# Chapter 11 Technology Enabled Education in Samoa: Issues, Challenges, Strategies and Recommendations

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### **ABSTRACT**

Education is seen as one of the most important factors for poverty alleviation and economic growth in developing countries (UNDP 2005; UNESCO 2005; WSIS 2005) and the use of Information and Communication Technologies (ICTs) for dissemination of education is believed to have huge potential for governments struggling to meet a growing demand for education while facing an escalating shortage of teachers (UNESCO 2006 in Anderson, 2008). This case study examines technology enabled learning initiatives in education in Samoa, focusing on developments at a leading university in Samoa (hereafter referred to as the university) and the Ministry of Education Sports and Culture (MESC). The case study focuses on the current status of technology based learning in Samoa outlining the current initiatives addressing the core issues of social accessibility, technological adaptability, economic viability, and political agreeability towards providing education and development opportunities. The discussion includes an evaluation of the effectiveness of presently used technology/ technology mix used in e-learning and its effectiveness in facing the demands posed by Social, Technological, Economical and Political (STEP) factors. For each technology initiative, issues and challenges are discussed followed by solutions and recommendations for future action and direction. The case study also looks at various international partnerships/ collaboration fostered by NUS and MESC to facilitate and enhance access to education for students, thereby are considered as solutions to the challenges in implementing technology based learning. The discussion concludes with a set of recommendations for the future of technology enabled learning in Samoa.

DOI: 10.4018/978-1-61520-909-5.ch011

## ORGANIZATION BACKGROUND

# The University

The university referred to in this study was established in 1984 (NUS Corporate Plan, 2009) and comprises of two institutes, the Institute of Higher Education and the Institute of Technology. The Institute of Higher Education has five faculties: Business and Entrepreneurship, Arts, Science, Nursing and Health Science, and Education. The Institute of Technology is comprised of three Schools: Engineering, Maritime, Business Studies Tourism and Hospitality.

The university is not self-sufficient financially with the main source of revenue being an annual Government grant and tuition fees. The fact that the government grant has not increased despite an increasing student roll has meant that the University has had to operate under financial constraints. Hence the University needs to continue to find avenues to bridge the gap between the Government grant and funds required to deliver quality education to the increasing number of students as required to achieve their vision of excellence (NUS Corporate Plan 2009).

## **MESC**

The Ministry of Education in Samoa (MESC) is responsible for policy, planning and research, corporate services, schools operations, curriculum development and assessment, sports, and culture. Primary education in Samoa extends through an eight-year cycle and is divided into lower primary (years 1-3), middle primary (years 4-6) and upper primary (years 7 and 8), corresponding to the 5 to 14 year-old age group (Chan Mow, Strigel & Vaa, 2007). Funding of schools is through partnership between government and communities, except for four senior colleges, which are fully government owned. The government provides salaries, stationery and curriculum whilst local communities, which mostly own the land, carry

the costs of maintenance and facilities. Education is compulsory until year 8 or age 14. As of 2006, there were 131 preschools in the country in addition to the 208 primary and secondary schools. In 2006 there were 141 government primary schools, 13 mission primary schools, and six private primary schools. Mission schools are operated by a variety of church groups, including Roman Catholic, Baptist, Congregationalist, Methodist, Seventh Day Adventist, Mormon, and Bahai churches. The number of children in the education system is estimated at 54,743 (MESC Statistical Digest, 2007). Current figures show 39,578 students in primary schools.

Secondary Colleges operate from years 9 to 13 and are currently streamed, based on academic performance. Entrance to secondary level is determined by a national exam at the end of year 8. Secondary schools, which operate from years 9 to 12, currently follow a slightly different curriculum and are generally community-focused and built and managed by the districts. The number of children in the secondary school system is estimated at 15,165, with a total of 791 teachers teaching at this level (MESC Statistical Digest, 2007). Despite a marked improvement at the secondary level since 1996, still a large percentage of students do not continue from year 12 to 13. Key examinations for secondary education include the Samoa School Certificate taken at year 12 level and the Pacific Senior Secondary Certificate examinations at the year 13 level.

# **SETTING THE STAGE**

# ICT at the University

In 1989, technology based learning was still a distant dream yet to be realized at the university with major constraints being the lack of infrastructure, the high cost and poor quality of connectivity. For the university, perhaps the first breakthrough came as a result of the establishment of the first satel-

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