



World Data on Education Données mondiales de l'éducation Datos Mundiales de Educación

VII Ed. 2010/11



Botswana

Updated version, August 2010.

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 (RNPE) 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 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.

Currently, the major policy document is the *Vision 2016*, which is based on the four principles of national development plans (e.g. democracy, development, self reliance and unity, designed to promote *Kagisano*) and is consistent with other policies such as the RNPE and the National Development Plan 9 (2003-2009). *Vision 2016* spells out a number of strategies for the development of critical sectors such as education, economy, communities and culture. In regard to the education sector, *Vision 2016* states that, by the year 2016, Botswana will have a system of quality education that is able to adapt to the changing needs of the country as the world around changes. Improvements in the relevance, the quality, and the access to education lie at the core of the Vision for the future. The education system will empower citizens to become the best producers of goods and services. It will produce entrepreneurs who will create employment through the establishment of new enterprises. Public education will be used to raise awareness of life skills, such as self health care.

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. The Act was amended in 2002 to incorporate



tertiary education and to give Botswana Examinations Council the authority to conduct the examinations as an independent authority.

The **Vocational Training Act No. 22** of 1998 provides for the establishment of the Botswana Training Authority (BOTA) as a parastatal body under the Ministry of Labour and Home Affairs.

The **Tertiary Education Act** of 1999 regulates the sector and provides for the creation of the Tertiary Education Council, whose functions include coordination, quality assurance and funding of tertiary education.

The **Botswana Examinations Act No. 11** of 2002 assigns to the Botswana Examinations Council (BEC) the function of conducting schools examinations and any other examinations for the Ministry and issue certificates in respect of such examinations.

Administration and management of the education system

The Government of Botswana, through the **Ministry of Education and Skills Development** (formerly, 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. The new organizational structure of the Ministry of Education was approved in 2008. The responsibilities and functions have been rationalized and streamlined into four major groupings, namely: basic education (including the departments of pre-primary and primary education; secondary education; out-of-school education and training; technical and vocational education; and curriculum development and evaluation); regional operations; education support services; and cooperate services. These groupings will enable the Ministry to use its resources more efficiently as well as improve the quality of services to its customers.

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 (NDP), 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** 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 early childhood care and development (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 coordinate all pre-primary education programmes. The strategy adopted for pre-primary education by the Ministry of Education is to assume a coordination 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.

The management of primary education is the joint responsibility of several departments of the Ministry of Education. The Primary Education Department, catering for the age group 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.

Based on the decentralization policy, the **Regional Offices** are expected to implement educational policies and ensure sound management and supervision of schools in a region. Each region will be headed by a director who will supervise all the Ministry's departments at regional level. The regional structures will play a crucial role in the development and delivery of education by supervising and coordinating all functions at regional level relating to curriculum implementation, delivery of out of school programmes, special support services as well as the technical services.

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 government vocational training centres and 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 coordinates special education activities at all levels. Its overall aim is to increase access to education for learners with special educational needs. An important development in recent years has been a growing recognition that children with special educational needs should be included within the general education environment commonly referred to as inclusive education. Botswana like other countries is gradually moving away from segregatory practices of special schools towards inclusive education. The move is facilitated by the implementation of the new policy (RNPE) which has given priority to the education and training of children with special educational needs. The Division of Special Education has been working with schools with a view to establishing School Intervention Teams. These teams of teachers with a common vision appointed by the school head advise and support other teachers in meeting the educational needs of all the children. The teams assess and recommend appropriate teaching strategies for children with special educational needs.

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 DNFE and the **Botswana College of Distance and Open Learning (BOCODOL)** are the main providers of non-formal education. BOCODOL is a parastatal body established in 1998. It provides basic education courses (at Junior Certificate level courses) through the distance education mode. To ensure substantial coverage, it has established five regional centres in strategic areas to further decentralize its services to maximize access. Furthermore, to ensure quality provision, BOCODOL engages part-time tutors who are qualified in courses they teach.

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.

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, coordinates 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 **Botswana Training Authority (BOTA)** was established in 2000 as a parastatal (autonomous) entity under the Ministry of Labour and Home Affairs. The mission of BOTA is to coordinate an integrated accessible vocational training system that meets the needs of the learners and industry through the development of standards, quality assurance, policy advice, monitoring and evaluation. BOTA has introduced a system of accrediting vocational programmes both within and outside the mainstreams of provisions, and is also responsible for the National Vocational Qualifications Framework that serves as a guide to various providers.

The **Tertiary Education Council (TEC)** was established as a parastatal (autonomous) body in 1999 and began its operations in June 2002. Its mission is to plan, develop and coordinate a well-resourced and comprehensive tertiary education system contributing to Botswana becoming a knowledge-based society. The main functions include policy, planning, quality assurance and funding of tertiary education. Jointly with the Ministry of Education, the Council is expected to implement the new tertiary education policy as defined in the Government White Paper No. 37, *Towards a Knowledge Society* (approved by the National Assembly in April 2008), which provides the policy direction for the transformation and restructuring of the tertiary education sector and the institutional landscape. The creation of a Human Resource Development Council is also envisaged.

