



EDUCATION SECTOR STRATEGIC PLAN 2011 - 2030



A roadmap into the future

Published in 2012
Department of Education
Papua New Guinea.

© Copyright 2012, Department of Education,
Papua New Guinea

ISBN 978–9980–86–481-9

National Library Service of Papua New Guinea

Table of Contents

<i>Acknowledgments</i>	3
<i>Secretary's Message</i>	4
<i>Summary</i>	5
<i>Introduction</i>	6
<i>The education system – the situation now and some challenges</i>	8
<i>Papua New Guinea – land and its people</i>	9
<i>Major Social Issues</i>	9
<i>Healthy living</i>	9
<i>Law and Order</i>	10
<i>Gender Equity in Education</i>	11
<i>Goals</i>	11
<i>Access</i>	13
<i>Basic Education</i>	13
<i>Post primary education</i>	16
<i>Specific strategies for the 2010 to 2030 SDP</i>	18
<i>Specific 2030 targets</i>	19
<i>Teachers and teacher education</i>	21
<i>Specific strategies for the 2010 to 2030 SDP</i>	22
<i>Specific 2030 targets</i>	23
<i>Management and planning</i>	24
<i>School management and planning</i>	24
<i>System management and planning</i>	25
<i>Specific strategies for the 2010 to 2030 SDP</i>	26
<i>Specific 2030 targets</i>	27
<i>The curriculum</i>	27
<i>Specific strategies for the 2010 to 2030 SDP</i>	29
<i>Specific 2030 targets</i>	29
<i>Technical and Vocational Education and Training</i>	30
<i>Vocational Education</i>	30
<i>Technical Education</i>	31
<i>Specific strategies for the 2010 to 2030 SDP</i>	31
<i>Specific 2030 targets</i>	32
<i>Monitoring and Evaluation</i>	33
<i>Costings</i>	34

List of tables

Table 1: Elementary enrolments, selected years	19
Table 2: Primary enrolments, selected years	19
Table 3: Secondary enrolments, selected years	20
Table 4: Distance education enrolments, selected years	20
Table 5: Admission and enrolment rates, selected years	20
Table 6: Completion rates, selected years	20
Table 7: Elementary staffing, selected years	23
Table 8: Primary staffing, selected years	23
Table 9: Secondary staffing, selected years	23
Table 10: Extra teachers required by sector, selected years	23

List of figures

Figure 1: The current education structure.....	9
Figure 2: Interventions Tree PNG Universal Basic Education	15
Figure 3: Monitoring and evaluation process	33

Acknowledgments

This document would not have been possible without the contribution of a large number of people.

The Department of Education formed a working group, chaired by Mr Joe Logha and overseen by Mr. John Josephs. This group comprised the following officers;

Messrs Maxton Essy, Gandhi Lavaki, James Agigo, Brian Monie, Baron Sori, and Geoff Thompson and Mesdames HatsiMirou, Jane Pagelio, Dominica Philip, Sabati Mero, Priscilla Rasehei and Lily Malaibe.

In particular the contributions of the late Clemens Runawery and the former Secretary for Education, Dr. Joseph Pagelio need to be fully acknowledged.


Finally, a number of earlier drafts of the document have been commented on by Sir Paul Songo of the Vision 2050 core group.

Secretary's Message

Two vitally important documents were produced by central agencies of Government in 2009 and 2010. These were the Vision 2050 document and the Strategic Development Plan, 2010 to 2030. These two documents provide a road map for our country to achieve true economic and political independence within the period of just one generation.

In order for these plans to be implementable there must be significant further input from line Departments to ensure that all plans are consistent. This has resulted in a period of alignment of plans to ensure this consistency. I would like to commend my predecessor, Dr. Joseph Pagelio, in taking the initiative with the Department of Education and with very little support from others in Government producing this document and ensuring that all education plans are aligned with whole of Government documents.

I am happy with the guidance that this strategic document will provide as the Department begins preparations for the next National Education Plan that will cover the years 2015 to 2024.



DR. MUSAWÉ SINEBARE PHD

Secretary for Education

February, 2012

Summary

The text for this plan is based largely from a concept paper that was designed by a small group from the department at the end of 2009. The paper was to provide an education response to the Vision 2050 document that was endorsed by Government in October, 2009. Government subsequently made it mandatory that all implementing agencies align their strategies with those of the Vision 2050 and Development Strategic Plan. This has been done as much as has been possible.

The intent was that this paper then be discussed by the Task Force that was due to be formed.

The Plan has been divided into a number of sections.

The first is an introductory section looking at the background and a brief history of education in Papua New Guinea. It also outlines some of the challenges currently facing Government in the provision of education services in the country. The references given throughout are related to the Vision 2050 document.

This is followed by five sections each considering important areas that need to be addressed if the dreams as articulated in Vision 2050 are to be realised. These sections are:

- 1. Access**
- 2. Teachers and Teacher Education**
- 3. Curriculum**
- 4. System Management and Planning**
- 5. Technical and Vocational Education and Training**

Each of these sections follows the same format.

First there is the section of the Department of Education Vision 2050 Concept Paper that relates directly to the particular area. This describes the situation as it will be in 2050. The numbers in brackets are references that are taken directly from the Vision 2050 document.

The second looks at specific strategies that will be put in place during the period of this Plan – 2011 to 2030 - to help move towards Vision 2050 goals. This section is accompanied by an implementation schedule that is based upon the four Medium Term Development Plan periods that make up the 20 year Strategic Development Plan.

Third are some specific targets to be achieved by 2030. Where appropriate, these targets have been developed from the indicators that have been identified and approved by the Department to form the Performance Assessment Framework.

Finally, there are the tables that are applicable for the particular area. The figures in these tables have been taken from the Department of Education Projections and costing model. This model was developed, initially, for the National Education Plan and then was further enhanced for use in the drafting of the Plan for Universal Basic Education.

These are the costings that have been used for the Medium Term Expenditure Framework that has recently been endorsed by the Department.

Introduction

Vision

The Papua New Guinea Vision 2050 is that, “We will be a Smart, Wise, Fair, Healthy and Happy Society by 2050”. The education sector can contribute to two of the seven pillars that make up Vision 2050. These two pillars are

- Human Capital Development, Gender, Youth and People Empowerment, and
- Institutional Development and Service Delivery.

In particular the education sector must take heed of the following statement from the Vision 2050 document:

Vision 2050 is aimed at producing citizens who are healthy and intellectually astute, and have high ethical and moral character and attitudes. Our people must be developed and empowered to take ownership of their own livelihoods.

The education contribution will treat the child as it's focus. The teacher is seen as being critical to the delivery of the required outcomes with the recognition and identification of the support services and a conducive environment that has to be put in place in order to allow the teachers to play their roles.

The vision for education in Papua New Guinea remains as it was in the NEP:

Our vision is integral human development achieved through an affordable education system that appreciates Christian and traditional values, and that prepares literate, skilled and healthy citizens by concentrating on the growth and development of each individual's personal viability and character formation, while ensuring all can contribute to the peace and prosperity of the nation.

The Mission

The Department of Education's mission, as defined by the National Executive Council, is fivefold:

- to facilitate and promote the integral development of every individual
- to develop and encourage an education system which satisfies the requirements of Papua New Guinea and its people
- to establish, preserve and improve standards of education throughout Papua New Guinea
- to make the benefits of such education available as widely as possible to all of the people
- to make education accessible to the poor and physically, mentally and socially handicapped as well as to those who are educationally disadvantaged.

The Values

Our values are those guiding principles that support the behaviour we expect of ourselves and of others. These values drive our commitment and are concepts that inspire, motivate and drive us forward with a desire to live in a society that is literate, smart, wise, fair, happy and God fearing.

The education system – a brief history

The education system has changed markedly since 1975. The system that was in place at the time of Independence was based firmly on the Australian system. It sought to educate a cadre of Papua New Guineans to take over the bureaucracy and the reins of Government following the granting of Independence. Critical at the time of Independence was the establishment of the unified system and the strong partnership that was forged between church and state in the delivery of education services. This system provided for:

- Six years of primary school education taught in what were known as community schools,
- Four years of lower secondary education taught in high schools, and
- Two years of upper secondary education that were taught in National High Schools
- A network of vocational training institutions providing a variety of different courses for students who had exited from the formal education system.

This system remained much as it was for the first 15 or 20 years post-independence until there was a major reform of the system starting in the early 1990s. This reform was implemented following two major studies conducted in the 1980s. The first of these was what has become known as the Matane Report and the second was the Education Sector Review.

**The Matane
Report – A
Philosophy
of Education**

The Matane report published in 1986 was entitled '*A Philosophy of Education*' which might be seen by some as being the birth of the education reforms, in particular the reform of the curriculum. It stressed that the school can help educate children but cannot and should not be regarded as the only agent of education. The home, the churches, the community, the police and the politicians are also influences on a child's life and must all contribute to the integral human development of the child. The attitude and the belief that the school is the only agent of education had to be changed.

The process of integral human development calls for an education system that helps individuals and the success of such a system requires the integrated involvement of all the agents of education; home, church, school, community and others. To achieve the aim of integral human development an individual must live and work with others and accordingly the goals of education should be directed towards socialisation, participation, liberation and equality.

It is instructive to reflect on some of the recommendations of the Matane Report and note just how much has been implemented, either through the education reforms or through other policy measures.

Recommendation 12

That the vernacular language be used as the medium of instruction in the early years of schooling and English be used in later years.

Recommendation 13

That ways be found to immediately expand upper secondary education

Recommendation 8

That funds be redirected from Higher Education towards the goal of Universal Primary Education

Recommendation 15

That standards in English and Mathematics be nationally monitored and further improved.

Recommendation 7

That those who benefit from upper secondary and tertiary level education should pay a larger proportion of the costs of that education.

In 1990/91 the government instigated an Education Sector Review to identify, document and develop strategies to rectify problems which had become endemic in the education system since independence.

The Education Sector Review

The Review confirmed inordinately high rates of attrition at the primary level ensuring that universal primary education would be unlikely ever to be achieved; low transition rates at the post grade 6 and grade 10 levels; a largely irrelevant curriculum; weak management and administration; declining resource allocations combined with high unit costs and a severe imbalance in the allocation of funding to higher education at the expense of education at the lower levels.

The Sector Review suggested that to do more of the same would be unlikely to have significant effect and would be prohibitively expensive. Consequently an integrated package of strategies was developed which radically changed the education system in its structure and curriculum and established a lower cost base at each level of education. It was following this review that the education reforms were introduced with the establishment of the elementary schools, the relocation of Grades 7 and 8 classes to the primary schools and Grades 11 and 12 to secondary schools. In brief, the system changed from being one offering six years of primary education, four years of lower secondary and two years of upper secondary to one with three years elementary, six years primary and four years secondary.

