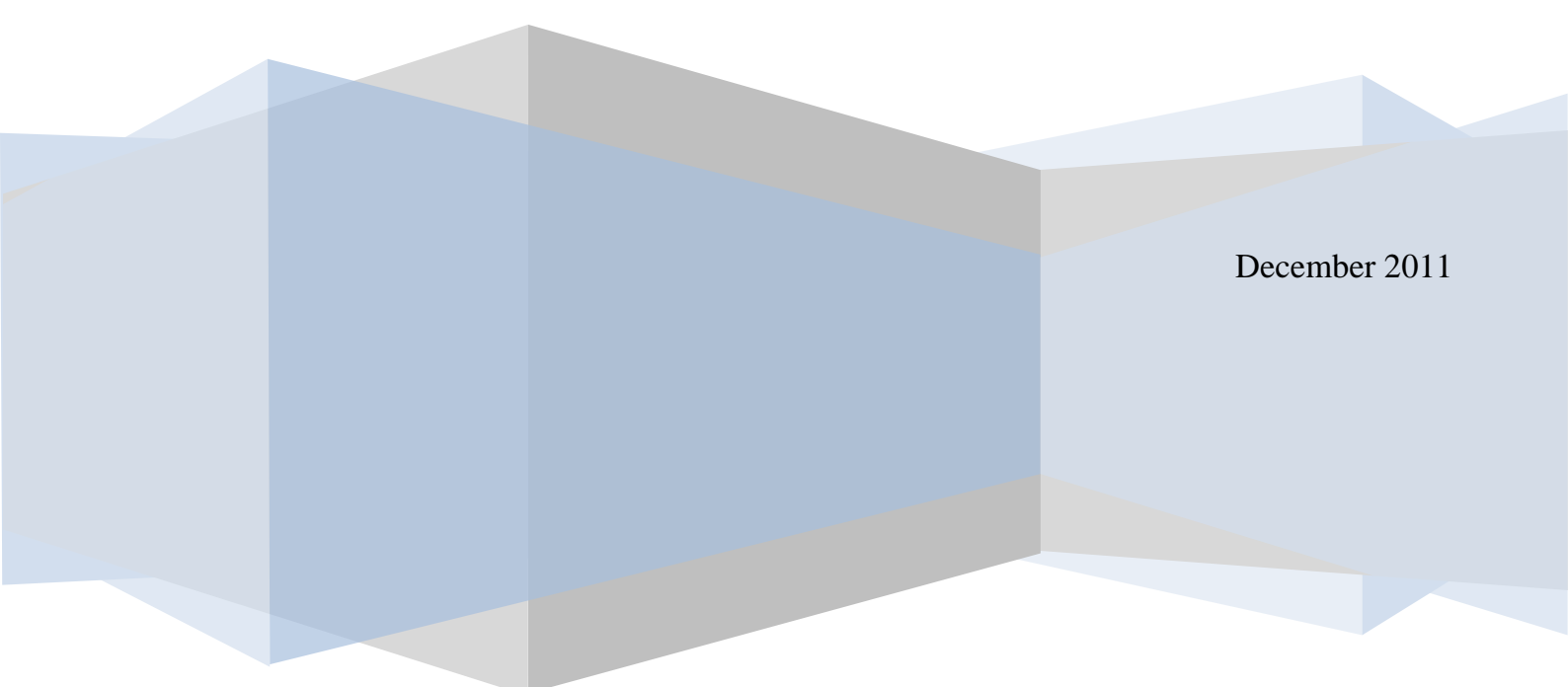


MINISTRY OF EDUCATION AND HUMAN RESOURCES

New Strategy for Prevocational Education



December 2011

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New Strategy for Prevocational Education

Executive Summary

Background

Since its conception in the late 90s, the Prevocational Education has been providing a second chance to pupils who have failed the CPE or who are above 13. The children complete a 3 year program in secondary schools and follow the NTC Foundation Course run by the MITD.

