



# Botswana

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## Principles and general objectives of education

The first National Policy on Education of 1977 endorsed the philosophy of 'Education for *Kagisano*', which means education for social harmony. Based on the four national principles of democracy, development, self-reliance and unity, social harmony is an important outcome for the society of Botswana. In this context, an ideal education system would be one that can be instrumental in the production of a society whose characteristics reflect the national principles, a society in pursuit of the national ideal of social harmony.

In 1994, the Revised National Policy on Education identified the goal of education as preparing Botswana for the transition from a traditional agro-based economy to an industrial economy in order to be able to compete with other countries of the world. In addition to responding to the demands of the economy, the government considered access to basic education a fundamental human right.

The main objectives of the of the Ministry of Education were identified as follows: to raise educational standards at all levels; to emphasize science and technology in the education system; to make further education and training more relevant and available to more people; to improve partnerships between schools and communities in the development of education; to provide lifelong education to all sections of the population; to assume more effective control of the examination mechanism in order to ensure that the broad objectives of the curriculum are realized; and to achieve efficiency in educational development.

## Current educational priorities and concerns

Botswana has experienced two major education policy reviews. The first National Policy on Education (NPE) dates back to 1977; the second was launched in 1994. A national conference on Education for All—organized in 1991 as a result of the 1990 Jomtien Conference—has also been the occasion for some major policy reflections.

The 1977 NPE was a significant milestone, as it provided a sound framework for educational planning and the provision of education. It also closed a chapter on one of the legacies of Botswana's colonial history—that of restricting access to quality education to only a few privileged individuals. The general strategy was to increase access to education at all levels, with special emphasis on universal access at the primary level, to develop educated human resources to meet the demands of society, and to increase educational expenditure at the primary level. Within this framework, the following recommendations were made:

- immediate priority for quantitative and qualitative improvement of primary education;



- provision of nine years of schooling for all children, with the last three years in junior secondary schools, by 1990;
- a reorientation of the curriculum to embody the national principles and to emphasize the acquisition of basic knowledge and skills that Botswana will need in a rapidly developing and changing society and economy;
- introduction of a national service scheme for Form V graduates, particularly in the field of primary teaching, until sufficient well-qualified candidates for teacher training become available;
- increased emphasis on part-time learning, out-of-school education, and the combination of learning and work;
- elimination of major discontinuities in the education system.

These recommendations were studied, priority areas were identified and sequences of action planned. The first sequence was to be achieved between 1977 and 1980, the second between 1981 and 1985, and the last, which later became known as the 'Aims of the Nine-year Basic Education Curriculum', from 1986 onwards.

Following the 1990 Jomtien Conference, the Ministry of Education convened a national conference on Education for All in June 1991. Its objective was to discuss the problems in meeting the basic learning needs of children, youths and adults, to focus the attention of the private sector, non-governmental organizations (NGOs) and the public on the education system, and to explore realistic means for rapidly extending coverage and improving the quality of basic education. It furthermore aimed to provide a platform in order to revitalize the commitment and support of all sectors and institutions in realizing the educational objectives.

The national conference adopted a statement on the scope of basic education as well as an appropriate institutional framework to meet the learning needs of children, youths, and adults within the Botswana context. Recommendations for strengthening basic education were clustered around four themes: policy formulation; improvement of educational quality; school management and educational administration; and building partnerships in the provision of education.

The first set of recommendations called for policies to be formulated for the provision of pre-primary, non-formal and special education so as to ensure accessibility of basic education to all groups of children. Additionally, it was declared that the nine-year basic education programme should be free and compulsory. Furthermore, the conference recommended improving the standard of both pre-service and in-service teacher training, the working conditions of teachers, curriculum content and its delivery, and the school environment. It also proposed the establishment of a National Examination Board to administrate examinations more tailored to the national context and more apt at maintaining international standards. Recommendations on school management and educational administration called for better training of teachers and other educators in these fields. The last set of recommendations centred on developing and strengthening partnerships with the private sector for the financing education, with NGOs for identifying and serving



groups with special needs, and with local communities for providing other forms of assistance.

All the recommendations above were discussed by the Ministry of Education's Policy Advisory Committee and reviewed by the second National Commission on Education, appointed in 1992 to revise the NPE. The newly appointed Commission conducted a thorough review of the 1977 NPE, as well as a series of consultations with educators, the private sector, enterprises, and the public in general. It commissioned a number of studies to investigate major issues in education and other issues that needed specific attention. The Revised National Policy on Education (RNPE) of 1994 translated most of the recommendations, derived from the 1993 Presidential Commission on Education, into educational policies. The main issues and objectives, around which educational development programmes were to be planned, included:

- to increase access, equity and educational standards at all levels;
- to improve and maintain quality at all levels;
- to provide lifelong education to all sections of the population;
- to improve general education so as to prepare students more effectively for life, citizenship and the world of work;
- to make training more responsive to the changing needs of economic development by emphasizing science and technology;
- to enhance the status and performance of the teaching profession;
- to ensure effective management of the education system and maximize community and parental development by improving partnerships;
- to increase cost effectiveness and cost sharing in the financing of education and training;
- to assume control of the examination mechanism that is more effective in order to ensure that the broad objectives of the curriculum are realized.

The recommendations of the Commission—accepted by Parliament—were divided into short-, medium- and long-term objectives. The implementation of the short-term objectives commenced immediately after the RNPE was adopted, while the implementation of the medium-term objectives was planned for the period of the Eighth National Development Plan (1997–2002). The timeframe for achieving the long-term objectives was set at twenty-five years.

The short-term objectives were identified as the re-introduction of the three-year Junior Primary Certificate and the reduction of class size from 45 to 40 pupils. The medium-term objectives to be implemented were: increasing access to vocational education and training; upgrading of primary school teachers to diploma level;



ensuring a 50% transition from junior to senior secondary education; and a reduction of class size from 40 to 35 pupils. The long-term objectives to be implemented over a period of twenty-five years were: the enactment of a compulsory education legislation; an additional reduction of class size from 35 to 30 pupils at the primary level; an accelerated automatic progression of gifted children; and a reduction of the duration of the primary cycle to six years if performance had adequately improved.

In addition to achieving universal access to basic education through schooling, the RNPE addressed other strategies through which this objective would be achieved, such as out-of-school education, education for the poor and disadvantaged, and education for people with disabilities. Another issue identified for action was the improvement of the quality of education, of which it was generally believed that concerns of access compromised. For example, the RNPE recommended raising the standard for teacher qualifications, in terms of both academic and professional qualifications, by introducing remedial teachers into the basic education system.

The provision of basic education at present means organizing learning opportunities to enable both children and adults to acquire basic literacy and numeracy skills, and to achieve an educational level equivalent to a Junior Certificate (a junior secondary school qualification). The RNPE recommended a ten-year structure for basic education, consisting of seven years of primary and three years of junior secondary education. In line with the expanded vision of Education for All, the basic education component was extended to include early childhood care and education. The Department of Curriculum Development and Evaluation interpreted these recommendations into objectives from which subject aims and curricula could be developed.

The second National Commission on Education not only set out goals of education in the RNPE, but also recommended strategies for achieving those goals and an institutional framework for the implementation and monitoring of the policies. Strategies addressed at improving learning achievement focused on improving material and physical facilities, teacher qualifications, learning to deal with mixed-ability groupings, curriculum development and learning assessment. A new challenge was for improvements to benefit the school-age population, as well as those who have to attain basic education through the non-formal system.

National Development Plan 9 (NDP9) provides the framework for the Government's socio-economic development perspective for the five-year term 2003/04-2008/09, and is guided by the four national principles of Democracy, Development, Self-reliance and Unity. In line with the theme of *sustainable and diversified development through competitiveness in the global market*, NDP 9 continues the implementation of RNPE of April 1994 with particular reference to the following:

- Provision of quality education with an emphasis on skills for self-employment and as the core to sustained and diversified socio-economic development of the country;
- Commitment to improving access to pre-school education, provision of ten years of basic education for all, increase access to senior secondary education,



expansion of Vocational and Technical Training and promotion of lifelong learning;

- Continued and sustained improvements in the relevance and quality of education as well as access to education;
- Provision of knowledge, skills, values and attitudes that prepares learners for changes in the world around them.

A new curriculum blueprint was developed in 1995. This blueprint addressed the acquisition of knowledge and problem-solving skills as well as the social, cultural, and ethical dimensions of human development. Implementation strategies for the new curriculum to address the component of improving learning achievement included: adopting a learner-centred approach in the development of curricular materials, as well as in teaching and learning strategies; using active rather than passive learning methodologies; continuous evaluation of learning, where learning difficulties are diagnosed and corrected; assessment of student learning through continuous assessment and examinations.

In 1997, the major goal of universal access to primary education was almost achieved, with a net enrolment rate of 98.4%. The system continues to attract older children who missed their chance to attend primary school but this group is shrinking, albeit slowly. Another success that has been registered is that the participation rate of boys and girls at the primary level is almost equal. The Community Junior Secondary School programme has also been successful in terms of increasing access to education beyond the primary level. Accessibility to schools has greatly improved, and as a result, children no longer have to walk long distances. Educational facilities have also improved. The school is even taking care of other needs such as feeding children when they are in school, and providing food rations during school vacations not only to increase enrolment, but also to keep children in school, at least until the end of the basic education cycle.

Gains have been registered in improving the quality of basic education. Curriculum revisions have been undertaken to adjust to the changing needs of the individuals and the economy. They have been coupled with improvement in assessing and reporting learning achievement to students and their parents. Essential learning materials have been provided, so that the cost of education is not borne only by the parents. The number of trained teachers has increased over the years, and the newly adopted strategy of improving both their academic and professional qualification holds a great promise in enhancing quality.

In recognizing the fact that learners with special needs are found at all levels of the education system, a new strategy for providing education to these persons has been adopted. Even though this strategy is relatively new and its impact has not yet been felt, a support system for the identification of learning needs has been set up. The number of units that provide special education increased, and most individuals who have been identified as having special needs have been placed in those institutions.



The strategy of providing education to out-of-school children and youth through non-formal means was first put into practice in the 1980s. It was strengthened in the 1990s as the National Literacy programmes gained ground and spread to the rural areas. In addition, the new emphasis on functional literacy, and assisting learners not only to acquire literacy and numeracy skills, but also to apply them in profitable ventures, has given a new lease of life to literacy activities. It also ensures that literacy is sustained.