Since the Education Sector Review there have been two National Education Plans endorsed by Government – one covering the years 1995 to 2004 and the other, the present National Education Plan, from 2005 through to 2014

The education system – the situation now and some challenges

The present situation

The situation now is that there have been huge increases in enrolments in recent years largely as a result of the restructuring of the system. Initial figures from the 2010 school census would suggest a gross admission rate into the prep grade of considerably more than 100. The numbers passing into both the lower and upper secondary grades have exceeded planned figures and more Papua New Guineans than ever before now have an opportunity to complete more than a basic education. However, there are still large numbers of children dropping out of school before completing a full basic education of nine years and this is one of the challenges that still faces the system. It is anticipated that the abolition of school fees as proposed in the Plan for Universal Basic Education will remove at least some of the financial barriers facing parents who want their children to go to school.

Some of the challenges

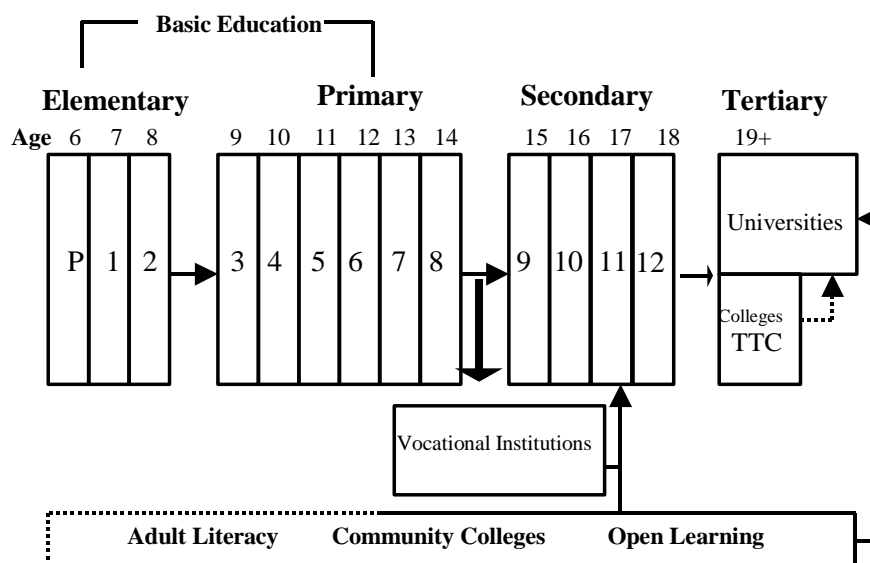
These highly significant achievements have brought with them further challenges that need to be addressed in the coming years. There have been concerns expressed regarding the quality of education being provided. In particular, the rapid expansion at the upper secondary level has meant that there are insufficient numbers of appropriately qualified teachers and many classes are being taught in poor quality buildings without the necessary textbooks and curriculum materials. This is likely to be compounded in future years due to the increasing numbers going through basic education, with improved completion rates, that will in themselves bring further pressure to bear on the secondary system.

All of these either have or will combine to seriously compromise the quality of education provided at the upper levels of the formal education system.

It is unfortunate, though in some ways inevitable, that the curriculum reforms were rather slower in being implemented and only now are we seeing the impacts of the outcomes based curriculum. There is a further major challenge for the system which is to ensure that the teachers and the schools have the tools with which to effectively teach this reform curriculum. Teachers

must be appropriately trained and inducted into the system. At present there are insufficient textbooks and many teachers are inadequately prepared to take on the task.

Figure 1: The current education structure



Papua New Guinea – land and its people.

Papua New Guinea occupies the eastern half of the island of New Guinea, which is just south of the equator and 150 kilometres north of the tip of Australia. Papua New Guinea comprises over 600 islands but 85 per cent of its land area of 463,840 sq km is on the mainland. This is mostly covered by tropical rain forests and divided by massive mountain ranges. Sustainable use and protection of its natural resources, which are of global significance, have attracted worldwide interest in recent years particularly its large gold and copper deposits, oil and natural gas reserves, large areas of arable land for potential agricultural production, an abundant supply of fresh water, large tropical forests, and extensive maritime fisheries.

Papua New Guinea's population is now estimated to be greater than six million and 85 per cent live in rural areas. Over 800 different languages are spoken throughout the 20 provinces. As demonstrated by the heterogeneity of languages spoken, there is a diversity of physical characteristics and culture depending on the province of origin. The population that is growing at the rate of 2.7 per cent per annum is predicted to reach 7.5 million by 2020.

According to the 2000 census, 42 per cent of the population is estimated to be below the age of 15 years. The Papua New Guinea Human Development Report, 1998 (Office of National Planning, 1999) has projected that by 2010 the school age population and the economically active population would have grown by 45 percent and 67 percent respectively.

Papua New Guinea has had a constitutional monarchy with a parliamentary democracy since it gained independence from Australia in 1975. The 1975 constitution vests executive power in the National Executive Council, which is headed by a Prime Minister. A major post independence political development was the creation in 1978 and reformation in 1995 of 19 provincial governments and the National Capital District and their associated bureaucracies. It is likely that two further provinces will have been established prior to the 2012 National Elections.

Major Social Issues

The following are major social issues affecting the welfare of our society. Education has an important role to play in addressing these. The Plan seeks to provide ways, with the support of the community and other stakeholders, of tackling these issues to ensure that we achieve a better future.

Healthy living

Citizens have a right to a healthy life which includes such aspects as clean water, a nutritious diet, immunisation programs, family planning, sanitation, shelter and local health services. Gains

made in the health status of Papua New Guinea prior to independence have not been sustained. For instance, the infant and maternal mortality rates are amongst the worst in the Pacific region. Life expectancy of 54 years at birth is the worst of the Pacific region. Inadequate funding, inefficient management and lack of community support are contributing factors to the country's health problems despite Papua New Guinea having one of the best health service networks in the region. The National Health Plan 2001-2010 states 'Health education programs will target health conditions and promote healthy behaviours'. There are many challenges for education in supporting the health sector to achieve better health outcomes for our nation's citizens. The Population Education and Personal Development curriculum have been developed in response to the need for a more relevant health curriculum at all levels.

The reform curriculum will provide students with the opportunity to take responsibility for their health using various preventative measures. Formal health education begins at Elementary where children learn about such things as washing hands, cleaning teeth and healthy foods and safe behaviours. At the primary level the personal development curriculum enables students to consider personal and community health and concerns such as the effects of family size, use of drugs and making informed choices. Personal development is an essential aspect of the secondary school and students are engaged in a more in depth study of health matters.

Currently, one of the greatest challenges to the health of the nation is HIV/AIDS. HIV/AIDS, first identified in Papua New Guinea in 1987, is rapidly spreading and is a major cause of admissions and deaths at the Port Moresby General Hospital. HIV/AIDS has major social and economic implications for our nation. It is mainly affecting young, sexually active adults of both sexes who belong to the most economically productive age groups. The prevention, control and treatment of HIV/AIDS are inadequate. The World Bank has estimated that there may be up to 50,000 people infected with HIV. The Health Department says more than 16,000 people in PNG have been diagnosed with HIV/AIDS since the first case was reported in 1987. There has been an eight per cent increase in HIV prevalence among people aged 15-24, and approximately one percent of women in the same age group who went to the antenatal clinic at the Port Moresby General Hospital were HIV positive. Port Moresby had the highest number of HIV/AIDS patients between 1987 and September last year with 4,983 and there were also 700 reported cases in the Western Highlands province followed by several hundred in Morobe, Eastern Highlands and Enga provinces.

An HIV/AIDS policy for education is essential way of demonstrating the commitment education has to educating its employees and young people about this disease. This policy has been developed and implemented as a matter of urgency.

Another challenge to the health of our nation is the emergence of illegal drug use, particularly among young people. The United Nations Office on Drugs and Crime reports that drug abuse has significantly risen in Papua New Guinea with the main concern being cannabis. The use of cannabis is influenced by its fairly easy availability. Other reported drug use includes inhalants such as glue and paint thinner among youth. Cocaine is reported to be used to a small extent and there are also some instances of 'ecstasy' use.

Law and Order

The issues that underlie Papua New Guinea's law and order problems are very complex and cannot be attributed to any one factor. The main victims of crime and violence are the weakest and most vulnerable groups in our community. A disproportionate number of these victims are women and girls. Many young people feel excluded from participating particularly in urban communities through lack of qualifications and employment opportunities. In rural communities youths are no longer subject to traditional controls that have been eroded by rapid social and economic change. These problems are exacerbated by limited access to formal education and a curriculum that has not been particularly relevant to the practicalities of life. Problems such as inter-group fighting, sorcery and sexual abuse are experienced in many rural communities and gangs receive much publicity in urban centres such as Port Moresby and white collar crime, corruption and fraud are on the increase. Improving law and order is a task for every sector including education.

Taking responsibility for your actions requires self discipline. Learning how to be responsible for your behaviour is an important part of education at home and at school. Parents are responsible

for their children's behaviour and this is an essential part of family life. Children need good role models and parents and teachers have an essential role to play with regard to discipline. When students are able to take responsibility for their actions they behave properly, show respect for others and live peacefully together.

At the Elementary level the curriculum encourages children to learn about good and bad behaviour, how to demonstrate love and care for other people, and talk about customary laws and practices. In the subject Personal Development at the Primary level students learn about how to make informed decisions and the consequences of not observing rules and laws such as destroying property, illegal drug use and domestic violence. Students also discuss familiar rules and laws of the community, families and schools and how these benefit our society as well as how our court system including village courts work. At secondary, students are inclined to experiment and challenge and question conventional behaviour. This is normal but needs to be carefully managed. Parents and teachers need to ensure that peer group pressure and the changes associated with adolescence are understood and students need to learn how to be discerning about appropriate behaviours, such as those associated with the occult, and their responsibility to others.

Gender Equity in Education

At every level of education more males are represented than females. In major studies cultural factors have been found to be the major obstruction to increasing participation of females at all levels of education. Access to informal education and training programs is even more difficult for women that are illiterate and the illiteracy rate amongst women is estimated at around 60 per cent. Regional variations reflect differences in historical experience. Higher enrolments of girls exist in regions where single sex education was provided in the past by missions. The Gender Equity in Education Policy (Department of Education, 2003) provides a framework of principles and practices to improve the lives of all children and promotes gender equity between girls and boys. Implementation of this policy has been slow-moving with little or no resources being allocated to support it.