While the project has yielded some positive results, it has also shown some systemic and process-related weaknesses. The Education and Human Resource Strategy Plan (EHRSP) 2008-2020 has highlighted the need to revisit the Prevocational Education so that it is more responsive to the future needs of the economy.

Challenges

The major challenges pertain to addressing the issues of quality, relevance, achievement and the open up of opportunities for further development. Specific to these challenges, the following weaknesses need to be addressed:

- Untrained teachers. Most of them have no pedagogical skills to teach students with major learning difficulties.
- Negative perception of prevocational stream. The project has led to a negative branding of students.
- Lack of self esteem and self confidence among students.
- High drop-out rates mostly in the 2nd and 3rd years.
- Failure of many students to access the National Trade Certificate Foundation Course after three years of Prevocational Education.
- Absence of formal certification. Whatever the children have learned is not recognized this acts as a demotivating factor for them to work hard

New strategy

The main strategic pillars for the reform are as follows:

- **Extension of programme duration from 3 to 4 years** with a gradual integration of trade skills and entrepreneurial skills right from year 1. This will enable students to obtain access directly to the NTC3 – the first year of vocational education of the MITD.

- **New Curriculum based on 4 key domains of learning** namely, Communication skills, Numeracy and Problem – Solving skills, Life Skills and Livelihood and Trade Skills.
- **Adapted Pedagogy** with emphasis on activity based teaching and learning and social skills and the use of modern ICT based pedagogical tools to enhance teaching and learning. French and English will continue to be used as a medium of instruction and Kreol Morisien will be utilised as a support language.
- **Bridging the Gap Programme** based on drawing and observing, playing, computer skills etc. so that children develop a liking for the Prevocational Education.
- **New Tracking mechanism** to address the issue of high drop-out rate
- **Quality Assurance System** to secure a sound internal efficiency and high quality of teaching and learning.
- **Assessment and Certification** so that the qualification obtained at the end of the PVE enables the student to opt for either a Vocational Education or reintegrate an academic stream. A system of continuous evaluation of knowledge and skills will be embedded throughout the whole cycle. The continuous assessment will be based on portfolios, personal developmental plans as well as on oral, practical and written tests.
- **Building up self-confidence and self-esteem** with psychological back up and support so that the PVE becomes attractive to the students.

Project Implementation

The project will be phased in gradually as from January 2012 with transition arrangements for students already enrolled for Prevocational Education and full implementation achieved by 2015.

New Strategy for Prevocational Education

1. Background

In an expanding and more deeply integrated global economy, the comparative advantage of Mauritius will continue to lie in the skills of its people. To this end, the country is challenged to continuously improve its competitiveness by enhancing its creative, skilled and competent human resource base, amongst other measures. Yet, while it is readily accepted that there will be a persistent and incessant need for higher levels of skills in the required number, it is also evident that there will be a parallel need for human resource investment across a wider range of skills.

In this national development strategy, re-alignment of the education provision has therefore become highly important. Access to education is no longer enough. Strong foundations at the lower levels of the system must ensure that all children acquire confidence in their learning abilities such that they will succeed at the higher levels of the system, and be prepared to enter a competitive job-market with a respect and thirst for knowledge that will maintain them throughout their life. The only way to ensure this is by creating a culture of achievement throughout the system, and at all levels of the system. Education policies will hence continue to focus on the major pillars of increasing access, improving quality and broadening equity as well as creating a culture of achievement throughout the system.

It is from this perspective that the current revamping of the Prevocational education subsector has to be seen.

2. Historical evolution of Prevocational Education

Prevocational Education has witnessed significant changes since its inception way back in the nineties, although some action had been initiated to cater for CPE failures in the seventies. First implemented by the ex-Industrial and Vocational Training Board (IVTB) from 1990 to 1996, its management was transferred to the Technical School Management Trust Fund in 1997, in the context of the implementation of the 9-year schooling reform in the educational system.

