St. Kitts and Nevis

Summary

Although the Federation of St. Kitts and Nevis has been involved in educational computing since 1998, most measures have been modest. Students in primary and secondary schools have access to ICT and to instruction in basic computer use; primary students also use educational software to build math and language-arts skills. Computer installations at all levels offer a mixed array of older and more current hardware, complicating maintenance and troubleshooting.

The recently released *National ICT Strategic Plan* (2006), however, proposes a credible and well-structured series of objectives and measures intended to significantly increase the impact of ICT on social and economic conditions. The plan includes a substantial section on education. Funding of education in St. Kitts and Nevis is provided by government and donor agencies; it is unclear the extent to which current sources of support will fund the proposed measures.

Traditionally based on agricultural production of sugar, the economy of the Federation of St. Kitts

Basic Data

Category	Date	Value
Population	2006	39,129
Per capita GDP (PPP)	2005	$8,200
Economy, composition agriculture	2005	Tourism, light manufacturing, financial services,
Literacy, total population 15 and over	2003	97.8
Literacy rate (women)	—	NA
Gross enrollment ratio, primary	2002/3	111.8
Gross enrollment ratio, primary (girls)	2002/3	114.9
Net enrollment ratio, secondary	2002/3	94.8
Gross enrollment ratio, secondary (girls)	—	NA
Number of primary schools	2007	24
Number of secondary schools	2007	7
Language of instruction	—	English

Sources: World Factbook, UNESCO, MOE

Relevant Policies

Document	Status	Date	Key points and objectives
National ICT Strategic Plan	Adopted	2006	■ Substantial attention to ICT in education ■ Computer literacy as a first step toward participation in the global information society ■ Subsequent steps accomplished via comprehensive reform of curricula, TPD, EMIS, etc.
ICT Strategy and Action Plan 2002 to 2006	Adopted Modified in 2004	2002	—

Source: MOE

and Nevis has been pushed by the decline of the sugar export market into diversification agriculturally and in sectors such as tourism, light manufacturing and financial services.

These changes notwithstanding, per-capita GDP above US$8,000 is approximately the mean for OECS countries. Slightly higher labor costs coupled with the graying of the local population, however, have reduced economic competitiveness.

Given these circumstances, education and the increased use of ICT in schools appear to be gaining in importance both within the MOE and among policymakers.

Policy and planning

St. Kitts and Nevis has yet to develop an ICT policy in education. However, the 2006 *National ICT Strategic Plan* includes a significant education section outlining specific actions intended to maximize the contribution of schools to ICT-

related human-resource development. Achieving human-resource development objectives, according to the plan, will require "deep changes in curricula, teaching methods, operation and management of formal and informal educational programs and institutions, provision of teaching and learning materials as well as supporting lifelong learning through a combination of traditional classroom (face to face), distance, and open education methods."

Strategic objectives include ensuring equitable access, achieving universal computer literacy among school-leavers, empowering teachers to use ICT to support teaching and learning, improving school administration through information management, and increasing communication and stakeholder participation. The *Strategic Plan* emphasizes partnerships between the MOE and other ministries.

In addition to government budget allocations, the *Strategic Plan* details the need for funding from multilateral and bilateral donor organizations, development agencies, and local stakeholders encompassing both businesses and communities.

ICT Resources in Schools

School type	Number	Median enrollment	ICT profile
Primary schools	24	~250	■ All schools have computer labs ■ Labs average 14 computers with Internet connection ■ Primarily used with language arts and math software package
Secondary schools	7	~350	■ All schools have computer labs ■ Labs average 30 computers plus Internet connection ■ Schools on St. Kitts all have broadband connections ■ The majority of schools on Nevis have dial-up connections ■ Lower-secondary has ICT curriculum ■ Upper-secondary prepares for CXC IT exam

Source: MOE

ICT in primary and secondary schools

The introduction of computers into schools in St. Kitts and Nevis began in 1998, primarily in support of student preparation for the CXC IT exam. As of 2007, however, the value of ICT in support of enhanced teaching and learning across the curriculum is receiving new emphasis.

Primary schools

In 2003, the MOE completed a US$1 million installation of computer labs in primary schools. These facilities are typically used for skill-building exercises delivered via an educational software package addressing language arts and math. The lab-based software is connected to curriculum resources used by teachers in their classrooms.

