THE e-LEARNING JAMAICA PROJECT Towards an Educated and Knowledge Based Nation



Sharing a vision for an educated and knowledge based people, in which equal opportunity for all would be a reality, the Ministry of Education and Youth (MOEY) and the Ministry of Industry, Technology, Energy and Commerce (MITEC) have collaborated on an innovative project to improve education in Jamaica's high school system, through the use of Information and Communications Technologies (ICT's),

The main goals of the e-Learning Jamaica Project are to:

- improve the quality of education,
- enhance the learning experience and
- ensure high levels of passes in the CXC Exams

Students in Jamaica's High Schools will benefit from a mix of formal methods with informal entertaining approaches to learning to stimulate the teaching/learning process and excite young minds to embark on a quest for knowledge. As the youths of Jamaica are already immersed in technology, the use of modern methodologies in the classroom is a natural move towards enhancing the learning process.

WHY e-LEARNING?

e-Learning refers to using electronic applications and processes to learn, including Web-based learning, computer-based learning, virtual classrooms, digital collaboration, where content can be delivered via the Internet, intranet, extranet, audio or video tape, satellite TV or CD ROM.

The e-Learning Jamaica project will introduce new approaches to impart instruction, stimulate learning and consistently deliver a good level of education to high school students addressing some key constraints in the system, and encouraging better student performance.

e-LEARNING PROJECT OBJECTIVES

- To develop a comprehensive set of standard ICT-based instructional materials for teachers and students, in 11 CXC CSEC subject areas;
- To provide schools with ICT equipment and software for use in the teaching and learning process, and to establish a Central Repository for the Educational Materials (CREM) at the MOEY;
- To enhance the skills of teachers through training programmes in the use of software and equipment and in modern methodologies for delivery of the high school CXC syllabus;
- To provide modern technologies to existing remedial programmes in high schools to ensure that all children keep pace with the schools' programmes;
- To institute standard examinations that will measure and track the performance of students in each grade in high schools, as well as, measure performance among schools.

PROJECT COMPONENTS

The Project has five components, designed to address each of the above objectives; Development of Instructional Materials and other content, Provision of Equipment/Technologies, Training of Teachers, Remedial Interventions, Continuous Assessment.

• Instructional Materials

A comprehensive set of instructional materials will be developed for both teachers and students for each grade in all 11 CXC subjects. These are: English Language, Mathematics, Social Studies, Integrated Science, Resource & Technology/Information Technology, Spanish, Geography, Building Technology, Chemistry, Biology and Physics. Manuals will facilitate practical, hands-on learning, as well as independent study and include student assignments. They will be supplied to schools in electronic/word processing format, as well as on CDs and DVDs and will also be available on the internet.

Interactive Software

Interactive computer technology will be used to support the teaching of abstract and challenging concepts, as well as to make lessons more exciting, especially for boys who are usually attracted to such technology.

Video Recorded Lecture Series

Expert subject teachers are being identified to deliver high quality lecture series for each subject, and at all five grades, to enhance classroom teaching or for use by inexperienced teachers. Presentations will be done by topic or concept and will be structured according to the curriculum. The series, to be packaged on DVD, will also include laboratory experiments, and may be reproduced by schools for loan or sale to students for home viewing. Lectures will also be broadcast on cable TV.

• Item Bank of Questions

An extensive database of questions, answers and explanation in multiple choice, structured and essay-type format is being developed by subject specialists across the island on a lesson basis for each subject and each grade. This will facilitate rapid preparation and correction of tests by teachers, self-testing for students and continuous student assessment.

• Equipment/Technologies

Schools will be equipped with

- Desk tops, lap-tops printers, servers and associated software to facilitate establishment of at least two computer labs and to provide access in school libraries and staff rooms and resource and A/V Centres,
- Class-room equipment including multi-media projectors and screens, video cameras, document cameras, scanners and other ICTs
- Broad-band internet access

A Central Repository for Educational Materials (CREM) is being established at the MOEY to house, continuously update and disseminate the instructional materials to schools isalndwide, as well as a comprehensive Educational Management Information System (EMIS) in the Ministry of Education and Youth to facilitate effective management and administration of the education system island wide

Edu-TV, an interactive television station, is being established at the MOEY and 11 specialist cable channels will each be dedicated to the continuous transmission of one subject in the video lecture series.