On 14 March 2001, the Prevocational Education (PVE) project under the control of the Ministry of Education was officially launched with the collaboration of other stakeholders, mainly the Bureau d'Education Catholique (BEC) and the Federation of Managers of Private

Secondary Schools, in the then existing 10 State Secondary Schools Vocational, 2 State Secondary Schools and 38 Private Secondary schools.

The move also meant a shift from the trade-oriented courses in Metalwork, Woodwork, Home Economics and Bicycle Repairs to more academic ones with the provision of textbooks to students

In 2011, the programme was being run in 50 State-owned institutions (including the 6 State Secondary Schools Vocational) and in 76 Private Secondary Schools.

3. Current status

3.1. Current Organisation of Prevocational Education

Prevocational Education is provided in secondary schools to those who have failed the CPE examinations twice. Children who have failed the CPE at their first attempt but who, by virtue of their age, are not able to remain in a primary school, are channelled to the prevocational stream of the secondary schools.

The aim is to provide three years of additional schooling to these children to make up for the academic deficit built up during the years of primary schooling and to enable skills development for further vocational training.

Since 2004, a one-year NTC Foundation Course is being run by the ex-Industrial and Vocational Training Board (IVTB) to prepare the prevocational year III students to join the first level of vocational programme (NTC level 3) at the IVTB.

The provision of prevocational education in secondary schools alongside the academic mainstream is based on the philosophy of an inclusive education with all students going to the same secondary schools and enjoying the same facilities. This approach which brings the students to live, learn and share experiences together, allows the children in the prevocational stream to gain self-esteem and self-confidence without any negative branding.

3.2. Enrolment

Currently, some 7270 students are following Prevocational classes which represent about 12.5% of the Form I to III student population of the secondary sector. The enrolment of students in the prevocational stream of our secondary schools for the past four years stands as follows:

Year	State	Private	Total
2007	3493	6080	9573
2008	2862	5633	8495
2009	2411	5622	8033
2010	2126	5316	7442
2011	2178	5092	7270

The enrolment has been continuously declining over the recent years, due to the decreasing population in primary schools as well as a slightly higher pass rate at the CPE. Again, it is evident that the decrease in enrolment of prevocational students in the SSS has been additionally influenced by the non-availability of classrooms due to the running of Form VI classes.

3.3. Teaching staff

The teaching force for the prevocational stream in the SSS comes from the TSMTF where they were employed as Basic Secondary School and then SSSV teachers. They have been absorbed by the Ministry of Education through a recruitment exercise carried out by the PSC. Those holding a degree were recruited as EO (Prevoc) and the others as Teacher (Prevoc).

Additionally, some redundant teachers from Private Secondary Schools have been re-deployed in state schools as prevocational teachers. Some Supply Teachers have been recruited on a contractual basis to fill in the shortages in state schools. Posting of teachers is done on the basis on the established teacher-class ratio of 1.5:1. The same ratio is observed by the PSSA for private secondary schools

In **2011** there were some 634 teachers for prevocational education, with 197 working in the State Secondary Schools that were offering prevocational classes and 437 in the Private Sector. A more detailed picture is given below:

Zone	No. of Schools		No of Classes		No of Teachers	
	State	Private	State	Private	State	Private
1	19	25	51	94	72	149
2	13	19	44	64	68	97
3	9	17	25	65	23	99
4	9	10	21	33	34	54
Rodrigues	0	5	0	18	0	38
TOTAL	50	76	141	274	197	437

It is noted that for some subjects like Visual Arts, Physical Education or ICT, it is the same teachers who work with the children of both streams (academic mainstream and prevocational).