Goals

This strategic document is based upon five pillars that are considered critical for driving progress to achieve the outcomes expected by the Vision 2050 and the visions for the education system.

The specific pillars and their goals for 2050 are:

Access

That all Papua New Guinean children complete nine years of basic education and that all have an opportunity for some form of education or training beyond Grade 8.

Teachers and teacher education

That all teachers are well trained and resourced and are accepted by the community in general as a professional body of education practitioners

Management and Planning

That all education institutions are managed effectively, transparently, with great autonomy and are accountable to their local communities.

The Curriculum

That the curriculum being delivered in all institutions is sensitive both to the needs of the local area and to the aspirations of the students.

Technical and Vocational Education and Training

That there be a nationwide system of institutions, public, private and community administered, offering skills development courses ranging from short courses targeting community development to full time courses leading to diploma and technician level qualifications.

Access

2050 Goal

That all Papua New Guinean children complete nine years of basic education and that all have an opportunity for some form of education or training beyond Grade 8.

Basic Education

Prior to discussing basic education there should first be note made regarding the provision of Early Childhood Education. Papua New Guinea has committed itself to achieving the six Education For All goals the first of which is related to ECE and calls for:

Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;

The situation at present is that the public provision of early childhood care and development is virtually non-existent. There are schools being run in urban areas largely for a profit motive as well as a number of one off initiatives in rural parts of the country. There is no single body regulating these schools or any framework to guide the development of further establishments.

During the period of this plan Early Childhood Education will have been accepted as being important for the development of the child but not, necessarily, as an integral part of the formal education system. It has to be recognised that some parents will not want to send their children to school before the age of six years.

Policy work will have been completed and a comprehensive document will have been produced that will point the way forward and, in particular will have determined exactly what provision of ECE will consist of and who is to be responsible for administering it. This work will be completed by the Inter Sectoral ECCD Coordination Committee which includes significant senior representation from the cognate Departments of Education and Health (NDOH). The Department of Community Development will be the lead agency but the Department of Education will provide support, if required, in professional areas in which they have a comparative advantage such as teacher education and curriculum development.

Appropriate models for ECE will have been developed and will have been trialled. There will be a number of different models endorsed for use that will reflect the very different situations existing throughout Papua New Guinea. They will cater for the three to five year age group. These models will range from formal day care type centres, to be found mostly in urban areas, that will provide a very early education for young children to much less formal community and church administered institutions in the rural areas. Although very different there will be a number of basic similarities.

- all will prepare children for entry into the formal elementary school system at the age of six years.
- all will be subject to a single regulatory authority that will be able to provide assurance to parents that their children are being cared for by responsible, registered individuals.

There will be no approved curriculum imposed although institutions will be provided with some guidance as to what young children should be asked to do. It is expected that some institutions, particularly those in the urban areas, will be introduced to phonics at an early age so that they can start reading.

The standards to be set will be in a number of distinct areas but principal amongst these will be the area of regulation. Parents who send their very young children to the ECCD institutions must be confident that they are being managed by competent, caring and suitably prepared individuals and be assured that their children will be properly cared for.

Widespread
early
childhood
education
introduced

The Plan for Universal Basic Education was endorsed by Government in late 2009 but this should not be considered a new National Education Plan. It simply reinforces the basic education chapters of the National Education Plan with revised and updated projections and costings. The Plan for Universal Basic Education was developed following considerable dialogue and consultation and it was decided that the focus of the education system must remain on the child. It was determined that there should be a number of major pillars that UBE should be built on. These were access, retention and quality. In addition to these there were some cross cutting issues such as management and planning, and equity, both in terms of gender and location. There will be different strategies put in place to deal with children from the really remote parts of the country. These strategies will include the strengthening and acceptance of multi grade teaching.

A number of key interventions were then identified and costed to tackle each of these issues. The figure on the following page illustrates how the interventions contribute towards the overall UBE objective.

The major contribution that the education system can make towards achieving the Vision 2050 of a healthy, wealthy and wise community is to ensure that all children are provided with a basic public schooling that allows them to contribute towards the type of society as envisaged in the Vision.

Free and compulsory education

There will be free and compulsory education **(1.17.2.1)** through to Grade 10 and retention rates will have improved dramatically because of that. All will have an opportunity to complete Grade 10. There will be equality of access for girls and children with disability at the basic education level and this will be carried on through into the post primary sector by 2050.

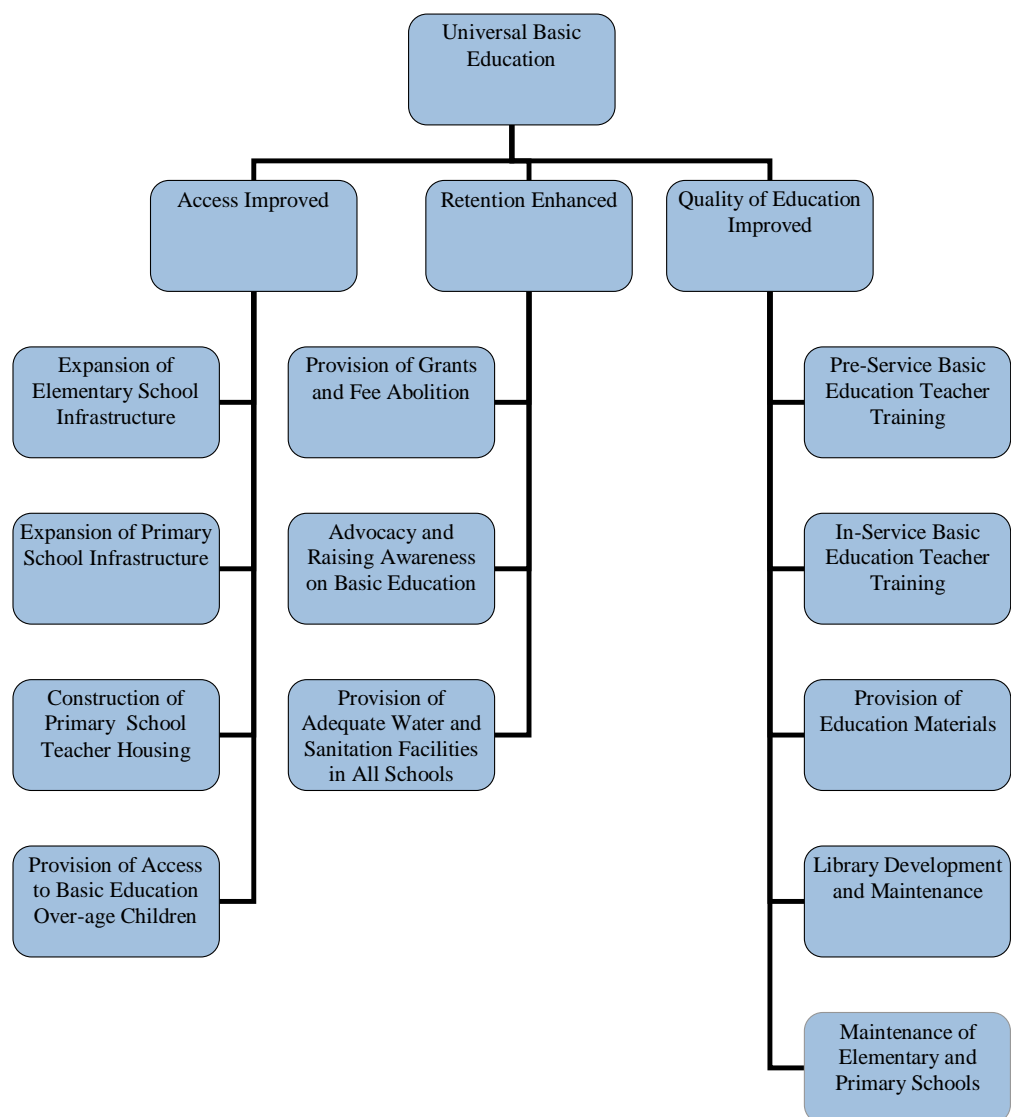
Provision made for true inclusive education

Efforts will be intensified to ensure that as many children with learning impediments as is possible are able to participate in what will increasingly be seen as being a truly inclusive education system. Designs for new buildings will be such that they allow for wheel chair access where appropriate and are friendly and accessible for all children. Despite all of these efforts it needs to be acknowledged that there will still be children with such severe disabilities that it is virtually impossible to educate within the formal school system. These children will largely be cared for within the communities but with support from care professionals.

There remain large differentials between the urban areas and the rural areas and, in particular the remote regions of the country. There are a few very remote schools in virtually every province and separate strategies will be dealt with to ensure that all Papua New Guinean children have equal opportunity for a basic education. In particular there will be efforts put into enticing teachers to those remote schools.

In recognition of the fact that a basic education for all benefits the whole community the financing of education at this level will be largely the responsibility of the different levels Government. This is not, however, to say that the parent has no responsibility for the education of their own children. They will continue to be responsible for ensuring that their child enrolls in school and remains until they have completed nine years of basic education. They will also be financially responsible for aspects of their child's education such as uniform and transport fees as and where this is appropriate.

Figure 2: Interventions Tree PNG Universal Basic Education¹



CROSS - CUTTING INTERVENTIONS

Equity Enhanced

- Gender (covered under Access, Retention, Quality)
- HIV/Aids (covered under Access, Retention, Quality)
- Special Needs Educations
 - Study on Special Needs Education Requirements
 - Implementation of Special Needs Education
- Most vulnerable children

Basic Education Management

Capacity Enhanced

- Training of Headteachers and Site Leaders
- Technical & Planning Support for DEAs
- Support to School Inspectorate
- Support to Provincial and National Education Authorities

¹Source Universal Basic Education Plan

Post primary education

The improved retention rates that are expected will result in far greater numbers of students completing Grade 8. At the end of Grade 8 there will be a number of options for students to take and it will be possible for all who complete Grade 8 to have available some form of post primary education or training. The state will provide fee free access into Grades 9 and 10 in the secondary school system or into an institution offering skills development courses.

The National Development Strategic Plan asks that all Grade 8 students progress to Grade 12 by 2050. This is going to be very difficult to achieve for a number of reasons, not least because of the enormous amount of infrastructure that would be required to be built, under our present system. Further to this it is probably not even desirable that all of our young people are subjected to a traditional highly academic curriculum. To do so would be to deny the fact that different people have different needs. It fails to recognise that not everybody is the same and that youths have different needs, different strengths and weaknesses and come from widely differing social and economic backgrounds. All of these influence learning behaviour and are reasons why so many leave our existing system of their own accord – it just does not suit everybody.