The **Botswana Examinations Council (BEC)** is mandated to conduct schools examinations and any other examinations for the Ministry and to issue certificates in respect of such examinations. The main action area of BEC is the development,



administration, accreditation and certification of schools examinations in the primary and secondary education subsectors.

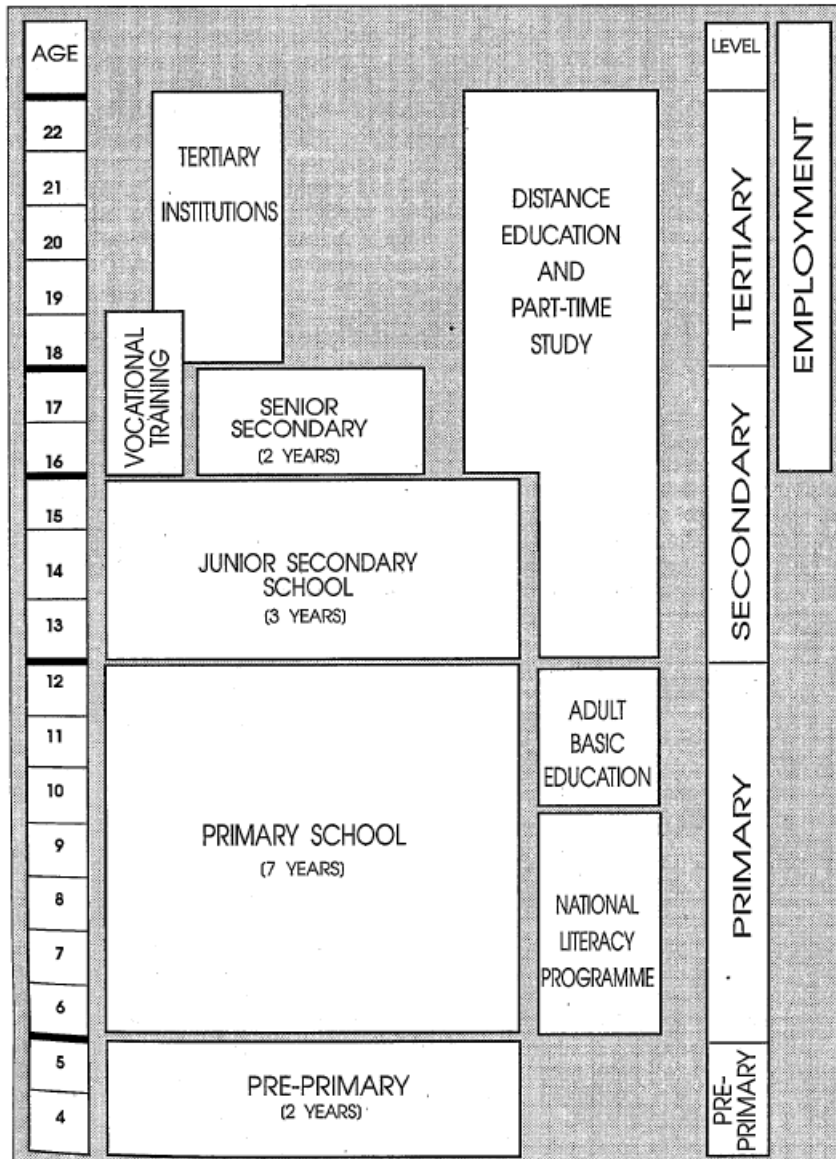
Through its Department of Adult Education, the **University of Botswana** is the lead agency responsible for the training of out-of-school education personnel and for research and evaluation in this sector. The **Centre for Continuing Education (CCE)** of the University is the lead agency responsible for: distance education programmes at the tertiary level; providing appropriate short courses and part-time programmes; and establishing a specialist committee for the continuing education sector to provide coordination and direction of programmes.

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

Botswana: structure of the education system



Pre-school education

Preschool 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 0–2½ years); 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.



Primary education

Primary education is the first stage of the ten-year basic education programme and covers standards 1 to 7. It is divided into two levels: lower primary (standards 1-4) and upper primary (standards 5-7). Since 1996, when the Revised National Policy on Education changed the official entry age from 7 to 6 years, children may begin standard 1 in the month of January following their sixth birthday. At the end of standard 7, pupils sit the Primary School Leaving Examination. 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.

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 tertiary and higher education. The implementation of the three-year junior secondary programme will be phased in over a period of five years.

Higher education

As regards tertiary and higher education, the University of Botswana offers a broad range of academic programmes—mostly at the undergraduate level. Professional and career studies leading to a certificate normally last one year; programmes leading to a diploma take two or three years to complete. 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, usually take four years—five years in the case of law and engineering. At the postgraduate level, postgraduate diploma courses normally last one year; the normal duration of master's degree programmes range from a minimum of three to a maximum of six semesters on a full-time basis; programmes leading to a doctoral degree last six to eight semesters on a full-time basis.