4. Critical analysis of the system

An objective analysis of the situation in the Prevocational education sector reveals clear systemic and process-related weaknesses:

4.1. Negative perception of the prevocational stream

The introduction of Prevocational Education (PVE) in 2005 at lower secondary school level to provide ‘refuge’ for students who had failed the CPE twice, and who by law were obliged to stay in school till the age of 16, has had a predictable outcome – namely the **negative ‘branding’ of vocational education**. It has not been seen as a sector which today is vitally important to the realignment of the education system to develop the human capital that will enable the country to meet its future economic targets. This has on the contrary reflected on the students who showed a lack of self esteem and self confidence leading to dissatisfaction.

4.2. Student drop out rate

One cause of major concern is the high dropout rate prevailing among students of the prevocational stream, as indicated by the table below:

Year	Admitted	Completed	Completion Rate	Dropout rate
2003	2825	1507	84.62%	15.38%
2004	3109	1570	69.32%	30.68%
2005	4157	2276	80.57%	19.43%
2006	3756	2418	77.77%	22.23%
2007	2920	3026	72.79%	27.21%
2008	2677	2640	70.29%	29.71%
2009	2790	2287	78.32%	21.68%

4.3. Curriculum

The learning experiences provided do not really cater for the individual needs and learning styles of the students while there is a dire lack of support materials in terms of audio-visual aids to assist the learning process. A curriculum that matches the needs of the students rather than a one-size-fits-all one would be welcome as would the in-built mechanism for a proper evaluation mechanism to monitor the efficiency of the learning experiences. Nor has the issue of inculcating “soft” skills been adequately addressed, especially for this group of learners whose social, communication and behavioural skills, among others, need to be sharpened. Further, the non-alignment of the curriculum with the New Curriculum Framework (Secondary) is another point of concern that needs to be addressed.

4.4. Untrained teachers

Many of the teachers (except for the category called ‘Prevocational Teachers), have no skills in handling students with behaviour problems nor having the requisite pedagogical skills needed to teach students with major learning difficulties in literacy and numeracy. This is further exacerbated by the demotivation of teachers who find themselves with no well-defined career path and accordingly no promotional prospects.

4.5. Inadequate/ insufficient resources

The workbooks provided since 2007 are basically trial materials and in some private secondary schools, the non-availability of resources for the preparation of support materials is being strongly felt. In these schools as well access to specialist rooms is limited, if available at all. On the other hand, there is a scarcity of tools and equipment for trade subjects like Agriculture, Electricity, Woodwork, Sewing and Cookery while school libraries have no books matching the needs of PVE students.

4.6. Infrastructure

The accommodation in secondary schools caters more for a formal setup than one that is functionally applicable for the implementation of activity-based teaching. Again, in quite a few schools, the classrooms for the prevocational stream are far too small or mere outstations with no access to specialist rooms for practical work.

4.7. Absence of a formal certification

In the course of the three years of prevocational education, there is no proper recording of the student's performance to highlight his/her progression (or regression as the case may be). Nor is there any portfolio, which, among others, could have served as a means to analyse the students' performance and to highlight strengths and weaknesses.

The certificate awarded poses a multi-pronged problem in that it is neither recognised as depicting a certain level of achievement nor does it have any equivalence that would situate it on the National Qualifications Framework and accordingly facilitate the transition from prevocational to further education. Finally, the absence of a formal certification impacts negatively on the chances for employability and entry into the labour market for this category of learners.

5. Need for review

The vision of Government to transform the education and training system to make it more responsive to the present and future needs of society has been adequately captured in the Education and Human Resource Strategy Plan (2008-2020) that, *inter alia*, laid down the foundations for the reform of the Secondary subsector and highlighted the need to revisit the Prevocational education to make it an integral part of the secondary schooling.

In the context of these reforms, the programme for prevocational education has to be reviewed to ensure its alignment with the new National Secondary Curriculum Framework currently being implemented.

More importantly, an in-depth review of Prevocational Education has become an imperative to address its inherent challenges, improve on its outcomes and make it more responsive to the needs of our economy which is becoming more skills-driven. As importantly, such a review will help ensure equity in the distribution of education outcomes while equally reducing the number of unqualified and unskilled people entering the skills-intensive market.

