



# **THE e-LEARNING PROJECT A Joint MEMT/MOE Project**

## **PERFORMANCE REVIEW TO DECEMBER 2007**

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## 1. Genesis of the Project

- ◆ Arose from a realization that an educated knowledge-based society would spur demand for Internet Services
- ◆ MEMT decided to contribute to the education of Jamaica's citizenry through an e-learning project
- ◆ Project developed by Joint Committee MEMT/MOE, chaired by MOE Junior Minister
- ◆ e-Learning Jamaica Company Limited incorporated in July 2005 to direct the implementation of the e-learning project
- ◆ Project being funded by Universal Access Fund from cess on international calls terminating in Jamaica

## 2. Purpose and Scope of Project

- 2.1 To utilize current state-of-the-art ICTs in Jamaica's high schools, grades 7-11, to
- Improve the quality of education
  - Enhance the learning experience
  - Improve the level of passes in the CXC CSEC exam
- 2.2 180 institutions
- 166 Public high schools
  - 6 Public Special Schools
  - 8 Colleges that train teachers for the high schools

## 3. Project Components

### 3.1 Component 1 - Instructional Materials

Acquisition / Development of a comprehensive set of standard ICT-based instructional materials for teachers and students in 11 subject areas

- i. Teachers Instructional Materials (TIMs)
- ii. Student's Instructional Materials (SIMs)
- iii. Interactive Educational Software (for 'challenging' topics)
- iv. Item Bank (25,000 questions, Multiple choice and extended questions)
- v. Video-taped Lecture Series

#### Media

- ◆ Exciting Text
- ◆ CD-ROMs
- ◆ DVDs
- ◆ Power Point Presentations
- ◆ Video-taped lectures
- ◆ Cable TV, 1 channel per subject
- ◆ Database resources
- ◆ Interactive Software
- ◆ Video/Tele Conferencing
- ◆ On-line lessons, tutorials
- ◆ Chat rooms
- ◆ Links to other resources



#### Development Methodology

- ◆ International Standards
- ◆ Best Practices
- ◆ Expertise in instructional design
- ◆ Expertise in writing instructional material
- ◆ Expertise in writing items
- ◆ Knowledge of the technology and how it can be integrated
- ◆ Supervision
- ◆ Quality Assurance

### **3.2 Component 2 - Technology Infrastructure for Storage / Dissemination/ Access**

- i. Provision of ICT equipment and software to schools
- ii. Establishment of a Central Repository for Educational Materials(CREM) to store, reproduce, continuously update, and distribute materials
- iii. Upgrade of the Education Management Information System (EMIS) at the MOE to enhance management and administrative capability
- iv. Broad Band Internet Access (provided by UAF)

#### Technology

- ◆ Desk tops
- ◆ Lap-tops
- ◆ Multimedia Projectors & Screens
- ◆ Intelligent White Boards
- ◆ Document Cameras
- ◆ Digital Video Cameras
- ◆ DVD/CD Players
- ◆ Scanners
- ◆ Tape Recorder/Players
- ◆ Televisions
- ◆ VCR Players

### **3.3 Component 3 - Teacher Training**

- i. Principals' Awareness and Orientation
- ii. Training of Teachers and Subject Tutors in Teachers Colleges in 3 phases
- iii. Modern methodologies for delivery, change management
- iv. Training and Certification in ICT skills (to international standards)
- v. Integration of ICT into the teaching/learning process (certification to ISTE standards)

#### Training Methodology

- ◆ 1 & 2 day Orientation Workshops
- ◆ Residential Workshops
- ◆ Modules On-line and on CD
- ◆ Video Conferencing
- ◆ Reinforcement lectures via EDU-TV
- ◆ 1&1 Onsite and group reinforcement
- ◆ Onsite Evaluation



### **3.4 Component 4 - Remedial Support**

Collaborating with existing remedial interventions providing ICT-based materials and equipment and training of tutors and support personnel

### **3.5 Component 5 - Continuous Assessment**

Introduction of standard examinations across the system at grades 7, 8 & 9 (Grade 11 CSEC and Grade 10 CCSC)

### **3.6 Project Evaluation**

- i. Programme / Project Evaluation
- ii. Impact Assessments

#### Methodology

- iii. Desk Reviews
- iv. Formative surveys - questionnaires, interviews, review of school reports
- v. Summative surveys - questionnaires, interviews, review of school reports
- vi. Examination Results
- vii. Attitude Surveys
- viii. Skills Surveys etc

