of Zambia, School of Education PAGE Monitoring and Validation Team is greatly indebted to numerous people without whose cooperation the monitoring and validation exercise for the ten months period (July, 1997 to April, 1998) would not have been possible. We thank the Ministry of Education PAGE Implementation Committee for identifying UNZA, School of Education as a suitable institution for the exercise and the institutional link forged therefrom. In particular, we are grateful for the leadership of the Deputy Permanent Secretary (Technical Cooperation) and Chairperson of the PAGE Steering committee, Mrs B. Y. Chilangwa, for providing and coordinating logistical support; we also recognise the efforts of the (then) PAGE Co-ordinator Mr Y. Mumbula. The Administrative Officer in the PAGE office Mr A. Ng'wane was always at hand to render assistance during the numerous times need arose and for his help we are thankful.

We are most grateful to UNICEF and through them the cooperating partners whose funds have been supporting PAGE and the monitoring and validation exercise. The support of individuals at UNICEF was exceptional. Ms Martha Santos' hard work, belief and enthusiasm for PAGE were inevitably infectious and we also acknowledge her contributions in the design of Annex 2. The coming of Mr Lawalley Cole reinforced UNICEF's support to PAGE and to the work the UNZA team did.

Our report has benefited from insightful views of numerous people at all levels of the education system starting from Mr C. E. Zulu, the Chief Inspector of Schools, officials at the Ministry of Education Headquarters, the Provincial Education Officers and District Education Officers and their staff in both Chipata and Lusaka. Principals of Chipata and David Livingstone feacher Training Colleges and their staff and students and most importantly, school communities comprising Headteachers, teachers, parents and pupils.

We want to thank Mrs E. N. Phiri, the Secretary to the Dean, School of Education, for the secretarial work that was really beyond the call of duty. She coped with humility the numerous drafts upon drafts of the equally numerous reports.

Although we are sincerely indebted to the assistance provided by many people, we take full responsibility for the contents of this report.

UNZA, School of Education PAGE Monitoring and Validation Team

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LIST OF ACRONYMS

AIDS Acquired Immuno-Deficiency Syndrome

AIEMS Action to Improve English, Mathematics and Science
BESSIP Basic Education Sub-sector Investment Programme
CIDA Canadian International Development Agency

DANIDA Canadian International Development Agency

Danish International Development Agency

DEO District Education Office

EDUKIT Education Kit

FAWEZA Forum for African Women Educationists in Zambia

HIV Human Immuno-deficiency Virus INSET In-Service Education and Training

MOE Ministry of Education

NGO Non Governmental Organisation
NORAD Norwegian Agency for Development

PAGE Programme for the Advancement of Girls' Education

PTA Parents Teachers Association
UNICEF United Nations Children's Fund

UNZA University of Zambia

YWCA Young Women Christian Association

EXECUTIVE SUMMARY

PAGE is a Ministry of Education programme that seeks to deliver quality primary education to all children, especially girls, and to reduce gender disparities in primary education enrolment, retention, completion and achievement. It has just completed the pilot phase and lessons to guide future directions are being sought. Bringing the programme beyond the twenty school stage, that is to national scale, is a vision that is currently being actively pursued. Hence there is a need to examine the PAGE experience in search of lessons to inform this expansion. This report is a synthesis of eleven reports that were prepared by an UNZA School of Education team contracted to monitor and validate PAGE interventions.

The UNZA monitoring and validation study established that PAGE was perceived as a positive force within schools and the Ministry of Education at national, provincial and district levels. The research studies that helped to develop the programme had given it a solid basis and were known to school staff. Advocacy efforts had achieved a great deal with respect to making communities, parents and teachers aware of the problems and importance of education for the girl child. In many schools single sex classes have given girls more confidence and this intervention is seen as helping girls achieve more academically. Familypac, an intervention to increase parental involvement, has been well-received but its implementation is hampered by parents' illiteracy and their non-attendance to sessions. Planned interventions were, for the most part, on track and ready to be taken to national scale. Many successful activities had taken place in 1997 and 1998. However, data with respect to enrolment, retention and achievement did not show that PAGE had wavaged to make an impact within its short lifespan. The magnitude of obstacles in education especially that of girls is such that measurable impact is most likely to come about if PAGE initiatives are augmented by other systematic and system-wide initiatives such as the AIEMS project and the Micro Projects Unit.