5.1. Methodology for review

The Ministry embarked on a much-needed and overdue exercise to give Prevocational Education a new strategic orientation. In this regard, a High Level Committee was set up at the Ministry to look into the issues pertaining to that subsector and to make relevant proposals. The Committee which also comprised representatives of PSSA, MIE, MES, MQA and MITD, established a number of working groups in areas which are critical to the development of the subsector namely:

- i). Curriculum, pedagogy and teaching materials;
- ii). Resource requirements;
- iii). Availability of space, and
- iv). Project management

The High Level Committee formulated a Concept Note on new strategic orientation for prevocational education.

5.2. National Forum

With a view to developing a national consensus, a National Forum on the development of the new strategy for the Prevocational sector was held on 30 August 2011. The Forum brought together various Stakeholders of the sector, including representatives of MIE, MES, MITD, MQA, TEC and Trade Unions. Participants also comprised representatives from Rodrigues as well as delegates from the World Bank and European Union.

During the Forum, discussions centered on the above mentioned inherent weaknesses of Prevocational education and on the need to chart out new strategic orientations for the subsector.

Discussions and deliberations on the Forum revealed a convergence of views on the need to revamp the subsector and in this regard, a number of recommendations were made.

These, together with other proposals submitted to the Ministry after the Forum, led to the consolidation of the new orientation and form the basis of this Strategy document.

6. New Strategy for Prevocational Education

The new strategy for the prevocational education is based on the following pillars:

Pillar 1: Extension of programme duration

In line with the objective to provide for both flexibility of access between programs and institutions and facilitate transition for a larger number to vocational education and/or the labour market, the project now makes for provision of 4 years of prevocational education with a gradual integration of trade skills and entrepreneurial skills right from Year 1. This would enable students to obtain access directly to the NC1- the first year of vocational education of the MITD.

The 4 year span will hence also cover the whole of the compulsory education period, that is, till age 16. The proposed new organizational arrangement will be as follows:

Years 1&2: Pre-Voc Education in secondary schools (Public and Private)

Year 3: 3 days in Pre-Voc Education in Secondary schools and 2 days at MITD

Year 4: 2 days in Pre-Voc Education in Secondary schools and 3 days at MITD

Pillar 2: New Curriculum

The National Curriculum Framework- Secondary (2008) has aligned the key competencies of mainstream as well as the Prevocational sector to a common set of Overarching Learning Competencies and proposed a Curriculum based on 4 key domains of learning for the prevocational stream, namely,

- i). Communication Skills,
- ii). Numeracy and Problem-Solving Skills,
- iii). Life Skills and
- iv). Livelihood and Trade Skills.

This alignment also keeps in view the demand of knowledge-driven societies to foster the development of 'soft' skills within the learners, right from an early age. It is noteworthy that,

while emphasis will be placed on working in teams, active learner involvement in his/ her own learning will also be emphasized.

Syllabi for Years 1 to 4 have now been updated and are being developed. The introduction of new materials in all schools will be effective in a phased manner in 2012 (for Years 1 & 2) and 2013 (for Years 3 & 4).

This new curriculum seeks to do away with gender discrimination that exists at present in prevocational education, as all learners will be exposed to the same trade skills.

Pillar 3: Adapted Pedagogy

With a view to engaging fully the students and enriching their learning experiences, a new pedagogy with emphasis on the following is being proposed:

- i). Activity based teaching and learning,
- ii). Social skills
- iii). Communication skills
- iv). Team work
- v). Critical thinking and problem solving skills
- vi). Independent working and thinking
- vii). Personal organisation
- viii). Self study

Modern ICT based pedagogical tools will be used to enhance teaching and learning in class and make it more attractive to the students.

Students will also visit industries, work organisations, hotels, etc to gain insightful knowledge into potential areas of future employment.

Moreover, exposure to English and French will continue and Kreol Morisien will also be used as a support language.

