MONITORING AND EVALUATION PLAN
FOR
NEPAD e-SCHOOLS DEMONSTRATION PROJECT
1. INTRODUCTION

The NEPAD e-Africa Commission requested the Commonwealth of Learning (COL), in collaboration with infoDev, to assist in managing and ensuring the monitoring and evaluation of the NEPAD e-Schools Demonstration project. The purpose of this document is to describe the framework for the plan, how it will be implemented, and the procedures for reporting findings.

1.1 Background

1.1.1 NEPAD

- The New Partnership for Africa’s Development (NEPAD) is a VISION and STRATEGIC FRAMEWORK FOR AFRICA’s RENEWAL. The NEPAD strategic framework document arises from a mandate given to the five initiating Heads of State (Algeria, Egypt, Nigeria, Senegal, and South Africa) by the Organisation of African Unity (OAU) to develop an integrated socio-economic development framework for Africa. The 37th Summit of the OAU in July 2001 formally adopted the strategic framework document. NEPAD is designed to address the current challenges facing the African continent. Issues such as the escalating poverty levels, underdevelopment and the continued marginalisation of Africa needed a new radical intervention, spearheaded by African leaders, to develop a new Vision that would guarantee Africa’s Renewal.

- NEPAD has identified infrastructure and especially information and communication technologies (ICT) development as a priority action area in order to promote suitable conditions on the African continent for sustainable development.

- The NEPAD e-Africa Commission is the NEPAD Task Team responsible for developing the NEPAD ICT program and implementing its projects. It was formally granted this status by the NEPAD Heads of State and Government Implementation Committee (HSGIC) in September 2002. The NEPAD Heads of States and Government Implementation Committee endorsed this action of the Steering Committee in November 2002. The Commission is therefore NEPAD’s instrument for collaboration in ICT matters with other bodies in Africa and abroad.

- The NEPAD e-Africa Commission expects to conduct its work through creating and fostering partnerships between governments, business and civil society. The partnership created by the Commission for the purpose of fulfilling the objectives of the NEPAD ICT Programme is known as the Information Society Partnership for Africa’s Development (ISPAD). Projects will be accomplished by bringing together skills, resources, capabilities and other contributions of partners who are members of ISPAD.

1.1.2 NEPAD e-Schools Initiative

- At its 6th meeting held in Abuja, Nigeria on March 9, 2003, the HSGIC adopted a set of six high-priority NEPAD ICT projects on the basis of a report of the NEPAD e-Africa Commission. The HSGIC called for continuation of work towards bridging the digital divide between Africa and the developed world and for speedy execution of these projects. Among these projects is the NEPAD e-Schools Initiative.

- The NEPAD e-Schools Initiative is a multi-country, multi-stakeholder, continental initiative, which intends to impart ICT skills to young Africans in primary and secondary schools and to use ICT to improve the provision of education in schools. The final goal being that within 10 years of implementation of this initiative in more than half a million schools on the continent, the majority of the Africa population would possess ICT skills with far reaching implications for the development of the African society.
• As one of the NEPAD e-Africa Commission’s top priority projects, the e-Schools Initiative was formally launched during the African Summit of the World Economic Forum in June 2003.

• In May 2004 a workshop on the NEPAD e-Schools Initiative was convened in Johannesburg, South Africa with representatives from the 13 “phase one” participating country governments. These countries were the group that signed the African Peer Review Mechanism (APRM) MOU and included Algeria, Burkina Faso, Cameroon, Gabon, Ghana, Kenya, Mali, Mauritius, Nigeria, Rwanda, Senegal, South Africa and Uganda. The outcome of the workshop was a pledge by the NEPAD e-Africa Commission and representatives of these countries to support the e-Schools Concept Framework as well as the e-Schools Demonstration Project (NEPAD e-Schools Demo).