The 2010 school calendar applicable to all schools (primary and secondary education) and colleges of education is divided into three terms (January-March, April-August, and September-November) and consists of 186 school days. 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 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.



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.

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 twenty-first century. As part of the process of implementation of the Revised National Policy on Education (RNPE, 1994) 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”. Both documents define the roadmap along which curriculum development should proceed in the middle to long term. The RNPE demands the development of a curriculum that is vocational in orientation, has a broad number of practical subjects and emphasizes foundation skills applicable to the world of work. The Policy further emphasizes that whatever curriculum is developed, it must relate to the world of work in the form of curricular activities that espouse the processes and organization of production and demands of working life. On the other hand, *Vision 2016* views education as a vital mechanism for empowering citizens in economic and social participation. The Vision emphasizes development of entrepreneurs who are capable of creating employment through the establishment of new enterprises.

To ensure subject diversification, the basic education programme has been organized 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 organization 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-centered 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 recognize that children learn at different rates and by different modalities.
- Active learning (by doing) recognized 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.

Upon successful 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 utilization 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 preschool education, there has been a large increase in different kinds of preschool 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) revealed 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. Thus, pre-primary education is mainly offered by NGOs and the private sector. However, the Ministry of Education has assumed the responsibility of developing curriculum materials and providing training and professional development opportunities for teachers.

In 1997, the national average of new entrants into standard 1 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 childcare 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, 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 coordination 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.

In 2008, the Curriculum Development Division under the Department of Curriculum Development and Evaluation made available the pre-primary curriculum framework. The Curriculum Framework, targeting children in the age group 3-6 years, is a national guide to planning appropriate Integrated Early Childhood Development (IECD) activities for the purpose of improving professional practice and programmes for young children to enable them to achieve their full potential. The framework is a culmination of a multipronged process of individual and group consultations. The consultations included various stakeholders involved in IECD services in Botswana, a desk review of curricular from other countries and related documentation, field visits to early childhood settings and interviews with key informants as well as with early childhood practitioners. Based on the integrated model of early childhood development, the framework has emerged in response to a succession of national and international policy developments.

The document is intended to provide early childhood practitioners in various settings including home schooling, as well as parents and other caregivers with guidance as they design early childhood programmes, to support children's holistic development and readiness for the primary school. As such, the framework outlines learning outcomes in the cognitive, affective and psychomotor domains in the child's social, emotional, physical, spiritual and cognitive aspects as a result of the planned activities undertaken at pre-primary. In addition, the framework is intended to serve as a guide for best practices towards the achievement of early learning goals. It is intended to support the early childhood practitioners with guidance to develop their own learning and teaching programmes according to their children's circumstances, ethos and needs. The framework targets the children in two main categories, 3 to 4 years of age, and those aged 4 years up to primary school age.

The programme integrates early childhood service provision at the center in an effort to provide for the child's rights in a holistic manner. It aims to:

- Promote a sense of self-identity, self-control, self-appreciation and social competency in order to develop confidence, independence and interdependence that will enable the children to make a positive contribution to the world in which they live.
- Promote national unity and respect for one's and other people's cultures and beliefs.
- Develop basic mathematical and scientific competencies in numbers, measurements, patterns, and shapes in a broad range of contexts.
- Develop an understanding, awareness and appreciation of the environment and their role in sustaining it.

- Foster the child's development of tactile skills, exploration skills, creativity, self-expression and discovery.
- Develop language as well as reading, writing and communication skills.
- Develop positive attitudes and disposition towards learning, a love for books and positive learning practices including concentration and task persistence.
- Enhance school readiness and preparation for smooth transition to primary schools.
- Develop orientation and mobility for children to be able to move around freely, independently and safely.
- Develop self-help skills through Activities of Daily Living (ADL).
- Acquire basic knowledge and prevention skills on health issues and develop safety habits.
- Create awareness that every child has the same rights and responsibilities.

The Curriculum Framework comprises six learning areas: a) personal, emotional and social development (to develop in children an understanding and appreciation of who they are in terms of self-awareness, emotional development and interaction with others); b) language development and early literacy (to develop language skills to enable children to communicate effectively and to facilitate learning in other areas); c) health, nutrition and safety (to develop children's knowledge and understanding of safety and healthy living practices); d) mathematics and scientific thinking (to develop process skills, knowledge, understanding and attitudes for science and mathematics); e) physical, creative and aesthetic development (children to develop gross and fine motor skills, creativity and appreciate beauty through art); and f) moral and spiritual guidance (children to develop good morals and demonstrate spiritual growth).

Young children are active and curious, they need to explore, discover, ask questions, practice and rehearse in order to build concepts and ideas from their experiences. These activities, which form the building blocks to learning, are brought together during play. Play should therefore form the core of all early childhood activities as it provides opportunity for the child to use all their senses to build concepts and ideas as they interact with the environment. To maximize the benefits derived from play, the teacher should provide as many opportunities as possible for exploration, experimentation and discovery. This is best done through well planned and resourced indoor as well as outdoor play, ensuring that children operate in a secure environment.