The team identified a number of lessons to consolidate successes thus far and inform the expansion of PAGE. These included:

- Management and monitoring need to be strengthened and streamlined, in particular teachers and head teachers need management training.
- Further evaluation needs to concentrate on better documentation of the variations between schools and on what makes PAGE work in different schools as well as on trends in enrolment, retention and achievement.

- Research needs to be conducted on other issues that impact upon girl child education such as sexual harassment, child labour, cultural practices and issues around women in management.
- Advocacy efforts need to be continued and intensified at all levels.

 Multi-media including alternative means for rural areas should be used.

 School and district staff capacity to provide gender training should be built.
- Guidelines should be developed for the implementation of single sex classes and these should include teacher training requirements and implementation strategies.
- The debate on single sex classes should continue.
- The Familypac intervention should be altered to account for illiteracy among parents.
- Clear guidelines should be developed for the implementation of the Familypac strategy.
- The 'Gender across the Curriculum' course should continue with more clear guidelines for its implementation, training for staff and over all gender and PAGE sensitisation within teacher training colleges.
- The impact of PAGE with respect to enrolment, retention and achievement should be monitored carefully to ascertain that perceived successes are actual ones.

PAGE achieved many successes in the past two years. However, much more needs to be done to consolidate them and make a measurable impact. This report hopes to point out lessons to guide the expansion and activities of PAGE and lessons that will help the programme reach its goals.

1. INTRODUCTION

The Programme for the Advancement of Girls' Education (PAGE) is a Ministry of Education (MOE) supported by UNICEF with initial funding from CIDA. PAGE was developed in 1996 based on experiences from the previous Girl Child Education Programme (1994-1995), as well as through the utilisation of findings from research studies that were part of that programme. The Girl Child Education Programme focused on policy development, development of gender sensitive materials and research. Building on the success of the Girl Child Education Programme, PAGE integrated advocacy, gender sensitisation, social mobilisation and testing of specific interventions to improve girls' education.

PAGE is a concrete expression of Zambia's commitment to the advancement of girls and women in education and all sectors of society. The programme seeks to deliver quality primary education to all children, especially girls, and to reduce gender disparities in primary education enrolment, retention, completion and achievement.

The overall objectives of PAGE are:

- to empower girls and women to fully participate in and benefit from the economic and social development of the nation; and
- to ensure the survival of girls into adulthood with particular emphasis on their protection from HIV/AIDS.

To pursue the above, the immediate objectives of PAGE are:

- to promote and create public awareness of the importance of girls' education and empowerment at national level, within the framework of the Education for All programme and Convention on the Rights of the Child
- to support MOE bodies (PEO, DEO, and Schools) to monitor and analyse data on girls' education
- to improve the efficiency and effectiveness of classroom practices in providing learners, especially girls, with basic competencies
- to implement specific interventions that directly impact on access, retention and achievement of girls in selected schools in Eastern and Lusaka province

PAGE strategies are implemented at national, provincial, district and school levels. At national level, PAGE

- builds leadership, commitment and carries out public advocacy for PAGE
- promotes policy development for the improvement of primary education, with special reference to girls
- supports research to enable the documentation, dissemination and discussion of PAGE through symposia, media presentations and other means
- promotes the development of gender sensitive, relevant and appropriate learning materials
- advocates for increase in the proportion of female teachers, female school head teachers and education managers

Two districts, Lusaka Urban and Chipata in Lusaka and Eastern provinces respectively, have been the pilot sites for PAGE interventions at provincial and district levels. Interventions at provincial and district levels included:

- orientating staff and increasing their capacities to support the development and implementation of PAGE
- supporting strategies aimed at increasing the number of female teachers, female school head teachers, and education managers
- strength mag provincial and district enpacities to include PAGE philosophies and objectives within annual plans, to monitor gender issues and targets, and to monitor, document and report on the experiences and lessons learned from PAGE

The 12 PAGE interventions (1999)

- · Research Studies
- Advocacy and sensitisation
- Participatory Planning and Management
- Affirmative Action
- Familypac
- Community Action
- Module 7: A girl friendly school is a child friendly school module
- Gender Across the Curriculum
- Single sex classes
- · Girls' Clubs
- Education materials, Edukits/ teaching and learning aids
- Community action
- mobilizing support of government, political, religious and other opinion leaders in support of PAGE

Within each of the two PAGE districts, ten pilot schools were selected for the implementation of PAGE interventions. In addition, five model schools were

identified in Lusaka. Selection was made by Provincial and District MOE officers, in partnership with UNICEF, and the main criteria for choice of pilot schools were that they were low achieving schools with a lack of infrastructure and from relatively impoverished catchment areas. Model schools were ones that were found to be exemplary in an initial assessment survey and were thus recognised as models. Though they were to implement the interventions, they were not to be the centre of focus and support. Their role has been to provide a standard for pilot schools. The school based interventions included:

- orienting school head teachers and staff to PAGE and creating supportive learning environments
- advocating for school management and staff to be more supportive of girls' education
- training teachers to upgrade their pedagogical skills with particular emphasis on mathematics science and the motivation of girl students
- providing relevant and appropriate learning materials
- defining and strengthening life skills pertinent to the needs of girls, for example, their aims and aspirations versus cultural and community pressures, growing up, pregnancy etc
- introducing single sex classes
- mobilising community and parental support through community campaigns and the introduction of Familypac
- developing and introducing EDURIT in conjunction with the Corriculum Development Centre

Five thematic reports fooked at five PAGE interventions which were tested widely. Summaries of the reports form part of this report. Other PAGE interventions were still in the planning stage and were not evaluated, while one was being reconsidered as an intervention.

The outcomes that PAGE hopes to see from implementing the above were:

- improved girls' participation and learning achievement in schools
- widespread national awareness and mobilisation in support of girls' education

- more meaningful learning experiences for girls through improved learning materials and teaching methods
- · more gender sensitive primary education programmes

The programme is firmly embedded within the Ministry of Education at all levels. A PAGE Steering Committee made up of senior officers from the Ministry of Education and other stakeholders, as well as the cooperating partners, gives policy direction. The executive body answerable to the Steering Committee is the PAGE Management Team composed of heads of four key departments in MOE and the National Implementation Committee which is composed of national and lower level MOE officials. At provincial, district and schools levels, there are PAGE Action Committees, charged with ensuring the implementation of PAGE as well as monitoring the programme at their levels.

PAGE has just completed a two-year pilot phase in 20 pilot schools - 10 in Chipata and another 10 in Lusaka. As PAGE goes to national scale, lessons are still being sought to inform the expansion.

2. BACKGROUND

In June 1997 the Ministry of Education contracted the School of Education, University of Zambia (UNZA) to monitor and validate PAGE interventions. Before the contract was signed, key indicators were developed by the team and agreed to by all stakeholders (Annex 1). For 1997 and early 1998, the UNZA Monitoring and Validation team focused on the five interventions which were fully developed, namely: Research Studies, Advocacy and Sensitisation, Familypac, Single Sex Classes and Gender across the Curriculum. As well as these five thematic studies, the UNZA team conducted a Baseline Study and reviewed PAGE's overall performance through three termly reports, the 1997 Annual Report and the End of (Monitoring and Validation) Project Report. This paper is a synthesis of those eleven reports.

The first monitoring and validation visits were between June and August 1997 during the second school term. This exercise was aimed at collecting data on the existing situation and developing a baseline. The second round of monitoring took place during the third term between September and December. 1997 and served to inform the five thematic studies, the Term three report and the annual report for 1997. The third round of monitoring took place between the months of February and April, 1998 and was the basis for the report for Term 1, 1998 and also contributed to the preparation of the End-of-project report.