In 1997, a Presidential Task Group commenced work on mapping a long-term vision for Botswana. The Task Group carried out a series of consultations, where citizens were invited to make submissions on their aspirations for the future. The year 2016, which was used as a point of reference, is important to Botswana in that the country will have reached fifty years of independence. The Presidential Task Group has since produced a report entitled *Vision 2016: Towards Prosperity for All*, which has been a subject of public debate. The report features education of citizens as a prominent aspect of shaping and preparing to 'own the future'. *Vision 2016* anticipates a future where citizens would have gone beyond basic education and the nation would be educated and informed. By the year 2016, Botswana should have a system of quality education that is able to adapt to the changing needs of the country in keeping with ongoing worldwide changes and paying attention to aspects such as:

- Improvement in the relevance, quality (of education) and access to education;
- Citizen Empowerment with a view to promoting production of quality goods and services and entrepreneurial development for employment creation;
- Opportunity for continued and universal education with options during and after secondary level to take-up vocational or technical training as an alternative to purely academic study.

## Laws and other basic regulations concerning education

The **Education Act** of 1966 provides the legal framework for the development of education in the country. Since 1966, the Act was revised on two occasions in order to reflect changes in educational policy.

## Administration and management of the education system

The Government of Botswana, through the **Ministry of Education**, has the portfolio responsibility for the achievement of goals for basic education. The **National Council on Education** (NCE) monitors the implementation of educational policy and advises the Government on matters relating to the education system. An additional responsibility of the NCE is policy formulation, and fostering public awareness and understanding of education policy. This structure provides a fertile ground for proactive educational policy.

Government policies, goals, and objectives in Botswana are sector-based. For the education sector, the Revised National Policy on Education (RNPE) of 1994 is the document that has driven education planning during the 1990s. Policy





pronouncements on the provision of education are outlined in the RNPE, while the set of activities that constitute the plan of action are found in National Development Plans (NDPs), the overall government planning documents that span a period of about five years. Some activities of the RNPE were implemented in the period of the Seventh NDP (1991–1996), while the majority of the activities were earmarked for implementation in the chapter on education and training within the Eighth NDP (1997–2002).

The provision of pre-school education is the responsibility of the **Ministry of Health** in partnership with the **Ministry of Local Government, Lands, and Housing** at the first two stages—early stimulation and care and play groups. The final stage (pre-primary) is under the authority of the Ministry of Education.

A Pre-primary Education Unit has been established under the Ministry of Education's Department of Primary Education, responsible for registering pre-primary education providers, establishing standards for ECCD, and supervising pre-primary education. A multi-sectoral Pre-school Education Committee consisting of representatives of several ministries, international organizations and NGOs has been established as a policy advisory board and to co-ordinate all pre-primary education programmes. The strategy adopted for pre-primary education by the Ministry of Education is to assume a co-ordination role, to provide support in curriculum development activities, and to provide avenues for training and professional development of teachers at this level. This strategy is especially adequate for the rural areas, where communities can be encouraged to take over the ownership of ECCD by initiating services that suit their local situations. However, it has not been fully implemented, given that the provision of pre-primary education has only just been incorporated in the educational policy.

The management of primary education is the joint responsibility of several departments of the Ministry of Education. The Primary Education Department, catering for youths 7-13 years, is a dual responsibility between the Ministry of Education and that of Local Government, Lands and Housing. Other than supervising that learning takes place in the primary schools, the Department is responsible for maintaining standards through regular inspection of schools, supervision of head teachers, assessment of teachers, curriculum reforms and support services to units.

The aim of the Secondary Education Department, catering for youths ages 14-23, is to provide broad-based education at the secondary level, in order to meet the country's human resource development needs. For efficient and effective delivery, the functions of the Department fall into four categories. The Development Services section supervises the access to secondary education by providing a fairly distributed network of junior secondary and senior secondary schools across the country. The Inspectorate continuously monitors secondary schools in order to raise standards of teaching and learning by ensuring that schools are well managed and that the national curriculum is followed. The Management and Training section develops and implements human resource development programmes to equip staff playing a leadership/management role at all levels with administrative and management capabilities. The **Regional Offices** represent the Department, implement educational policies and ensure sound management and supervision of schools in a region.



The responsibility for vocational education and training is also shared by the Ministry of Education and the **Ministry of Labour and Home Affairs**, while technician training is provided through several ministries, parastatal organizations and the private sector. The Department of Vocational Education and Training within the Ministry of Education is primarily responsible for all institutional-based vocational programmes—technical and vocational education and apprenticeship skills training—provided through six government vocational training centres and about forty government-subsidized community-based training schools called ‘Brigades’. The Department is also responsible for overseeing and monitoring the programmes offered in about sixty private vocational schools. The responsibilities of the Department cover a wide spectrum and include policy development, planning of new facilities, programme development and assessment, pre- and in-service teacher training, management and programme support, inspection and financial audits. These responsibilities are carried out through five Divisions: Policy and Development; Programme Development and Delivery; Human Resource Management and Development; Brigades Development; and Departmental Management.

The Division of Special Education was established in 1984. It provides national policy leadership and direction in special education. It serves as an advisory department to other departments of the Ministry of Education on issues concerning learners with special education needs. The Division plans, develops and co-ordinates special education activities at all levels. Its overall aim is to increase access to education for learners with special educational needs. The Division operates through four units. The Specialist Services Unit is responsible for curriculum adaptation and modification. It is also responsible for the development of support programmes and the recruitment of special education teachers and it continuously monitors the quality of teaching and learning in schools. The Liaison and Support Services Unit is responsible for personnel recruitment and training. It plans and monitors appropriateness of the provision of special education programmes through collaboration with other ministries and NGOs. It also co-ordinates early stimulation programmes and vocational programmes. The Resource Centre Operations Unit is responsible for the assessment of learners with special needs to determine their educational needs and appropriate school placement. The Management Unit is responsible for the day-to-day running of the Division.

The Ministry of Education is also responsible for the National Literacy Programme. Different structures and committees for the co-ordination of activities have been put in place. The Department of Non-formal Education (DNFE) officials play a pivotal role in providing educational opportunities for out-of-school youth and adults. Like all other departments, policy matters for DNFE are discussed by the **National Literacy Advisory Committee** and the heads of departments, who can deliberate on policy matters and make recommendations to the **Policy Advisory Committee**. The Department conducts two major programmes, the Adult Basic Education programme and the Distance Education programme.

The Department of Teacher Training and Development—formerly known as the Department of Teacher Education—was established in 1989 when it was separated from the Department of Primary and Teacher Training. It was created in response to the mass expansion of primary and junior secondary schools in need of locally trained teachers. The Department oversees the pre-service and in-service professional





development of teachers. The chief executives and overall managers of primary education are the directors of the departments. Education officers of the Primary Education Department supervise head-teachers, while head-teachers, in turn, supervise primary school teachers. Policy-making for the primary level is the sole prerogative of the NCE.

The Department of Teaching Services Management aims to provide a co-ordinated and efficient teacher management system to facilitate the provision of an efficient and motivated teaching force. The Department's main objective is to provide, manage and equitably deploy competent work force resource in government and government-aided primary and secondary schools and colleges of education, with attention to terms and conditions of service including welfare-related issues.

Decision-making and management of activities that are geared towards achieving learning outcomes is the responsibility of the **Examinations, Research and Testing Division** (ERTD). The role and responsibilities of ERTD are: developing assessment programmes, developing and administering examinations, monitoring learning achievement, and conducting assessment-related research that will improve of learning achievement.

The Department of Curriculum Development and Evaluation was created upon recommendation of the NCE in 1977. It has the overall responsibility for providing leadership in improving the quality of education through curriculum development, review and revision. It directs, co-ordinates and monitors curriculum review for the Ten-Year Basic Education and the Senior Secondary Education programmes. The Department also plans for and develops appropriate instructional materials to support the implementation of the curriculum.

The Division of Planning, Statistics and Research manages all information needed for planning, monitoring and evaluation. It also co-ordinates all research geared towards policy formulation and decision-making. The Department of Student Placement and Welfare develops human resources for Botswana's economy through the provision of government-sponsored financial assistance for study to deserving citizens at the tertiary level. Financial assistance can be extended to cover long-term in-service teacher training.

The Government encourages and welcomes assistance from partners and other stakeholders such as local authorities, local communities, donor agencies, NGOs, churches, parents and learners themselves. This is especially true for activities that take place outside the school, where various projects have been initiated in conjunction with the Ministry of Education and local communities. The provision of early childhood care and development has been the initiative of the private sector, NGOs and local communities who have benefited from substantial assistance from international organizations.

Even if schools are generally run by personnel under the supervision of **School Inspectors**, the Revised National Policy on Education supports the involvement of all stakeholders in education. At the primary level, local communities are encouraged to participate in **Parent-Teacher Associations**, while community junior secondary schools have a formalized community-based structure composed of a **Board of**



**Governors**, working with school management teams on building partnerships between the community and the schools, and promoting community ownership of schools.

## Structure and organization of the education system

In Botswana, the Formal Basic Education Programme includes the first ten years of education (Standards 1 through 10 or Form 3) and, as soon as practicable, this will be preceded by two years of pre-primary education to provide equity and quality for all children as they begin more formalised instruction at the primary level.

### Pre-school education

Pre-school education is generally defined as a programme that caters to children aged 0–6, as a three-tier system composed of: early stimulation and baby care (age group 0–2/2½); play school or day care/nursery (children aged 2½/3–4); and pre-primary education (children aged 4–6). It is dispensed in day-care centres, which used to be mainly located in urban areas, but since 1997, the majority (59.5%) are in rural areas. It is foreseen that two years of pre-primary education will be included in the ten-year formal basic education programme, so as to provide equity and quality for all children when they enter primary school.

### Primary education

Primary education is the first stage of the ten-year basic education programme and covers Standards I–VII. Since 1996, when the Revised National Policy on Education changed the official entry age from 7 to 6 years, children may begin Standard I in the month of January following their sixth birthday. At the end of Standard VII, pupils sit the Primary School Leaving Examination.

Every pupil of primary school going age is encouraged to attend primary school. Pupils who begin primary schooling are admitted in Standard I at the beginning of the year. The minimum entry age is 6 years in public schools and 5 years in private schools and the maximum entry age in public schools is 10 years. However, flexibility is often exercised to enable pupils in the remote areas to have access to primary education. Schools are not expected to admit children in primary schools during the term unless there are sufficient reasons which prevented the child from attending school at the beginning of the year.

### Secondary education

Secondary education consists of three years of junior secondary school (completing ten years of basic education) followed by two years of senior secondary school. Progression from the junior secondary to the senior secondary cycle is through the Junior Certificate Examination. Senior secondary education culminates in the Cambridge Overseas School Certificate Examination GCE O-level examination, granting access to higher education. The implementation of the three-year junior secondary programme will be phased in over a period of five years.



As regards post-secondary and higher education, the University of Botswana offers a broad range of academic programmes—mostly at the under-graduate level. These include bachelor's degrees in accounting and business administration, engineering, agricultural science, law, library and information studies, nursing, social work, and most of the basic arts and sciences. First-degree courses take four years—five years in the case of law. The University also offers professional and career studies leading to a certificate (one year of study) or a diploma (two or three years of study). At the post-graduate level, one-year post-graduate diploma courses and two-year master's degree programmes are offered.

