Design and Monitoring Framework

Project Number: 36513
November 2007

Proposed Asian Development Fund Grant Independent State of Samoa: SchoolNet and Community Access Project

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK[a]

Design Summary	Performance Targets/Indicators	Data Sources/ Reporting Mechanism	Assumptions and Risks
Impact A more equitable and effective ICT-enhanced education system and promotion of life-long learning	By 2015 • ICT in education and e-learning institutionalized as reflected in higher retention and utilization rate by gender. • Improve employment rates for high school graduates by 20%. • Improved system equity reflected in Gini coefficient of resource allocation and/or benefit incidence analysis.	• Ministry of Education, Sports, and Culture (MESC) statistics • National University of Samoa and University of the South Pacific data and reports • United Nations human development index report • Labor market survey • Equity measures in MESC data system	**Assumption** • Government develops and implements required policies for sustainability **Risk** • Lack of commitment from the Government and civil society to support SchoolNet from the financial, managerial, and policy viewpoints
Outcome 1. Enhanced learning outcomes for secondary students and improved knowledge sharing through ICT.	By 2013 • 70% of students in secondary schools have improved competencies in at least 3 academic subjects, relative to 2008 baseline data, and 50% of community members have ICT competencies to communicate and share knowledge. • 70% of teachers in secondary schools use ICT to teach cognitive skills and use interactive, student-centered, and authentic learning approaches. • E-learning materials for six secondary subjects developed, embed in the respective school curriculum, and disseminated to all secondary schools.	• Training reports, project progress and M&E reports, MESC statistical reports, performance appraisal reports, student achievement data • Pre- and post-intervention surveys, school reports • Analysis of data from phased implementation of Project in experimental design	**Assumptions** Sufficient resources are available for • recurrent costs; • human resource recruitment, development, and retention; • future IT capital investments; and • access to e-learning tools and materials. • Communities provide sufficient support to this initiative. **Risk** • Uncoordinated ICT projects increase fragmentation and inefficiency in ICT and education sectors
Outputs 1. Improved quality of teaching and learning through e-learning materials and approaches		• Procurement and installation completion and sign-off reports from schools • MESC reports; portal information and other	**Assumptions** • MESC has capacity to work with cross-cutting activities • School communities form SchoolNet

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1.1 Developed e-curriculum capacity and distribution	• Within 18 months of Stage 2 commencement ,CMAD staff source, adopt, and disseminate e-curriculum and e-learning material for three secondary subjects, and within 36 months the remaining three subjects, to 42 secondary schools.	training materials developed • Training reports; project progress and M&E reports • School pre- and post-intervention surveys; school reports	implementation committees **Risks** • ESP II and SchoolNet Project are not fully coordinated. • School management capacity may be lacking. • Stakeholders may not be fully coordinated and in agreement.
1.2 Developed e-teaching capacity	• Within 12 months of Stage 2 commencement, SOD and NUS staff adopt and deliver e-teacher training embedded in student-centered and interactive approaches; within each subsequent 12 months 800 teachers in schools provided with equipment are using ICT tools in interactive, project based, authentic teaching and learning processes; and within 36 months 15,000 secondary school students demonstrate enhanced problem solving, research, and cognitive skills such as reasoning and critical analysis.		
1.3 Strengthened management capacity	• Within 12 months of project effectiveness, staff development appraised and cost estimates analyzed. • Within 24 months of Stage 2 commencement, 21 SRO are using e-teaching methods and materials and 33% of secondary teachers and principals are using e-teaching methods and managing the learning centers in each year (2009–2011), aligned with deployment of equipment and connectivity.		
2. Improved education access through ICT		• Training reports, project progress and M&E reports, and MESC reports	
2.1 Installed SchoolNet equipment and connectivity	• Within 48 months of the Project effectiveness all 42 secondary schools will have learning centers fully operational.	• School pre- and post-intervention surveys, school reports	
2.2 Integrated SchoolNet pilot	• Within 6 months of Stage 2 commencement, all 5 pilots enhanced, based on lessons learned and the current technical design.	• Completion and sign-off reports from schools, data center performance reports	
2.3 Extended network to connect MESC	• Within 18 months of Stage 2 commencement, relevant MESC divisions and units set up and connect the SchoolNet, and division staff are using ICT applications.		
2.4 Strengthened data center and portal	• Within 12 months of Stage 2 commencement, upgraded data center and portal are operating, and within 36 months 70% of MESC staff and teachers are using the ICT facilities		