A variety of methods were used to monitor and validate PAGE interventions. These included observation, structured and unstructured interviews, focus group discussions, questionnaires, tests and reviews of records and secondary data. The methods were employed differently in the various studies and will be briefly described in the summary of each thematic report. In all the monitoring exercise the team drew on information gathered at national, provincial and district MOE levels, in schools and at the two teacher training colleges where PAGE interventions are being tested.

The UNZA monitoring and validation study established that the PAGE was perceived as a positive force within schools. It could not, however, produce definitive findings with respect to why PAGE did or did not work because of the limited time within which the studies had to be completed. Findings were, naturally, not significantly different. Therefore, the team would like to begin by recommending that both internal and external monitoring and validation efforts continue.

3. THE BASELINE SURVEY

3.1 Background and methodology

The objectives of the PAGE Baseline Survey were to provide information on the types of interventions being implemented in PAGE pilot schools, the extent to which schools have implemented the various PAGE interventions, the processes and methods employed and the impact of PAGE interventions. In addition the team was to recommend how schools should proceed in order to gain full benefits from the programme. Data collection was through a review of PAGE documents, education and girl child documentation; observations of schools and teacher training colleges; semi-structured interviews with MOE officials at national, provincial, district, and school levels; and group interviews with teacher training college principals and lecturers. Interviews were of a qualitative nature. No parents or students were included in this survey.

3.2 Findings and discussion

Much of the Baseline Survey concentrated on the following five specific interventions which each has a section later in this report: Research Studies, Advocacy and Sensitisation, Single Sex Classes, Familypac and Gender across the Curriculum. There were, however, a number of overall findings with respect to implementation of PAGE, primarily in relation to schools, as per the study objectives.

Awareness of PAGE: The majority of people at all levels (national, provincial, district and school) were familiar with PAGE objectives. PAGE interventions and the general directions of the programme.

Administrator commitment: MOE officials head teachers and senior teachers interviewed indicated that most of them support the programme and its interventions. Indicators of administrator commitment noted by the team were:

- · more women teachers had been promoted to management
- general improvements in the appearance and maintenance of schools
- the girl-child friendly logo and names of PAGE committee members displayed on walls and notice boards
- verbal reports that records were kept of PAGE activities.

PAGE organization within school: Every school had a PAGE Committee as well as other school committees. Its membership was normally posted on the notice board and comprised teachers, pupils and parents. Nearly all schools had

PAGE work plans. The team did not specifically assess how well this organization worked within the various schools.

PAGE monitoring: The team found that maintenance of records varied among the schools and in some schools was decidedly weak. Moreover, there was little awareness that the purpose of record keeping was to document PAGE with the aim of informing its future direction. Another issue was that the flow of information and reports from the National Implementation Committee down to schools and vice-versa did not seem to be smooth.

In addition, it was not very clear who was responsible for monitoring PAGE activities at the school level. The PAGE Action Committee, class teachers, the school INSET co-ordinator, school staff members, parents, PAGE officials and school inspectors were all named in the various schools. According to the teachers, monitoring is done through lesson observation, regular supervision, completing questionnaires, written reports and/or PAGE committee reports. Although all these may have a role, it is important to identify what indicators should be monitored and who is responsible for collecting, recording and reporting the information.

Parent involvement: Although no attempt was made to interview parents during field visits, interviews with teachers and the limited observations made by the team indicated that there was increased parent involvement and that parents supported and encouraged their children, especially daughters, with their school work. Specific instances were:

- parents were going to school to observe teaching and learning in their children's classrooms
- parents were volunteering to participate in school activities and do work around the schools
- parents were co-operating on school committees
- public relations between school and parent communities had improved, making the work of PTAs easier
- some parents had agreed to be used as role models
- increased appreciation of girls' education among parents

PAGE was seen as having helped parents to become more supportive of their daughters' education and more involved in schools overall. However, the team felt it vital that these findings be approached with caution as these were largely

based on general impressions by MOE officials, head teachers and teachers highly involved with PAGE.