At the university level, the academic year is divided in semesters separated by a study break, and consists of not less than thirty weeks.

## The financing of education

Education has consistently enjoyed a favoured position in the allocation of the national budget since independence. Educational expenditure increased substantially since the start of the implementation period of the 1977 National Policy on Education, when the attainment of universal primary education became a national goal and priority. One of the strategies used to increase access to primary education was to abolish school fees at that level in 1980. Since then, primary school enrolment rates have continued to grow.

In 1990, at the end of the Sixth National Development Plan's (NDP) implementation period, a substantial amount of resources had been spent on the expansion of the primary school programme. During the Seventh NDP (1991–1996), the largest share of development expenditure was allocated at the junior secondary school level. The share of the national budget that has gone to education has averaged 22% in the 1990s. Investment in education continues to be a priority in the current planning period (1997–2002). A proportion of the funds were earmarked for the expansion of junior secondary school buildings, as well as for new classrooms in primary schools. With the exception of centres run by the district and city councils, pre-school education is by and large funded by individuals, with subsidies from donor agencies, NGOs, and the private sector.

The cost of education has increased over the years. Participation is also increasing, but due to the heavy emphasis on individual funding, it has not yet reached satisfactory levels. The cost of improving primary and secondary schools alone amounts to more than 50% of the development budget. Other costs that are incurred for infrastructure that supports basic education go towards teacher training. On the other hand, commitment to universal primary education gained renewed impetus in the last decade, as demonstrated by the allocation of an average of 23.8% of the education budget to primary education.

Expenses on teachers' salaries, supplies and administration costs have remained constant throughout the 1990s. Teacher salaries have on average taken up 80.2% of the budget allocated to primary education, while teaching and learning materials have averaged 16.2%. About 3.6% of the budget was spent on administration of primary education (e.g. inspection). A substantial increase, from 259



*pula* (P) in 1990 to P1,110 in 1999, was observed in the unit cost of primary education since 1990.

The highest increase in unit costs occurred between 1995 and 1996. This was the time when the implementation of the Revised National Policy on Education's recommendations finally got underway. Public expenditure on primary education as a share of the Gross Domestic Product has been consistently around 1%. Education is free in Botswana. This means that no fees are charged for tuition, teaching and learning material, boarding (where it exists), co-curricular activities and meals provided at the school. At the primary school level, parental contribution to education consists of a nominal Parent-Teacher Associations levy to cover the cost of preparing meals provided at school. In recent years, the Government has spent more resources on learners with special needs by giving subsidies to institutions that cater to those learners.

The Department of Student Placement and Welfare is mandated with offering higher education scholarships to deserving Botswana students. Tertiary education has and is still provided for and financed mainly by the Botswana Government. In 1973 a bursaries scheme was introduced, where beneficiaries were expected to contribute 5% of their initial gross salary for a stipulated period after completing their training.

In April 1995, the Government introduced a re-organized bursaries scheme. This is the Grant / Loan scheme where students are now awarded grants and or loans to pursue their tertiary training. It is expected that the loan portion of the scholarships be re-paid, free of interest, as soon as the beneficiary becomes employed. In terms of recovery the two schemes will run concurrently until all beneficiaries of the 5% scheme have all contributed. Students following areas of critical manpower shortage or disciplines essential to the development of the economy—the more technical and science-based professional studies or disciplines of specialised nature—will receive more generous financial support. The number of scholarships awarded across all categories in 2001 was 5,624 (1,390 in 1995).

## **The educational process**

The government's goal for education is to provide for lifelong education which will prepare Botswana for the transition from a traditional agro-based economy to the industrial economy that the country aspires to.

The primary and junior secondary school programmes together form the Ten Year Basic Education Programme, whose aim is to provide quality education that develops fully productive citizens for the 21<sup>st</sup> century. As part of the process of implementation of the RNPE and Vision 2016 ideals, a broad, practically oriented curriculum has been developed that provides opportunities for learners to develop technological skills that are related to the world of work, and “pays attention to the development and acquisition of attitudes, values and skills required for economic development in a rapidly changing world”.

To ensure subject diversification, the programme has been organised around two broad areas: a core area, which is followed by all students comprising the conventional languages and sciences; and optional groups, including Humanities,



Sciences and creative, Technical and vocational subjects as well as enrichment subjects. Equity is also realised in the choice of subjects as learners are given an opportunity to make a selection in accordance with their preferences and revisions.

The diversified curriculum called for by the RNPE (1994, Rec 29) incorporates the following basic components:

- *Foundation skills*, such as decision-making skills, problem solving, communication, self-presentation, teamwork and computation, developed through cross-curricular approaches with emphasis on process skills as well as subject content.
- *Vocational orientation of academic subjects*, taught in such a way that concepts, knowledge and processes could be applied to the day-to-day life of the learners and to the world of work.
- *Practical subjects*, designed to help students develop an understanding and appreciation of technology, manipulative skills and familiarity with tools, equipment and materials.
- *Readiness for the world of work* - curricular and co-curricular activities will be developed to provide students with an awareness and understanding of the world of work and an appreciation of the values and attitudes towards all types of work; including knowledge about the economy, the processes and organisation of production, and the demands of working life.
- *Careers guidance* will be offered with the aim of equipping students with the necessary skills and knowledge that will enable them to make informed decisions about their occupational development and other aspects of preparation for life.

To effectively implement the components of basic education, the following strategies have been adopted:

- A learner-centred approach where curricular materials and learning and teaching strategies are responsive to the needs and interests of the child, and where the teacher is viewed as a facilitator and guide rather than a reservoir of knowledge.
- Teachers trained to have an understanding of child development and individual differences and to recognise that children learn at different rates and by different modalities.
- Reinforcement and success recognised by teachers as two of the best motivators in learning.
- Active learning (by doing) recognised as much more effective than passive learning (listening).
- Educational personnel to accept the proposition that all children can be successful within their own limits.



- The progress of children to be continually evaluated, learning diagnosed and remediation provided as needed.
- The world of work concepts to be infused throughout the curriculum including development of positive attitudes toward self-employment capability and continuing education and training beyond the ten years of basic education.
- The philosophy of the basic education programme to be continually evolved to reflect new needs and directions for Botswana.

On completion of the Ten-Year Basic Education Programme, students should have:

- developed competence and confidence in the application of computational skills in order to solve day-to-day problems;
- developed an understanding of business, everyday commercial transactions, and entrepreneurial skills;
- developed critical thinking, problem solving ability, individual initiative, interpersonal and inquiry skills;
- developed desirable attitudes towards different types of work and the ability to assess personal achievement and capabilities realistically in pursuit of appropriate career/employment opportunities/ possibilities and/or further education;
- acquired knowledge, skills and attitudes in food production and industrial arts for self-reliance and self-sufficiency;
- developed awareness and/or literacy and understanding of the significance of computers in the world of work;
- acquired knowledge and understanding of their environment and the need for sustaining utilisation of natural resources;
- developed desirable attitudes/behavioural patterns in interacting with the environment in a manner that is protective, preserving, and nurturing;
- acquired knowledge and understanding of society, appreciation of their culture including languages, traditions, songs, ceremonies, customs, social norms and a sense of citizenship;
- developed the ability to express themselves clearly in English, in Setswana and/or a third language both orally and in writing, using them as tools for further learning and employment;
- acquired the basic science knowledge and skills, including basic knowledge of the laws governing the natural world;
- acquired a good knowledge and practice of moral standards and health practices that will prepare them for responsible family and community life;
- developed their own special interests, talents and skills whether these be dexterity, physical strength, intellectual ability, and/or artistic gifts;





- acquired an appreciation of technology and technological skills including basic skills in handling tools and materials;
- gained the necessary knowledge and ability to interact with and learn about their community, the government of their country and the world around them.

## Pre-primary education

Historically, the Ministry of Health provided care for newborn babies and children under its Primary Health Care programme. Services that were provided included family planning and educating pregnant women about maternal health care. The development of early childhood education prior to 1977 was not guided by any policy direction: neither did early childhood care and development (ECCD) appear on the agenda of the first National Commission on Education. However, ECCD was provided in various forms by day-care centres primarily run by voluntary organizations such as churches, the Red Cross, women's groups, and private individuals.

Due to a high social demand for more widely available pre-school education, there has been a large increase in different kinds of pre-school provision since 1977. This has led to the establishment of a multi-sectoral Reference Committee on early childhood education in 1980, composed of representatives from the Ministries of Education, Health, Local Government and Lands, as well as voluntary and religious organizations. The work of the Committee resulted in the adoption of the National Policy on day-care centres in 1980, whose aim was to provide guidance and to reduce problems that were inherent in the uncontrolled establishment of day-care centres in the country.

Pre-primary education centres were known by various names, such as day-care centres, nursery schools, crèches, pre-primary units, reception schools, and kindergarten classes. They also served different functions. While some provided custodial care to young children, others functioned as pre-schools or preparatory classes for the primary school level. With an exception of 'reception' classes in most private English-medium schools, an assessment of the pre-primary initiatives during the period of the National Policy on Education (NPE) reveals that, while day-care centres played a role in socializing children and providing custodial care, they were not effective in preparing children for school. There was no prescribed curriculum for this level, and the quality of leadership in many centres was inadequate. Furthermore, many centres did not have any links with primary schools.

It is against this background that the Ministry of Education has continuously made proposals since the late 1980s, for a greater involvement in the provision of pre-primary education. This was recognized by the Government in the Seventh National Development Plan, when a commitment was made to prepare a comprehensive policy on pre-school education and to link it to the formal education system.

ECCD still has the lowest participation rates. This is partly due to the fact that educational policies have not singled out this level for rapid expansion in the way that was done with the primary level about thirty years ago and the secondary level in the



1990s. Thus, pre-primary education is mainly offered by NGOs and the private sector. However, the current education policy has charged the Government with the responsibility of developing co-ordination mechanisms. The Ministry of Education has assumed the responsibility of developing curriculum materials and providing training and professional development opportunities for teachers. This is a highly significant contribution, given that a substantial part of educational expenditure is absorbed by teachers' salaries.

In 1997, the national average of new entrants into Standard I that had attended some form of organized ECCD programme was 27%. Of those who were enrolled in private schools, 92.8% had ECCD experience, while only 24.8% of the public school pupils had some pre-primary education experience. The same applies to schools in urban and rural areas. In 1992, there were 208 day-care centres with an enrolment of 11,424 children throughout the country. More than one-third of the child-care facilities were located in urban council areas, which accounted for less than a quarter of the total population. About one out of seven children in urban council areas attended day-care centres against one out of thirty children in district council areas. By 1997, there were 291 day-care centres, of which 118 (or 40.5%) were located in urban areas and 173 (or 59.5%) rural areas.

One of the reasons for this disparity is that ECCD service is mostly provided as a private initiative, at a high cost for parents, or by NGOs also for a significant fee. Some pre-primary education facilities are run by churches and local authorities for a minimal fee, but even though these are highly in demand, they cater to only a small proportion of eligible children. As a result, the home still largely remains an alternative means of pre-primary care provision in the rural areas, where grandparents and other relatives look after the children while their parents are involved in economic activities outside the home.

