Chapter 4

Selected regional ICT initiatives in education

Overview

This section briefly profiles several initiatives that have been launched within the region, or by international organizations with strong ties to the region, in order to increase the effectiveness of ICT in education or to provide new access and capacities.

It is not within the scope of this report to describe or assess larger regional institutions such as UWI or to report on all multi-national initiatives within the region. The objective of this section is instead to draw attention to regional initiatives or organizations that currently support ICT in education effectively, or that in the case of smaller or less mature programs have the potential to provide effective support in the future. This section also identifies initiatives that have had only limited impact but that point to the need for more effective measures.

Initiatives and organizations are presented in sequence based loosely on their launch dates. These include:

- OERU policy initiative
- Caribbean Universities Project for Integrated Distance Education (CUPIDE)
- Caribbean Knowledge and Learning Network (CKLN)
- UWIDEC Blended Learning Project
- Caribbean Association for Distance and Open Learning (CARADOL)
- Virtual University of the Small States of the Commonwealth (VUSSC)

In addition, OERU has expended significant effort on its Education Management Information System (EMIS) initiative. This initiative is discussed in detail in the section, Regional overview of EMIS, which also outlines country-specific EMIS efforts.

OERU policy initiative

In 1999, the OERU launched a project to support development of ICT policies in education by OECS member countries. Specific measures included development, review and revision of a Model ICT policy for the education system in 2000.

The Model ICT policy was complemented by processes of consultation and advisement to several countries supporting review and modification of the model policy and leading to a national policy ready for adoption. The model policy emphasizes issues that include:

- Access
- Learner-centered pedagogies
- TPD
- Lifelong learning
- Information management

The document also specifies technology skills that primary, lower secondary, and upper secondary students will acquire. The model policy also includes 44 statements of actions to be undertaken by the MOE, principals, or other stakeholders.

Countries drawing on the OERU Model policy to develop their own ICT policies in education include:

- Anguilla
- British Virgin Islands
- Dominica
- Grenada (in process)
- St. Lucia
- St. Vincent and the Grenadines

These countries, including all four of the Windward Islands, are among the smallest and in several cases poorest in the region. For the most part, their efforts in ICT have been modest, typically emphasizing preparation of secondary students for the CXC ICT
exam. MOE capacity with regard to technology planning, procurement, and implementation is not high overall—despite the presence of capable individuals in these ministries.

For these reasons, OERU support has been exceptionally important. The *Model ICT policy in education* lays the foundation for educational ICT programs that are comprehensive and pedagogically progressive. In most of these instances, however, the impact of policy on practice has yet to be felt substantially.\(^{16}\)

Recent policy-related events include the March 2007 meeting of Chief Education Officers (CEOs) under the theme, “Educational Policy and Practice in the OECS—Integrating and Sustaining National and Regional Initiatives.”

**Caribbean Universities Project for Integrated Distance Education (CUPIDE)**

The CUPIDE project was launched in 2003 as a partnership among five of the region’s universities, with funding through 2006. Its principal objective is to increase access to tertiary education through the development of Distance Education (DE) capacity among these universities. While DE is not unusual in the Caribbean, e-learning penetration is low, with online course offerings tending to originate in universities outside the region. (CUPIDE itself is in fact a mirror site for the Massachusetts Institute of Technology (MIT) Open CourseWare [OCW] project.)

Originally conceived as a capacity-building project within UWIDEV, the project was expanded to include the University of Guyana, the Anton de Kom University of Suriname, the University of Quisqueya, Haiti, and University of Technology (UTech) in Jamaica. Project impact has been limited by disparate capacities among the partnering universities and by the more general difficulties arising from multi-lateral, multi-country collaboration among large institutions. Different levels of technical infrastructure (both nationally and institutionally) and human-resource capacity, in particular, slowed response time and hampered agreement on priorities. These difficulties were compounded by reliance on English as the project’s primary language, complicating communication with collaborators in Haiti and Suriname.

Outputs from CUPIDE include:

- Development of the CUPIDE portal (pilot)
- Training on CUPIDE LMS and Web portal
- Four-module pilot course, “Developing an online course using a team approach”
- Mirror-site agreement with MIT OCW
- Formation of CARADOL

Overall, impact has been limited. The CUPIDE portal has been launched as a pilot site, but is has not been populated with course content.