Teacher performance: Generally, the teachers interviewed indicated support for PAGE. From interviews and observations in schools the following were evident:

- desk arrangements in some schools suggested pupil-centred teaching approaches
- teachers who appeared to be highly motivated despite the absence of personal incentives
- the use of innovative teaching materials
- teachers ready to use their spare time and weekends to assist slow learners
- teachers following up absent pupils with the use of PAGE bicycles
- sharing of PAGE lessons with other teachers
- female teachers being used as role models for girls
- teachers involved in sensitising the parents and communities about the importance of girls' education
- general support and encouragement for all children

The reasons for these perceived changes were diverse and could very well be synergistic effects of a number of factors. These included teachers' participation in school workshops on Module 7 - A Girl Friendly School is a Child Friendly School Module, the increase in female school managers; the overall attention; support that comes with being part of a project such as PAGE; and/or the provision of resources such as bicycles. Maintaining these without a special project will be the challenge.

Attendance: There was a perception among teachers in most PAGE schools of both Lusaka and Chipata districts that girls' attendance had improved. Teachers attributed this change to sensitisation of parents with respect to the importance of girls' schooling. Certain schools, notably Bauleni, Kabanana, Kapita and Nthombimbi, reported that attendance improvements were marked. The reasons for these schools noting a relatively large increase in attendance was unclear at this stage of implementation but is an area for future investigation so that these successes can be replicated.

Enrolment: Teachers also perceived that there were improvements in enrolment for both boys and girls. Enrolment data for the 1997 school year collected by the team showed that in the PAGE schools the number of girls enrolled in Grade 1 most often equalled or even exceeded that of boys. A positive trend noted by the team that may account for some of these increases was flexibility in the interpretation of enrolment policies.

Retention: Another teacher perception was that girls were staying in and in some cases returning to school. However, there was no data to support this. Enrolment figures showed that in all schools there were more boys than girls by the time the children reached Grade 7. In most schools this trend was evident by Grade 4.

Pupil performance: Teachers also perceived that girls in all grades were achieving more since the advent of PAGE. In some schools, specifically, Makwe, Walela and Kapita in Chipata, and Bauleni in Lusaka teachers reported that more girls had passed their Grade 7 examinations. MOE officials also indicated that increased numbers of girls had qualified for Grade 8. Specific improvements in girls' behaviour with respect to girls' performance that were reported by teachers included:

- increased confidence about themselves and their abilities
- increased willingness to participate in class discussions, answer questions and take part in reading and other activities
- evidence of more learning taking place such as pupils going to schools to study on week-ends
- more positive interactions between pupils, teachers and parents with respect to learning
- girls able to express their ideas better
- more competition among girls and between single sex and mixed classes

The team was not able to establish that the improvements in performance can be exclusively attributed to any one PAGE intervention or to PAGE alone.

3.3 Lessons to inform PAGE expansion

The Baseline Survey indicated that PAGE was a successful programme. However it also uncovered areas upon which the programme should concentrate:

Information flow from central levels to the periphery and back again needs to be improved. Borrowing from the clearly defined AIEMS information cascade may help.

- Another weak aspect of the implementation of PAGE that requires attention is inadequate documentation of activities. The concept that pilot schools are conducting an experiment as well as strategies for systematic monitoring and reporting seemed not fully understood at school, district and provincial levels.
- The team noted variations in the success of PAGE and that schools which have scored most successes owe it to dedicated school head teachers who use participatory management styles. Management training for head teachers as well as advocating for the placement of quality personnel in those positions, may be appropriate areas for PAGE to consider in future.
- PAGE school implementation lacks uniformity. This may be a problem when making decisions about expansion if one views PAGE as a strict experiment. However, PAGE will be working within real school situations and those will vary. Perhaps the different experiences should be documented to better inform PAGE implementation within the varied contexts where it will operate.
- An area for further research is to determine what can be attributed to PAGE and what cannot. For example, while successful implementation of PAGE at Nthombimbi school can hardly be doubted, there is the question of whether the renewed community interest in the school is a result of PAGE or the construction of a new classroom block by Micro Project Unit. AIEMS interventions also work in synergy with PAGE. Moreover, many changes are taking place in Zambian society. Resources dedicated to this, however, will need to be balanced by the possibility of separating out the effects of these interventions as well as the actual usefulness of such findings if the contexts within which PAGE and the actual usefulness of such findings if the contexts within which PAGE
- Positive perceptions of changes in enrolment, attendance, drop-outs and performance need to be verified.