• The NEPAD e-Schools Demonstration Project (NEPAD e-Schools Demo) has been identified as a critical initial step for the implementation of the NEPAD e-Schools Initiative. The NEPAD e-Schools demo is intended to accrue a body of knowledge, based on real-life experiences of the implementation of ICT in schools across the African continent that will serve to inform the rollout of the broader NEPAD e-Schools Initiative. To this end, the NEPAD e-Schools Demo will establish and monitor six NEPAD e-Schools in each of the participating phase one countries.

• The NEPAD e-Schools Demo is one of three strands of activities currently underway within the NEPAD e-Schools Initiative. The other activities involve the development of the NEPAD e-Schools Initiative business plan and the SATLINK project which is intended to define the most appropriate satellite connectivity architecture for the NEPAD e-Schools Initiative. It is expected that these activities will converge into the rollout of the broader NEPAD e-Schools Initiative towards the end of 2005.

2. THE NEPAD e-SCHOOLS DEMONSTRATION PROJECT (NEPAD e-SCHOOLS DEMO)

The implementation of the NEPAD e-Schools Initiative is an unprecedented undertaking. There are a number of layers of complexities inherent in implementation given that this is a multi-country, multi-stakeholder continental undertaking. In order to ensure the effective rollout of the NEPAD e-Schools Initiative, the NEPAD e-Africa Commission will implement, as an initial step, the NEPAD e-Schools Demo.

2.1 Project Purposes

The NEPAD e-Schools Demo is intended to accrue a body of knowledge, based on real-life experiences of the implementation of information and communication technology (ICT) in schools across the African continent that will serve to inform the rollout of the broader NEPAD e-Schools Initiative.

The NEPAD e-Schools demo must therefore provide a platform for, amongst other things:
- determining typical e-Schools scenarios and requirements in various circumstances in Africa;
- highlighting the challenges inherent in the large-scale implementation of e-Schools programmes;
- monitoring the effectiveness of multi-country, multi-stakeholder partnerships;
- determining ‘best practice’ and working models for the large-scale implementation of the NEPAD e-Schools Initiative;
- demonstrating the benefits of the envisaged satellite-based network;
demonstrating the benefits of ICT in African schools.

2.2 Project Scope

In order to achieve the objectives expressed in the previous section, the NEPAD e-Schools Demo will establish and monitor six secondary NEPAD e-Schools in each of the participating “phase one” countries. These schools must conform to the agreed upon attributes of a NEPAD e-School.

The following countries have confirmed participation in the NEPAD e-Schools Demo and have submitted a list of participating schools:

<table>
<thead>
<tr>
<th>Algeria</th>
<th>Mali</th>
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</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>Mozambique</td>
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<tr>
<td>Cameroon</td>
<td>Nigeria</td>
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<tr>
<td>Egypt</td>
<td>Rwanda</td>
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<tr>
<td>Gabon</td>
<td>Senegal</td>
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<tr>
<td>Ghana</td>
<td>South Africa</td>
</tr>
<tr>
<td>Kenya</td>
<td>Uganda</td>
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<tr>
<td>Lesotho</td>
<td>Mauritius</td>
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</tbody>
</table>

The following countries are also candidates for participating, but not yet confirmed:

<table>
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<tr>
<th>Angola</th>
<th>Ethiopia</th>
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<tbody>
<tr>
<td>Benin</td>
<td></td>
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<tr>
<td>Congo</td>
<td></td>
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</tbody>
</table>

Given that the e-Schools Demo project is to serve as mechanism for learning in order to develop models for the effective rollout of the NEPAD e-Schools Initiative, it is imperative that the schools chosen to be included in the NEPAD e-Schools Demo, provide a reasonable reflection of the spectrum of African school environments. The participating schools were therefore chosen according to the following criteria:

- All six schools should be at a secondary or equivalent level;
- There should be a mixture of urban and rural schools;
- If possible, one of the schools should be without access to electricity;
- There should be a mixture of schools in terms of size;
- All six schools should have a room that could be utilised for setting up an ICT laboratory;
- There should be good security;
- The teachers at these schools should be willing to avail themselves for various training courses.
2.3 Project Management

- The NEPAD e-Africa Commission has established an office and a manager to oversee the management and implementation of the NEPAD e-Schools Demo. This office will be responsible for:
  - Political goodwill and commitment;
  - Overall management and co-ordination;
  - Communication;
  - Promotions;
  - Guidelines for participation;
  - Research, monitoring and evaluation;
  - Facilitation of formal agreements amongst partners.