**Caribbean Knowledge and Learning Network (CKLN) and E-Link Americas**

The CKLN was launched in 2004 by CARICOM with the support of the World Bank, EU, United Nations Development Program (UNDP), UNESCO, ICA, Canadian International Development Agency (CIDA)/International Development Research Centre (IDRC) and the Organization of American States (OAS). Broadly presented, the CKLN mission is to enhance regional competitiveness by facilitating networking, knowledge sharing, and instruction among Caribbean TLIs. Accomplishing the CKLN mission involves three start-up phases:

- Strengthening the ICT capacity of TLIs
- Establishing a knowledge and learning network
- Building capacity at the regional level

University-level e-learning is to form a key element of the knowledge and learning network. CKLN has conducted one or more workshops on the conversion of course materials for use in Moodle the open-source LMS, a free software e-learning platform.

Other accomplishments to date include the 2005 assessment of infrastructure, ICT competencies, and

\(^{16}\) Although many of the adopted policies have yet to be enacted in schools and school systems, several respondents contacted for this study suggested that the OERU Model policy was becoming dated and would benefit from revision to address newer practices and tools.
student administrations systems of nine TLIs involved in a CKLN pilot project, and an overall assessment of the Caribbean labor market.

One element associated with CKLN—an element considered primary by several respondents contacted for this report—was the provision of high-speed, satellite-based Internet connectivity to TLIs through partnership with E-Link Americas. The E-Link Americas project, launched by the Institute for Connectivity in the Americas in 2004, was to provide low-cost, high-speed connectivity throughout Latin America and the Caribbean. Unanticipated project delays, technical challenges, and cost overruns, however, led to decision to close the project in January 2006.

In response to the failure of E-Link Americas, CARICOM has endorsed a CKLN proposal requesting roughly US$10 million for development and implementation of C@ribNET, an advanced high-speed network to connect the region’s TLIs.\(^\text{17}\)

To date CKLN impact has been limited. The establishment of knowledge and learning networks among researchers, educators, students, and others, however, remains a critical objective within the region, as does implementation of high-speed networking. In May 2006, CKLN was awarded financing of €2 million by the European Union. CKLN will launch a version of the Moodle LMS.

**UWIDEC Blended Learning Project**

Since 1996, UWIDEC has provided DE to students throughout the Caribbean using a combination of printed instructional resources, face-to-face tutorials, and audio conferencing. UWIDEC is currently transforming a portion of its DE instruction to a “blended learning” approach that combines face-to-face instruction and print-based resources with the use of online learning resources and discussion, synchronous e-tutoring and/or email.

In the original combination of modes, UWIDEC courses rely primarily on printed resources and face-to-face tutorials at its Distance Education Centers and other sites. Three or four audio-conferences per course are used to deliver uniform instructions regarding course administration, exams, and other issues. Tutorials are used to address course content, conduct learning activities, provide feedback, and accomplish other administrative and instructional tasks.

The new, blended-learning structure will continue to rely heavily on printed learning resources, but will use ICT to enhance student access to resources and the possibilities for asynchronous learning. Students will also connect to the UWIDEC LMS, running on the Moodle open-source LMS software, and will receive CD-ROMs with presentations and other course materials. These resources will enable them to participate in online discussions, practice exercises, assessments, and other activities. For the next several years, face-to-face tutorials will remain integral to the instructional design and the assessment process.

For the 2005–2006 academic year, UWIDEC launched a pilot project\(^\text{18}\) to develop online courseware for 13 courses originating at its Mona Campus in Barbados. Courses covered introductory sociology, Caribbean civilization, math for social sciences, business and accounting, and education counseling, among other topics. Development of the CD-based content encountered challenges chiefly related to the need for additional staffing with skills in video and online resources.

The change from synchronous, face-to-face tutoring to e-tutoring brought other challenges into focus, including the need to train and maintain a corps of skilled e-tutors, limited student access of materials (whether by choice or as the result of barriers), and limited student interaction online. Additional lessons learned include the need for sustainable, clearly articulated incentives for e-tutors.

Less elaborate higher-education experiments with blended learning have been conducted in the region as well: In Jamaica, in-service teachers are required to achieve the bachelor’s degree. To meet the needs of TVET teachers with limited release time and working at a distance from the campus, the UTeach used email to reduce these teachers’ needs to attend

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\(^17\) In February 2008, CKLN received an additional $650,000 in funding from IDB to support C@ribNET.