As mentioned, a Pre-primary Education Unit has been established under the Ministry of Education's Department of Primary Education. Work on registering pre-primary education providers, establishing standards for ECCD, and supervising pre-primary education has begun under this unit. A partnership between the Ministry of Education and the Ministry of Local Government, Lands and Housing, with duties and responsibilities of each, has been worked out. A Pre-school Education Committee has been established to co-ordinate all pre-primary education programmes. The Committee consists of representatives of several ministries, international organizations and NGOs. This multi-sectoral Committee has assumed the role of a policy advisory board, and has produced a draft blueprint on pre-primary education.

The strategy adopted for pre-primary education by the Ministry of Education is to assume a co-ordination role, to provide support in curriculum development activities, and to provide avenues for training and professional development of teachers at this level. This strategy is especially adequate for the rural areas, where communities can be encouraged to take over the ownership of ECCD by initiating services that suit their local situations. However, it has not been fully implemented, given that the provision of pre-primary education has only just been incorporated in the educational policy.



Two major problems have been identified. The first is the lack of information on the existing pre-primary education facilities in different parts of the country. No standard procedure has been developed to collect information as it has been done for other levels of education. As a result, different councils have various mechanisms for the registration of pre-primary education facilities. The second problem, emanating from the absence of a comprehensive register, is that it is impossible to estimate ECCD enrolment in the country. As a result, the nature and characteristics of pupils are not well documented. Other problems include gross disparities in the quality of pre-primary education facilities, teacher qualifications, and the quality of the services provided.

## Primary education

The first National Commission on Education envisaged the task of primary schooling as providing “the foundation of basic competencies that will prepare the child for continued in-school and out-of-school learning for social and economic life in a modernizing society.”

The Primary School Programme forms the lower level of the Ten-year Basic Education Programme. It comprises a seven-year primary course split into two levels of learning: the lower primary (standard 1-4) and the upper Primary (standard 5-7). The programme is woven around the acquisition and application of foundation skills. It thus emphasises the acquisition of communication, numeracy and literacy skills, the development of an awareness of the interrelationship between Science, Technology and Society, and the acquisition of socially desirable skills and attributes. Its implementation is based on the learner-centred approach where curricular materials and learning/teaching strategies are responsive to the needs of the learner.

In the Lower Primary, the subject packaging is broad, with some subjects integrated to facilitate theme and project teaching. The focus at the Upper Primary level is mainly on the development of pre-requisite skills for the junior secondary school curriculum.

On completion of seven years of Primary Education pupils should have:

- acquired language skills to be able to express themselves appropriately in English and Setswana as tools of communication and also for learning;
- developed desirable attributes such as curiosity, creativity, assertiveness, self-esteem, open-mindedness, respect for the environment and for one’s own life;
- developed awareness of the interrelationship between Science, Technology and Society in everyday life;
- developed desirable attitudes towards and appreciation for different types of work and the ability to assess personal capabilities/weaknesses and achievement;
- acquired knowledge, skills in and appropriate attitudes towards food production and industrial arts;



- acquired knowledge and understanding of their society through appreciation of their culture and tradition including languages, songs, ceremonies, customs, social norms and a sense of citizenship;
- developed skills such as numeracy, literacy, communication, adaptability and problem-solving for further learning and vocational preparation;
- acquired critical thinking, problem solving and inquiry skills;
- developed competence and confidence in the application of computational skills in order to solve day to day problems;
- developed awareness and appreciation of the use of computers in everyday life;
- developed awareness and appreciation of basic entrepreneurial skills in business and everyday commercial transactions;
- developed ability to recognise and appreciate the contribution of religion in the formation of values and behaviour patterns;
- developed awareness of their rights and responsibilities related to health, gender, law, violence, identity, civic and other social and moral issues;
- developed their own special interests, talents and skills whether these be dexterity, physical strength, intellectual ability, and/or artistic gifts.

The provision of primary education has largely been the responsibility of the government. Of the 740 primary schools registered in 1999, 665 (or 89.9%), were government-owned, 66 (or 8.9%) were privately-owned, while 9 (or 1.2%) were community-owned, but government-aided. Most government-aided schools have been converted to fully-fledged government schools in the past decade, with the percentage of government-aided schools dropping from 19.9% in 1990 to 1.2% in 1999. This was done as a means of improving access to primary school, and to provide a relatively equitable service of primary schooling in the communities.

Access to education—especially basic education—is one of the main objectives of the education system in the country. The achievements of the education sector since the 1977 NPE implementation included:

- an increase in the number of primary schools, from 376 in 1978 to 647 in 1991 (72.1% growth);
- the abolition of tuition fees in 1980, which meant that government expenditure on primary schooling increased substantially;
- an increase in the number of trained primary school teachers, from 61% in 1978 to 84% in 1991 (13% growth);
- an improvement in teacher/pupil ratios, from 1:50 in 1978 to 1:35 in 1991.

In the 1990s, several targets and strategies were set for the strengthening of primary education. Most of these were part of the planning document, the Seventh National Development Plan, which was prepared in 1989/1990. Other targets were pronounced



at the national conference on Education for All in 1991. The main goals and targets that address the internal efficiency of the education system were improving access, quality, relevance and cost effectiveness of primary education.

The Seventh National Development Plan has emphasized the need to strengthen primary education by ensuring universal access to ten years of basic education within the next twenty-five years, with a 98% progression to Form I (junior secondary level) by 2000. This objective is to be attained by building more schools and classrooms, by integrating more privately-run *Setswana* medium schools into the government system, by reducing class size from a maximum of 40 to a maximum of 30 pupils, and by applying both formal and non-formal approaches for the provision of education in remote areas.

In terms of quality and relevance, the goals are to increase the number of trained teachers and to improve their quality by offering a pre-service diploma qualification and in-service training programmes, to increase the practical orientation of the curriculum in the formal education system, to improve performance in mathematics and science subjects, and to develop local curriculum materials and assessment systems. Cost-effectiveness should be increased by reducing and containing the unit cost, and by enhancing contributions from individuals, communities, and the private sector.

Even if progress is registered in some areas, the main education indicators witness to remaining challenges, of problems to be solved and of inequalities to be absorbed. In 1997, primary schools admitted only 62.4% of the 7-year-olds. About an equal number of children admitted were either 6 or 8 years of age. Some parents, particularly those in urban centres, prefer to have their children start school earlier than the official age. Conversely, some parents in the rural areas enrol children in school about one or two years after the official school age. A pattern similar to that of the intake rates was observed in the enrolment rates of all the grades at the primary level in 1997.

Average repetition rates experience a steady decline, from nearly 7% in 1983 to about 3% in 1997. The average repetition rate for the 1980s was 5.6%. This figure was at its lowest in 1993 (2.7%). However, it increased again to 3.5% in 1995. The reason for the increase might be the change in repetition policy that was introduced in 1994. The policy that was operational prior to 1994 was that of automatic promotion from one grade to the next, with repetition being only allowed in Standard IV. With automatic promotion, teachers could retain children who showed deficits in attaining basic literacy and numeracy skills only at Standard IV.

Even though the new policy of assessed progression has not been officially implemented, the non-repetition rule has been somewhat relaxed in anticipation of the new policy. Assessed progression will allow repetition of up to 12.5% of each class. While the general trend was that repetitions were increasing on one hand, the most disturbing feature is that the average dropout rate has been increasing consistently over the years, and stood at 3.5% in 1997. In 1991, for every 1,000 children there were 47 repetitions, while only 10 pupils dropped out of school. The rates were about equal from 1993 to 1995. However, there were more children dropping out of school than those repeating in 1997 (35 and 30, respectively). Another trend was that the



dropout rate was higher in the rural areas compared to urban areas. A possible explanation could be high poverty levels in the rural areas compared to urban areas.

With a net enrolment rate of 98.4%, Botswana has virtually achieved universal primary education. However, the challenge for Botswana is greater in that achieved universal primary education is only a first step to a more ambitious goal of ten years of basic education. The marginal cost of education has increased as education services are being taken to more rural and remote areas. In order to maintain efficiency in the primary school system, extra investments should go into programmes geared towards encouraging pupils in remote areas to remain in school. These include re-packaging the curriculum, developing culturally sensitive materials, and making learning more interesting.

Policy-mandated external assessment occurs at three stages in the basic education cycle. The first assessment is the Standard IV attainment test, developed by the Examination Research Testing Division (ERTD)—a unit within the Curriculum Development and Evaluation Department, but administered locally by teachers. It is a curriculum-based test consisting of a numeracy test, and two tests of basic literacy skills, one in *Setswana* and one in English. The results of these tests are used to make decisions on whether to promote pupils to the next grade, or to retain them to strengthen their basic literacy and numeracy skills. In addition to being mid-point in the primary cycle, administering the test at Standard IV is important in that it is a point after which the medium of instruction switches from *Setswana* to English.

Development measures for the Standard IV test were already in place at the beginning of the 1990s, while criteria or competencies for all curricula subjects are being incorporated in the syllabus revision process currently underway. To date, the attainment test has been used to retain learners who show a serious deficit in attainment of basic literacy and numeracy skills in Standard IV. However, the role of the attainment test is likely to be enhanced in the future with the implementation of the RNPE recommendation of adopting the assessed progression approach to promote children from one grade to the next.

The second policy-mandated assessment is the Primary School Leaving Examination (PSLE). The PSLE was originally a selection test, but has since been developed into a criterion-referenced achievement test. The PSLE consists of five subjects: *Setswana*, English, mathematics, science, and social studies.

The third, the Junior Certificate Examination (JCE), comes at the end of ten-year basic education programme. This test is a norm-referenced achievement test that is used primarily for selecting students for the senior secondary phase.

The transition rate from primary education to junior secondary education was 69.3% in 1991. It increased to 93.3% in 1998, and was almost 100% in 2000/2001.

In 2004, the total number of students enrolled in primary (Standard I-VII) was 328,692. The pupil-teacher ratio was 26:1.





## Secondary education

The nine-year basic education cycle established by the NPE of 1977 was replaced in the 1990s by the objective of a ten-year cycle, extending lower secondary schooling from two to three years. The NPE also adopted the concept of Community Junior Secondary Schools (CJSSs) as a strategy to increase partnerships between the government and the communities.

The three-year junior secondary school programme forms an integral part of the Ten-year Basic Education Programme. It revolves around the acquisition of foundation skills such as decision making, problem solving, team work and computing, the vocational orientation of academic subjects as reflected by the application of concepts, knowledge and processes and the appreciation of technology, manipulative skills and familiarity with tools, equipment and materials. Sensitive emerging issues and other cross curricular issues have been infused in the whole curriculum package.