Assessment is viewed as a continuous process of collecting information from children and their parents to enable monitoring of each child's progress as regards the curricular goals and performance standards in the various developmental domains. This information is useful to the teacher for planning and designing learning experiences for children and is also communicated to parents to provide a guide for parental involvement. Teachers who will be receiving the children in subsequent years will also need assessment information, to assist with smooth transition. It must be emphasized that the purpose of the assessment information is to provide information to the teachers and parents for the benefit of the child. The framework provides a general idea regarding the assessment of each learning area; details for the assessment of each performance indicator are available in the teacher's guide.



Within each of the learning areas, there are outcomes that are divided into various competencies each with performance indicators to enable a tracking of the child's progress. The indicators show what a child who has gone through the programme should know, say and do in different situations. In addition to these, activities and possible support materials are indicated to give an idea of the methods through which the children will learn the given concepts. The teachers' guide will elaborate these further to equip the teacher with a variety of methods they can choose from to enhance the achievement of competency in a given area. (Ministry of Education. Curriculum Development and Evaluation Department, 2008).

According to official data, the pre-primary education participation rate has increased from 10% in 2003 to 17% in 2007. This is attributed to expansion of pre-schools which increased from 453 to 477 over the same period. The expansion though minimal, has gradually enhanced the participation of children with special needs, since 129 disabled children were enrolled in pre-schools in 2004/05. Equally important is the fact that the number of teachers has increased from 690 in 2001 to 1,587 in 2007, of whom 51.6% are trained. The government grant which is provided to communities to encourage them to set playgrounds has also enhanced participation at this level. (Ministry of Education and Skills Development, 2008).

Primary education (basic 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 divided into two levels: lower primary (standards 1-4) and upper primary (standards 5-7). The programme is woven around: the acquisition and application of foundation skills; the vocational orientation of academic subjects; practical subjects that can help students develop an understanding and appreciation of technology, manipulative skills and familiarity with tools, equipment and materials; and curricular and co-curricular activities aimed at providing students with an awareness and understanding of the world of work and an appreciation of the values and attitudes towards all types of work. It emphasizes 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-centered approach where curricular materials and learning-teaching strategies are responsive to the needs of the learner.

In the lower primary cycle, 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 recognize 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 standard 1-4 curriculum has been recently reviewed and revised to take cognisance of the current societal and economic aspirations. The curriculum has been repackaged to include, in addition to the traditional subjects of languages and sciences, new learning areas such as cultural studies, creative and performing arts, and environmental science. In essence, the curriculum at lower primary is aimed at providing a platform that promotes a holistic growth of individuals who are in line with the society in which they live. At the upper primary level, the curriculum is further diversified and increases the learning areas to provide a broader knowledge base that prepares the learners, not only for life but for the world of work. The post-primary curriculum has also been closely aligned to the primary curriculum such that there is ease of transition between the different levels.

The junior secondary programme has been organized around two broad areas; a core area that is done by all students comprising the orthodox languages and sciences and optional groups including humanities, sciences and creative technical and vocational subjects and enrichment subjects. In addition to the conventional subjects, a whole range of practical subjects has also been included. The increased number of practical subjects is meant to help students to develop an understanding and



appreciation of technology, manipulative skills and familiarity with tools, equipment and materials. Through these, students will develop competence, and confidence in the application of computational skills, entrepreneurial skills, critical thinking, interpersonal and enquiry skills in order to solve real life problems and work challenges. The Ministry of Education has continued to ensure that the curriculum is relevant to the children's lives by ensuring that foundation skills such as decision making, problem solving, self presentation, team work and computation form an integral part of the curriculum. These skills are transferable to a whole range of careers such as communication, word processing, programming, creative writing and instructional designing.

Furthermore, the post-primary curriculum (both junior secondary and senior secondary curriculum) takes on board emerging societal issues such as HIV and AIDS, environmental issues, population and family life education, disaster preparedness, computer awareness, and civic responsibilities through infusion and integration. This approach allows the curriculum to maintain the existing learning areas while at the same time addressing social ills and expectations. The curriculum also addresses the psycho-social ills by providing skills for life support materials. The main objective of these materials is to impart knowledge, develop healthy attitudes and instil skills for healthy decision making. The materials reflect such skills as problem solving, critical thinking, communication, decision making, creative thinking, self awareness, empathy and stress management.

To ensure a balanced selection of content, the curriculum is developed through broad-based national panels. These are either individuals or representatives of stakeholder institutions selected from different parts of the country. The panels therefore, represent different communities and geo-political and cultural settings. On the same vein, teachers who serve in the panels represent schools from a variety of geographical and economic contexts. In addition to the diverse national representation, the Department of Curriculum consults nationally ensuring that the whole national, ethnic, gender, religious, cultural spectrum is covered. The content selection subsequently subsumes a national character. To ensure that the content is of the right level, curriculum developers benchmark with other regional and international curricula. They also apply the learning theories to ensure appropriateness of the content and adherence to the cognitive, psycho-socio and effective stages of child development. Curriculum content selection, in this case, is closely informed by the current learning and teaching theories and best practices.