4. RESEARCH STUDIES

4.1 Background and methodology

PAGE was built on the success of the Girl Child Education Programme implemented in 1995. Research studies were commissioned to describe the situation with respect to girls' education in Zambia and identify strategies to improve it. This process began with a situation analysis (Kelly, 1994) and Mitchell's (1994) proposal for a girl child research agenda. A further research agenda was then agreed to by the MOE, UNICEF and CIDA and this agenda moulded the research papers that will be discussed in this section. The studies utilised qualitative participatory methodologies and the process of conducting them began with a workshop in qualitative methodology for would be researchers.

Many problems for girls were exposed in these studies, problems that hinder their development in education, problems that PAGE interventions seek to overcome.

Girl Child Research Studies

- A Research Agenda on the Girl Child by C. Mitchell, November, 1994.
- Below the Poverty Line in Education: A Situation Analysis of Girl Child Education in Zambia by Michael J. Kelly, December, 1994
- Survey of Conditions in 20 Zambian Schools by Dylan Aspinwall, March, 1995
- Banders to Girls Education: A Study of the Konwledge Attitudes and Practices of Zambian Educationists, by Monica Munachonga, June, 1995
- Curriculum in the Making: Evolving a Course in Teacher Education on Gender and Social Change by Claudia Mitchell, November, 1995.
- Listening to the Girl Child by Dickson Mwansa, December, 1995.
- 7. Learning from Inside the Classroom by Irene Malmbolwa-Sinyangwe and Barbara Chilangwa, December, 1995.
- 8. In the Best Interests of the Girl Child by Tukiya Mabula and Yizenga Chondoka, 1998.
- Comprehensive Education Analysis (Chipata District, Eastern Province) by Geoffrey Lungwangwa, December, 1995.

The team reviewed a selection of the school documents. observed school activities interviewed head teachers and teachers in all 20 pilot and the 5 model schools. Prior to the visits school questionnaire developed which included questions such as whether teachers were familiar with the research studies and the problems of girls' education, whether they had seen and read the reports and whether they were able to identify the studies' major recommendations.

4.2 Findings and discussion

Findings with respect to the research studies focused on two areas: the content of six of the actual studies and their relationship to current PAGE initiatives: and teachers' awareness of the studies.

Below the Poverty Line: Kelly's study identified several problems facing girls with respect to their education including that:

- almost half of school age girls were not in school, with this proportion being larger in rural areas
- enrolment for both boys and girls had been declining and urban schools were badly overcrowded
- many schools had expanded without adequate sanitary facilities, discouraging maturing girls from attending
- primary school completion and achievement levels were declining for both girls and boys
- girl's performance in mathematics and science was poor
- cost-sharing affected girls more, as parents most often chose to send a boy to school
- the rate of adult illiteracy remained very high

In Kelly's study the causes of girls' low levels of participation and performance were identified as being from within the school, the household and the girl. Underfunding and poor planning from the central and periphery levels were also recognised as hindering girls' education.

Recommendations from this report focused on national, provincial and district level planning and advocacy for education, as well as changes that needed to be made within schools. Many of them hav, ican incorporated in the intercentions that were introduced in PAGE pilot schools, specifically, single sex classes, upgrading of schools which ended at Grade 4 to Grade 7 level, the use of female teachers as role models for girls, and advocacy and sensitisation on the importance of girls education in Zambia. Some of the recommendations have also been incorporated in the Ministry of Education policy document *Educating our Future*.