The establishment of CJSSs expanded rapidly throughout the 1980s in terms of numbers of schools built and of pupils enrolled. Achievements in the provision of education at the junior secondary level included:

- an increase in the number of schools, from 42 in 1985 to 149 in 1991, representing a growth rate of more than 350%;
- Form I enrolment increased from 10,577 students in 1985 to 26,491 in 1991, representing a growth of more than 100%;
- total enrolment increased from 27,804 students in 1985 to 55,430 in 1991;
- an increase in the percentage of pupils entering Form I, from 38% in 1985 to 65% in 1991;
- an increase in the ratio of Form I places to Standard VII leavers; in 1985, places available in CJSSs could accommodate 64% of the primary school leavers, whereas 83% could be accommodated in 1991.

In 1990, the goal was to attain 100% progression to the junior secondary level. It was realized, however, that it would not be possible to pursue the aim of ten years of basic education solely through the formal education system. Hence, parallel programmes in the non-formal education sector were developed for out-of-school youth and adults.

The number of CJSSs increased from 120 in 1990 to about 234 in 1997. This rapid expansion resulted in increased enrolments. Even though enrolment had risen over the years, participation in the junior secondary cycle is much lower than participation in the primary cycle.

The senior secondary programme is a post-basic education programme with a practical orientation aimed at preparing learners for the world of work and community involvement. The two-year broad based curriculum for Senior Secondary Schools in Botswana takes cognizance of the nature of knowledge, the contribution that different



subjects offer and the infusion of sensitive emerging issues. It is spirally organized with its base grounded on the Ten-year Basic Education Programme. The programme is diversified to include academic, technical and commercial subjects. It also promotes a culture of life long learning and a link with the world of work. It, thus focuses on Information Technology, promotes the development of moral, social values, cultural identity, good citizenship and builds desirable work ethics.

Senior secondary education should be seen as a vehicle towards attaining economic growth and development and ensuring that the people of Botswana are a major national resource. It should pay attention to the development and acquisition of attitudes, values and skills required for economic development in a rapidly changing society. Further more, it should help learners acquire tools to deal with new technology and to manage and accommodate change, thus preparing them for active participation as citizens of tomorrow. It should aim to reduce the existing educational and economic disparities by increasing access to education for all learners at this level. It should further address equity in education.

Education at this level should provide equal opportunities for all children to develop their potential. It should be a period when new and varied talents emerge and flourish while existing ones are enhanced. It should cater for learners with different abilities and those with special needs if it has to contribute to the quality of life for all. This will ensure active participation in the development of the country in line with the national ideals of democracy, development, self reliance, unity and social harmony (*kagisano*).

Therefore, the senior secondary school curriculum will:

- be wide based offering an opportunity for learners of different abilities to develop their potential;
- utilise innovative learner-centred approaches to teaching;
- be diversified to include academic, technical and commercial subjects thus accommodating a whole range of abilities and interests;
- have a practical orientation which will allow students to have hands on experience and the opportunity of applying knowledge and skills acquired to real life situations;
- seek links with industry and the private sector to prepare learners for the world of work;
- be sensitive to emerging issues which will be infused, integrated and/or developed into different subject areas as the need arises;
- promote a reading culture across all the subjects in the curriculum;
- be a flexible programme leading to a subject based examination to allow for recognition of achievements in different subjects at different levels;
- allow learners to take examinations designed to cover varying ability range and demonstration of positive achievement at different levels in different subjects;
- reward learners for positive achievement, showing what they know, understand and can do;



- provide a range of assessment techniques appropriate for different subjects and skills;
- encourage development of learner profiles to reflect achievement in skills areas not covered in the examinations;
- be designed to be gender sensitive and make efforts to positively address existing biases to help all learners fully develop their potential.
- have a strong Guidance and Counselling component that will assist students in the choice of subjects and examination levels. Guidance and Counselling will also assist the teachers with the handling of the wider ability groups and students with special needs.

On completion of the two-year senior secondary programme learners should have:

- acquired knowledge, developed confidence and ability to assess their personal strengths and weaknesses and be realistic in choosing appropriate career/employment opportunities and/or further education and training;
- developed skills to assist them in solving technical and technological problems as they relate to day-to-day life situations;
- developed desirable attitudes and behavioural patterns in interacting with the environment in a manner that is protective, preserving and nurturing;
- acquired attitudes and values, developed basic skills and understanding to allow for execution of rights and responsibilities as good citizens of Botswana and the world;
- developed information technology skills as well as an understanding and appreciation of their influence in the day-to-day activities;
- acquired knowledge, attitudes and practices that will ensure good family and health practices including awareness and management of epidemics ( such as HIV/AIDS ) that prepare them for productive life;
- developed pre-vocational knowledge and manipulative skills that will enable them to apply content learnt, and attitudes and values developed, to practical life situations in the world of work;
- developed an understanding of, and acquired basic skills in business, everyday commercial transactions and entrepreneurship;
- developed foundation skills such as problem solving, critical thinking, communication, inquiring, team work /interpersonal, to help them to be productive and adaptive to survive in a changing environment;
- developed study skills required for further study and training.

The Government has decided to step up the provision for technical and vocational education and training to meet the economic and development objectives of the country for the twenty-first century. This will be facilitated through the introduction of new technical and vocational education programmes at the upper secondary and tertiary education levels. The Botswana Technical and Vocational Education Programme will be a college-based programme. It will be broad based within a



vocational field with a substantial component of key skills. It will be module- and outcome-based, and incorporate a component of work place attachment. The new programme aims to produce flexible, adaptable, skilled and trainable young people for employment, both in the formal and informal sectors, as well as providing a progressive route for further and higher education and training.

For 2000/2001, the transition rate from junior secondary to senior secondary education stood at 49.1% (22% in 1994 and 37.6% in 1998).

Access to technical/vocational education and training (TVET) has been, and still is, very limited and many young people are excluded due to lack of physical training places. Technical colleges typically receive 100 applications for each training place. The adults and working population are excluded due to lack of flexible learning opportunities. The range of programmes has in the past also limited opportunities for training. At the level of craft training, an apprenticeship programme based on the German model was the main form of training. A requirement for following the training programme was a contract with sponsoring employers. The industrial base in Botswana is still very small and has not been able to support such a training model to any significant level. The apprenticeship scheme only absorbs 1.5 % of the school leavers.

The views of the employers were that the programmes were not meeting the needs of industry. A recent evaluation of the apprenticeship programmes, commissioned by the Ministry of Labour and Home Affairs, recommended that the scheme be modernized and made more flexible to accommodate ongoing training for workers as technology and skills requirements change. The Revised National Policy on Education (1994) directed that new programmes be introduced to cater for the growing number of school leavers to prepare for both formal employment and informal sector activities. The policy states that the government should cater for the initial broad-based training, while the employers should provide specialized skills training.

A study carried out by UNESCO/ILO in Botswana on vocational education and training needs stressed the need for 'educated multi-skilled technicians'. The report stated that those going into TVET should ideally have twelve years of basic education before embarking on skills training. Vocational programmes should provide a broad skills base as well as allow for specialization to make workers more versatile on the job and less prone to retrenchment. The need for higher-level skills and increased focus on technician training was also stressed.

A long-standing problem has been the poor status of TVET as compared to academic education. This is a real problem in Botswana and many people who took the vocational route found themselves in a *cul-de-sac* with regard to progression. This problem can only be improved through higher financial investment in TVET, the development and delivery of programmes of higher quality, and by ensuring that such programmes open opportunities both for employment and further and higher education and training.

The Botswana Technical Education Programme (BTEP), launched in 2001 by the Ministry of Education, has been designed to address the above problems while



incorporating all the essential features of a modern TVET system. The programme is college-based; it includes both project work and a period of work attachment; it was developed and is being implemented with the support of industry, includes a range of key skills modules in addition to the vocational core and elective modules; it is accessible and flexible, designed to a high international standard, includes strict quality assurance measures, prepares for first employment, opens doors for further and higher education, and provides a base for lifelong learning.

The key aim of the BTEP is to improve access to, and quality of, vocational education and training and to produce graduates who are employable or who have the ability and initiative to start their own businesses.

The Botswana Technical Education Programme will be initially offered in the following Nine (9) vocational areas and the other areas depending on the development of the curriculum. The nine vocational areas are:

1. Business
2. Hairdressing & Beauty Therapy
3. Building Construction
4. Hospitality and Tourism
5. Clothing, Design and Textiles
6. Information & Communications Technology
7. Electrical & Mechanical Engineering
8. Multi-media
9. Agro based

The BTEP is designed to develop a wide range of skills, knowledge and understanding of the vocational area of study and also vital skills that everyone needs to succeed at work and in life. These vital skills are incorporated into the curriculum as 'Mandatory Key Skills Units, namely: Communications, Numeracy, Entrepreneurship, and Personal & Interpersonal Skills:

The Ministry of Education is now preparing to step up technician-level training. The BTEP courses have initially been developed at foundation certificate and certificate levels (secondary level), but are now also being developed to advanced certificate and diploma levels (tertiary level). The courses will cover areas critical to the economy that are not covered by other ministries or organizations. Some technical colleges, currently offering secondary-level programmes, are already equipped to take on third level programmes. At the same time, a new institution specifically for training technician and technologists is being established, referred to as the College of Applied Arts and Technology.

The issue of access to TVET is being addressed in a variety of ways. The government is doubling the number of physical training places through an intensive construction programme. But this measure will still not be enough to meet the economic and individual demand for training. It will therefore be necessary to find new and more innovative ways of delivering education and training. The main



strategy is to use existing institutions more efficiently. A project is now being implemented for TVET institutions to be open and used throughout the day, evening, weekend and vacation time. The second approach will be to determine what needs to be learnt in a classroom or workshop and what could be learned by distance education. The provision of modular education and training (applicable to all the programmes under development) provides new opportunities in this regard. Students could cover a number of modules by themselves using libraries, learning resource centres, company training-centres and would only need to fill an institutional training place for a smaller number of modules. The plan is to combine this development with the use of information and communications technology (ICT), i.e. distance education delivered through interactive electronic means, using multimedia and video-conferencing as well as CD-ROMs, through Internet and Intranet direct access or download. A joint Government of Botswana / European Union project is in place to pilot this approach at the College of Technical and Vocational Education, a technical teacher training college, to be located in Francistown, designed with electronically linked remote learning centres in four other locations across the country.

Total enrolment in all secondary programmes in 2004 was 169,729, with 158,558 students enrolled in general programmes and 7% enrolled in technical and vocational programmes. The pupil-teacher ratio was 17:1 in lower secondary, and 11:1 in upper secondary.

### **Assessing learning achievement nationwide**

Evidence gathered by the first National Commission on Education (NCE) revealed that actual learning achievement of many of those reaching Standard VII under the automatic promotion system was very low and that many children at that level were virtually illiterate. The percentage of those who could not read the most simple sentence was as high as 30% or 40%. Because there was no check on performance, both children and teachers in the lower grades had no means of measuring learning attainment.