## **4. Project Implementation Plan**

- i. Phase 1 – Pilot project September 2006-August 2007
- ii. Phase 2 September 2007-August 2008
- iii. Phase 3 September 2008-August 2009



## **5. The Pilot Project**

### **5.1 Purpose of Pilot Project**

To test all strategies, methodologies, processes, support systems and utilize lessons learned to influence rollout to other schools

### **5.2 Scope of Pilot Project**

- ◆ 26 High Schools
- ◆ 3 Teachers Colleges
- ◆ 1 Special High School
- ◆ 1 Independent High School
- ◆ 5 subjects (English Language, Mathematics, Information technology, Biology, Chemistry)
- ◆ Grades 10 & 11

### **5.3 Pilot School Selection Criteria**

- ◆ From three parishes in close proximity to facilitate ease of logistics in implementation activities
- ◆ Rural, urban
- ◆ Inner city, uptown
- ◆ Boys only, girls only, coeducational
- ◆ Traditional, newly upgraded, technical
- ◆ Performing well, average performance
- ◆ One Special Needs
- ◆ One Independent
- ◆ 3 Teachers Colleges that train 80% of secondary school teachers

### **5.4 Major Objectives of Pilot Project**

- i. To acquire and place TIMS, SIMS educational software and video lectures for challenging topics in pilot schools by end December 2006
- ii. To install equipment in the pilot schools by January 2007 and at the CREM by February 2007
- iii. To complete methodology training for pilot school teachers by December 2006 and begin ICT Training by January 2007
- iv. By August 2007, to develop strategies to enhance existing remedial programmes through the use of the educational technologies
- v. By August 2007, to develop a strategy for implementing the standard assessment programme across grades 7-9
- vi. To ensure buy-in and ownership of the project by project schools



- vii. To hire staff, and install office equipment and implement financial and operational systems by September 2006
- viii. To institute effective planning and performance monitoring strategies
- ix. By December 2006, to implement a comprehensive public education programme
- x. By December 2006, to conduct a baseline study and develop evaluation criteria for a formative and summative evaluation system to inform on project implementation and project impact

## **6. Performance to Date**

### **6.1 Administration**

- i. Staffing, furniture and equipment in place
- ii. Financial Systems in place, Accounting Software purchased and installed
- iii. Board and Board Subcommittees meeting monthly, Annual Planning and quarterly reviews in place, new Board awaited
- iv. RFP published for Public Relations Consultant, Comprehensive Public Relations programme to be implemented early 2008 (awaiting new Board)
- v. Evaluation Consultant selected, awaiting approval from NCC—baseline survey now planned for February to March 2008

### **6.2 Instructional Materials**

- i. School e-Learning Implementation Committees (SEIMC) established in all schools and colleges to oversee the implementation of the project and ensure buy-in/ownership
- ii. Subject Advisory Groups (SAG) involving MOE subject experts established to ensure standards and quality assurance
- iii. Philosophical framework for materials deployment agreed
- iv. Publishers of existing high quality TIMs and SIMs selected to provide materials to schools in the short-term, contracts being negotiated – expected to acquire in early 2008
- v. Proposals from writers of content to be owned by the Govn over the long term being evaluated
- vi. Specifications for educational software being developed
- vii. Consultant contracted for a short-term to review existing item banks and management software and guide the process of item bank development
- viii. Teachers commenced Item Writing, approx 1871 items reviewed and accepted and being placed in a temporary Moodle-adapted database Biology (448), Chemistry (257), English Language (715), Information Technology (257), Mathematics (371)



- ix. Instructional Video providers producing 50 video lectures, field testing commenced, delivery to schools to commence in January 2008
- x. Instructional Technology Expert being contracted to assist with the planning for the materials development, to advise on the structure of the CREM and to identify an appropriate Learning Content Management System (LCMS/LMS)

### **7.3 Teacher Training**

- i. Assessment conducted to determine training needs for teachers in the pilot schools
- ii. HEART Trust NTA selected as the provider for ICT Training and Certification (NCTVET NVQ-J) – training started in July 2007 and some 1230 teachers and lecturers are currently in training or have been trained at various levels, beginners, intermediate and advanced
- iii. RFP for provider of Technology Integration Training published in November 2007 and proposals being evaluated
- iv. Pilot Colleges developing plan for training of lecturers in technology integration using online and video technology programmes provided by overseas partner colleges