The subject packaging for standards 1-4 is broad with some subjects included together into broader areas to facilitate project teaching and integration. Music, physical education, design, art and craft are part of the area creative and performing arts. Agriculture, home economics and science are integrated in the environmental sciences area. Religious education, moral education and social studies are taught under the area cultural studies. The broad areas are organized around modules. Setswana, English and mathematics are taught as separate subjects. The focus in the upper primary (standards 5-7) is more towards the development of the pre-requisite skills for junior secondary curriculum. Selection procedures will have to be defined to allow for broad-based selection. There should be eight subjects and the infusion and integration approach of emerging issues should continue to be used. The subjects are: English; Setswana; mathematics; science; social studies; agriculture; religious and



moral education; and creative and performing arts (design and technology; art and craft; music; home economics; physical education; and business studies). To guide teaching and learning a set of minimum attainment targets has been developed for each of the subject areas. The attainment targets differ from specific objectives as they are general to help the teacher plan activities and assess student performance and provide remediation.

Schools have to work out suitable timetables based on the current length of the school day. Concerning time allocation, two options are considered: 40 teaching periods per week (with each period lasting 40 minutes), or 45 weekly periods lasting 35 minutes each.

The population constitutes of various ethnic groups who speak 27 different languages other than Setswana, which is the national language. Both English and Setswana are the official medium of communication and instruction in all educational and official communication. In recent years efforts have been made towards the development of a language policy that seeks to encourage recognition of other languages for instructional purposes. The use of multiple languages seems to be a pedagogical reality and the Ministry of Education and Skills Development has undertaken a study to identify the languages in the country and assess their level of lexicon development. The Ministry encourages the use of the mother tongue at pre-school and primary levels up to standard 2. Furthermore, the spiral curriculum allows learners to learn from their community and gradually broaden to other communities. Learners at lower primary level also study cultural studies, which focuses on their culture. This ensures that children are not excluded from learning because of their language and culture.

Student achievement and performance is assessed through continuous assessment and tests. Criterion referenced testing is utilized to assess the students for diagnosis, remediation and selection purposes. Two attainment tests are administered in primary education: at standard 4 and at standard 7 levels. Attainment targets are generated for the different subjects and levels. Teachers are encouraged to develop student profile records to reflect what the students are able to do, what are their strengths and weaknesses. The records are to be passed from one level/standard to monitor students' progress. The standard 4 attainment test is 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 4 is important in that it is a point after which the medium of instruction switches from Setswana to English.

Development measures for the standard 4 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. The second assessment is the Primary School Leaving Examination (PSLE) at standard 7. The PLSE 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.



Average repetition rates experienced 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 4. With automatic promotion, teachers could retain children who showed deficits in attaining basic literacy and numeracy skills only at standard 4.

While the general trend was that repetitions were increasing on one hand, 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. In recent years, there is evidence of decline in the overall dropout rate, from 1.9% in 2001 to 1.4% in 2005. This is partly attributed to the provision of boarding facilities which have reduced the distance travelled by children from home to school especially in remote areas settlements which are far from villages where schools are located. Another factor which has impacted on the reduction of dropouts is the improved school feeding programme. There were 790 primary schools in 2008. It is estimated that children being actively supported in units designed for their special needs at this level made less than 1% of the primary school population in 2003, and the percentage was almost insignificant at the lower secondary level.

With a net enrolment ratio of 98.4%, Botswana has virtually achieved universal primary education. However, the challenge 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.

The transition rate from primary education to junior secondary education was 69.3% in 1991. It increased to 93.3% in 1998, and was 96.6% in 2007. According to the UNESCO Institute for Statistics, in 2005 the total number of students enrolled in primary education (standards 1 to 7) was about 327,000. The gross enrolment ratio was 107%, and the net enrolment ratio was 84%. The total number of teachers was approximately 13,000.

Secondary education

The nine-year basic education cycle established by the National Policy on Education (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.



As mentioned, 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.

The establishment of CJSSs expanded rapidly throughout the 1980s in terms of numbers of schools built and of pupils enrolled. 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 Junior Certificate Examination (JCE) comes at the end of the 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. For 2000/01, the transition rate from junior secondary to senior secondary education stood at 49.1% (22% in 1994 and 37.6% in 1998); it increased from 49% in 2004 to 66.7% in 2008. These achievements are influenced by the introduction of the double-shift programme, and the expansion of secondary schools which amount to 277 including 44 private senior secondary schools. (Ministry of Education and Skills Development, 2008).

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 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 students 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;
- utilize innovative learner-centered 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;
- 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.