All Papua New Guineans will have an opportunity to complete a free education through to Grade 10. This will be achieved through a rapid expansion of the number of places that are available in the high schools and the secondary schools. Initially this expansion will ensure that the facilities in all existing schools are used to their fullest. Indeed, the full utilisation of all existing facilities has to be achieved if the country is going to be able to offer a post primary education for all. One efficient early strategy will be to introduce shift teaching into schools where it is deemed appropriate which will clearly be those that are in the urban areas. Any further expansion that is required will concentrate on opening more day schools and building on existing school infrastructure in the districts.

The possibilities for schools offering Grades 3 to 10 will be strongly considered as a cost effective way of providing the number of places that are going to be required in a very short period of time. There is no real reason why this could not be done given that it is already happening in the private sector. A larger percentage of students receiving their secondary education at day schools will mean that greater support can then be given to the smaller numbers who, because of their home locations are obliged to take up boarding places. This will have the effect of improving equity and help toward achieving goals of equality of opportunity.

It is accepted that not all students who complete Grade 8 will desire to enrol in a secondary school offering a traditional, academically inclined lower secondary curriculum. It is expected that over the period of this plan the secondary schools will increasingly begin to offer the skills development pathway of the lower secondary curriculum and also that vocational institutions will be upgraded and be in a position to offer similar courses. These are the institution currently known as technical high schools.

There will be far more flexible, alternative pathways available that will be held in much greater esteem than is the case at present for Grade 10 graduates. The successful harnessing of developments in information and communications technology will allow for very different options to become available and students will have access to many more choices and mixed mode education and training will become a far more attractive option. The mixed modes of study that will become available will include internet related learning for the higher levels and possibly home learning for parents who are suitably qualified and who wish to opt out of the state provision of education. These differing pathways will provide all young Papua New Guineans with the opportunity to make the most of their talents be they practical, artistic, academic or sporting.

The state will provide generous subsidies for those continuing their studies beyond Grade 10 whether it be in the formal secondary school system or through an institution offering the skills development pathway.

If they do not wish to immediately enrol in a secondary school or a skills development institution that attracts a subsidy from Government then they will receive a 'voucher' that they would be allowed to use for an alternative form of education or training. Such a voucher system will mean

**Post primary
subsidies and
scholarships**

that all students who complete Grade 10 will be provided by the Government with a certain amount of support for training beyond their basic schooling even if they do not continue within the formal sector. There will be an opportunity through this scheme for commercial training institutions to complete for the enrolment of these students.

The implications of achieving Universal Basic Education and then full access to lower secondary are significant in that there will be many more students eligible for this voucher following Grade 10.

The pathway to University will remain in essence as it is at the moment although there will be a much larger percentage of students entering the universities through distance education. The choices that students will have to make as they progress through the formal education system will be dependent to a great degree on the curriculum choices that are available.

The numbers going through the traditional academic pathways to Grade 12 **(1.17.2.4)** and subsequently to university will rise but this will be by no means the pathway for the majority. The greater emphasis will be to provide realistic and affordable options for those that graduate from Grade 10 to equip them with the skills and the knowledge to enable them to lead a meaningful and happy lifestyle in their own communities and to make optimal use of the opportunities that are available in those communities.

**Scholarship
scheme**

The expansion of Grades 11 and 12 at the traditional academic secondary schools will be achieved in a cost effective manner and will not perpetuate the very expensive boarding school model, which is a drain on resources both in terms of infrastructure costs and recurrent costs. Parents will continue to contribute toward the cost of fees at the upper secondary level although a scholarship scheme will be introduced so that no talented students will be denied an opportunity to complete their education. Scholarships, which will be more than just school fees and will include living expenses, will be awarded to students with genuine needs and who are particularly talented. This will help to provide **equality** of opportunity for students from the most remote parts of the country.

**Government
school of
Excellence**

There is a concern regarding the standards of the students gaining entrance into the universities and this has to be addressed during the plan period. A number of options will be considered. One of these would be to establish Government run 'Schools of Excellence' in various fields with entry points either at post Grade 8, Grade 10 or Grade 12. The latter would be in order to complete a university preliminary year. There need not be just one point of entry and the establishment of dual entry points at post Grade 8 and post Grade 12 is amongst the options being considered.

Criteria will be set in order to determine which schools will be designated as Schools of Excellence. These criteria will not necessarily be all academic and the schools must be seen as being tools for social mobility. They must perform in such a way as to justify being considered 'excellent' and should also act as model schools. Initially, the schools will be chosen from amongst the existing National High Schools but they will be introduced gradually.

A reward system will be developed for schools who are able to demonstrate excellence in whatever fields. Streaming is not considered acceptable in some sections of the education community and it is probably not a good road to take. There is an alternative and that is setting within our secondary schools. The distinction between setting and streaming is that the same students are not necessarily in the same group for all subjects. There are timetabling and possibly staffing issues that may make setting difficult, particularly in some smaller schools, and a study will be conducted to ascertain first to what extent it goes on at present and second as to whether it is desirable to make to work

There will be provision for Government to award scholarships for extremely gifted children to enter institutions outside of the state system both within the country and overseas in order to allow them to make the most of their abilities. This will further strengthen the private state partnership principles that are currently being championed.

There will be space for schools specialising in fields that are not catered for adequately in the school system and that will lead to the development of Papua New Guineans who will be a source of pride for the country and contribute towards national unity. The sports and the arts are two such areas that will be developed.

Distance education to be enhanced

Distance education will be one of the keys to achieving access targets if only because the growth of the population and improvements in retention will mean that all students will not be able to be catered for in the formal school system. All new developments in information and communications technology will need to be harnessed as and when they become available. Such developments will have the effect of bringing schooling, and education as a whole, closer to the home in the form of e-schools. In essence, there is a need for a complete revamping of the system to take advantage of new technologies.

The links between the distance education providers and those in the formal schooling system will be much stronger and there will be no perception of distance education being a second best option. It must still be acknowledged that distance education is not an easy option especially amongst those who do find academic work challenging. Increasingly, as the formal education system provides for increasing numbers of opportunities, distance education providers will increasingly offer tertiary level courses.

Schools and learning institutions will become much more inclusive and will positively welcome members of the community to utilise their facilities. It is expected that ICT Learning Centres, maybe the expansion and development of what are known as libraries, will have been established in many schools in the district centres that will offer access to the internet and e learning (1.17.2.19) that will allow a much larger number of people to take advantage of the increasing opportunities that will be offered from both within Papua New Guinea and from overseas.

There will be a greater utilisation of other institutions such as the vocational training centres and the distance education facilities. Greater networking will take place and these types of facilities will be seen more as community assets rather than education institutions.

Private schooling and training to be encouraged

Private education will be encouraged (1.17.2.7)(1.17.2.17) and as Papua New Guinea becomes more affluent increasing numbers of parents will opt to keep their children out of the state school system. There will continue to be generous tax breaks available for these parents who do choose to educate their children privately. A greater and improved relationship between the private sector and the Department of Education will be seen by 2050 and this will develop into being a true partnership. This is entirely consistent with the Private Public Partnership policy currently being pursued by Government. This will be basically in the post primary sector and, more particularly, in the skills development area, but there will be an increasing number of Papua New Guinean parents opting to send their children through an alternative basic education system to that provided by the state.

All students in post primary institutions will be required to take part in community action activities such as hospital or prison visits. A School Cadetship Program will have been developed to further stress the importance of discipline, loyalty and respect. Scouts and guiding organisations will be encouraged to expand. A more ambitious concept might be to look again at the National Service Corps model that was briefly introduced in the early 1990s and use this as a vehicle for nation building. These sorts of activities will inculcate a degree of humility in our students. Inter school programs will be introduced to instil pride in their school.

In recognition of the fact that the major beneficiaries of an upper secondary education are those who receive that education the cost for the user will be greater at this level. However, from 2012 the Government will contribute 75% of all upper secondary fees. It is anticipated that before 2050 that education to Grade 12 will be fee free and that parents will only be responsible for ancillary costs such as school uniforms and transport costs.

Specific strategies for the 2010 to 2030 SDP

- A1.1 Provide a framework for early childhood education in the country.
- A1.2 Extend 'tuition free' education to all grades.
- A1.3 Instigation of dialogue regarding the introduction of compulsory basic education.
- A1.4 To establish schools to allow for greater and more cost effective access to secondary enrolment.

A1.5 Incrementally reinvigorate the current National High Schools into Schools of Excellence

A1.6 To fully integrate distance education into the mainstream system.

	MTDP 1	MTDP 2	MTDP 3	MTDP 4
Provide a framework for early childhood education in the country				
Extend 'tuition free' education				
Instigation of dialogue regarding the introduction of compulsory basic education				
To establish schools to allow for greater and more cost effective access to secondary enrolment				
Incrementally reinvigorate the current National High Schools into Schools of Excellence				
To fully integrate distance education into the mainstream system				

Specific 2030 targets

A2.1 Achievement of Universal Basic Education

A2.2 Grade 8 to 9 transition rate of 70% - 95%

A2.3 Grade 10 to 11 transition rate of 50%

A2.4 Grade 8, 10 and 12 completion rates rise to 85.1%, 53.6% and 24.6% respectively.

A2.5 Top 5% of Grade 10s to transit into the National School of Excellence

A2.6 Gender Parity Index of 1 throughout the formal education system

A2.7 15% transition into distance education from Grade 8 and Grade 10?

A2.8 15% transition into skills development institutions?

Table 1: Elementary enrolments, selected years

	2010	2015	2020	2025	2030
Prep	213,519	261,221	279,486	320,301	367,077
Grade 1	201,399	253,248	266,530	305,453	350,061
Grade 2	160,033	237,564	258,695	291,294	333,833
Total	574,951	752,033	804,711	917,048	1,050,971

Table 2: Primary enrolments, selected years

	2010	2015	2020	2025	2030
Grade 1 ²	39,150	0	0	0	0
Grade 2	50,112	0	0	0	0
Grade 3	179,220	222,790	251,014	277,791	318,358
Grade 4	148,998	211,048	243,490	264,913	303,600
Grade 5	134,282	203,516	236,123	252,633	289,527
Grade 6	120,332	198,798	228,916	240,922	276,106
Grade 7	108,824	170,404	214,739	233,840	263,306
Grade 8	92,251	146,131	200,014	226,897	251,101
Total	873,169	1,152,686	1,374,296	1,496,996	1,701,998

²There will be no Grade 1 and 2 classes in the primary schools from 2013 because all children will commence their education at an elementary school.