An update of the situation analysis was undertaken towards the end of 1997. The updated national situation analysis on Girls' Education indicated the following.

• Girls enrol in Grade 1 in numbers almost equal to those of boys and, in some provinces, in numbers exceeding those of boys. In Grades 1-4 a

reasonable gender balance is maintained, with the gender gap not exceeding six percentage points. The gap between the sexes widens considerably in Grades 5-7 where girls typically constitute only 46% of the enrolment. The position is worst in Grade 7 where girls may constitute only 40 per cent of the enrolment. This means that in many provinces there are three Grade 7 boys for every two girls. In the more remote and poor rural districts only one-third of the Grade 7 enrolment are girls.

- Progression rates from Grade 4 to Grade 5 tend to be lower for girls than for boys.
- Although there are variations between provinces, dropout rates for girls tend to be higher than those for boys, whereas the reverse is true for repetition, the rates for boys being higher than those for girls.
- School completion rates have been declining since the early 1990s for both boys and girls. Because the boys started from a very high level and girls from an already low level, the extent of decline for boys has been greater than that for girls. Nevertheless, in every province the completion rates for girls remain substantially below those for boys. In both the Northern and Northwestern Provinces, 52% of the girls who entered Grade 1 in 1990 completed Grade 7 in 1996.
- The number of girls progressing into Grade 8, in both conventional secondary and basic schools, is smaller than the number of boys. In some provinces, however, the progression rates for girls are higher than those for boys; this is because of the small number of girls in Grade 7 and the relatively large number of boys.
- The examination of performance of girls in Grade 9 is inferior to the performance of boys. A lower proportion of girls receive full certificates and higher proportion fail entirely.
- The level of reading achievement of Grade 6 girls is below that for boys, with a gender gap of almost five percentage points. Less than a quarter of the girls in Grade 6 reached the minimum level of reading ability expected by their teachers.

Kelly further says that the provinces identified school-based factors responsible for girls' low participation and performance as falling under the following seven clusters: school, location, school infrastructure, quality of schooling, the curriculum, the school culture, school personnel and personally embarrassing situations.

Home and community-based factors affecting girls' school participation and performance were grouped under seven clusters namely: child-rearing practices, household chores and responsibilities, customary practices, gender attitudes, poverty, disillusion with education and educational issues such as a high levels of adult illiteracy and low levels of community participation in the learning activities that go on in the classroom.

Comprehensive Education Analysis (CEA) of Chipata District:

Before

PAGE was introduced in Eastern Province, this analysis was conducted in order to pinpoint the exact nature of the problems of the girl child in education and further inform the development of PAGE. Lungwangwa's study in Chipata district found that:

- under-enrolment, with very small class sizes compared to those in town:
- low pupil-teacher ratios
- declining participation rates of girls after Grade 4
- high rates of absenteeism especially among girls
- fewer educational opportunities for girls, poor children and those from remote areas due to poverty, distance and parental attitudes
- low numbers of pupils sitting Grade 7 examinations due to lack of fees

The study made several recommendations aimed at improving education leadership, building capacity, facilitating supervision and improving school inspection, establishing support networks for the education of girls and disadvantaged children, and reducing the cost of education for poor children. Some of them were used in the development of PAGE.

Learning from Inside the Classroom: This study investigated what happens to girls compared to boys inside the classroom as well as teachers perceptions about the learning of girls and boys. Qualitative data was collected to determine the type of interaction that went on between the pupils and teachers and between boys and girls.

The findings of this study indicated that the extent to which girls participated in classroom activities and completed assignments was related to the grade level, the subject being taught and whether the school was rural or urban. Other findings were that:

- teachers tended to give more negative comments on responses by girls than boys
- regardless of guidelines, girl class monitors supervised girls while boys supervised boys and when a girl was absent, boys supervised the whole class
- girls were made to sit on the floor when there were not enough chairs; and
- girls cleaned classrooms while boys picked papers

The research concluded that girls' performance deteriorated after Grade 4, that girls were discriminated against by teachers, and that overall, they had more problems at school. Recommendations included advocacy and sensitisation, the development of gender sensitive pedagogical strategies and materials, that clear actions be spelt and carried out for cases of sexual harassment with corresponding penalties, and that single sex classes be introduced. Many of these were similar to Kelly's recommendations and are part of PAGE. One area that this study started to but did not completely explore was that of sexual harassment and strategies to counter it.

