

# Connections



A news publication of *The Commonwealth of Learning* • October 1999 Vol. 4, No. 3

## Using community learning centres to improve reading skills



*Literate people find it hard to grasp the full impact of illiteracy. In a world operating on written laws, rules and instructions, being illiterate is a severe handicap... It is tantamount to disability affecting every aspect of living. It confines job opportunities to the most menial and low paid tasks. It means being unable to read instructions on a packet of seed, a tin of powdered milk, or an oral contraceptive. It means being unable to read newspapers, street signs, warning signs. It means the inability to check legal rights... And it means being exposed to fraud and expropriation.*

REPORT OF THE INDEPENDENT COMMISSION ON POPULATION AND QUALITY OF LIFE

A £500,000 COL literacy project is now underway with special funding announced by Britain's Prime Minister, The Right Honourable Tony Blair, at the 1997 Commonwealth Heads of Government Meeting (CHOGM). With partners identified in three developing Commonwealth countries – Bangladesh, India and Zambia – COL is demonstrating the use of technology-based community learning centres to support literacy work with a focus on reading skills.

The need to increase literacy levels remains the primordial educational challenge facing developing countries in the Commonwealth. Responding to this need, The Commonwealth of Learning sought support from the British Department for International Development (DFID) to undertake a pilot project to explore ways in which literacy programmes might be enhanced through the use of information and communication technologies (ICTs).

This work continues to be particularly relevant as this year's CHOGM approaches in November. Commonwealth Governments have agreed with their South African hosts to focus on human development and the challenges of globalisation. COL is honoured to be responding to this theme through this initiative.

Creation of access to various technologies through pioneering technology-based community learning centres (CLCs) is at the core of the implementation of the project in each of the three countries. While there is an increasing consensus on the usefulness of CLCs, a key goal of this project is to demonstrate and evaluate the appropriateness and effectiveness of technology-based CLCs through which literacy workers can develop learner competencies in reading, numeracy and in the use of information and communication appliances.

The on-site implementation and management of the Project has been arranged with a partner organisation in each of the three pilot countries. Each of these partners will have a primary role in determining the project site(s), programme focus, tutor selection, choice of appropriate technologies, marketing and management of the CLCs.

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PHOTO CREDIT: M.S. SWAMINATHAN RESEARCH FOUNDATION

### KEYNOTE PRESENTATIONS

The Commonwealth of Learning and the Caribbean Broadcasting Union are pleased to announce that the following keynote speakers have been confirmed:

**The Honourable Mia Amor Mottley**, Minister of Education, Youth Affairs and Culture, Barbados. Mia Mottley has been a key player in developing the Barbados government's job-creation initiative and authored a well-known white paper that draws the link between better education and job fulfilment.



**The Honourable Brian Tobin**, Premier, Province of Newfoundland and Labrador, Canada. Mr. Tobin is a passionate speaker on overcoming the obstacles and off-shore competition that face human resource development in small island states and isolated regions, including the importance of bringing education to as many people as possible.



**The Honourable Burchell Whiteman**, Minister of Education and Culture, Jamaica. Minister Whiteman will be describing his Government's draft policy on the use of information and communications technologies for education, which defines the roles of all parties in the new "smart partnerships" of the public, private and community sectors.



**Dr. Huguette Labelle, O.C.**, President, Canadian International Development Agency. Madame Labelle has held many senior positions in the Canadian government and is widely respected for her leadership in the uses of new technologies for human development. She has headed CIDA since 1993.



**Professor Cardinal Warde**, Faculty Director, Department of Electrical Engineering, Massachusetts Institute of Technology. Professor Warde is a Barbadian who



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is an eloquent speaker on developmental issues in the Caribbean, including technology in education.

### PARALLEL SESSIONS

Over 50 papers will be presented in parallel sessions. Topics range from professional development in education and health care by distance and open learning, to strategic implementation of learning technologies and the appropriate uses of technology in global education. The *Journal of Educational Media* is working with COL to produce a special issue of the Journal in March 2000. The publication will contain an account of *TEL-isphere 99* and six of the highest-rated papers selected by the Journal.