Table 3: Secondary enrolments, selected years

	2010	2015	2020	2025	2030
Grade 9	52,489	79,546	151,515	179,670	195,478
Grade 10	40,706	64,154	122,889	160,011	171,199
Grade 11	16,474	23,903	47,112	63,317	66,638
Grade 12	12,490	20,606	36,345	54,547	59,399
Total	122,159	188,209	357,861	457,544	492,714

Table 4: Distance education enrolments, selected years

	2010	2015	2020	2025	2030
Grade 9					
Grade 11					

Table 5: Admission and enrolment rates, selected years

	2010	2015	2020	2025	2030
Admission	98.8%	105.5%	100.0%	100.0%	100.0%
Elementary	91.0%	103.8%	96.9%	96.4%	96.4%
Primary	75.0%	96.3%	100.3%	95.3%	94.6%
Basic education	94.6%	108.6%	108.4%	104.8%	104.2%
Lower sec	30.8%	42.9%	71.5%	77.2%	72.8%
Upper sec	10.1%	14.0%	23.0%	28.3%	26.4%
Secondary	20.8%	28.9%	47.9%	53.4%	50.2%

Table 6: Completion rates, selected years

	2010	2015	2020	2025	2030
Grade 8	57.7%	79.9%	95.4%	94.5%	91.2%
Grade 10	27.3%	38.8%	64.9%	73.8%	68.9%
Grade 12	8.8%	13.2%	20.3%	26.6%	25.2%

Teachers and teacher education

2050 Goal

That all teachers are well trained and resourced and are accepted by the community in general as a professional body of education practitioners.

The critical trigger to achieving all of this is the teacher. **Teachers** will need to be creative, innovative, industrious and professional in their attitudes. We must be prepared to raise our standards and not to be satisfied with anything that is less than the best. Teachers should be rewarded fairly based upon their qualifications, their responsibilities and their performance.

Upgrading of teachers

There will be a continuous program of professional development to build on a pre service degree program. All teachers will undergo refresher courses on a regular basis and to be paid for by the Government. This will ensure that all teachers are able to keep up to date with the latest curriculum innovations and kept abreast of the latest developments in their profession. These courses, which will be over and above regular professional development activities will be delivered through a mixed mode of delivery and utilise the latest information and communications technology (1.17.2.19) as it becomes available. This professional development will not only concentrate on teaching issues but will also address the ongoing issues regarding poor management within the school system. We have learnt that good teachers do not necessarily make good administrators and too often teachers are placed in positions of authority without being adequately prepared for the added responsibilities. There will be an increasing need for innovative leadership and young teachers with potential will be identified and provided with the opportunity of a career path leading to a fast track into leadership positions.

Greater opportunities for elementary school teachers

Elementary school teachers will be provided with greater opportunities for professional development that will allow them to progress in their profession and become primary school teachers. The elementary schools themselves will have greater status and some of them will become very large institutions which will have to be reflected in the level of the teachers.

At pre service level the teacher education curriculum will be constantly reviewed to ensure that it is fully consistent with any new curriculum developments. This will mean that all graduate teachers are equipped to teach all of the primary grades from Grade 3 to Grade 8. Further, in order to achieve true **equality** of opportunity in education all graduate teachers will be equipped with the skills and sensitivities to deal with children with varying disabilities. There will be a number of different pathways available for teachers to be trained ranging from full time college based courses to more flexible on the job training supported by a strong mentoring program.

Recognising the fact that outstanding teachers do not necessarily make good administrators, teachers will be provided with the opportunity to win promotional positions without having to necessarily take on greater administrative duties. This recognises the fact that in order to move through the salary scales talented teachers usually end up teaching less

New criteria for selection of teachers college students

Processes for the selection of students to attend the Teachers Colleges will be such that only suitable applicants are accepted. This will be achieved through either the use of an aptitude test or by a demonstrated commitment to teaching as a career. This latter could be through a letter of commendation from a local pastor or village elder or from working voluntarily in the local primary school. This will mean that the quality and the motivation of students who are entering the colleges are as they should be and result in teachers displaying the attitudes, the application and the behaviour that the community expects.

Further to this the process for the registration of teachers following their first year of service will be tightened up. Currently, only a tiny percentage fails to achieve their registration. The system should not be afraid to fail people or to ask teachers who are having trouble adapting to their career to repeat their registration period.

The type of increase in access to secondary schooling as intimated in the previous section will have an impact on the supply of secondary school teachers. There is only significant source of

Innovative models for secondary teacher training

supply at the moment – the University of Goroka – which is not a healthy situation and one that will have changed by 2050. Other universities will have established Faculties of Education that will provide both pre service training for secondary school teachers as well as a wide range of professional development courses for teachers at all levels of the system. If need be the country may have to recruit specialist teachers from overseas to fill specific short term gaps that may emerge. These gaps are likely to be in the harder science subjects, maths and economics.

There will be increasingly innovative strategies put in place to attract university graduates into secondary school teaching. The situation at present is that university graduates perceive themselves as being ‘too good’ or too highly qualified to become teachers. Graduates with good degrees in areas of shortage will be provided with a number of alternatives to attract them into teaching. These could include an apprenticeship style of training that would be based upon the present elementary teacher training program. The trainee teachers would be based in large secondary schools with experienced teachers being made responsible for the supervision of their teaching whilst at the same time the trainees complete a series of assignments. A more expensive option would be to place the graduates on salary, or part thereof, whilst completing a post graduate diploma in teaching, a major part of which would comprise practice teaching.

A well paid professionalized teaching force

Teachers will be seen as being a professional body in the same way as are doctors, engineers and others in our society. A National Professional Standards Framework will have been established to ensure that teaching standards are maintained and consistent with those in the Pacific region. This will serve to improve their self-esteem as well as their commitment and, equally as important, their morale. The terms and conditions for teachers will reflect this new degree of professionalism. There will be greater financial incentives for teachers who take the initiative and take responsibility for their own professional development.

Housing for teachers is particularly important and, although still not a condition of service, will be provided when there is a demonstrated need **(1.17.2.16)**. Incentives for teaching in remote areas, both monetary and otherwise will be such that teachers are attracted to remote areas. Government will work with education authorities and governing bodies to look at ways of providing housing for teachers which should go beyond the traditional solution of Boards of Managements building houses or of providing housing allowances for teachers. All of this will help contribute toward a rejuvenation of the teaching service and the raising of the morale of both serving and would be members.

Schools to be given greater flexibility

Time on task for teachers will be maximised and this will require a great degree of flexibility. There will be many different local problems that will have their own local solutions that have to be negotiated between the school, the teacher and the community. Such local solutions may include the school being closed for short periods during, for example, the coffee flush with the days to be made up at another time of the year or it may involve weekend teaching in recognition of the fact that teachers have to miss days from school in order to deal with pay and other issues of a personal nature. Teachers need to be able to devote the bulk of their time in teaching related activities rather than become side tracked with non core activities. It is intended that local community members be utilised, either on a voluntary basis or in return for a token payment to support the schools in carrying out non teaching related activities.

The teachers colleges will have been incorporated into the universities and the lecturers will have undergone considerable professional development and all will be holders of a Masters degree qualification. Whilst it is important that the colleges are incorporated into the university system the Government will have to ensure that there are sufficient places available for teaching students in order to cater for the expansion of the schooling system

Specific strategies for the 2010 to 2030 SDP

- T1.1 Redesign teachers college curriculum to reflect needs in the schools and the reform curriculum.
- T1.2 Update teachers college curriculum on a regular basis to reflect changing needs.
- T1.3 Develop alternate pathways for teacher education.
- T1.4 Establish a National Professional Standards Framework
- T1.5 Conduct an ongoing program of professional development.

T1.6 Formalise linkages between teacher education institutions and the universities.

	MTDP 1	MTDP 2	MTDP 3	MTDP 4
Redesign teachers college curriculum				
Update teachers college curriculum				
Develop alternate pathways for teacher education				
Establish a National Professional Standards Framework				
Conduct an ongoing program of professional development				
Formalise linkages between teacher education institutions and the universities				

Specific 2030 targets

- T2.1 That all elementary and primary school teachers have a diploma qualification
- T2.2 That 30% of primary school teachers have a degree qualification.
- T2.3 That all secondary school teachers have a degree qualification.
- T2.4 That all upper secondary school teachers have a subject degree qualification.
- T2.5 That all teachers take part in professional development activities on an annual basis.

Table 7: Elementary staffing, selected years

	2010	2015	2020	2025	2030
Prep	6,101	7,463	7,985	9,151	10,488
Grade 1	4,805	7,383	7,771	8,905	10,206
Grade 2	4,155	7,067	7,696	8,666	9,931
Total	15,061	21,914	23,452	26,723	30,625

Table 8: Primary staffing, selected years

	2010	2015	2020	2025	2030
Grade 1	783	0	0	0	0
Grade 2	751	0	0	0	0
Grade 3	5,121	6,365	7,172	7,937	9,096
Grade 4	3,751	6,238	7,099	7,723	8,851
Grade 5	3,564	6,266	7,025	7,516	8,613
Grade 6	3,333	6,420	6,949	7,314	8,382
Grade 7/8	6,874	9,489	11,850	13,164	14,697
Total	24,176	34,778	40,094	43,654	49,640

Table 9: Secondary staffing, selected years

	2010	2015	2020	2025	2030
Lower	3,490	5,387	10,288	12,766	13,775
Upper	1,518	2,340	4,375	6,196	6,632
Total	5,008	7,727	14,663	18,963	20,407

Table 10: Extra teachers required by sector, selected years

	2010	2015	2020	2025	2030
Elementary	2,111	700	365	719	824
Primary	2,211	1,554	1,128	825	1,335
Secondary	862	618	1,365	421	435

Management and planning

2050 Goal

That all education institutions are managed effectively, transparently, with great autonomy and are accountable to their local communities.

School management and planning

School community partnerships

True **partnerships** will be forged at the school level between the school and its community. Parents will be increasingly involved and play their role in this part of a child's education. The communities and the parents will have regained their schools and take a greater active involvement in all aspects of school life. The Parent and Citizen's Associations will have been reinvigorated as a result of the School Learning Improvement Plan program and it is expected that this will lead to a greater sense of ownership and self-reliance amongst school communities.

All school governing bodies will have established a school business such as a piggery or chicken farm, or a coffee small holding in that is appropriate for their community and that can be used both as a tool for learning and also in order to become more self-reliant

The system has encountered problems relating to communicating with school communities. There has been a reluctance amongst many education officials when it has come to articulating issues and explaining decisions to parents and other interested parties. Seldom do communities feel that they have been dealt with in the type of respectful manner, as equals, and in the way that they deserve. This has resulted in many communities feeling put upon and feeling that they have little real power. Community elders, including experienced working people who have retired to their villages, will be encouraged to take on this role of educating people as to exactly what their responsibilities are as parents. Training could be provided for this in a similar way in which the District Women Facilitators have been prepared for their work as a part of the Basic Education Development Program.