- The e-Schools Coordination Body has been established. This Body consists of representatives from each of the participating phase one countries, and will be responsible for approval of frameworks and implementation plans as well as in-country coordination and communication.

- Country governments will be responsible for:
  - Country-level co-ordination;
  - Provision of schools, personnel for training, school security, etc.;
  - Assistance with monitoring and evaluation;
  - Promotion of sustainability.

Note: These roles will be facilitated, in part, through the appointment of a “country liaison” person.

- The NEPAD e-Africa Commission has appointed coordinators for each of the identified critical components, i.e. Infrastructure, Content, Teacher Training and the “Health Point”. The role of these coordinators is work with the various consortia to ensure the development of an appropriate strategy and country-level action plan for implementation of these components of the demo.

- The NEPAD e-Africa Commission will use the Information Society Partnership for Africa’s Development (ISPAD) as the mechanism for involvement of private sector organisations, civil society organisations and non-governmental organisations. Various partnerships will be created from among these organisations for the purpose of taking responsibility for providing the following services to the participating schools in an assigned group of countries:
  - Infrastructure necessary for the implementation of the NEPAD e-Schools Demo project - including hardware, software, connectivity, electricity, etc.;
  - Training;
  - Curriculum-based content;
  - Maintenance and support.

- The Commonwealth of Learning has agreed to manage monitoring and evaluation for the demo on behalf of the NEPAD e-Africa Commission. The Commonwealth of Learning will therefore, in collaboration with the other NEPAD e-School Demo project structures:
  - Develop a monitoring and evaluation framework and implementation plan.
  - Develop data collection strategies
  - Prepare reports based on available data
  - Provide recommendations regarding the planning and implementation of the next phases of the NEPAD e-Schools project.
3. THE MONITORING & EVALUATION (M&E) FRAMEWORK

As stated previously, the NEPAD e-Schools Demo project is being undertaken in order to accrue a body of knowledge based on real-life experiences of ICT applications in schools across the African continent that will serve to inform the rollout of the NEPAD e-Schools Initiative. The purpose of the monitoring and evaluation process during the Demo project phase is, therefore, twofold:

- It must provide the managers and decision-makers responsible for implementing the Demo project with information and feedback as the project proceeds in order for them to make any necessary adjustments.
- It must synthesise the lessons learned during the Demo project and make recommendations for the comprehensive rollout of the NEPAD e-Schools Initiative in a summary report at the end of the demonstration period.

3.1 The Model

While there are many different models of programme evaluation, the CIPP Model (context, input, process and product) has been selected because it provides for a comprehensive approach that seems appropriate for the Demo project (1). It is a decision-focused approach to evaluation that emphasises the systematic provision of information for programme management and operation. In this approach, information is seen as most valuable when it helps project managers to make better decisions, so evaluation activities should be planned to co-ordinate with the decision needs of the staff responsible for implementing the project. Data collection and reporting are then undertaken in order to promote more effective programme management. Since programmes change as they are implemented, decision-makers’ needs also change. Evaluation activities have to adapt to meet these changing needs as well as to ensure continuity of focus in order to trace development and performance over time.

The four dimensions of the CIPP evaluation framework assist a decision-maker to answer four basic questions:

1. What should we do? (The Context)
   This involves collecting and analysing needs assessment data to determine broad objectives, set priorities and define the expected outcomes. For example, in the context of the NEPAD e-Schools initiative, it was concluded that issues such as escalating poverty levels, underdevelopment and the continued marginalisation of Africa needed a new radical intervention. As a result they set a goal that within 10 years of the implementation of this initiative in more than half a million schools on the continent, the majority of the African population would possess ICT skills with far reaching implications for the development of the African society. This then led to the establishment of the broad objectives for the e-Schools Initiative.

