Technology in Education – Towards National Development
Presentation

- Purpose and Scope of Project
- Project Components
  - The Technologies
- Strategies for Implementation/Sustainability
- Impact on National Development
Purpose of Project

- 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

May 09
Scope of Project

- **186 institutions**
  - 166 Public high schools
  - 6 Public Special Schools
  - 1 Independent High School
  - 8 Colleges that train teachers for the high schools
  - 5 Community Colleges
  - Over 11,000 teachers and lecturers
  - Over 213,000 students (2006 statistics)
Specific Constraints being targeted

- Lack of standard instructional materials
- Inadequate equipment in schools and at MOE
- Low level of ICT skills among teachers
- Inadequate remedial programme
- Lack of standard system for measuring and tracking student performance
Component 1 - **Instructional Materials**

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

- Teachers Instructional Materials (TIMs)
- Student’s Instructional Materials (SIMs)
- Interactive Educational Software (for ‘challenging’ topics)
- Item Bank
- Video-taped Lecture Series
Component 2 - **Technology Infrastructure for Storage / Dissemination / Access**

- Provision of ICT equipment and software to schools and Colleges
- Establishment of a Central Repository for Educational Materials (CREM) at MOE to store, reproduce, continuously update, and distribute materials
- Upgrade of the EMIS at the MOE to enhance management and administrative capability
- Broad Band Internet Access (provided by UAF)
Component 3 - Teacher /Tutor Training

- Principals’ Awareness and Orientation
- Training of Teachers and Tutors in Colleges in
  - ICT skills (certification to NCTVET standards),
  - Utilization of the new instructional materials
  - Integration of ICT and other modern methodologies for delivery, change management, into the teaching/learning process (certification to ISTE standards)
  - Training of 2 Systems Administrators from each institution
  - Training of 2 Trainers from each institution
- Training of 2 Lecturers from each College to Masters degree level in Technology in Education
Component 4 - Remedial Support

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

Component 5 - Continuous Assessment

- Introduction of standard examinations across the system at grades 7, 8 & 9 (Grade 11 CSEC and Grade 10 CCSC. MOE implementing at Grade 9)
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
Desk tops
Lap-tops
Multimedia Projectors & Screens
Interactive White Boards

Document Cameras
Digital Video Cameras
DVD/CD Players
Scanners
Televisions
- Remedial type lab (approx 25 computers)
- Group type lab (10 desktops or laptops)
- Computers for Library, resource room
- Computers for staff room (desktops/Laptops)
- Bank of (10) laptops to create mobile labs
- Network connectivity and presentation bundles for grades 10 and 11
- Interactive whiteboards in group lab and AV room
IMPLEMENTATION/SUSTAINABILITY STRATEGIES

- Equipment Suppliers enter into a framework contract, delivering equipment on a predetermined schedule over 3 years, beginning with the pilot schools and the CREM – deliver latest technology at the same price.

- No equipment and furniture delivered if schools are not properly prepared to accept in terms of secure space and adequate electrical circuitry and trained System Administrators.
IMPLEMENTATION/SUSTAINABILITY STRATEGIES

- e-LJam will broker adequate insurance coverage for the schools to participate if desired
- e-LJam also lobbying for Systems Administrator to be added to school establishment
- MOE strategy to use the HEART network to provide maintenance services
IMPLEMENTATION/SUSTAINABILITY STRATEGIES

- Subject Advisory Groups comprising Ministry officers to ensure quality
- Revised ETT curriculum being used
- MOE being equipped to manage and maintain an Instructional portal
- Teachers Colleges being equipped to ensure on-going professional development of teachers, both pre-service and in-service
The Impact

The project will revolutionize every aspect of the school system – teaching, learning, administration.
Impact on Teaching

- Greater proficiency in the use of ICTs by lecturers in the teachers colleges and high school teachers - lesson planning, lesson delivery, student evaluation, reporting

- Inexperienced teachers will have a pool of standard high-quality materials to draw from

- Better alignment between teacher communication methods and student interactive trends

- Difficult concepts can be dealt with more easily and more excitingly

- All teachers leaving Colleges will be proficient in the use of ICTs in Instructional delivery
Impact on Students

- Quest for knowledge encouraged
- Increased interest in education, teaching/learning process more exciting, especially for students who learn ‘differently’ or are disabled
- Improved attendance at school
- Increased participation of parents thru Cable TV, broadcasts, Internet
- Improvement in passes at the school-leaving CXC CSEC examinations
Impact on Administration

- Modernisation of school development planning
- Greater efficiency in school operation
- Improved decision-making since would be data-driven
- Increased and more efficient communication with stakeholders
Impact on Community/National Development

- Improvement in the quality of education between Grades 7-11 (Forms 1-5) in one hundred and seventy-two (172) high schools island-wide
- School-leavers better suited to the 21st century world of work
- Creation of local expertise in development of digital material and other technology-driven industries, with the possibility of exporting these services
- Greater appetite for internet and data-driven services \ Increased demand for affordable computers for teachers and students
- Project can be used as case study for project implementation nationally and regionally
Partnership with the Library Sector

- The impact and sustainability of the intervention is highly dependent on partnerships that are forged with other actors in the education sector, such as the Library Sector.
- Libraries provide all the additional educational resources required by a learner, and some Libraries like the National Library, focus on special topics or special areas.
Partnership with the Library Sector

- **CD’s and DVD’s are being borrowed from Libraries just as are books**
- **Very shortly, libraries will be on the same broadband network as the schools, able to share those resources in an even more exciting way**
- **The possibilities are mindboggling – blogging, web-conferencing, web-content management, online courses, are now commonplace methods of communication and teaching**
We look forward to exploring those relationships and synergies that can be forged with the NLJ and other libraries through the use of these technologies and thus make an even greater impact on the education system and National Development.

THANK YOU
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