Community "think tanks" to provide voluntary service

Schools will have become increasingly inclusive and community members will become more involved in school activities. There will be a regeneration of clubs and societies at our schools. These will not necessarily be administered by teaching staff but rather should be run by interested community members. A group of such people could form a 'think tank' for the community and identify people to be used to provide support for the schools. The education system will make the most effective use that it can of the growing number of qualified and experienced people who are living in the rural villages. Many of these people would be only too pleased to contribute something, however small, back to their own community if granted that opportunity.

In recognition of the fact that there are increasing numbers of our young people who come from broken homes and from single parent families more formal **partnership** arrangements should be made with the church groups and other non governmental organisations that provide for these troubled youths.

A professionalized teaching force will be supported by principles of **good governance** that will be demonstrated in all schools. There will be ongoing training for school managers. Continuity of leadership is important and managers of rural remote schools will be granted special dispensation if they are willing to commit themselves to the school for multiple years. This is to stop some teachers using small remote schools as stepping stones to more senior positions and only serving for a short period

More concrete support for teachers will come from the Boards of Management and other governing bodies. Their role is to provide an environment conducive to effective teaching and learning through ensuring that the teacher is allowed to concentrate on his or her work rather than being concerned about their housing and other aspects of their lives outside of the classroom. A professional teacher should not be expected to teach in a classroom that is open to

**Service
delivery
improvements**

the elements or has not got even the most basic security. Classrooms will be well resourced, secure and authorities willing to sink considerable investment into the latest information technology that is available. There is equally going to have to be an investment made into school libraries and considerable discussion has still to take place as to what a school library should look like in 2050.

At the school level, Boards of Management will be held responsible by the communities that they serve. They will be required to publish minutes of meetings, they will be required to publish their financial results and explain to their parents how school fee money has been spent and to the Government as to how grant money has been expended. Schools will be given almost complete responsibility for their own operations through –per capita school grants from all levels of Government. The Boards of Management will be responsible for all aspects of their schools from the purchase of school materials through to the maintenance of school facilities and staff housing. In exchange for being granted these greater responsibilities the Boards of Management must ensure that they are transparent in all of their dealings both in their own deliberations and also with the parents and the wider community.

The Parents and Citizens Associations will act as watchdogs to ensure that sound financial practices are followed. Examples of good practice will be celebrated. It will be a pre requisite that all Headteachers and other leaders will have to have completed an accredited course on the principles of leadership, financial management and personnel management before they are eligible to be appointed to such positions. Basic leadership and management courses will be incorporated into the pre service teacher education programs. This is in recognition of the fact that all teachers, even those in their early years, do have management and administrative roles to play in the running of the schools.

System management and planning

Good governance at all levels is of enormous import for the teacher if they are to feel confident in their work. At the national level the Department of Education will concentrate on students and teachers. It will be responsible for standards, issues of compliance and the ongoing monitoring of the system.

Appointments procedures will be transparent and will be seen to be fair and this will be seen as the rights of teachers. In particular, the role of the churches in the appointments process will be reviewed in light of the spirit of cooperation and collegiality. The responsibility for appointments will rest much more with the provinces with the Teaching Services Commission taking more of an oversight role.

People working within the Department of Education and at all levels of the public service will be well qualified, committed and will treat parents and the general public with the respect that they deserve. Appointments to positions of trust and authority will be made in a transparent and open manner. Appointees will be answerable for their actions. It is only in this way that Papua New Guinea will see significant improvements in service delivery.

**Gender
balance in
decision
making**

Women will be well represented on school Governing Bodies, Provincial Education Boards and the National Education Board. They will not be included as mere tokenism and will participate fully in all decision making. Although progress has been made in this area there is still much to be done in terms of advocacy to ensure that people do understand the importance of women having a full and equal say in decision making. All meeting proceedings will be widely publicised and members of decision making boards will be fully accountable for decisions that they make. Women will be equally represented in key strategic decision making positions. It is this that will result in female participation having a positive effect in the community.

**Sound
planning
processes**

The key to achieving outcomes as expected in Vision 2050 is the establishment and maintenance of sound planning processes at all levels of the system. The Department of Education will be responsible for setting broad policy direction and strategic planning for education with sound consistent implementation plans prepared at the sub national levels of Government. Policy development will be informed by research and will be conducted in close consultation with all partners. The Department of Education will consult closely with the Department of National Planning and Monitoring and other stakeholders to ensure that successive Medium Term

Development Plans are consistent with endorsed education plans, that targets are achievable and that strategies will contribute toward the achievement of long term goals.

There are still issues of equity between provinces and also between districts within province. Management at the national level will provide incentives and practice positive discrimination when it comes to the allocation of resources. There are a very small number of very isolated schools that the provinces find it virtually impossible to deal with. This is because of the disproportionate amount of money that is required to adequately look after them. It is because of this that they are frequently left with no support at all. The Department of Education will take over the administration of these schools either through the establishment of a section within the Department or by providing significant grants to relevant church organisations where this is appropriate.

Planning and management processes will be enhanced by the continuing advances being made in ICT. The provinces and the districts will be connected to the EdNet and this will greatly improve both the accuracy and the timely availability of all types of school and other data. At the school level, SkulNet will have been extended to include all schools in the country greatly improving the efficiency of school management.

Schools will be required to produce rolling school development plans. The planning process will be characterised by high levels of harmony and synchronicity between the various levels.

Formal **partnership** arrangements will be made at senior levels between the State, donor partners and church agencies. There will also considerably strengthened public private partnerships. All of these partnerships will mature over the years and responsibilities of each will be clearly demarcated. The essence of the partnerships will be mutual respect and no one group will dominate in any way. This is consistent with the unified education system that envisaged at its formation of collaboration and partnership between the church and the state. One critical principle is that the sovereignty of the state is paramount as are the principles embedded in the Paris Declaration on Aid Effectiveness.

The roles of the different partners will evolve over time but the relationships formed over many years will be strong enough to be able to withstand any pressures that may come to bear. The churches and the donor partners will become less significant in terms of funding support to their schools but will continue to play an important role.

Indeed, it has become clear in recent times that the churches have become less and less supportive of their schools in terms of financial support for infrastructure and assistance in other areas that is their responsibility. There are good reasons for this in that traditional links between the local churches and their overseas partner churches have eroded over time as they become more localised. This has meant less financial support coming from overseas and also less expertise in terms of lay missionaries teaching in the mission schools. All of this needs to be recognised when it comes to articulating a more contemporary role for the churches as partners in education. One option would be to recognise the fact that the mission agencies still administer some 50% of the schools in the country and that many of these are in the more remote parts of the country. The Government has the responsibility to provide a quality basic education for all of it's young people and will increasingly take over much of the financial responsibilities. It is likely that by 2050 the churches themselves will have become more involved with the pastoral side of education and more assertive in supporting the administrations within their schools.

The National Education Plan will continue to be formulated every ten years following full consultation amongst stake holders. Provincial Governments will be expected to produce their own plans consistent with the National Education Plan.

The donor partners will continue to provide support as Papua New Guinea takes it's place in the international community. However, as this takes place it can be expected that this will lead to adjustments in the mode of assistance that is provided.

Specific strategies for the 2010 to 2030 SDP

- M1.1 Provide training and support for education planners at the national and the sub national levels.

- M1.2 Review and formalise the demarcation of responsibilities for the delivery of education services.
- M1.3 Formalise partnership agreements between the Department of Education and key stakeholders such as the churches and the donor community.
- M1.4 Further develop the Education Management Information System and extend this to the sub national level.

Specific Strategies	MTDP 1	MTDP 2	MTDP 3	MTDP 4
Provide training and support for education planners at the national and the sub national levels.				
Review and formalise the demarcation of responsibilities for the delivery of education services.				
Formalise partnership agreements between the Department of Education and key stakeholders.				
Further develop the Education Management Information System and extend this to the sub national level.				

Specific 2030 targets

- M2.1 All schools to have established an appropriate school business.
- M2.2 Complete the 2015 to 2024 and the 2025 to 2034 National Education Plans.
- M2.3 For all provinces and districts to be a part of a nationwide Education Management Information System.
- M2.4 For all planners at the provincial level to have at least some formal training.

The curriculum

2050 Goal

That the curriculum being delivered in all institutions is sensitive both to the needs of the local area and to the aspirations of the students.

Regular curriculum review and updates

The teacher can be as professional and as qualified as possible but will not be able to impart knowledge as they should and deliver the required outcomes if there is not either a relevant and suitable curriculum available for them to teach or adequate equipment and teaching materials. The reform curriculum itself is sound and suitable for delivering the outcome required but independent reviews of the curriculum need to be carried out on a regular basis to ensure that it remains responsive to a changing Papua New Guinea. A digital curriculum will be a part of the expansion of e education that will involve satellite technology. This curriculum at the basic education level is developing a child as a whole person. The problems that have been documented are related to the implementation of the reform curriculum rather than to the curriculum itself.

The core curriculum itself will be developed by the Department of Education with significant amounts of input from teachers, the churches and other key stakeholders. The Boards of Studies are strong and will represent all of those that have an interest in the education and training of children and young people in Papua New Guinea. It is expected that Boards of Studies members

Community participation in curriculum

will consult more broadly amongst their constituents to ensure that there is significant input from all quarters in decision making over curriculum issues. It is these Boards that will ensure that the curriculum is reviewed on a regular basis(1.17.2.11). The monitoring of the teaching and learning that is going on in schools will be the role of the Standards Officers who are based in all districts in the country.

These officers are provided with the finances and other tools that they require in order that they are able to carry out this core task. The site leaders will take an increasingly important role in the assessment of teachers that will allow the Standards Officers the opportunity to be able to spend more time providing advisory, managerial and planning support to schools and their governing bodies.