Access to basic education increased rapidly in the 1980s, due to, among many factors, the increase in the number of schools that were nearer to communities and the abolition of school fees. With more children in school, the system needed to pay closer attention to the quality of basic education. Hence, both the National Policy on Education (NPE) of 1977 and the Revised National Policy of Education (RNPE) of 1994, mandated assessment of learning achievements.

The four external examinations (Standard IV attainment test, Primary School Leaving Examination, Junior Certificate Examination and Botswana General Certificate of Secondary Education) are developed in partnership with classroom teachers and curriculum developers, and administered by the Examinations Research and Testing Division (ERTD).

At the classroom level, teachers are encouraged to keep a performance record of all learners, and to appraise their achievements against the skills that they should achieve at each level as stipulated in the curriculum. Efforts to synchronize continuous assessment procedures, so as to include classroom scores when reporting learner achievements at the national level, are underway.





Communities and district authorities also take a keen interest in how their schools perform in external examinations in comparison with other schools within the district, and schools that show evidence of good learning achievement are rewarded. Comparisons on learning achievement are also made across districts. This information is used for policy-making and planning purposes at the national level. On the whole, learners that are enrolled in private schools perform better than those enrolled in government schools do.

#### *Standard 4 Attainment Test*

This test serves as a checkpoint to enable the teachers to diagnose the learning problems of children in order to plan remedial measures. The tests cover work in the four levels of the lower primary syllabus. Up to now Standard four pupils have been writing attainment tests in English, Maths and Setswana.

Examinations subject officers invite teachers in their subject areas to develop the tests and their marking keys. The tests are then printed and dispatched to the Regional Education Offices where they are in turn distributed to schools. The teachers administer the tests and mark them. With guidance from Primary Department, the schools look at the test scores to determine who needs remedial teaching and who can proceed to Standard Five.

To date, information on the success of using the Standard IV attainment test for monitoring learning achievement has been very scanty. Corroborating sources of evidence are the high Standard IV repetition rates—as compared to repetition rates in other grades—that are published in the Education Statistics Bulletin. It is presumed that these rates are a result of the forced retention of pupils who do not attain the pass mark of 50%. The survival rates to Standard V can therefore be used as a proxy for actual learning achievement measures for the NPE implementation period. In 1996, the survival rate to Standard V was 85.7% (83.7% for males and 87.6% for females). In 1998, the survival rate to Standard VII was 85.7% (83.7% for males and 87.6% for females). These are pupils who enrolled in Standard I in 1992 and sat the criterion-referenced PSLE at the end of the 1998 school year.

#### *Primary School Leaving Examination (PSLE)*

The PSLE are administered at the end of seven years of schooling. The introduction of basic education programme and the availability of places at junior secondary level ended the selection role of PSLE. Its role has changed to diagnosis of weaknesses in student achievement with a view to assist the teaching and learning processes at Junior Certificate. Achievement of students in national examinations is reported using dimensions which indicate student performance in different cognitive levels across the syllabus content. This gives more information than the previous system of reporting in subject and overall grades.

The PSLE consists of five subjects: *Setswana*, English, mathematics, science and social studies. Criteria for mastery of each subject were set during the test development process. For reporting purposes, letter grades are attached to criteria of mastery. The percentage of pupils that attained a “C” criteria or higher in each of the five PLSE subjects was between 65% and 85%. Data shows that, for all PSLE subjects, a higher percentage of students in the urban compared to rural areas attained



the criteria of “C” or better. The order of differences from highest to lowest is English (15.2%), science (12.7%), mathematics (11.3%), social studies (8.9%) and *Setswana* (2.9%).

Urban and rural differences in the percentage of pupils that attain the criteria of “C” or better can be explained by a number of factors. The highest difference is in English, while the lowest is *Setswana*, both language subjects. The most plausible explanation for the differences is the fact that a higher percentage of children in the urban areas hear and/or use English everyday. Some are fluent in English either because they use it as their first language, or because they attend English-medium schools. Furthermore, English is the medium of instruction and the language of the examination for the other three subjects. This means that mastery of English affects all subjects except *Setswana*.

With the introduction of the criterion-referenced test, the results of the PSLE are primarily used to provide a student entry profile at the beginning of the junior secondary phase and secondarily as a selection mechanism since a 100% progression rate to the junior secondary level has not yet been achieved. However, the introduction of a criterion-referenced PSLE and the training of teachers, other educators and stakeholders on criterion-referenced testing procedures, was only a first step in a series of actions that have to be undertaken. If learning achievement is to improve in basic education, educators at the JCE level will have to be oriented in criterion-referenced testing procedures.

#### *Junior Certificate Examination (JCE)*

The JCE is administered at the end of the third year of the Junior Certificate (JC) course to measure the achievement level of candidates at this point. The examination is used for two purposes:

1. as a tool to select students who proceed to the next level of education, which is the senior secondary;
2. as an assessment mechanism that measures the extent to which basic competencies and skills have been acquired. This is particularly important, as the end of the JC is a terminal point for the majority of Botswana students and hence employers have to know what exactly they are capable of doing.

Currently the criterion is norm-referenced but there is a move towards it being criterion-referenced as dictated by policy. Test blue-prints and assessment procedures appropriate for reporting the performance in dimensions or subject components as well as in subject and overall grades have been developed.

The examination mostly assesses through terminal written papers to determine the achievement levels of the candidates. Every subject has at least one written paper. In addition, project work and practical examinations are used for aspects of the syllabus that cannot be assessed by pen and paper.

The division currently offers examinations for twenty-one subjects at this level, and the subjects make a total of fifty-seven papers. The format of questions includes multiple-choice, short-answer and structured questions.

### *Botswana General Certificate of Secondary Education (BGCSE)*

The BGCSE is the localization of the Cambridge Overseas School Certificate (COSC). The localization process includes marking, development of syllabuses, setting of papers, administration, grading and grade reviews.

## Higher education

The University of Botswana was inaugurated in July 1982. Until October 1975, the University College in Botswana was part of the Regional University of Botswana, Lesotho and Swaziland. After the withdrawal of Lesotho, Botswana and Swaziland decided to develop a joint university.

The development of the University of Botswana and Swaziland broadly conformed to this plan until the two university colleges became autonomous and no longer planned jointly. However, co-operation and exchange of students between Botswana and Swaziland continued.

The University of Botswana is an autonomous institution and comprises six faculties (business, education, engineering and technology, humanities, science and social sciences), the School of Graduate Studies and three academic centres.

Post-secondary education in Botswana is offered at two levels. The first level comprises the teacher-training colleges and a range of vocational and technical training institutions. A number of these institutions—such as the Institutes of Health Sciences and the Colleges of Primary Education—are linked to the University of Botswana through the affiliated structures that have been established to oversee academic quality. The second level (tertiary education) comprises the University, the Botswana College of Agriculture and the Colleges of Education of Molepolole and Tonota. Enrolment figures for the academic year 1997/1998 are summarized in the table below:

### **Enrolment at the post-secondary level (1997/98)**

<b>Institution</b>	<b>Number of students enrolled</b>
Teacher training colleges	999
Vocational and technical training centres	8,830
University of Botswana	8,007
College of Agriculture	392
Colleges of education	1,261
<b>Total</b>	<b>19,489</b>

*Source:* Central Statistics Office of Botswana, 1999.



The University of Botswana offers a broad range of academic programmes—mostly at the under-graduate level. These include bachelor's degrees in accounting and business administration, engineering, agricultural science, law, library and information studies, nursing, social work, and most of the basic arts and sciences. First-degree courses take four years—five years in the case of law. The normal requirement for admission to bachelor's degree programmes is the Cambridge Overseas School Certificate. At the post-graduate level, one-year post-graduate diploma courses and two-year master's degree programmes are offered to bachelor's degree holders.

The University also offers professional and career studies leading to a diploma or a certificate. The admission requirement for diploma programmes is normally a minimum of a third division ("C" pass) in the Cambridge Overseas School Certificate or its equivalent. The normal requirement for admission to certificate programmes is a minimum of a pass in the Junior Certificate Examination. It should be noted that these requirements do not guarantee admission. Usually, the duration of full-time study for a diploma is two years and for a certificate, one year. An additional year is required in the case of part-time study.

In 1998/1999, total enrolment at the University of Botswana amounted to 10,161 students, of whom 7,946 were on a full-time basis and 2,215 on a part-time basis. A total of 9,523 students were enrolled in under-graduate courses, and 638 were studying at the post-graduate level. Staff included 568 faculty members and 1,659 support staff. Total income of the University for 1998/1999 amounted to P291,993,894. The Government provides the majority of the University's revenue. Only a small proportion of the qualified and eligible age group has access to the University; nearly two thirds of those who actually apply are turned away for lack of places. In 2004, total enrolment in higher education in Botswana was 12,982 students.

## Special education

Disadvantaged groups in the context of Botswana are people with various forms of disabilities, and people who live in remote areas. Other groups of disadvantaged people include learners from poor socio-economic backgrounds, HIV & AIDS orphans, and girls who drop out of school due to early pregnancy..

In 1991, the National Policy on Education did not state any explicit goals on the provision of education for persons with special educational needs. The need for organized special education services became a concern of the Government with the Revised National Policy on Education (RNPE) of 1994, which provided a strategy for implementing special education activities. The strategy began with transforming the former Special Education Unit under the Department of Primary Education into a stand-alone Division of Special Education, and recasting its role as a division that supports all levels of education. This Division is charged with the responsibility of providing planning, advisory, and administrative services for children with disabilities across all levels of the education system. One of its goals is to mainstream special education services as part of the regular education system, and, where necessary, set up separate special education units. It has also mounted several programmes that include identifying students with learning abilities, placing these students in relevant educational institutions, and providing special materials and assistance where necessary.



The RNPE delineated explicit goals for the provision of education for children with special educational needs, and made recommendations for the alleviation of difficulties for other populations. The goals that were formulated are:

- to ensure that all citizens of Botswana, including those with special needs, have equal educational opportunities;
- to prepare children with special needs for social integration, as far as possible, with their peers in ordinary schools;
- to ensure a comprehensive assessment that is based on each child's learning needs, and not on group norms, and which is followed by individualized instruction;
- to promote early identification and intervention that will ensure maximum success of the rehabilitation process;
- to ensure support and active participation of the students' parents and community through an education and information campaign.

Actions planned for the implementation of the recommendation include the revision of the curriculum and learning materials. The proposed curriculum will be skill-based and non-prescriptive, which means that teachers will receive prototype materials, which they will adapt to their local contexts in order to incorporate knowledge and experiences of learners. This has implications for, among others, pre-service and in-service teacher training in adapting curriculum materials. All these actions were implied in the sub-sector goals, but there were no specific targets and time frame for achieving the targets.