Upon successful 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 and 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 Ministry of Education has developed a broad, practically oriented curriculum that provides opportunities for learners to develop technological skills that are related to the world of work; pays attention to the development and acquisition of attitudes, values and skills required for economic development in a rapidly changing world; and provides opportunities for learners to develop information technology skills, develop basic prevocational knowledge, skills and attitudes that will enable them to acquire and sustain jobs. The programme is diversified to include academic, technical and commercial subjects thus accommodating a wide range of abilities and interests. In addition, the programme links with industry and the private sector, to prepare learners for the world of work.

The new senior secondary education programme has a strong guidance and counselling component that is meant to assist learners with life skills and in the choice of subjects. In order to ensure that learners are prepared for the world of work, curricular and co-curricular activities have been developed to provide an awareness and understanding of the world of work and appreciation of the values and attitudes towards all types of work. This includes knowledge about the economy, the processes and organisation of production and the demands of the working life. Hence the curriculum includes such subjects as commerce with planned co-curricular activities like structured visits to companies, work simulations such as mini-enterprises, productive activities such as school gardens and community projects. Hands on experiences and a direct involvement of people from industry are central to the development and nurturing of work related values and attitudes.

Further, the post-primary curriculum has a strong element of career guidance. The rationale for the inclusion of this aspect is that students need to understand the range of occupations available and to identify their own potential areas of interest and aptitude. Careers' guidance is therefore offered as a way of equipping students with the necessary skills and knowledge to enable them to make informed decisions about occupational development and the labour market.

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 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.

Access to technical and 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. 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. An 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 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.

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 is offered in nine vocational areas, e.g.: business; hairdressing & beauty therapy; building construction; hospitality and tourism; clothing, design and textiles; information and communications technology; electrical & mechanical engineering; multimedia; 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 BTEP courses have initially been developed at foundation, certificate, advanced certificate, and diploma levels (tertiary level). However, it has been expanded to include the Fresh Start Programme to give candidates with no or limited formal qualifications as well as those with varying ages, abilities and mild disabilities the opportunity to enter vocational education and training, to acquire generic skills and gain practical experiences in vocational areas which may improve their employment prospects, encourage them to enter into self employment or increase their chances of continuing their education and training. A new programme referred to as Access Programme for students with disabilities is being developed to start in 2011. The programme will enable students with disabilities to access the BTEP courses. The construction of additional technical colleges, the upgrading of seven brigades and the expansion of some vocational and technical education colleges to include new centres for special education have contributed in increasing enrolments in vocational and technical education from 6,208 in 1996 to 13,027 students in 2005.

The Botswana National Vocational Qualifications Framework (BNVQF) is an integrated system of nationally recognized qualifications and nationally endorsed standards for the recognition of vocational skills. The Vocational Training Act of 1998 requires the Botswana Training Authority (BOTA) to develop the BNVQF for the purpose of accreditation and determination of equivalencies of vocational qualifications. It further requires BOTA to develop and review national training standards for the various qualification levels within the Framework. These standards are to form a clear and consistent system that is relevant to the needs of the various sectors of Botswana's economy. As a result, unit standards registered by BOTA on the BNVQF, guide the relevancy of programmes and courses developed by vocational training institutions. Programmes and courses are pathways towards the award of a qualification. Institutions have to apply to BOTA for registration and accreditation for their training services and systems for managing quality to be recognized under the BNVQF.

The Framework also facilitates the coordination of VET provision, assessment of learning, and the award of credits and certificates. The Framework sets quality standards in the provision of VET, as well as moderation across fields of learning and levels of qualifications. Following assessment based on unit standards, learners will be awarded certificates of achievement. The BNVQF is made of unit standards and national vocational qualifications that certificate meaningful outcomes of learning for all vocational sectors. It covers 12 fields, further subdivided into subfields



According to the UNESCO Institute for Statistics, in 2005 the total enrolment at the secondary level (including lower secondary) was estimated at about 169,000 students, mainly enrolled in general programmes (93%). The gross enrolment ratio was 79%, and the net enrolment ratio was estimated at 56%.

It is estimated that some 10% to 15% percent of school going age children are still not in schools, the majority of whom are children with disabilities, those with learning difficulties, orphans, child labourers and street children, girls, remote area dwellers and those from poor families. (Ministry of Education and Skills Development, 2008).

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 7 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 NPE of 1977 and the RNPE of 1994, mandated assessment of learning achievements.

The four examinations (standard 4 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 Botswana Examinations Council (BEC).

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.

The standard 4 attainment 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



4 pupils have been writing attainment tests in English, mathematics and Setswana. The survival rates to standard 5 can be used as a proxy for actual learning achievement measures for the NPE implementation period. In 1996, the survival rate to standard 5 was 85.7% (83.7% for males and 87.6% for females). In 1998, the survival rate to standard 7 was 85.7% (83.7% for males and 87.6% for females). These are pupils who enrolled in standard 1 in 1992 and sat the criterion-referenced PSLE at the end of the 1998 school year.