2. How should we do it? (The Inputs)
   This involves the steps and resources needed to meet the new goals and objectives and might include identifying and reviewing successful external programmes and materials as well as gathering information.

3. Are we doing it as planned? (The Process)
   This provides decision-makers with information about how well the programme is being implemented. By continually monitoring the implementation of the project decision-makers are able to determine how well plans and guidelines are being followed, issues that are arising, adequacy of resources, etc, and then make adjustments as necessary.
4. *Was the project successful? (The Product)*

This dimension of the Framework, as it is applied in this project, needs to be divided into evaluation subparts that answer such questions as How well were the planned outcomes achieved?; Were the inputs appropriate?; How effectively were the inputs implemented?; and, How transportable are they to the next phase of the NEPAD e-Schools Initiative?

3.2 Monitoring and Evaluation Team

Implementing a M&E framework as comprehensive as this requires that everyone involved in the NEPAD e-Schools Demo contribute to the data collection process by completing questionnaires, recording their experiences in logs, and, filing reports as the Demo project proceeds. The following list defines the groups involved in the process and the contributions that will be expected:

**Team Leader.** The Team Leader will be appointed by COL and will report to the COL Programme Officer responsible for the partnership between COL and the NEPAD e-Schools Demo project. The team leader, working with COL the NEPAD e-Schools Demo project manager will be responsible for:

- Ensuring the implementation of the monitoring and evaluation plan;
- Maintaining regular communication with in-country colleagues and project managers regarding the M&E process, including site visits;
- Ensuring the orientation of country- and school-level personnel in each participating country regarding the M&E plan as well as their assistance with its implementation;
- Ensuring liaison and communication with project managers;
- Establishing procedures for data analysis;
- Identifying reports required during the period of the demonstration project and ensuring their preparation;
- Preparing the final evaluation report at the end of the demonstration period according to an agreed framework.

**Demo Project Management Office** – will support the implementation of the M&E plan by:

- Being the primary contact for the Team Leader;
- Ensuring communication of the plan to all stakeholders;
- Receiving feedback and proposing amendments to the plan as required;
- Working with Country Liaison persons, school principals, education service providers and working groups to ensure adherence to the M&E reporting schedule, and, to encourage completion of the questionnaires;
- Preparing quarterly progress reports on project implementation;
- Advising and supporting the Team Leader as mutually agreed.

**Country Liaison Persons** – the Ministry of Education in each participating country shall designate a liaison person to advise and assist the M&E team leader and the NEPAD e-Schools Demo Project Manager regarding the implementation of the M&E plan in that country. This person will be expected to provide the following support:

- Ensure school-level co-operation by identifying and collaborating with a contact person at each participating school (normally the school principal) who can assist with the implementation of the M&E plan at the school level;
- Contribute to the development of data collection and analysis procedures and ensure implementation of the M&E plan in the countries of responsibility;
- Prepare reports as required during the demonstration period;
• Supervise data collection as required;
• Maintain regular communication with school-level contacts and the team leader to ensure feedback regarding the implementation of the M&E plan and to suggest adjustments as needed;
• Provide a personal report for the M&E team leader at the end of the project regarding lessons learned and recommendations concerning the next phase of the e-School Initiative;
• Contribute to the development of recommendations and the preparation of the final report.

School Principal
• Assist country liaison person with data collection as required;
• Ensure communication to in-school colleagues and the wider community about the project and the M&E process;
• Provide bi-monthly reports to the country liaison person regarding the progress of project implementation at their school.

Teachers
• Complete online questionnaires promptly when requested to do so;
• Ensure they keep their school principal briefed re any problems or issues that arise.

Students
• Complete online questionnaires promptly when requested to do so.

ISPAD Consortia
There will be several consortia comprised primarily of private sector organisations that will provide the infrastructure, related training and content for the Demo project. It will be critically important for their experiences and feedback to be included in the M&E process. Therefore each consortium will be asked to:
• File a written plan that describes the process and timelines for the implementation of the Demo project in the schools within their jurisdiction;
• Provide progress reports on the implementation of their plan at six and twelve month intervals of the Demo project.