\(^18\) Information about the blended-learning pilot project is drawn from Thurab-Nkhosi, D., “The challenges of blended learning at UWIDEC: A case of ICT innovations in the developing country context,” (2006) a paper delivered at the Commonwealth of Learning (COL) PCF4 conference in Ocho Rios, Jamaica.
Caribbean Association for Distance and Open Learning (CARADOL)

CARADOL was launched by CUPIDE in 2005 to facilitate regional development of open and distance learning (ODL) by enabling networking, communication, capacity building, and partnerships among ODL organizations. CARADOL is open to persons, governmental and non-governmental organizations involved in or interested in DE.

Although launched by the CUPIDE universities, CARADOL was conceived initially in 1999 at a regional conference in Guyana, “Promotion, Quality, Pragmatism and Partnership in Distance Education Delivery, with additional input during a 2000 “Distance Education in Small States” in Jamaica.

Virtual University of the Small States of the Commonwealth (VUSSC)

Conceived in 2000 by the Commonwealth Education Ministers, VUSSC is a network of organizations collaborating on development of e-learning content in conjunction with the Open Education Resource (OER) initiative of the COL. An international initiative, VUSSC groups participating countries in four regional focal groups. The Caribbean group includes Barbados, Belize, Dominica, Jamaica, St. Kitts and Nevis, St. Vincent and the Grenadines, and Trinidad and Tobago. Both the COL OER initiative and VUSSC are associated with Wikieducator, a wiki-based site hosted by COL and intended to support collaborative authoring of free, open-source educational content.

Content developed for Wikieducator and VUSSC is built using the eXe open-source authoring tool and is designed to run in Moodle, the open-source LMS widely used in Caribbean TLIs, as well as proprietary LMS environments such as WebCT. Curricula focus on topics—tourism, entrepreneurship to date, and life-skills development—that have specific relevance to many SIDS.

VUSSC outcomes to date include:

- Launch of the VUSSC node in Wikieducator (www.wikieducator.org/VUSSC)
- “Boot camps” for courseware developers in Mauritius, Samoa, Singapore, and Trinidad and Tobago
- Development of a VUSSC business plan for 2007–2013

The Mauritius boot camp produced a framework for a certificate-level curriculum in tour guiding.

The March 2007 Singapore workshop was attended by 11 representatives of Caribbean educational organizations out of 26 participants overall. That boot camp produced a nearly complete entrepreneurship course.

VUSSC is conceived as relying on TLIs to provide educational services that include accreditation, admissions, online tutoring and grading, and awarding of certificates, among others. The initiative is intended to build capacity for the development of e-learning resources and to lead to the proliferation of such resources under an open-source model.

At the time of this report, VUSSC has demonstrated potential but has achieved only limited impact—both in terms of trained course developers and completed content. The benefits to TLIs of the development of standards-based open-source e-learning courseware are great. If and when TLIs allocate resources to the development of VUSSC courseware, they may greatly enhance their abilities...
to offer e-learning courses that meet the needs of local residents and that contribute to the development of human capacity among SIDS.

**Note on potential collaboration among e-learning initiatives**

CUPIDE, CARADOL, and CKLN are interconnected, Caribbean-centric initiatives that focus on e-learning to various degrees. VUSSC is an international initiative focused on Commonwealth countries, but which includes strong Caribbean representation. It may be instructive at this point to identify complementarities between these projects, especially in relation to their apparent strengths and limiting factors.

To focus on CUPIDE, the most developed of the purely Caribbean initiatives: both CUPIDE and VUSSC seek to increase capacity for the development of e-learning in the Caribbean. CUPIDE has been limited by the challenges of collaboration; VUSSC is built on a foundation of collaborative (wiki-based, open-source) tools and environments, but lacks adequate financial support to achieve the scale and pace of content development necessary to meet the demand for e-learning courseware targeting Caribbean concerns. There may be barriers to closer collaboration—such as focus among CUPIDE and its partners on degree-based as opposed to certificate-based programs—but there may also be opportunities for effective partnership that deserve exploration.

(Note that all four e-learning-related initiatives support use of the Moodle open-source LMS.)