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2.5 Strengthened MESC ICT capacity	• Within 18 months of Stage 2 commencement, policies are developed and operational, and additional IT Unit staff are appointed to manage and implement IT support.		
3. Established partnerships to support SchoolNet and Community Access Program (CAP) 3.1 Community awareness of SchoolNet conducted 3.2 Management of SchoolNet and Community Access Program (CAP) established 3.3 Signed agreement on partnerships	 • By fifth year of the Project, 80% of the participating communities are aware of SchoolNet and CAP program and benefits, and 60% are using basic ICT applications. • Within 6 months of Stage 2 commencement, SchoolNet committees are formed, appointed, and fully operational. • Within 9 months of Stage 2 commencement, agreements are reached with the Government on the universal services fund, with other government agencies on cost sharing, and with communities and other users on cost recovery.	• MESC reports, project progress and M&E reports • Government and/or MESC documents • Policy report and signed agreements between communities and MESC, Government and private ICT providers, and among Ministry of Finance, MESC, and Ministry of Communication, Information, and Technology	
4. Strengthened education management through ICT systems 4.1 Strengthened data collection and analysis 4.2 Evaluated impact, developed MTEF, financial framework, and coordinated reporting, auditing, and reviewing.	 • Unified data system established and operational within 18 months of Stage 2 commencement . • Within 12 months of project effectiveness, (i) MTEF and financing framework developed, (ii) system for projecting and monitoring progress toward financial sustainability in place, (iii) M&E indicators developed and implemented, (iv) baselines and efficiency studies designed and implemented, and (v) ESP II reports and reviews incorporate SchoolNet.	• ADB review mission reports, MESC reports • Media reports, pre- and post-intervention survey • Validated MESC statistical data, project progress and M&E reports	

Activities with Milestones	Inputs
Component 1 • Consultant recruited and fielded within 3 months of project effectiveness. • Detailed design and bidding document completed within 6 months of project effectiveness. • Within 18 months of Stage 2 commencement, CMAD staff trained and source, develop, and disseminate e-curriculum and e-learning material. • Within 24 months of Stage 2 commencement, SOD and National University of Samoa staff fully trained in developing and delivering e-teaching materials and methods. • Within 24 months of Stage 2 commencement, CMAD and SOD train teachers, principals, and school review officers to implement e-teaching methods. • Within 6 months of equipment commissioning, principals and administrators trained and manage the network and equipment. • Within 6 months of project effectiveness, M&E indicators and procedures for monitoring, data analysis, and reporting developed and implemented.	**ADB $1,072,000** Training and workshops $285,000 Content development $322,000 Consulting services $465,000 **Government $78,000** Taxes and duties $78,000 **Contingencies $100,500**
Component 2 • Consultant recruited and fielded within 3 months of project effectiveness. • Within 3 months of project effectiveness, implementation consultants selected and fielded. • Within 6 months from Stage 2 commencement, detailed design prepared and agreed. • Within 24 months of Stage 2 commencement, at least 40% of the selected schools will have learning centers operational. • Within 24 months of Stage 2 commencement, formal agreement for an education network with dedicated international gateway. • Within 36 months of Stage 2 commencement, all the selected schools have learning centers operational. • Existing pilots enhanced based on lessons learned within 6 months of Stage 2 commencement. • Within 18 months of Stage 2 commencement, relevant MESC divisions and units set up and connected to SchoolNet.	**ADB $3,127,400** IT equipment and network $2,073,800 Vehicle $38,600 Training and workshops $150,000 Consulting services $865,000 **Government $746.300** Counterpart staff, taxes, and duties **Contingencies $433.100**
Component 3 • Consultant recruited and fielded within 3 months of project effectiveness. • By end of fifth year of the Project, 80% of the participating communities are aware of SchoolNet and CAP program and benefits. • Within 6 months of Stage 2 commencement, SchoolNet committees formed and operational. • Within 12 months of Stage 2 commencement, management plans for CAP developed. • Within 12 months of Stage 2 commencement, agreement reached with other government agencies, communities, and users.	**ADB $360,000** Training and workshops $50,000 Consulting services $310,000 **Government nil** **Contingencies $41,900**
Component 4 • Consultant recruited for EMIS and efficiency studies within 3 month of project effectiveness. • Unified data system established and operational within 18 months of Stage 2 commencement. • M&E indicators developed and implemented, and baseline studies completed within 8 months of Stage 2 commencement. • MTEF and financing framework developed and system for projecting and monitoring progress toward financial sustainability in place within 12 month of project effectiveness. • PPRD supported in strengthening and, within 12 month of project effectiveness, implementing EMIS. ESP II reports and reviews incorporate SchoolNet Project.	**ADB $788,000** Training and workshops $100,000 Consulting services $628,000 Operation and maintenance $60,000 **Government $60,000** Operation and maintenance **Contingencies $92,800**

CAP = Community Access Program; CMAD = Curriculum Materials and Assessment Division; EMIS = education management information systems; ESPII = Education Sector Project II; ICT = information and communication technology; IT = information technology; M&E = monitoring and evaluation; MTEF = Medium-Term Expenditure Framework; SOD = School Operations Division; PPRD = Policy, Planning and Research Division.

[a] As reliable baseline data are not available to measure performance indicators, the project design included data collection under Stage 1 of the Project, and the design and monitoring framework will be revised accordingly.