This core curriculum that is used all over the country is vitally important in terms of national unity and national identity. It has to be recognised however that Papua New Guinea is a country that is so rich in it's diversity and that this diversity can be seen as either an enormous boon or, alternatively, an impediment to development. In order for the country to be able to make the most of this diversity there will be a sufficient flexibility in the curriculum to allow for the non-core part of the curriculum to be influenced and determined by the local communities. Certain selected parts of the curriculum, such as language, mathematics, science and ICT will remain a national function whilst others will become a provincial function but will still use a national outcomes and competencies framework. This will have the effect of empowering those communities that do wish to have an input into what their children are taught. Teachers will be equipped to be able to translate the needs of the community and incorporate these into their teaching programs. They will be helped in this regard by the establishment of vernacular resource development centres

The basic education curriculum will be developed in such a way that students will be equipped with the skills and the knowledge to either return to live a rewarding life within their own communities or to be able to continue with further education and training. If Papua New Guinea is to become a happy, healthy etc community then the many students that do return to their communities will have the skills to be able to take advantage of any income generating opportunities that may be available. It is for this reason that any school based curriculum be developed around local needs of knowledge and skills. A simple example would be that the coastal schools should develop courses on constructing water related transport such as canoes and learn the science of them.

All students will be encouraged to be independent in thought and in deed and they will have the confidence to be able to make the most of their own particular attributes. Vocational skills will be as highly regarded as academic prowess.

Student values and respect

A lack of respect amongst our school children will have been addressed. This will begin with self respect that will be addressed in all subjects not just Personal Development. Students when they leave school will be respectful to their elders, their leaders and their community as well as to their environment; they will be obedient, honest and caring for others(1.17.2.10). Cultural norms, values and obligations will be instilled. These and other attributes are covered in the personal development sections of the curriculum and it is the teacher who has the principal role of having to inculcate these values. The teacher, however professional, however well trained is not going to be able to provide these and other desired outcomes without support and this must, principally, come from the parents and the broader school communities.

Quite how the alternative pathways spoken of in the access section will develop is very largely dependent upon the types of curriculum that will be developed. Curriculum developers both within the Department and also within the institutions around the country will work closely in partnership with industry to produce modularised courses. These courses will be taught in skills development institutions around the country and will allow for participation from the whole community – young and old, employed and unemployed alike (1.17.2.3).

There will be a number of these institutions whose core business is to take their students directly from school usually from Grade 8. If they specialise in one particular discipline they could be called a School of Agriculture or a School of Building. There will be one of these in each district (1.17.2.9). The students who attend these institutions will follow the skills development pathway of the secondary school curriculum which will allow them to achieve both a School Certificate,

either through formal teaching and learning or through distance education, and also an accredited trade qualification. Some of these institutions may use hospitality and tourism as their specialist skills area **(1.17.4.4.2)**.

Traditionally, examinations have been set and administered by the Measurement Services Branch of the Department of Education but the possibility of establishing an independent examinations board will be seriously considered during the period of this plan **(1.17.2.11)**. This could result in a situation whereby Curriculum Development, Assessment and Examinations could be outsourced or become a separate entity with a Board taking full responsibility and employing suitably qualified experts to coordinate their functions.

Articulation and accreditation

The National Qualifications Framework will have become well entrenched by 2050 and all courses, both short and long, will attract some form of accreditation. This Framework will also allow for greater articulation between education institutions of differing types.

Specific strategies for the 2010 to 2030 SDP

- C1.1 Monitor quality of curriculum implementation on a regular basis through further development of a CSMT (or similar).
- C1.2 Develop a standards monitoring process for post primary education.
- C1.3 Devise a process for the development of locally relevant curriculum.
- C1.4 Fully utilise the Standards Officers for monitoring teaching and learning in the schools.
- C1.5 Outsource curriculum development, assessment and examinations

	MTDP 1	MTDP 2	MTDP 3	MTDP 4
Monitor quality of curriculum implementation on a regular basis through further development of a CSMT (or similar).				
Develop a standards monitoring process for post primary education				
Devise a process for the development of locally relevant curriculum				
Fully utilise the Standards Officers for monitoring teaching and learning in the schools.				
Outsource curriculum development, assessment and examinations				

Specific 2030 targets

- C2.1 That Standards Officers provide written reports on 60% of schools each year.
- C2.2 All schools will have developed their own courses following nationally developed accreditation policy and reviewed every three to five years.
- C2.3 Curriculum becomes a shared function for national and provincial education
- C2.4 The focus at national level will be on language, maths, science, ICT and technical subjects
- C2.5 That there will be competency based courses taught in all schools.

Technical and Vocational Education and Training

2050 Goal

That there be a nationwide system of institutions, public, private and community administered, offering skills development courses ranging from short courses targeting community development to full time courses leading to diploma and technician level qualifications.

The vision for TVET is that there be a highly adaptable and innovative skilled society by 2020. More specifically, TVET will seek to ensure that there be increased articulation and accreditation and that there be multiple entry and exit points. This will be supported by a regulatory framework which will encompass the roles currently undertaken by the National Apprenticeship and Trade Testing Board, the National Training Council and the TVET Division of the Department of Education.

In order to be able to achieve this TVET will need to create an environment conducive to delivering high quality technical vocational education and training for the people of Papua New Guinea. The public perception of TVET will be greatly enhanced and the value of a skills based education will be more fully appreciated as a tool for national development. TVET will increasingly be seen as being as equal to an academic education.

Vocational Education

There will be a wide range of vocational institutions operating in all provinces and in all districts in the country. The public perception of vocational education will have matured over the period of this 20 year plan and the institutions will be respected as being capable of benefiting the whole community and not just those who attend. Students and parents will have to be provided with greater motivation to enrol in vocational institutions and be aware of the very real benefits that can be gained from such training. As such, there must be seen to be direct links between the training programs and either employment in the formal sector or a demonstrated enhancement of the quality of life in the community

The current state of the vocational institutions in the country is that many are in need of major infrastructure rehabilitation and few have the tools and equipment that are required to run successful training programs. There will be a period of steady investment in the institutions during this twenty year plan period.

The issue of how to employ suitably qualified and trained instructors will also be addressed. The problem at present is that there is an acute shortage of trained and competent tradesmen available for employment in the vocational institutions due to the present building boom and other effects of the LNG Projects. The management of the centres will need to be addressed through a major training program that will include entrepreneurial training for all managers and senior staff. The institutions will become increasingly less dependent upon grants from Government.

There will be rural development institutions, which will include the community colleges, in all districts in the country **(1.17.2.9) (1.17.2.3)** that will concentrate on offering short courses that will be relevant to the community that they serve. These institutions will be existing vocational centres that will have been upgraded to a standard that will allow them to provide people with the skills required to take full advantage of the economic opportunities that are available to them in the area. In some cases these may be quite high level skills and all of these centres will provide entrepreneurial training.

Provinces and district authorities will determine which centres will take on this role. The institutions will become increasingly self-reliant and in many cases will utilise only tools and

**Articulation
between
institutions**

equipment that are readily available in the village situation. A number of these institutions will also offer full time modularised one year and Level 1 & 2 National Certificate courses for members of the community who have achieved at least a formal Grade 8 or 10 qualification.

There will be a small number of **vocational institutions** offering a **School Certificate** qualification (TVET are looking at one in each province and are the institutions that are currently designated as Technical High Schools or Vocational Secondary Schools). These will be two year courses for Grade 8 leavers and the curriculum followed will be that of the skills development pathway of the secondary schools curriculum. There still needs to be considerable policy development done in this area. In addition to these institutions there will be increasing numbers of secondary schools offering the skills development pathway as opposed to just the academic pathway. Graduates from these schools will be able to progress to other secondary schools to be able to complete a full secondary education. Increasing numbers of these schools will follow a skills development pathway. There will be a very small number of institutions that offer Grades 11 and 12 through this same skills development pathway.

Technical Education

**Each province
to be
designated a
technical
college**

There are at present a small number of technical and business colleges in both the private and the public sectors offering diploma level courses with articulation through to the universities and other institutions. Existing technical colleges will be invigorated and streamlined with one to be established in every province to cater for specific and relevant trades in the technical industry. These will provide ample opportunities for the post Grade 10s and 12s students flooding the nation with technically skilled and qualified people. The change will be progressive.

**One
Polytechnical
Institution in
each region**

The largest of the technical colleges, Lae, was in 2010 re-designated as the National Polytechnic Institute, of PNG which reinforced its reputation as the most effective of the colleges. There will be three further Polytechnics for the Highlands, Southern and New Guinea Islands. These will be established during the period of this plan. The first will be in Port Moresby starting in 2014 with the others in Rabaul and Mt. Hagen due to be established towards the end of the plan period. There will be direct articulation from the Technical Colleges, the numbers of which will be increased over the period **(1.17.2.8)**, and the polytechnics and then to the University of Technology.

The role of the polytechnics and the technical and business colleges will remain much as they are today in that they will exist primarily to provide suitably qualified labour to satisfy the needs of the growing and increasingly sophisticated economy. There are relatively few graduates at present and numbers are not sufficient to satisfy the demands of industry. Numbers will be increased at an annual rate of (7)% to provide 3300 graduates each year by the end of the period **(1.17.2.6)**.

National Certificate Level 1-5 curriculum offered in these institutions will be flexible and will be presented in modular form to allow for students with varying needs and time constraints. There will be multiple entry and exit points to allow for these different needs and also for students to take advantage of recognition of prior learning. Appropriate curriculum will be developed for use in these institutions following widespread consultation with industry, resource developers and other stakeholders

Technical and Business Colleges have program linkages with University of PNG, Professional Accounting body and Cost and Management Accounting Institute. Industry representatives are in Councils of all colleges. TVET Division is planning to offer courses on Flexible and distance modes in 2012.

Specific strategies for the 2010 to 2030 SDP

- TV1.1 To develop policy to allow for articulation between the different types of institution.
- TV1.2 To establish an overarching regulatory authority for skills development.
- TV1.3 To develop curriculum appropriate for the development of skills at all levels.
- TV1.4 To conduct an extensive public awareness campaign to promote the nation building significance of TVET.

TV1.5 To develop existing institutions to achieve targets rather than build new institutions.

	MTDP 1	MTDP 2	MTDP 3	MTDP 4
To develop policy to allow for articulation between the different types of institution.				
To establish an overarching regulatory authority for skills development.				
To develop curriculum appropriate for the development of skills at all levels.				
To develop existing institutions to achieve targets rather than build new institutions.				