3.3 Interactions among M&E Team Members

The locus of all communications during the Demo project must of course be the Demo Project Manager. Therefore the Team Leader at the Commonwealth of Learning will maintain weekly communication with the Project Manager and will also establish a listserv to create a forum for wider discussion of issues regarding the M&E process. The Team Leader will also arrange for selected site visits and focus group discussions as resources permit.

4. MONITORING & EVALUATION IMPLEMENTATION PLAN

The following M&E implementation plan has two primary components. The first of these, called The Monitoring and Evaluation of Outcomes focuses on the questions “What should we do?” and “How well are the planned outcomes being achieved?” The second, called Assessing Inputs and Monitoring Implementation, deals with the other two questions in the M&E framework, “How should we do it?” and “Are we doing it as planned?” The details of the Implementation Plan were developed during a workshop convened by the Coordinating Committee for the NEPAD e-Schools Demo project on October 20 & 21, 2004 in Pretoria, South Africa. The workshop was facilitated by the COL appointed M&E Team Leader.

4.1 Monitoring and Evaluating Outcomes
The broad objectives for the NEPAD e-Schools Initiative have been defined as follows:

1. To provide ICT skills and knowledge to primary and secondary school students that will enable them to function in the emerging Information Society and Knowledge Economy.

2. To make every learner health literate.

3. To provide teachers with ICT skills to enable them to use ICT as tools to enhance teaching and learning.

4. To provide school managers with ICT skills so as to facilitate the efficient management and administration in the schools.

These objectives define the vision and general purposes of the NEPAD e-Schools Initiative and, as such, provide the start point for developing this section of the M&E Implementation Plan. However, more specific outcome statements that describe what would be happening in schools if these broad objectives were being met, are necessary to provide direction for the M&E process. Once the “outcome statements” are in place it becomes possible to define the “indicators” that will be used to measure how well each outcome is being achieved – and then to make judgements about the degree to which the broad NEPAD e-Schools Initiative objectives are being met.

The development of the “outcome statements” and the “Impact Indicators” was a major focus of the October workshop. A set of proposed Outcomes and related Impact Indicators, gleaned from a comprehensive review of related evaluation reports (2) and the excellent portal regarding ICT applications in education that has been assembled by the UNESCO Bangkok office (3), was presented for discussion by the Committee. The Outcomes and Impact Indicators that were agreed to are presented in Table 1.