• Teacher Training

All teachers in the high schools and subject tutors in relevant Teachers Colleges will be trained in a 3-pronged programme, covering (i) Teaching Methodologies; (ii) ICT Training

and Certification; and (iii) Training of Trainers in Technology Integration. Over 11,00 teachers and tutors will be trained over the project period.

• Remedial Programme

Several existing remedial interventions in the high schools have been identified, and e-Learning is collaborating with the MOEY to review and to determine possible integration or collaboration strategies that will facilitate the use of ICT-based materials and technologies in these programmes.

• Continuous Assessment

Standard year-end examinations will be developed to be administered across schools at grade 7-9. This will ensure a consistent level of assessment of students at all times across the system

PHASED INTRODUCTION OF the e-LEARNING PROJECT

The project will be implemented in two phases:

THE RESEARCH PHASE

The Pilot Programme

A Pilot Project will be introduced during September 2006 to August 2007in Grades 10 and 11 at 28 selected schools covering five subjects, English Language; Mathematics; Information Technology; Chemistry and Biology. Schools selected are in the parishes of Kingston, St. Andrew, St. Thomas and St. Catherine. Three Teachers Colleges will also be included in the pilot, Shortwood, Mico and Church

The Pilot Programme will be the testing ground for the project design, approach to implementation, the use of teaching and learning materials, the technology applications and software as well as the support systems that must be in place to ensure successful implementation and sustainability.

THE IMPLEMENTATION PHASE

All Island Access to e-Learning

The second phase of the project will run from September 2007 to August 2009, will include all eleven (11) subjects in the high school CXC CSEC syllabus adding Social Studies; Integrated Science; Spanish, Geography; Building Technology and Physics.

Implementation will take place in all grades from 7 - 11, in all 166 high schools that will be in place in Jamaica.

COLLABORATION WITH THE MINISTRY OF EDUCATION AND YOUTH

The pedagogical integrity of the project is ensured through the close involvement of the MOEY in

- Providing policy guidance, standards and quality assurance to the material development and the teacher training processes
- Carrying out R&D on the use of various media for instructional delivery, eg. Web-based material, EDUTV, MOEY Radio

e-LEARNING PILOT PROJECT

The Pilot Programme is the testing ground for the project design, implementation methodologies and the use of the teaching and learning materials as well as the support systems that must be in place to ensure the efficient roll-out of the project to the other high schools and teachers colleges.

The Pilot is being implemented in twenty-eight (28) high schools in Kingston, St. Andrew, St. Thomas and St. Catherine and three (3) Teachers Colleges

Selection Criteria for the pilot schools

- 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

PILOT SCHOOLS

Ardenne High School Glengoffe High School **Queens School** Ascot High School Hydel Group of Schools St. Andrew High School for Girls Camperdown High School Immaculate Conception High School St. Georges College Calabar High School Kingston High School St. Mary's College Campion College Lister Mair-Gilby Snr. School for the Deaf St. Jago High School St. Thomas Technical High School Clan Carthy High School Mavis Bank High School Denham Town High School Mona High School Spanish Town High School Donald Quarrie High School Morant Bay High School Tarrant High School **Excelsior High School** Oberlin High School Vauxhall High School Greater Portmore High School

PILOT TEACHERS COLLEGES

Mico Teachers College Shortwood Teachers College Church Teachers College

PILOT SUBJECTS

In the pilot year, materials are being sourced/developed for five subjects in grades 10 and 11. These are: English Language; Mathematics; Information Technology; Chemistry and Biology.

The e-Learning Jamaica Company Limited

e-Learning Leads the Way!