Pillar 4: Bridging the Gap Programme

In the past, many children were not attracted to the Pre-Voc stream because the same approach and teaching methods based on rote learning and drilling exercises, as in the CPE class, were used. To enable the child to develop confidence and find schooling meaningful, a Bridging the Gap Programme will be introduced in Year I.

As per this programme, a new pedagogy based on practical activities such as drawing and observation, playing, art, computer skills etc will be used for the first two months of Year I. A student profiling through Bridging the Gap will also be carried out to gauge the level of competencies attained and the exact needs of the child.

Pillar 5: Capacity Building for teachers and Heads of Schools

The Educators of the new programme will be subject to further training where activity- based learning will be promoted. This new training will be built on the Enhancement Programme model itself a hands-on pedagogical model that encourages creativity and the practice of classroom innovation.

A Certificate of Attendance will be awarded to the trainees and some credits will ultimately be earned and added on to such that these may ultimately lead to the fulfillment of the requirements for a B.Ed.

Possibilities will also be explored for the enlistment of specialists as resource persons for the promotion of communication and problem-solving skills as well as life skills.

Focussed workshops for Heads of schools will as well be mounted for them to buy-in the programme and to develop ownership thereof.

Pillar 6: Quality Assurance

It is important to set up a strong Quality Assurance system within this sector to secure internal efficiency and quality of teaching and learning. Support will be provided to every school for self-empowerment and ownership and hence enabling it to reflect on its performance and set measurable goals for improvements to happen.

This element will have to be fully incorporated into the School Improvement Plan (SIP) of every institution.

Pillar 7: Assessment & Certification

Contrary to the existing situation where Prevocational students do not receive any formal qualification, the 4th year of Prevocational will lead to a formal certification. Those successfully completing the 4 years of Prevocational education will be considered as holding a qualification at par with the CPE (MQA, Level 1 qualification). This is of utmost importance so as to give this stream an added value, thus motivating students to complete their education and leave school with a formal qualification.

For this to materialize, the following are proposed:

- Build in a system of continuous evaluation of knowledge & skills throughout the whole cycle. As such, strong emphasis will be placed on developing strategies for remediation through appropriate teaching and learning materials and strategies right from Year 1. The continuous assessment will also be based on portfolios, personal developmental plans as well as oral, practical and written tests. To curb absenteeism and late arrivals, some weighting will also be given to attendance and punctuality.
- A modular approach, with due attention to practical and applied skills, will be envisaged so as to cater for the different range of abilities, and to allow for more flexibility, especially for those who have failed with the traditional examination structure.

This approach will also facilitate identification of competencies developed by each learner. It will help to devise a system of certification that will provide a record of achievement more in line with the philosophy of Prevocational education.

The Certificate of PVE would also be recognized by MQA and pitched at a specific level in the National Qualifications Framework thus allowing for pathways for lifelong learning

The Certificate of Prevocational Education should enable the learner to opt for either:

- i). Vocational Education; or
- ii). Reintegrate an academic stream; or
- iii). Become functional and employable in any sector

As the certification will be designed to provide a statement of achievement in each domain, it should also allow employers to identify key desirable skills in the future employee. Thus, the system of certification should make it easier for the holder to testify to her/his knowledge and skills on the job market.

Pillar 8: Tracking and Monitoring Mechanism to prevent drop-out

Given that the rate of drop-out is generally higher here than in the mainstream, a permanent tracking mechanism will be established so as to identify students who keep away from the classes and the school. This mechanism will help towards reinforcing the current statistical database on drop-outs and will also facilitate the formulation and implementation of concrete measures to bring them back into the system.

The student tracking mechanism coupled with an intervention unit which is being set up, will follow every student who enters the prevocational stream, identify early dropout and take prompt action for reintegration of dropouts in the schooling system.

Pillar 9: Reinforced psychological back up and support

Psychological back up and support will be provided all throughout the 4 year programme. An outreach exercise for parents will be conducted with a view to partnering with them to promote the development of their children.