It is important to note that the Coordinating Committee views these Outcomes and Impact Indicators as providing the guiding framework for planning and evaluating the NEPAD e-Schools Initiative generally – not only for the Demo period. However, the Committee recognised that it would be unrealistic for all indicators to show progress within the timeframe of the Demo project, therefore those Impact Indicators marked with an asterisk (*) will be the particular focus during the Demo project period.
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<thead>
<tr>
<th>NEPAD e-Schools Outcomes</th>
<th>Impact Indicators</th>
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<tbody>
<tr>
<td><strong>1. Students</strong>&lt;br&gt;Through the use of ICT:&lt;br&gt;• Develop appropriate level of ICT capability&lt;br&gt;• Become more engaged in own learning</td>
<td>• Demonstrate proficiency in the use of ICT for:*&lt;br&gt;  o word processing&lt;br&gt;  o spreadsheets&lt;br&gt;  o basic e-mailing&lt;br&gt;  o basic Internet browsing&lt;br&gt;  o presentation tools&lt;br&gt;  o graphics.&lt;br&gt; • Use ICT to collaborate, publish and interact with peers, experts and other resource people. <em>&lt;br&gt; • Use ICT to locate, evaluate and collect information.</em></td>
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<tr>
<td><strong>2. Learning environments</strong>&lt;br&gt;ICT is used to support constructivist teaching that is more:&lt;br&gt; • Learner-centred&lt;br&gt; • Knowledge-centred&lt;br&gt; • Assessment-centred&lt;br&gt; • Community-centred.</td>
<td>• Students use ICT to investigate the real world and build a wider, deeper knowledge base.<em>&lt;br&gt; • ICT enables students to be active as participants in their own learning.</em>&lt;br&gt; • The interactive, multimedia and communication characteristics of ICT are used to enhance student motivation.<em>&lt;br&gt; • ICT is used to foster collaboration and cooperation among students and more interaction with teachers.</em>&lt;br&gt; • ICT is used to support more individualized learning (at their own pace).<em>&lt;br&gt; • ICT is used to provide learning experiences and allow students to progress at their own pace.</em>&lt;br&gt; • ICT tools are used to increase student productivity.*&lt;br&gt; • Students engage in higher levels of thinking such as application, analysis and synthesis&lt;br&gt; • Adaptive technologies are used to enhance learning for students with physical disabilities</td>
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<td><strong>3. Teacher ICT competencies</strong>&lt;br&gt;Teachers are competent to apply ICT in order to:&lt;br&gt; • Support students (with respect to learning activities)&lt;br&gt; • Create a constructivist learning environment&lt;br&gt; • Contribute to the relevant learning communities</td>
<td>Teachers are:&lt;br&gt; • able to teach students how to use available hardware devices safely*&lt;br&gt; • able to use and apply basic software programmes in the context of their teaching*&lt;br&gt; • able to use ICT to improve their professional and administrative proficiency*&lt;br&gt; • able to use the internet to locate additional learning resources to enrich the curriculum*&lt;br&gt; • able to use ICT to facilitate a variety of assessment and evaluation strategies*&lt;br&gt; • aware of health, legal and ethical issues with regard to the use of ICT*&lt;br&gt; • able to plan and design learning experiences supported by ICT with a special reference to health topics <em>&lt;br&gt; • able to collaborate with other teachers internally and externally to their school</em>&lt;br&gt; • able to develop digital content teaching materials on their own.</td>
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4. School ICT capacity
All teachers and students have immediate access to:
- The hardware and software necessary to support the curriculum
- The support necessary to enable its use.
- Teachers and students have ready legal access to a range of appropriate content software
- Students and teachers have ready access to ICT hardware
- Effective policies are in place for the management of hardware resources
- Teachers and students have access to online services such as internet and e-mail
- Teachers and students have access to technical support when required
- There is management and coordination of digital resource materials across all learning areas

5. School environment
The school environment is supportive of teachers and students’ use of ICT based on a shared, community-based vision that prepares students to learn, work and live successfully in a knowledge-based, global society
- National policies and long-term plans are in place to promote and support and use ICT in schools
- [Note: These should be shared via the portal that is to be established by the Demo manager]
- Pedagogical school policies encourage students to reach out beyond the classroom
- Curriculum support personnel are available to assist teachers to integrate ICT in the learning and teaching process
- School policies and processes engage parents, community members, school staff and learners in interactions and partnerships that advance the use of ICT in schools
- Schools collect and analyse data regarding the use of ICT to inform decision-making

6. Health Point
The Health point is a unit to be developed within each school through which to:
- Provide access and accessibility to information more especially in rural areas
- Health promotion to children, parents and community
- Health workers’ access to information
- Health services to students
- Health education is promoted in schools via print and ICT related methods including broadcasting
- A health portal is available to health workers and the wider community
- Mass media are used to promote healthy living and to provide health related information on topics such as HIV/AIDS and malaria, TB, nutrition, and hygiene

4.2 Data Collection Strategies
Online questionnaires to be completed by:
- Ministry of Education (MOE) respondents: 1 per country
- School principal: 1 per school
- Teachers: 10 per school (selected by the principal)
- Students: minimum of 25 per school selected by the school principal using the following criteria:
  - Must have access to computer with Internet connection
  - Be participating in the e-Schools Demo project
  - Be representative of gender and grade levels
Questionnaires will be administered online at the start, mid-point, and at the end of the Demo project.

