Project Name: Guam Department of Education (GDOE) Technology Plan: Gateway to Success

Estimated Cost: $ 24,879,909.52   for FY2010/2011

Project Description:

The GDOE is requesting AARA funding for the implementation of its District Technology Plan, *Gateway to Success 2008*. *Gateway to Success 2008,* establishes a vision for GDOE to strive to enhance communication, attain administrative efficiency, and advance students' academic achievement through the use of technology. It sets the department's mission of expanding technology access, increasing administrative effectiveness, providing professional development, improving on a standards-based teaching and providing a learning environment in order that students become lifelong learners and technology-literate citizens of Guam. Its primary goals are as follows:

> Goal 1: To assist every student to ensure that every student is technologically literate by the time the students finishes the eighth grade;

> Goal 2: To effectively integrate technology resources and systems with teacher training and curriculum development to establish research-based instructional methods that can be widely implemented as best practices by state educational agencies and local educational agencies;

> Goal 3: To develop, maintain, and improve GPSS infrastructure to support the goals and action steps of the district action plan; and

> Goal 4: To develop, maintain, and improve GPSS administrative functions to support the goals and action steps of the district action plan.

Gateway to Success 2008 is inclusive of an Action Plan. Components in the Action Plan include action steps, timelines, and indicators of completion, to monitor the progress of the technology plan. GDOE has approximately 1990 teachers and 1925 classrooms.

The plan's budget encompasses the costs to acquire and support the different aspects of the plan: hardware, software, professional development and other services required to implement each strategy. Infrastructure budget includes telecommunication services, Internet access, internal connections; capital outlay (classroom electrical upgrades). The Hardware budget includes the teaching tools for classroom use and its peripherals. GDOE wishes to implement 1 to 1 computing for grades 7 to 12 and Smartboards for every classroom. The Software budget includes the cost of educational software (district-wide); Ebooks; the student management system software enhancements; and productivity software. Professional Development includes student management system-professional services/training services; teacher in-service training; and instructional off-island conferences/workshops. Along with all the technology, GDOE needs to ensure the required infrastructure is in place, which emphasizes more bandwidth to the classrooms.

GDOE Technology plan: Technology funds are requested through ARRA for the implantation of GDOE's technology plan:

Infrastructure: ($ 5,871,671)
> **Telecommunication Services, Internet Access, Internal connections ($4,133,471 Estimated).** Upgrade the existing fiber infrastructure and procure the needed services to provide more bandwidth for more reliable Internet connectivity in the classroom for end

users. These services include connectivity between school sites, Internet access service, and the internal connections that need to be improved and redesigned for fail-over and reliability.

Costs: Services $2,480,082.72 (Telecommunications, Internet Access services, & internal wiring installation), Materials $1,240,041.36 (cables, fiber optic, connectors, racks), Contingency $413,347.12.

Wireless connectivity project (Wireless accessibility) ($1,170,000 Estimated). Design and setup wireless connectivity at all schools. This will include the design of the wireless network, access points, antennas, wireless management software, and support.

Costs: Services $643,500 (Services to assess and upgrade electrical capacity), Materials $409,500 (Wiring, conduit, Wireless AP, antenna), Contingency $117,000

Capital Outlay (classroom electrical upgrades) ($568,200 Estimated). Provide the needed electrical upgrades for classrooms that exceed their electrical capacity.

Costs: Services $340,920 (Services to asses and upgrade electrical capacity), Materials $170,460 (Wiring, molding, outlets), Contingency $56,820

Hardware ($15,151,864)

Teaching tools (classroom use & peripherals) ($7,059,364 Estimated). Provide at least 5 computers in every classroom, presentation equipment (ex: multimedia projectors Smartboards & ELMOs, etc.), and mobile computer labs with mobile carts.

Costs: Services $352,968(setup, configuration, installation), Materials $6,000,459(desktop, monitors, UPS, projectors, mobile labs), Contingency $705,936

Student Ebook Equipment, instruction and support ($8,092,500 Estimated). This will provide equal access for DOE students by providing a computer for each student as Ebooks to serve as textbooks and help address our textbook problems; and to provide technology resources for learning. This will provide one to one computing for GDOE students and teachers.

Costs: Services $809,250(setup, configuration, installation), Materials $6,474,000(Laptops, laptop cases), Contingency $809,250

Software ($2,472,774.32)

Educational Software (district-wide) ($1,622,554 Estimated). Purchase subject-related educational software for the different grade-levels and EBooks to support and enhance teaching and learning in the classroom.

Cost: Services $81,128 (Installation, configuration, support), Materials $1,379,171(Software), Contingency $162,255

Student Management System ($571,000 Estimated). Provide additional functionality to the existing student management system. This will include School Interoperability Framework for integration, Business intelligence module, ID integration, and other enhancements.

Cost: Services $57,100(Implementation, configuration), Materials $456,800(software), Contingency $57,100

Productivity ($279,220 Estimated). Provide document management system, textbook inventory system, asset management software, and library system software for entire district. Provide Office suite applications, and other software to enhance productivity in the classroom and offices.

Costs: Services $13,961 (Installation, configuration), Materials $237,337 (Software, manuals), Contingency $27,922

Professional Development ($ 1,383,600)

Student Management System / Professional services/Training services ($217,600 Estimated). Provide basic and advance training and implementation services for all teachers and staff to effectively use technology, such as basic computing, Internet, using an on-line grade-book, online attendance, etc.
Costs: Services $152,320 (Implementation, configuration), Materials $43,520 (manuals, project supplies), Contingency $21,760

Teacher In-Service Training ($1,036,000 Estimated). Pay the contract instructor to teach technology courses. Provide tuition costs for teachers enrolled in completing technology courses.
Costs: Services $932,400 (contractual trainers, tuition costs), Materials $51,800 (training material and supplies), Contingency $51,800

Instructional Off-island Conferences/workshops ($130,000 Estimated). Cost for airfare, accommodation, entrance fee, and per diem for off-island technology conferences for technology master plan committee members and technology teacher/mentors. This is essential in keeping our teachers current with best practices regarding educational technology. These teachers will then provide workshops/training for other DOE teachers. We are looking to send 5 participants on the first phase and 16 participants on the 2nd phase.
Costs: Services $110,500 (travel, per Diem, entrance fee), Contingency $19,500