Specific 2030 targets

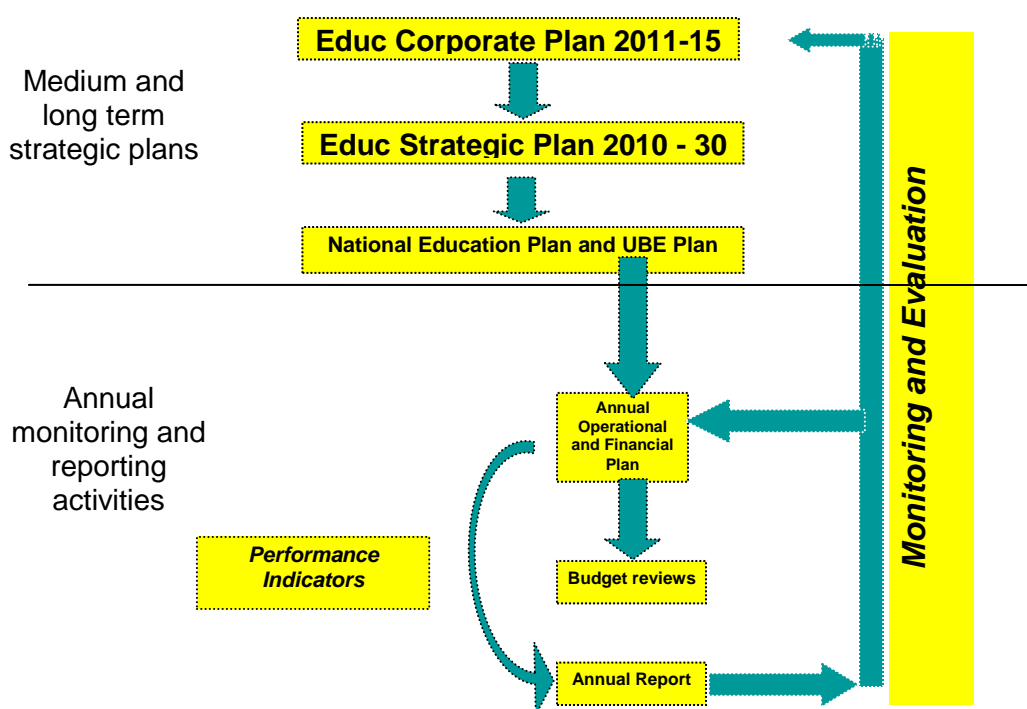
- TV2.1 A regulatory framework to have been established
- TV2.2 To establish one secondary institution in each province offering skills development courses.
- TV2.3 A vocational centre to be in every district offering locally relevant skills courses
- TV2.4 To produce 10,000 graduates with diplomas each year.
- TV2.5 Establish one National Polytechnic Institute in each region
- TV2.6 Streamline Technical Colleges and ensure that one is in each province
- TV2.7 Introduce National Certificate for all TVET institute with modularised programs.

Monitoring and Evaluation

A monitoring and evaluation system will be established to support the continuing review of policies and guidelines, and to monitor progress of the activities of the Department. The regular reporting of progress will be done quarterly as a part of the quarterly budget review process and will measure the performance of each division against the expected outputs of the Annual Operational and Financial Plan. The lead players in this will be the Divisions of Finance and Budgets and Policy, Planning and Research.

The monitoring and evaluation of the National Education Plan and the Plan for Universal Basic Education will be undertaken annually and will report on indicators as developed for the Performance Assessment Framework. Annual education census figures will be used to produce these indicators and disaggregate them by province, district and gender.

Figure 3: Monitoring and evaluation process



Costings

The following indicative figures are projected from the Department of Education enrolment and costing projections model. The costings are organised as per the Department of Education Medium Term Expenditure Framework. This has been developed by the Department allows officials to project budgetary needs in two ways. First is by school level and second by expenditure category.

The school levels and expenditure categories are shown in the table below.

MTEF School Levels		MTEF expenditure Categories	
Elementary	1	Teacher Education	1
Primary	2	Education Materials	2
Secondary/NHSs/FODE	3	Institutional Infrastructure	3
Vocational and Community Colleges(Post basic and up to grade 12)	4	Education Standards	4
Technical (post grade 12)	5	Institutional Funding	5
Teacher Colleges	6	Management and Administration	6
Other (Management and administration)	7	Personal emoluments	7

The tables below show the amount of expenditure required by level of schooling for selected years in each of the seven categories outlined above.

Elementary

	2010	2015	2020	2025	2030
Teacher Education	14,927.4	13,762.0	12,526.2	22,454.2	32,617.4
Education Materials	0.0	10,303.6	13,337.7	19,611.3	28,528.7
Institutional Infrastructure	13,283.8	29,854.7	53,787.6	78,410.4	68,041.0
Education Standards	15,632.5	26,924.4	34,517.1	47,551.3	66,438.7
Institutional Funding	55,232.8	97,375.7	132,984.3	193,418.9	282,907.1
Management and Admin	21,008.3	43,496.9	55,892.1	72,281.6	96,592.0
Personal emoluments	124,461.7	232,278.0	289,752.9	380,073.2	447,428.9
Totals	244,546.6	453,995.3	592,798.0	813,800.8	1,022,553.8

Primary

	2010	2015	2020	2025	2030
Teacher Education	33,431.2	69,506.8	89,922.3	115,802.0	150,019.2
Education Materials	352,758.0	233,432.6	317,382.4	442,997.7	641,790.0
Institutional Infrastructure	59,460.0	463,559.6	394,975.2	512,412.9	608,303.7
Education Standards	29,737.3	53,318.6	78,244.0	105,534.3	147,032.6
Institutional Funding	141,520.5	374,834.5	570,368.1	792,943.2	1,150,606.7
Management and Admin	42,118.5	80,192.1	111,707.7	136,167.9	177,537.3
Personal emoluments	459,318.3	847,496.5	1,138,887.1	1,427,428.5	1,667,328.7
Totals	1,118,343.9	2,122,340.6	2,701,486.9	3,533,286.5	4,542,618.3

Secondary

	2010	2015	2020	2025	2030
Teacher Education	663.7	1,380.4	3,343.3	5,518.3	7,579.3
Education Materials	0.0	18,508.8	44,915.8	73,293.3	100,733.1
Institutional Infrastructure	111,504.9	551,339.4	629,141.9	481,677.0	903,964.4
Education Standards	6,235.1	13,192.5	31,776.6	53,423.7	73,190.2
Institutional Funding	20,259.9	261,299.2	680,119.5	1,115,313.3	1,532,311.2
Management and Admin	4,495.1	10,825.2	24,742.2	35,925.0	45,153.0
Personal emoluments	117,401.3	232,350.7	513,960.1	765,169.2	845,847.3
Totals	260,560.1	1,088,896.2	1,927,999.3	2,530,319.9	3,508,778.5

Vocational

	2010	2015	2020	2025	2030
Teacher Education	168.9	955.3	1,321.7	1,853.8	2,637.9
Education Materials	2,294.4	2,928.2	3,737.3	4,769.8	6,087.6
Institutional Infrastructure	7,749.9	28,331.9	21,716.2	35,373.4	57,619.6
Education Standards	817.7	1,411.5	2,296.2	3,729.0	6,051.1
Institutional Funding	5,030.3	43,267.3	70,477.8	114,801.0	186,998.7
Management and Admin	827.9	1,656.0	2,538.0	3,669.4	5,455.5
Personal emoluments	29,883.9	48,920.2	72,778.2	106,926.7	140,181.5
Totals	46,773.0	127,470.3	174,865.4	271,123.1	405,031.9

Technical (post grade 12)

	2010	2015	2020	2025	2030
Teacher Education	302.2	433.9	622.9	894.2	1,283.7
Education Materials	0.0	0.0	0.0	0.0	0.0
Institutional Infrastructure	5,160.6	11,723.8	23,262.3	44,404.0	83,141.0
Education Standards	0.0	0.0	0.0	0.0	0.0
Institutional Funding	0.0	831.8	1,524.1	2,188.0	3,141.2
Management and Admin	0.0	0.0	0.0	0.0	0.0
Personal emoluments	7,566.8	13,714.0	22,510.9	36,369.7	53,376.9
Totals	13,029.5	26,703.5	47,920.2	83,855.9	140,942.9

Teacher Colleges

	2010	2015	2020	2025	2030
Teacher Education	0.0	0.0	0.0	0.0	0.0
Education Materials	0.0	0.0	0.0	0.0	0.0
Institutional Infrastructure	11,903.2	0.0	0.0	0.0	0.0
Education Standards	0.0	0.0	0.0	0.0	0.0
Institutional Funding	1,883.9	6,556.0	8,367.4	8,367.4	8,367.4
Management and Admin	0.0	0.0	0.0	0.0	0.0
Personal emoluments	9,825.4	12,098.6	11,713.3	15,864.7	17,206.4
Totals	23,612.5	18,654.6	20,080.7	24,232.1	25,573.7

Other (Management and administration)

	2010	2015	2020	2025	2030
Teacher Education	0.0	0.0	0.0	0.0	0.0
Education Materials	0.0	0.0	0.0	0.0	0.0
Institutional Infrastructure	0.0	0.0	0.0	0.0	0.0
Education Standards	0.0	0.0	0.0	0.0	0.0
Institutional Funding	0.0	0.0	0.0	0.0	0.0
Management and Admin	27,695.8	44,908.5	67,136.0	95,251.2	117,007.8
Personal emoluments	19,902.0	36,879.2	56,781.9	81,932.9	118,125.2
Totals	47,597.8	81,787.8	123,917.9	177,184.2	235,133.1

Totals by category

	2010	2015	2020	2025	2030
Teacher Education	49,493.5	86,038.3	107,736.4	146,522.4	194,137.5
Education Materials	355,052.4	265,173.2	379,373.1	540,672.1	777,139.4
Institutional Infrastructure	209,062.5	1,084,809.5	1,122,883.2	1,152,277.8	1,721,069.7
Education Standards	52,422.6	94,847.0	146,834.0	210,238.3	292,712.6
Institutional Funding	223,927.5	784,164.5	1,463,841.2	2,227,031.8	3,164,332.3
Management and Admin	96,145.6	181,078.7	262,015.9	343,295.2	441,745.7
Personal emoluments	768,359.4	1,423,737.2	2,106,384.4	2,813,764.9	3,289,495.0
Totals	1,754,463.4	3,919,848.3	5,589,068.3	7,433,802.4	9,880,632.2

References

A Philosophy for Education (The Matane Report), Department of Education, 1986
Education Sector Review, Department of Education, 1986
Vision 2050, Government of Papua New Guinea, 2009
Medium Term Development Program, Government of Papua New Guinea, 2010
National Development Strategic Plan, Department of National Planning and Monitoring, 2010
Projections and Costings Model, Department of Education, 2011
National Education Plan, Department of Education, 1995
National Education Plan, Department of Education, 2004
Universal Basic Education Plan, Department of Education, 2009
Medium Term Expenditure Framework, Department of Education (unpublished), 2011
United Nations Education Strategic Plan, 2012 to 2015, Department of Education and United Nations, 2011
TVET Management Plan, Department of Education, 2011