**Selected focus groups:**
- The goal is to have 1 focus group per country
- Focus groups will be organised and facilitated by an independent organisation (e.g. Schoolnet Africa) or by COL
- The focus groups will use a common discussion framework to be developed by the M&E Team Leader
- Representatives from the participating schools, local community and government will be invited to participate in the focus groups.

**Reports from:**
- Country liaison persons
- School principals
- Private sector partner consortia

**Teacher logs:**
- To record personal experiences during the Demo period

**Interviews:**
- The Team Leader may arrange for a sample of telephone interviews with individuals from other members of the M&E team

### 4.3 Assessing Inputs and Monitoring Implementation

The second task for the Coordinating Committee at the October 20-21 workshop, following the definition of the Outcomes and Impact Indicators, was to develop a framework for:

- Assessing the planning for the Inputs needed to achieve the Outcomes (e.g. infrastructure, training, development of instructional content materials, and, requirements for the Health Point). Input plans are the response to the question “How should we do it?”
- Monitoring and evaluating the process of implementing the planned Inputs. This must address the question “Are we doing it as planned?”

This component of the NEPAD e-Schools Demo project M&E plan is particularly important because the way the Inputs are planned and implemented will largely determine the degree of success in achieving the project Outcomes. The procedures and reports described in this section of this document are designed to generate sufficient data to analyse the experience during the Demo period and to reach conclusions about how input planning and implementation can be improved for the next phase of the NEPAD e-Schools Initiative.

#### 4.3.1 Assessing Input Planning

Detailed Implementation plans will be prepared by each of the consortia for each of their assigned schools according to guidelines specified by the Project Manager. These plans will outline the strategies to used to for each of the following components: Infrastructure development; training; content and the Health Point. The consortia will also be asked to prepare a report that describes the process of developing each of the plans along with recommendations for improving the process as the
NEPAD e-Schools Initiative moves forward. Table 2 outlines the points that should be addressed in these reports in more detail for each of the major Input sectors.

### Table 2: Assessing Development of Input Plans

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<th>Input Sector</th>
<th>Assessment Reports</th>
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| **Infrastructure** | The report should first explain any discrepancies between its content and the specifications defined by the Project Manager. It should then comment on:  
• the process used to develop the plan and how it could be improved  
• Perceived strengths/weaknesses  
• Constraints experienced  
• Adequacy of resources – both human and financial  
• Conditions required for sustainability beyond the Demo period  
• Recommendations for future planning in this sector |
| **Training for Teachers, School Administrators and School-based Support Person re ICT Competencies (see Outcomes and Indicators in Table 1)** | The report should first explain any discrepancies between its content and the specifications defined by the Project Manager. It should then comment on:  
• the process used to develop the plan and how it could be improved  
• Perceived strengths/weaknesses  
• Constraints experienced  
• Adequacy of resources – both human and financial – needed to achieve the training outcomes  
• Evaluation strategies  
• Recommendations for future planning in this sector |
| **Training for Teachers re ICT pedagogical applications across curriculum subjects** | The report should first explain any discrepancies between its content and the specifications defined by the Project Manager. It should then comment on:  
• the process used to develop the plan and how it could be improved  
• Perceived strengths/weaknesses  
• Constraints experienced  
• Adequacy of resources – both human and financial – needed to achieve the training outcomes  
• Evaluation Strategies  
• Recommendations for future planning in this sector |
| **Development of ICT Curriculum - Based Learning Materials** | The report should first explain any discrepancies between its content and the specifications defined by the Project Manager. It should then comment on:  
• the process used to develop the plan and how it could be improved  
• Perceived strengths/weaknesses  
• Constraints experienced  
• Adequacy of resources – both human and financial – needed to achieve the training outcomes  
• Evaluation Strategies  
• Recommendations for future planning in this sector |
| **Health Point** | The report should first explain any discrepancies between its content and the specifications defined by the Project Manager. It should then comment on:  
• the process used to develop the plan and how it could be improved  
• Perceived strengths/weaknesses  
• Constraints experienced  
• Adequacy of resources – both human and financial – needed to achieve the training outcomes  
• Conditions for sustainability beyond the Demo period  
• Recommendations for future planning in this sector |
4.3.2 Monitoring the Implementation of Input Plans

This will require scheduled reports from all parties involved in the implementation process. The reporting responsibilities, report guidelines and reporting frequencies are described in Table 3.