7. Implementation process

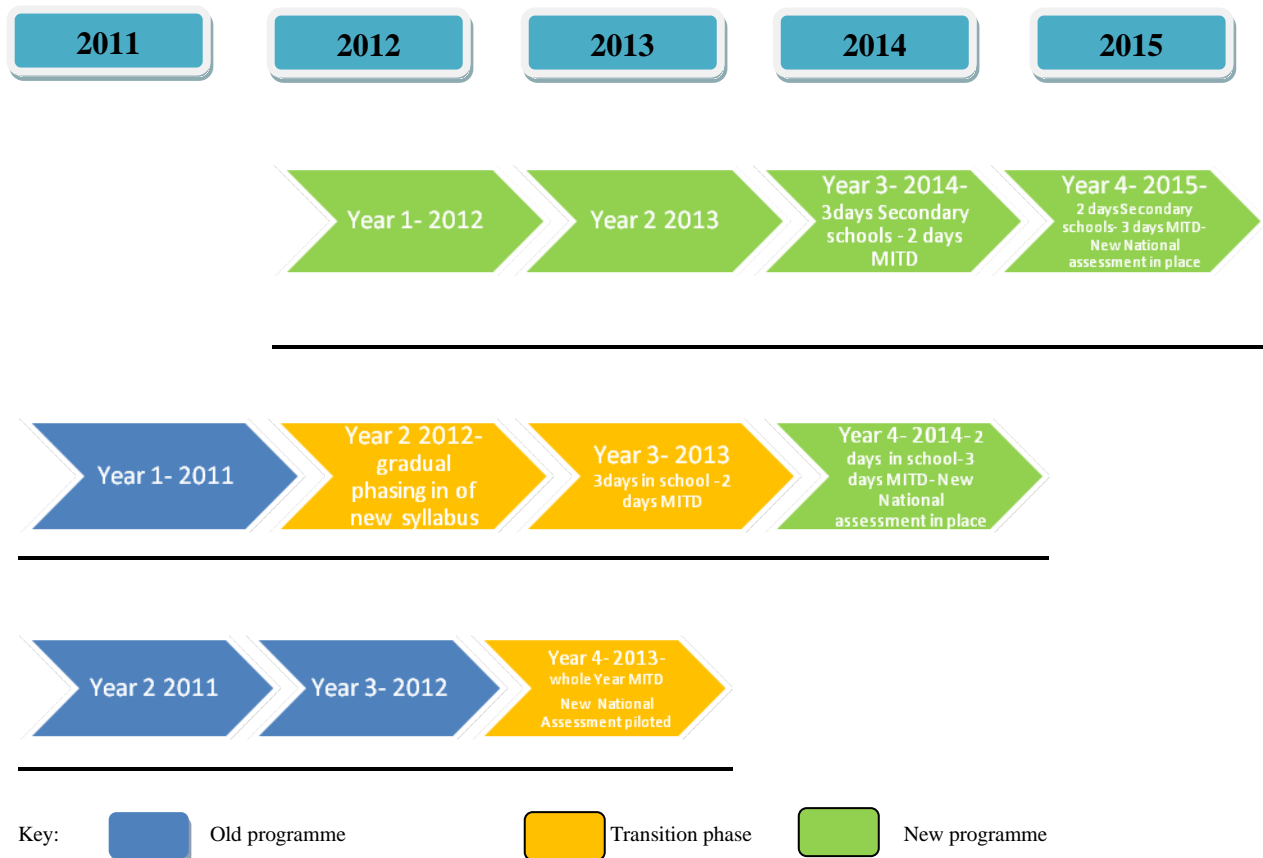
The project will be implemented in two phases- Year 1 & 2 in 2012 and Year 3 & 4 in 2013. It will involve preparing the syllabus, holding workshops with all stakeholders, writing, piloting and finalizing the teaching and learning materials, teacher training and working on the new end of programme assessment and certification.