Concerning the 2007 results, performance of the pupils was weak. In English and mathematics the mean performance was around 30%, while in Setswana it reached 45%. Most pupils could not score 50% of the available marks. Girls performed better than boys in each subject. Benchmark performance levels developed by teachers showed that over 50% of the pupils did not reach the low performance level. According to the criteria they developed, 22.5% of the pupils qualify for progression in mathematics while 43.7 and 54.9 are suitable for progression in English and Setswana respectively. Pupils that performed the best were in the age group 6-10. Pre-schooling was associated with better performance. Pupils who speak English more often perform better. Pedagogical practices were found to be associated with performance. Too much or too little homework and testing depressed achievement. Over 75% of the pupils were taught by female teachers and they performed better than those taught by male teachers. Overloaded curriculum (as perceived by the teacher) was associated with lowered performance. Socio-economic factors were strongly linked to performance. These included home possessions, family problems, orphanage and parental indifference were associated with learning. Availability of reading materials, electricity and means of receiving communication were associated with good performance. (BEC, 2008).

The Primary School Leaving Examination (PSLE) is 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.

The Junior Certificate Examination (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: a) as a tool to select students who proceed to the next level of education (senior secondary); and b) 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 students and hence employers have to know what exactly they are capable of doing. 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 curriculum and examinations at the junior secondary level put emphasis on understanding and application of concepts; development of inquiry, decision making, reasoning, creative, analytical, problem solving and process skills and the acquisition of hands on experience that should increase the participation and performance of all groups e.g. groups of different abilities, learners with special needs, girls and boys. All these skills entail more practical and challenging content that require higher levels of engagement of a learner's cognitive ability that are commonly referred to as high order thinking skills. A total of 206 schools and 45 private centres registered candidates for the 2009 JCE. The 2009 JCE assessed, for the second time, candidates in the four junior secondary schools that introduced double shift in 2006. A total of 40,180 candidates satisfied the requirements of the 2009 JCE. In terms of the results, 0.1% of the candidates (or 44) obtained 'merit', 1.5% (or 618 candidates) were awarded grade A, 22.3% (or 8,950) were awarded B, 51% (or 20,494) were awarded C, and 25.1% (or 10,074 candidates) obtained D. Mathematics had the highest proportion of candidates awarded grade A at 5.4% followed by integrated science with 4.1%. Most learners (around 70%) obtained the lowest grade D – E in all the core subjects. Candidates who obtained E were 20.9% in Setswana, 28.9% in English, 28.7% in mathematics, 30.2% in integrated science, 31.3% in social studies, 27.2% in agriculture, and 29.2% in moral education. The proportion of girls awarded grades A to C was 74.9%, while that of boys was 69.5%. Girls performed better than boys in all subjects. (BEC, 2010).



The Botswana General Certificate of Secondary Education (BGCSE) is the localization of the Cambridge School Certificate Examinations (CSE). The localization process includes marking, development of syllabuses, setting of papers, administration, grading and grade reviews. BGCSE is a syllabus-based examination. Each syllabus is graded on an 8 point scale from A* to G. Candidates who fail to reach the standard required for grade G are regarded as 'unclassified' and no result is reported on the certificate. O-level syllabuses are graded on a 5 point scale from A to E. Of the 31,468 candidates for the 2009 examination, 14,028 were boys and 17,428 were girls. In 2009, 47,955 of the grades issued were C, and 34.75% of the grades issued were C or better (for a total of 80,857 grades C issued; all candidates and all syllabuses are included, in 2009 a total of 220,141 grades were awarded). A total of 50,563 of the grades were D, 48,761 were E, 30,212 were F, 14,586 were G, and 7,691 were U.

As regards the BGCE syllabuses, in the case of English language 18.8% of candidates were awarded grade C or better; among other syllabuses, this percentage was 47.3% for Setswana, 28.9% for mathematics, 6.6% for science, 79.2% for chemistry, 74.4% for physics, 69.6% for biology, 44.2% for history, 43.5% for geography, 35.6% for development studies, 45.8% for English literature, 47.2% for computer studies, 37.2% for commerce, and 50.9% for agriculture. In the case of languages (English and Setswana), as in previous years girls performed better than boys (33.5% of the grades awarded to girls were grade C or better compared to 26.8% for boys), although the gap between boys and girls was smaller in 2009 than in 2008. All students in government schools are required to follow courses leading to BGCSE examinations in Setswana, English language and mathematics (the core subjects); the overall percentage of candidates in each who were awarded grade C or better in all three core subjects in 2009 was 11.2% (this percentage was 10.5% in 2008, and 12.4% in 2007). (BEC, 2010).

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 (today the Botswana General Certificate of Secondary Education, BGCSE). 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 BGCSE.

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 (normally a four-year programme on a full-time basis).

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 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 BGCSE 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 teacher certificate (PTC) to a three-year diploma in primary education. The Centre for Continuing Education at the University of Botswana has also 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 RNPE have been: the incorporation of pre-primary education in the pre-service teacher training curriculum; ongoing in-service teacher training programmes, both short and long-term; and the institutionalization of Annual Teachers awards to teachers who have demonstrated excellence and commitment to the teaching profession.