**Table 3: Implementation Reports**

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<th>Report Responsibility</th>
<th>Report Guidelines</th>
<th>Reporting Frequency</th>
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| From the Project Manager to all Stakeholders in Demo project and the M&E Team Leader | • Status of input planning  
• Resources (HR and financial)  
• Issues requiring resolution  
• Communication to stakeholders  
• Status of implementation schedule  
• Political issues  
• Other | Quarterly during Demo period |
| From Country Liaison Persons to Project Manager and M&E Team Leader | • Status of implementation re:  
  • ICT deployment  
  • Teacher training (ICT and pedagogy)  
  • Student training  
  • Availability of LMS  
  • Identification of critical issues and solution Strategies (report will use information from school principals) | Quarterly during Demo period |
| From each of the consortia to the Project Manager and the M&E Team Leader. | Guidelines will be finalised following a review of Implementation plans. The following are therefore illustrative:  
• Status of implementation re each of the plan components (Infrastructure, Training, Content and Health Point)  
• Changes to the plan? What were they? Why?  
• Issues encountered  
• Unexpected events – did these help/ hinder progress?  
• Existence of service level agreements.  
• Feedback received re: appropriateness and effectiveness from teachers, school heads, students and country liaison persons  
• Perceived sustainability issues | Mid-point and end of Demo period |

4.3.3 Monitoring and Evaluation Reports from the M&E Team Leader

Information gathered from the above reports and the summaries of the online questionnaires will be supplemented by follow-up telephone interviews and the planned focus groups. The M&E Team Leader will draw on this information to provide periodic interim reports to the Project Manager and the Coordination Committee during the Demo period, and, to provide a final summary report. Summaries of the online questionnaires will be provided following the completion of each round of responses (i.e. at the beginning, mid-point and end of the Demo period)
The Interim reports will be provided at the fourth and eighth months following the launch of the Demo project. These reports will be structured according to the four Input sectors and will focus on observations and recommendations regarding the implementation process.

The final report will be structured as follows:

- Background context
- Description of inputs (e.g., infrastructure, training, funding, human resources/expertise, policy development, etc.)
- Description of processes (e.g., organisation, partnerships, intergovernmental agreements, M&E model, etc.)
- Outcomes – this section to be shaped by the purposes of the demonstration project:
  - Typical scenarios and requirements at the school level
  - Challenges to be expected in large-scale implementation
  - Effectiveness of partnerships
  - Examples of “best practice”
  - Benefits of the satellite-based network
  - Benefits of ICT in African schools
- Recommendations

4.3.4 Monitoring and Evaluation Activity and Reports Schedule

The schedule for the completion of these activities is shown in Table 4. The M&E Team Leader will work through the office of the Project Manager to ensure that the integrity of the schedule is maintained.
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5. END NOTES

1. CIIP Evaluation Model Checklist
   http://www.wmich.edu/evalctr/checklists/cippchecklist.htm

2. The work of Dr C. Paul Newhouse was particularly helpful in developing the set of proposed Outcomes. Dr Newhouse, in a study for the Western Australian Department of Education, synthesised a generic set of outcomes based on an extensive international review of literature and projects related to ICT applications in schools. His framework is composed of five dimensions: students, learning environments attributes, teacher professional ICT attributes, school ICT capacity and school environment.

3. Among the many resources available through the UNESCO Bangkok portal is a comprehensive collation of the various types of indicators that have been developed to measure the impact of ICT applications in education. This information was particularly helpful in developing the Impact Indicators that are proposed for the NEPAD e-Schools Initiative.

February 10, 2005