One of the main problems linked to educating children with special needs is identification. In some schools, educators can identify children with physical disabilities, but are not trained to identify children with special learning needs. Indeed, identification of learners with special needs is a specialized area that needs highly specialized knowledge. Identification and assessment of disabilities is provided through the Central Resource Centre (CRC).

Visually Impaired learners include those who are totally blind and those with low vision. Learners with visual impairments follow the same curricula as their sighted counterparts with necessary adaptations and modification. They access the curricula through the use of Braille, large print, tape recordings, assistive / adaptive technology and optical devices. Children with visual impairments are integrated in the mainstream schools.

Children with hearing impairment are placed in special schools and units for children with hearing impairment. Students follow the same curricula followed by non-hearing impaired students except that communication for them is through Sign Language and/or Total Communication.

Children with speech and language impairments are placed in the regular schools except for those children who may have other conditions such as intellectual



disabilities. These children access the same curriculum followed by regular school children, with modifications and adaptations of the curriculum where necessary. Therapy is provided at the CRC in the areas of articulation, feeding, stammering, etc.

Children with mental handicaps are either placed in special schools, units, or mainstream schools. Stimulation / therapy is provided for the children at CRC, as well as counseling for parents. There is no specific curriculum for children with mental handicaps at the moment. Teachers individually modify and adapt the curriculum to suit the needs of children with mental handicaps. Their programmes cover Activities of Daily Living (self-help skills, social skills and communication skills) and basic academic skills such as reading, writing and numeracy. Through the help of specialist teachers some children are integrated into regular classes and as such sit for examinations, while some with severe mental handicaps do not.

Children with learning disabilities are assessed to determine their level of functioning. Placement for these children is in the regular schools with remedial teaching. The schools are expected to develop Individualised Educational Programmes (IEPs) through the assistance of the Senior Teacher Advisor - Learning Difficulties (STA-LD). Children follow the same curriculum and sit for the same examinations as regular school children.

For students with physical disabilities, joint consultation is done by the Occupational Therapist, Educational Psychologist, Rehabilitation Officer and the Itinerant Teacher for appropriate intervention, support and placement. Schools are advised and supported on issues of accessing the curriculum, physical environment and any other necessary support needed by the students.

The education system is facing a serious problem of school dropouts due to teenage pregnancy. Even though school participation rates between boys and girls are about equal, retention and graduation rates are skewed in favour of girls. In response to this problem, government introduced a new policy that encouraged young mothers to re-enter school soon after their child's first birthday. A study has shown that girls do not take advantage of the provision of this policy because of a number of reasons, one of which is that school is a hostile environment to young mothers. One of the programmes that have been initiated to provide support for young mothers is the Basic Education for Pregnant Students project, known as *Diphalana*, supported by UNICEF.

*Diphalana* is aimed at educating students to prevent pregnancy and at providing uninterrupted basic education for girls who would otherwise drop out of school due to pregnancy. Students who participate in this programme are pregnant teenage girls who have been encouraged to continue schooling, and young mothers who have come back to re-enter school after a recent pregnancy. The main focus of the project is providing life-skills education. This is in view of the fact that pregnant girls are at a higher risk not only of falling pregnant again, but also of contracting sexually transmitted diseases including HIV & AIDS.

The Division of Special Education conducts sensitisation/awareness workshops on special education for teachers at both primary and secondary levels.





## Private education

Traditionally, early childhood care and development in Botswana has been provided by the private sector together with NGOs and local communities. A large number of private individuals offering day-care programmes have benefited from the government's financial assistance. In 1996, there were about 350 private day-care centres, but little information is available on the nature of these centres, their location, and the quality of their facilities.

In 1997, the national average of new entrants into Standard I that had attended some form of organized early childhood development programme was 27%. Of those who were enrolled in private schools, 92.8% had pre-primary experience, while only 24.8% of the pupils in public schools had participated in pre-primary education.

At the primary level, of the 740 schools that were registered in 1999, only sixty-six (or 8.9%) were privately-owned, while 665 (or 89.9%) were government schools and the remaining nine (or 1.2%) were government-aided schools run by the communities.

Overall, the government has increased its co-operation with the private sector in the aim of realizing its educational objectives and obtaining additional funding. Partnerships between the government, the private sector and NGOs have been established for the provision of education for children with special needs. In addition, the education policy provides for easy registration of private vocational colleges.

With regard to learning achievement, pupils in private schools often perform better. The quality of teaching and the learning environment seem to stimulate better performances. One of the reasons why there are more qualified teachers in the urban areas than in the rural areas, is that there are more private English-medium primary schools in the urban areas, and these employ more academically and professionally qualified teachers than in public schools.

## Means of instruction, equipment and infrastructure

Out-of-School Education programmes provide access to basic education for children and adults who are unable to access the formal Basic Education Programme.

Strategies addressed to improve learning achievement have focused, among other factors, on improving material and physical facilities. The 1994 Revised National Policy on Education recommended that an adequate number of classrooms be built in each school. In addition, each primary school was to be equipped with an administration block, a library, a fully equipped science room, and a resource centre. Additional subject specific rooms were to be included in junior secondary schools. All buildings in education institutions were to be accessible to all students, including students with physical and/or learning disabilities.

To increase access at secondary level over 100 schools were built between 1990 and 1999. For instance, in 1994, there were 165 Community Junior Secondary schools and this figure has now risen to 205. At senior secondary level, in 1994 there



were 23 schools (government and government-aided). Four schools have since been opened bringing the total to 27. An upgrading programme of all the senior secondary schools was started in the mid-90s, and its completion is expected by the end of the current National Development Plan. All schools are being provided with additional classrooms, laboratories, hostels (where applicable), teachers' houses, and equipment including computers.

The Revised National Policy on Education recommends that all students should be exposed to computer awareness at the junior and senior secondary levels. The Ministry of Education has managed to build one computer laboratory in each of the secondary schools. Notwithstanding, only thirty-six of the junior schools and eight of the senior schools have been equipped with computers. The challenge is to equip the remaining schools as well as to be able to replace computers, as they become obsolete. In addition, one computer laboratory with twenty computers installed is not adequate to cover all students, especially taking into account that some of the schools have enrolments exceeding 1,500 students. It will become necessary very soon to provide more computers in order to make exposure to IT more meaningful and beneficial to all the students.

## **Adult and non-formal education**

Officially launched in 1981 under the responsibility of the Ministry of Education's Department of Non-formal Education (DNFE), the National Literacy Programme (NLP) was the result of the work of a task force set up to investigate alternative ways of providing basic education skills for the illiterate population.

Throughout the 1980s, enrolment in the NLP was at its highest between 1984 and 1986. This was the period when the impact of the programme was beginning to be felt. However, there was a drop in enrolment in 1988, possibly due to the drought of 1987. Overall more women than men enrolled. However, the preliminary figures of the 1991 census indicated that 31% of the adult population of 16 years of age and above was still illiterate. The census data also showed that nearly three quarters of the adult population of the same age group lacked literacy skills or did not complete their primary education. For those wishing to undertake part-time learning beyond the basic cycle of school education, there were relatively fewer opportunities for further general education.

In 1991, the DNFE adopted the following objectives from a list of goals set for the Literacy Decade by the world community:

- To eliminate illiteracy or functional illiteracy through education in rural areas and urban slums, in favour of women and girls and among groups having special educational needs;
- To increase public awareness of the scope and nature of illiteracy as well as means and conditions for combating it. In particular, an effort should be made to alert public opinion to the rate of illiteracy among adult women and its implication for the well-being of children, and the association between



illiteracy on the one hand, and poverty, under-development, and economic, social and cultural exclusion on the other;

- To increase popular participation, co-operation and solidarity in efforts to combat illiteracy, particularly through activities of the Government, NGOs, the private sector, volunteer organisations, and community groups;
- To launch and implement a plan of action for the eradication of illiteracy by 2000, and to address issues of critical importance to the progress of literacy such as reducing primary school drop-out rates and establishing post-literacy programmes to prevent relapse into literacy.

A number of activities were planned for the literacy decade under the NLP. These included the Literacy at the Workplace project, income generating projects, village reading rooms, and the English as Second Language programme.

The “Literacy at the Workplace” project, though conceived in the 1980s, started in 1991 as an organized initiative. The purpose of this project was to reach illiterate people at their places of work. The general operational strategy was that the DNFE, along with the target organization, would work together to identify illiterate workers. The responsibilities of the organization were to provide space or identify a venue where classes would be held, arrange a class schedule and commit to releasing the employees to attend classes, and provide payment for the teacher. The DNFE identified and trained teachers, and provided teaching materials. A total of 51 organizations have participated in this project since its inception in 1991. To date, there have been 580 participants.

The “Income Generating Activities” programme is charged with the responsibility of imparting productive and business management skills to people who participate in the NLP as a means of improving their livelihood. This affords them the opportunity to use their literacy and numeracy skills in life situations, thereby avoiding relapsing into illiteracy.

“Village Reading Rooms” is a joint project between the DNFE and the Botswana National Library Service. It was conceived in the 1980s as a post-literacy programme to afford the new literates an opportunity to continue reading.

The English as Second Language programme is an outcome of the 1984 and 1987 evaluation studies of the NLP. The evaluation revealed a need for the provision of English as a second language for communication and further studies.

The mass media has also been utilized for disseminating training and support materials in education. For instance, the local newspapers, *Mmegi* and *The Guardian*, carry inserts that address topical issues on education, and/or offer revision materials to learners for completing classes. The medium of radio, especially the state-owned Radio Botswana, also has a wide variety of radio programmes that are aired for their educational value. These include instructional support programmes that are designed and produced by the School Broadcasting Unit of the Department of Curriculum Development and Evaluation. The programmes publicize and support literacy



activities and agricultural events, and offer agricultural education. Some programmes have been designed recently for the dissemination of messages about HIV & AIDS.

'Brigades' education also provides an alternative to the more academic junior secondary education. The Brigades are small autonomous community-based establishments involved in vocational training and development projects. There were 23 Brigades operational in 1993. The DNFE has begun a programme to offer academic skills training and a Junior Certificate course by correspondence. This course was designed and introduced for students who dropped out of the formal education system, as well as for adults.

There are still some problems to be solved in the field of non-formal education. Those who pursue this type of education have the same goals and desire to be empowered through access to new knowledge, skills and attitudes and to have comparable academic qualifications. The RNPE has provided the institutional support for distance education and for pursuing education goals through other non-formal means. However, the school-like mode of delivery that is utilized for non-formal education is not very user-friendly. Neither is the pedagogy that borrows heavily from traditional classroom practices. Another problem is that some types of learning support systems that the school population enjoys are not extended to non-formal education. Often the development of adult-friendly curricula and learning materials is left to non-curriculum specialists and assessment frameworks that are not suited for literacy and distance education are imposed to this sub-sector. Policy direction and strategies to be considered in this area include providing tax incentives for companies that participate in programmes that promote workplace literacy.