Barriers to Girls' Education: Munachonga's study aimed at assessing the extent to which constraints to girl child education can be explained in terms of how gender values, biases and other cultural factors influence education policy formulation, planning and administrative practices. The study found:

- negative values and attitudes about girls' education among educationists and teachers
- that poverty and/or rising costs of education reinforce parents' preference for sending boys to school
- that divisions of labour in homes undermine girls' interest and ambition for education and professional advancement
- that pregnancy and early marriages are a severe constraint

Recommendations included advocacy and sensitisation, training on gender analysis and sensitisation, removal of gender inequalities in the division of labour, scholarships and tuition waivers for girls, sex education as part of the curriculum, and punishment for parents who force their children into marriages. Many of these were, once again, similar to recommendations in the other research papers and are part of PAGE.

Listening to the Girl Child: This study by Mwansa used participatory approaches to listen to the voices of pupils, teachers and parents with regard to the problems girls face at school and at home. It revealed many problems faced by girls including that:

- girls perceived that boys saw them as sex objects
- girls complained that they had a lot of household chores and little time to do school work
- sexual abuse by boys and at times teachers and early pregnancies were seen as a big problem
- initiation ceremonies led to high drop-out rates

This study recommended the introduction of sex education through school counsellors, reforms in traditional sex education, punishment for child and sexual abuse, advocacy and sensitisation, intensification of child-to-child

programmes and career counselling. Most were included into the interventions of PAGE and were, again, similar to what was recommended on the other reports. A possible area for further study is that of child abuse and labour.

Curriculum in the Making - Evolving a course in Teacher Education on Gender and Social Change: A new curriculum, Gender Studies, Social Change and Primary Education', was evolved through a workshop on gender at David Livingstone Primary Teacher Training College. Recommendations included a course syllabus and plan of action for replicating the course. This recommendation has been used in PAGE but has also evolved because it was later realized that the college could not add another course to the existing curriculum. Hence it was recommended that gender be integrated across the curriculum in Primary Teacher Training Colleges.

In the Best Interests of the Child and Survey of Conditions in 20 Zambian Schools were not reviewed.

Familiarity with research studies: Ninety-five percent of the teachers indicated that they were familiar with the research studies and the reports were most often available in schools, although sometimes locked away in a head teacher's office. However in depth questioning revealed that few teachers had actually read them. A few teachers had read parts of the reports. Some teachers mentioned that the research reports were used and read to them during PAGE workshops.

Familiarity with findings and recommendations: Asked whether they were familiar with the problems of girls as identified in research studies, 97 per cent revealed that they were very familiar and some went on to list many of the problems and the recommendations. Moreover, some of the problems identified in the reports as hindering girls' education are being addressed. Their responses and actions indicated a general understanding of the recommendations from the research studies. It was not clear, however, whether, they had a clear understanding that the interventions being implemented as part of PAGE were stemming directly from the recommendations of research studies.

4.3 Lessons to inform PAGE expansion

As PAGE goes to scale, it will be important to disseminate the findings from research papers in a more accessible manner. Simplified booklet, pamphlet or poster formats would be more likely to be read.

The information from the research reports should also be used in sensitisation workshops and as part of advocacy initiatives.

Although the studies answered many questions on girls' education, many more still need to be answered. Future research should focus on the following:

- child abuse in relation to child labour
- sexual harassment by teachers and fellow pupils
- cultural practices that hinder education
- local variations in beliefs in the value of education of the boy child
- constraints to female teachers assuming management positions
- the impact that traditional leaders' level of education has on their views on girls' education; attitudes of female and male employees toward their female supervisors and vice-versa
- self esteem among rural and urban female teachers in Zambia