Teacher support for professional development is provided through a network of 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. Most of these 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; identify the needs of schools and to be responsive and sensitive to their requirements and difficulties through provision of support services; develop training programmes that will foster the professional development of all teachers in order to make them more effective classroom practitioners; promote autonomous school based staff development; sensitize schools to new developments in education and to systematically monitor and support them; provide opportunities for in-service officers to update and upgrade their professional skills and qualifications.

In-service primary school teachers are offered the opportunity to upgrade their qualifications to a minimum of diploma level either through full time or part-time training. These policy initiatives have increased the number of teachers with diploma qualifications by 54.7%, from 3,822 in 2005 to 5,912 in 2008.

An evaluation of teacher education programmes has been launched to determine how well the programmes are responding to the needs of the system. The exercise will focus on evaluating the content of the secondary and primary education diploma programmes, examine the framework of the curriculum to determine their effectiveness in producing teachers with desirable qualities; determine the relevance and effectiveness of the curriculum; review the credentials of and qualifications of lecturers to determine their levels of competence in facilitating acquisition of content, professional knowledge, skills and attitudes to teacher trainees.

The recruitment procedures have been improved to ensure that the most suitable and appropriate candidates are recruited to serve in the teaching profession. This entails the development of selection criteria, and conducting selection procedures



including screening and short listing of candidates. In this regard, the candidate's performance forms the basis for appointment decisions. A transfer policy was developed to afford teachers an equal opportunity to serve in all parts of the country on a fair rotational basis. In an effort to address the many complaints that were often associated with the administration and management of transfers, the policy has been reviewed and a new policy which became effective in 2006 has created separate transfer boards for primary, secondary and tertiary institutions. Inter-regional Transfer Boards have also been established to deal with transfer across regions. In order to ensure consistency and uniformity in the application of this policy, guidelines have been developed to assist the boards in this exercise. (Ministry of Education and Skills Development, 2008).

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

References

Botswana Examinations Council. *Standard 4 Assessment Report 2007*. Gaborone, 2008.

Botswana Examinations Council. *2009 Junior Certificate Examination Results Summary*. Gaborone, 2010.

Botswana Examinations Council. *Botswana General Certificate of Education. 2009 Examination. Summary of results*. (In collaboration with the University of Cambridge Local Examinations Syndicate). Gaborone, 2010.

Ministry of Education. *Education for Kagisano*. Gaborone, 1977.

Ministry of Education. *Curriculum development and evaluation*. Gaborone, 1985.

Ministry of Education. *Seventh National Development Plan (1991–1996)*. Gaborone, 1990.

Ministry of Education. *Curriculum Blueprint*. Gaborone, 1995.

Ministry of Education. *Eighth National Development Plan (1997–2002)*. Gaborone, 1996.

Ministry of Education. Examinations, Research and Testing Division. *Primary School Leaving Examinations Results*. Gaborone 1998.

Ministry of Education. *Education for All 2000 Assessment: country report of the Republic of Botswana*. (Prepared by K.M. Letshabo; under the co-ordination of M.I. Mokubung). Gaborone, 1999.

Ministry of Education. *The development of education. National report of Botswana*. Report presented at the 46th session of the International Conference of Education, Geneva, September 2001.



Ministry of Education. *The development of education. National report of Botswana.* Report presented at the 47th session of the International Conference of Education, Geneva, September 2004.

Ministry of Education and Skills Development. *National report on the development of education. Inclusive education: The way of the future.* Report presented at the 48th session of the International Conference of Education, Geneva, November 2008.

Ministry of Education and Skills Development. *National Report on the development and state of the art of adult learning and education in Botswana.* Gaborone, 2008.

Ministry of Education. Curriculum Development and Evaluation Department. *Pre-primary Curriculum Framework.* Gaborone, 2008.

Presidential Task Force. *Vision 2016: Towards Prosperity for All.* Gaborone, 1997.

UNESCO and International Reading Association. *Improving the quality of literacy learning in the content areas: Situational analysis of secondary level education in Botswana.* Presented by International Reading Association for UNESCO Section for General Secondary Education, Division of Secondary, Technical and Vocational Education. Paris, UNESCO, 2005.

UNESCO Institute for Statistics. *Global Education Digest 2009: Comparing Education Statistics across the World.* Montreal, UNESCO:UIS, 2009.

Web resources

Botswana Examinations Council: <http://www.bec.co.bw/> [In English. Last checked: August 2010.]

Botswana Training Authority: <http://www.bota.org.bw/> [In English. Last checked: August 2010.]

Ministry of Education and Skills Development: <http://www.moe.gov.bw> [In English. Last checked: August 2010.]

Tertiary Education Council: <http://www.tec.org.bw/> [In English. Last checked: August 2010.]

University of Botswana: <http://www.ub.bw/> [In English. Last checked: August 2010.]

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