In 1993, the DNFE and the Central Statistics Office conducted the first literacy survey in the history of the country. Its objectives were: to measure gender and age literacy differentials; to assess the impact of literacy programmes and factors relating to accessibility of educational facilities; to identify the most pressing needs in terms of educational policies and provision in order for priorities to be set for the future direction of adult literacy programmes; to assess socio-economic and cultural factors that may be associated with literacy and problems in the adult population; and to assess factors influencing school attendance.

Literacy was defined as "the ability to read and write in *Setswana* or English, and the ability to carry out simple arithmetic computations in everyday life". Literacy tests were administered to the population assumed to be illiterate, the criterion being that the respondents should be citizens of Botswana aged 12–65 who never attended school, or who left school before Standard V. Respondents who attained a pass mark of 50% or more were considered literate.

The national literacy rate for adults, i.e. the rate for the age group of 15 years and over, stood at 68.9% in 1993. The literacy rate for males was 66.9%, while the rate for females was 70.3%. The general pattern is that literacy rates decline with age. Figures show that people aged 15–24 have the highest literacy rates (89.5%), while people aged 45 and above have the lowest (35.6%). Younger females had higher literacy rates than males (92.3% compared to 85.8% for the 15–24 age group), while older males had higher rates than females (36.2% compared to 35.0% for the age group 45 years and above).



As it was expected, literacy rates in the urban areas are higher than in the rural areas. There is a difference of 17% between the overall literacy rate of the urban and rural populations (81.5% compared to 64.5%). However, for the younger age group of 15-24, the gap between urban and rural literacy rates is significantly lower (92% and 89.4%, respectively).

In 1994, the RNPE made a number of recommendations pertaining to the reduction of illiteracy. Actions targeted in these recommendations were to continue and expand the activities of the NLP, to review the salary level and employment conditions of literacy group leaders, to conduct a national household literacy survey, and to evaluate the NLP as part of the survey. It also recommended to give priority to post-literacy activities by developing literate environments that support productive activities in traditional agriculture and the informal sector, and to introduce a basic education course for adults offering an academic qualification equivalent to the Primary School Leaving Examination.

In addition, the RNPE made a number of recommendations pertaining to imparting skills to out-of-school youth and children, and for promoting lifelong education for adults in an attempt to improve their lives. The goals of out-of-school education were to establish a learning society in which education is seen as a lifelong process and to guarantee universal access to basic education for school-age children and for adults to promote equity and social justice.

The strategies for assisting young people and adults include increasing the number of educators in the out-of-school education sector, establishing resource centres for those working in out-of-school education, developing a policy of using school facilities for out-of-school education activities, funding and monitoring these activities and conducting research and evaluations of the existing programmes. The RNPE also recommended a shared use of all educational facilities in order to get maximum utility from facilities such as classrooms and resource centres.

A policy should be developed in response to the threat of HIV & AIDS in school. Botswana could follow the example of other Southern and Eastern African countries that have declared a national disaster and have charged the education sector with a more prominent role in the fight to reverse the trend on HIV & AIDS infection rates. Life Skills Education programmes, possibly with peer-education mode of delivery, should be developed and introduced at all levels of schooling as a matter of priority. This could be done after a series of public consultations and public debates on strategies that can be adopted. All sub-sectors of education should have an HIV & AIDS focal point, and adapt the Life Skills programmes for the target population. An HIV & AIDS school policy should be developed as a matter of urgency to help pupils and students who are infected and affected by HIV & AIDS.

The Botswana College of Distance and Open Learning (BOCODOL) was created by an Act of Parliament in December 1998 to improved access to learning opportunities on a nation-wide scale for the out-of-school young adults. Its creation marked a milestone in the development of Education for Botswana and a significant step towards realising Botswana's Vision 2016, which emphasises the elimination of poverty through the provision of knowledge and skills.





BOCODOL currently offers secondary school courses, i.e. Junior certificate (JC) and Botswana General Certificate in Secondary Education (BGCSE). The College is now starting to broaden the types of courses it offers to include vocational, professional management, and other programmes. The open learning method of BOCODOL seeks to break down the barriers to personal development by providing flexible learning environments, enabling people to study what is relevant to their needs, at a time and place convenient to them. The learners study from specially designed materials, which use a combination of different types of media, methods and communication technologies, rather than through direct face-to-face mode of instruction as in conventional schools. In this way, distance education allows them to study at home or in their workplace, at their own pace, without having to leave their families or job commitments.

## Teaching staff

The highest academic qualification for the majority of primary school teachers during the 1977-1994 period was the Junior Certificate, obtained after nine or ten years of education. This was also the minimum qualification for entry into the teaching profession. A number of teachers did have a Senior Secondary School Certificate (SSSC) qualification, while a few others had the Primary School Leaving Certificate as their highest academic qualification.

An important component of the primary teaching force in the 1990s has been the contribution of National Service participants, also known as *Tirelo Sechaba* participants (TSPs). Many students who had successfully completed senior secondary education were placed into the different government sectors, such as the education sector. In 1997, there were 1,523 TSPs in the teaching force. In most urban schools, they were not solely responsible for a class, but paired with an experienced teacher or teamed up with other TSPs, with whom they shared their teaching duties. Even though they provided an invaluable service and some relief where shortages existed, *Tirelo Sechaba* participants were not necessarily part of the teaching establishment.

The 1994 Revised National Policy on Education (RNPE) recommended that the minimum academic qualification for admission into the teaching profession be raised to the SSSC or its equivalent.

In 1997, the primary school teaching force was made up of 12,977 teachers and only 17.1% had the required minimum academic qualification—the SSSC. By contrast, the percentage of teachers who had attained the minimum academic qualification of the Junior Certificate in the old dispensation was 93.7%.

The Department of Teacher Training and Development was created as a response to the mass expansion of primary and junior secondary schools. Its primary purpose is therefore to give leadership and direction to pre-service and in-service teacher training. Historically, the training of primary school teachers was primarily the responsibility of the teacher-training colleges (TTCs). Over the years, these colleges have awarded four different kinds of teaching certificates, i.e. the Elementary Teacher Certificate, the Primary Lower Certificate, the Primary Higher Certificate, and the Primary Teacher Certificate. All TTCs have recently been upgraded to





colleges of education following the 1994 RNPE recommendations on raising teacher qualifications to the diploma level. The colleges of education and the University of Botswana currently share the responsibility of training and certifying teachers. Four colleges train primary school teachers, while two are responsible for the training of teachers at the junior secondary level. The minimum requirement for teacher trainees for both primary and junior secondary colleges of education is the SSSC.

After three years of full-time study, colleges of education award a diploma (equivalent to an associate degree) allowing the holder to teach either in primary or junior secondary schools, while the University of Botswana awards a bachelor's degree in education.

In 1997, the percentage of primary school teachers who were certified to teach according to the new national standard—a diploma or higher—was only 3.7%. In urban areas, this percentage was higher (7.9%) and lower in the rural areas (2.8%).

A recent study showed a general trend of an excess of trained teachers in urban areas, and a deficit in rural areas. Four urban areas had trained teachers in excess. Orapa and Jwaneng, the towns with the highest number of trained teachers, are diamond-mining towns, which have privately-run schools. The mining company is responsible for the training of teachers, and staffing the schools. A wastage of resources is recorded for Gaborone, the capital, and Lobatse. A possible explanation for this excess could be that teachers were placed or transferred to rural areas and could not take those placements for a variety of reasons. Another explanation for this disparity could also be that the more educated teachers have more choices available to them—in terms of alternative employment—hence they tend to leave public schools for private schools in urban centres.

Following the recommendation to have the Senior Secondary School Certificate as the minimum academic qualification to enter training for primary school teachers, a new programme for upgrading the qualifications of primary school teachers to a diploma level has been finalized, upgraded from a two-year Primary Teachers Certificate (PTC) to a three-year Diploma in Primary Education. The Centre for Continuing Education at the University of Botswana has developed a distance education programme. The curriculum content of the programme is aimed at improving both the subject matter and the professional qualification of teachers.

Some further improvements in teacher training and development following the Revised National Policy in Education have been:

- incorporation of pre-primary education in the pre-service teacher-training curriculum;
- ongoing in-service teacher training programmes, both short and long-term;
- institutionalisation of Annual Teachers awards to teachers who have demonstrated excellence and commitment to the Teaching Profession. These are presented to deserving candidates on Botswana Teachers day, inaugurated in 1999.



Teacher support for professional development is provided through a network of 12 Education Centres, which are located at strategic points in the country so that in-service activities could be done near to where the teachers are.

Eleven of these 12 Education Centres have custom built facilities. The Centres have the capacity to provide residential courses. Each Centre is staffed with In-service Education officers whose responsibility is to provide teachers with the necessary professional support for effective implementation of the school curriculum.

The programmes run at the Education Centres are designed to meet the needs of schools. Staff Development Committees were established in the schools to act as liaison organs for the professional development of teachers. In most instances In-service Education Officers conduct school based workshops whereby they work with teachers in their regular environment. The basic functions of the Education Centres are:

- To provide an effective and coherent in-service education programme and to support the implementation of government policies and recommendations by liaising with all stakeholders.
- To identify the needs of schools and to be responsive and sensitive to their requirements and difficulties through provision of support services.
- To develop training programmes that will foster the professional development of all teachers in order to make them more effective classroom practitioners.
- To promote autonomous school based staff development.
- To sensitise schools to new developments in education and to systematically monitor and support them.
- To provide opportunities for in-service officers to update and upgrade their professional skills and qualifications.

In recognition of the contribution of teachers towards the development of Botswana, Dr G.K.T Chiepe, the erstwhile Minister of Education declared the first Thursday in June every year Botswana Teachers Day. This is a day when, among other activities, recognition is given to all those involved in the teaching profession for their services to the education system over the years. Henceforth this day has been celebrated yearly since 1999. The awards are all Presidential awards delegated to the Minister for Education for presentation to teachers during this day. The four categories of medals awarded include:

1. Long & Distinguished Service Medal in recognition of teachers who have completed 30 or more years of continuous and reputable service. Up to ten (10) teachers may receive this honour in any one year.
2. Meritorious Service Medal for those who have worked exceptionally well in and outside of the classroom. An example of outstanding work in the classroom would be new methods of teaching or innovative classroom practices. Meritorious service medal may be awarded to twenty (20) teachers each year.



3. Silver Jubilee Medal to recognise those with continuous and reputable 25 years of service. A total of fifty (50) Teachers receive this award yearly.
4. Mid-Career Medal which is awarded to those teachers who have rendered 15 years of reputable service. Up to one hundred (100) teachers can receive this award each year.

The selection of teachers for these awards is a transparent exercise which involves all stakeholders across all levels of the Education system.

In 2004 the total teaching staff was 12,717 in primary schools, 6,716 in lower secondary, and 4,924 in upper secondary.

## Educational research and information

Information is not available.

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*For updated links, consult the Web page of the International Bureau of Education of UNESCO: <http://www.ibe.unesco.org/>*