### **7.4 Equipment**

- i. Equipment, Network and related software bids approved by NCC and Cabinet in October 2006 and protest on main equipment contract cleared by NCC in June 2007
- ii. Network Contract signed in May 2007, infrastructure work began in August 2007, 50% complete,
- iii. Equipment contract signed in September 2007, delivery to commence in February 2008
- iv. Audio-visual equipment delivered to all pilot and phase 2 schools and school system administrators trained to set up and dismantle, phase 3 to be completed by February 2008
- v. Computer Furniture delivered to pilot schools, phase 2 implementation to begin February 2008

### **7.5 Management and Control**

- i. MOE providing building infrastructure works to house and secure the equipment, from the Education Transformation Fund
- ii. Project Manager employed by e-LJam to validate requirements, assist in hiring contractors, monitor the works and liaise with MOE's building officers in signing off works
- iii. Infrastructure Monitoring Committee established including the e-LJam Technical Committee, and representatives from UAF, MOE Building Office and the MOE School Facility and Infrastructure Team
- iv. Suppliers enter into a framework contract, delivering equipment on a predetermined schedule over 2 ½ years,



- v. No equipment delivered if schools are not properly prepared to accept in terms of secure space and adequate electrical circuitry.
- vi. Provision made to provide distinctive marking which will identify the equipment being provided by e-LJam in the event of theft

## 7.6 Financial Performance

◆ Reflects the start-up activities and the delays in Project Implementation

FINANCIAL PERFORMANCE	BUDGET TO END DECEMBER 2007	EXPENDITURE TO END DECEMBER 2007	VARIANCE
	J\$	J\$	%
GOVERNANCE & ADMINISTRATION	80,468,874.20	60,370,986.55	75.02
INSTRUCTIONAL MATERIALS	263,762,447.85	8,273,377.76	3.14
TRAINING OF TEACHERS	64,284,307.56	9,896,469.14	15.39
TECHNOLOGY INFRASTRUCTURE	1,506,915,272.27	275,726,478.93	18.30
REMEDIAL	3,570,000.00	9,669.00	0.27
PROJECT EVALUATION	2,044,000.00	89,132.00	4.36
LOANS	138,000,000.00	0	0.00
CAPITAL COSTS	16,610,000.00	15,780,721.53	95.01
<b>TOTAL</b>	<b>2,075,654,901.88</b>	<b>370,146,834.91</b>	<b>17.83</b>

## 7.8 Time Performance

- i. Pilot Project 6 months behind schedule and approx 60% implemented
- ii. Plan to fully implement pilot by March 2008,
- iii. Partial implementation of Phase 2 commenced as of September 2007 and will be completed by August 2008 as originally planned



## 8. Major Constraints

- i. Delays in agreement on scope, look, feel and strategy for acquisition / development / deployment of materials and on the deployment of technology in the schools
- ii. Slow development of standards and specifications for instructional materials due to time constraints of experts assigned
- iii. Lengthy and involved procurement process
- iv. Protest from Bidder on major contract
- v. Delays in acquisition of contractors to carry out building infrastructure works in the pilot schools and inadequate resources assigned to the sign off process

## 9. Lessons Learned To Date

- i. The importance of collaboration / involvement of stakeholders, schools, MOE, funders, to create buy-in and ownership and provide the necessary policy guidance. The involvement of the MOE through a Memorandum of Understanding is yielding benefits of access to the experience of the Ministry's technical staff. The School Committees will ensure the timely involvement and accountability of the school leadership
- ii. The need for continuous research and refinement and flexibility– nothing cast in stone - especially in the pilot phase, it is desirable to have the will to try out new approaches and have the capacity to act without fear of failure.
- iii. The need to use existing materials, methodologies, know-how to get materials into the schools in the short-term – need not invent the wheel– this will also allow evaluation of the interaction of teachers and students with the electronic and print resources - in general, it is a strategic goal of the project to own materials for open adaptation and dissemination
- v. The need to maintain focus on learning rather than technology. There is a concern that schools may be more interested in the capital acquisition than in the pursuit of project goals and objectives.
- v. The need to estimate more realistic timeframes for all activities
- vi. The need for strategy to maintain interest – eg in Item writing
- vii. The need for strategy to minimize procurement delays
- viii. The need for experts to be allowed the time to devote to providing critical input – standards, reviews, research, building contractor approvals etc
- ix. The need to ensure a significant period for assimilation, reinforcement and practice in the schools after implementation of the technology prior to the ending of the project