Low levels of ICT skills common among primary teachers, in combination with limited TPD-focused organizational resources, constitutes a barrier to further integration of computers into teaching and learning across the curriculum.

Secondary schools

The project to install computer labs in secondary schools began in 1998, but encountered a string of challenges that both delayed and compromised completion of the project. All secondary schools have functioning computer labs and Internet connections. Installation among schools on Nevis, however, lagged installation on St. Kitts for a range of reasons, with Internet connectivity most strongly affected. The majority of high schools and primary school on Nevis connect via dial-up at present.

As is common throughout the region, the primary focus of computer use in secondary schools is to prepare upper-secondary students for the CXC IT

exam. Unlike many of the region's education systems, schools in St. Kitts and Nevis also offer an ICT curriculum designed for lower-secondary students. An additional ICT curriculum developed by OERU was pilot tested in secondary schools in the 2005–2006 academic year.

Teacher professional development

Although possibly adequate for the current low level of computer use and integration in schools, both in-service and pre-service TPD systems form barriers to increased use of ICT.

The MOE has conducted no large-scale in-service TPD programs since the installation of computer labs in secondary schools in 1998. School faculties typically include IT teachers, who are responsible for conducting lab sessions, teaching computer literacy, and providing basic maintenance.

The need for local in-service TPD capacity has been recognized by the MOE as a significant barrier to expansion of ICT in education.

Since 2003, the Clarence Fitzroy Brown College has offered a two-year Associate Degree in Education. Computer literacy is included as a requirement for the degree.

Tertiary education

Tertiary institutions serving the populations of St. Kitts and Nevis include the Clarence Fitzroy Bryant College and a UWI school of continuing studies. (Six overseas campuses of foreign universities are also located on the island, with enrollments drawn almost exclusively from international students.) Bryant College provides basic computer services and

Teacher Professional Development Programs

TPD program type	Target population	Objectives	Scale	Barriers
No in-service programs	—	—	—	—
Brown College, Teacher Education Division	Pre-service teachers	■ Associate of Arts degree, education involves IT training	■ ~40 graduates per year	■ Trained teachers may be recruited by schools in other countries

Source: MOE

instructions, while UWI offers enrolled students access to online course material and to instruction via video teleconference (VTC).

Bryant College, with an enrollment of 500 students, awards associate degrees and includes a Division of Teacher Education and a computer studies program. Graduates of the teacher-education program receive computer literacy training. Bryant College has four computer labs with approximately 60 computers connected to the Internet.

The local UWI SCS offers both contact-based and distance-based instruction to students. Programs of study include post-graduate work in education, with a maximum of six students enrolled at a given time. UWI students in St. Kitts can use a campus computer lab to access UWI course content. However, the majority of students are enrolled in contact-based courses or, through UWIDEC, in courses delivered via VTC.

Nonformal, distance, and open education

At present, three libraries on the islands—in Basseterre, Sandy Point, and Cayon—offer patrons access to computers connected to the Internet.

Funding from the Taiwanese government has enabled the recent construction of an indeterminate number of Community Access Points (CAPs), offering ICT access and training to members of lower-income communities. Per the *National ICT Strategic Plans,* the CAPs will support access to government services online, educational opportunities, work and career opportunities, and other services.

A pilot community-access and ICT training project was conducted in 2001–2002 under the Rural Adult Education Program. In this project, a school computer lab was opened to community members during non-school hours. Although planning documents and other reports refer to proposed expansion of this program, no progress has been made at the school level.

EMIS

The *National ICT Strategic Plan* strongly emphasizes the need for effective EMIS. However, EMIS has yet to be implemented.

Barriers and challenges

- **Lack of trained teachers:** Present TPD measures are inadequate to achieve the objectives for ICT use and integration outlined in the *National ICT Strategic Plan.* The ICT component in teacher education focuses exclusively on basic computing skills; the MOE has no in-service TPD capacity in ICT.
- **Aging computers and low maintenance capacity:** Installation of computers began in 1998 and has continued. Many of the computers in secondary and, to a lesser extent, primary schools are both old and under-maintained. In addition to being costly to maintain, these older computers do not run newer software or Web applications.
- **Lack of ICT capacity within MOE and private sector:** School faculties include trained IT teachers. Broader human-resource support for ICT in schools, however, faces challenges in terms of limited technical knowledge and experience within the MOE and the private sector. These challenges affect maintenance and support, telecommunications, provision of TPD, procurement, and other activities.