7.1. Transition phase

The new model will be phased in gradually into the system as from January 2012 with full implementation achieved by 2015:

- Students entering in Year I in 2012 will follow the new programme right from the start and through to 2015.
- For those who will be in Year II in 2012, the new programme will be gradually phased in with the introduction of new pedagogical materials during the year and in 2013. While Year 2 will be spent in school, they will, in 2013, follow the new Year III programme 3 days per week at their secondary school and the remaining 2 days in an MITD training centre. The year after, for Year IV, they will spend 2 days in their secondary school and 3 days in MITD.
- Interim arrangements will be made for those who will be in Year 3 in 2012. Those in Year 3 in 2011 are to be housed in MITD for the whole of the 4th Year in 2012.
- As regards the final assessment for Year 4, this will introduced on a pilot basis in 2013 and fully implemented as from the end of 2014.

The transition is illustrated diagrammatically as follows:



7.2. Resources

7.2.1. Teaching staff

No major implication in terms of human resources is foreseen as the programme will be run with the existing teaching force. Moreover, there is also a pool of redundant MEDCO Educators who, in case of any shortage, will be redeployed after having received the required training.

7.2.2. Infrastructure and facilities

The new prevocational programme will be organized into Year 1&2 in secondary schools and Year 3&4 in secondary schools and the MITD training centres. This arrangement will require some 40 additional classrooms as from January 2013. The construction of these 40 additional classrooms will be executed under the Ministry's capital budget of 2012.

8. Project Management

The process has already started for the recruitment of a Project Manager (Prevocational Education) who will drive the project towards the attainment of its goal which is “*improving learning outcomes of Secondary Education through the implementation of a comprehensive strategy to provide a diverse learning experience to students*”.

Additional support will be provided to Heads of Schools in the management of the Prevocational stream and, more particularly, in monitoring the implementation of the curriculum. As the case is currently for the mainstream, a Head of Department for the prevocational stream will be appointed and the senior most Educator (Prevocational) at the school will be given that responsibility. As for all other subject Heads of Department, s/he will perform additional duties for which s/he will be paid an allowance. Given the special responsibilities for what pertains to that stream, s/he will also form part of the Senior Management Team of the school and attend Heads of Department meetings.

9. Project outcomes

The expected outcomes of the prevocational education are ultimately:

- The promotion of lifelong learning skills
- The development of trade skills
- The acquisition of CPE equivalent competencies
- A knowledge of History and Geography

Concluding note

The existing Prevocational Education programme has to be revamped such that a prevocational student should acquire sufficient skills and competencies to at least attain CPE level and even pass this examination as a private candidate while still enrolled in the prevocational sector.

The current policy of admitting to the Prevocational stream children who have failed CPE exposes them to branding. Consideration may also be given to the opening of Pre-voc classes to children who have failed CPE only once or who have passed the CPE only marginally. Pathways will be created between the academic and the prevocational streams and parents will have the option to register their children for the prevocational classes in the secondary schools. This measure may be implemented only in the medium term.

Annex

New Strategy for Prevocational Education
Implementation Plan

SN	Activity	2011		2012			2013			2014		
1	Preparation of New Curriculum											
	Year 1											
	Year 2											
	Year 3											
	Year 4											
2	Preparation of teaching learning materials											
	Year 1											
	Year 2											
	Year 3											
	Year 4											
3	Implementation of new programme for PVE											
	Year 1											
	Year 2											
	Year 3											
	Year 4											
4	Training of Educators											
5	Conducting workshops for Heads of Schools											
6	Working out new National Assessment and Certification											
7	Infrastructural works											

**New Strategy for Prevocational Education
Implementation Plan**

SN	Activity	2011		2012			2013			2014		
8	Setting up of Quality Assurance for PVE											
9	Appointment of a Project Manager											
10	Appointment of Heads of Department											
11	Implementation of New tracking mechanism											