### SPONSOR SUPPORT

The British Department for International Development and the World Bank's InfoDev (Information for Development programme) have joined the Caribbean Development Bank as major financial supporters of the conference, ensuring delegate participation from within the region. Microsoft Corporation, Cable and Wireless, and KPMG are participating as corporate sponsors. All exhibit space has been allocated. The Ministry of Education and Culture, Barbados, and the University of the West Indies Distance Education Centre are acting as local hosts.

Delegate registration is still available.

Further information: [www.col.org/tel99](http://www.col.org/tel99)  
e-mail: [tel99@col.org](mailto:tel99@col.org)

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In Bangladesh, 12 community learning centres are planned and the Bangladesh Open University will be taking a very direct leadership role in the development of literacy curricula, the development of technology-based materials and in the direct delivery of programmes.

Working with the Indira Gandhi National Open University in India, the focus will be on the development of literacy materials to be used for direct delivery in the sub-centres through various collaborating organisations, including two State Resource Centres.

In Zambia, the project will concentrate on the development of literacy materials, but will have an emphasis on the training of community development workers. Two hundred Community Development Assistants will be trained and 200,000 people are expected to be involved in the literacy programme. The University of Zambia will administer the programme through three learning centres.

In each country, the project will focus on the following outcomes:

- enhancing knowledge of appropriate and sustainable use of ICTs in literacy education;
- training literacy tutors to be knowledgeable in the use and availability of ICTs;
- significantly improving participant learners' reading, numeracy and ICT skills;
- developing materials for use both by learners and in training literacy workers; and
- collecting objective data regarding the role of ICT-based CLCs.

The project's international advisory committee includes representatives from the partner organisations and of literacy education experts. COL's project manager is Dr. Glen Farrell, former President of the Open Learning Agency in British Columbia, Canada. COL has also identified an independent and experienced external evaluator to provide monitoring and objective evaluation of the literacy project as it progresses along its initial pilot phase.

Further information is available on COL's web site at: ([www.col.org/models/literacy.htm](http://www.col.org/models/literacy.htm))

## Government support

The Commonwealth of Learning is extremely grateful for the confidence Commonwealth Governments have shown in its work through their generous support toward the implementation of its current *Three-year Plan, 1997-2000*. Most Governments are adhering to their pledges and commitments with respect to annual funding for the core budget.

Canada, through the combined generosity of the province of British Columbia and the federal government, continues to be a leading contributor along with Britain, through the Department for International Development. Both these countries have also made further contributions for specific initiatives that would otherwise have been beyond the scope of the core budget.

*Mr. Abdallah M. Ngororo, Permanent Secretary, Ministry of Science, Technology and Higher Education, Tanzania, officially launches the certificate training programme for laboratory technicians. The materials have been adapted for local use in African countries through a programme sponsored by COL and the Commonwealth Secretariat, in collaboration with the Commonwealth Association of Polytechnics in Africa.*



New Zealand's contribution is also impressive as it is not only one of the larger in absolute terms but even more outstanding in relative terms. Its support, along with that of Australia, has enabled COL to reach out to communities in the Pacific as well as in Africa and other parts of Asia.

The substantive and constant support provided by India, along with a number of other developing Commonwealth countries is also noteworthy. In fact, 33 of the 54 Commonwealth countries have contributed to COL's core funding during the current *Three-year Plan* period.

This partnership between the developed and developing members of the Commonwealth demonstrates how COL is a shared endeavour, clearly distinguishing it from the more conventional donor-recipient models of co-operation. A cumulative record of member Government funding received and other financial statements are available on COL's web site.

This reality is further demonstrated when one factors in the tremendous direct and indirect local support provided by Governments and institutions hosting workshops, training sessions and other activities spearheaded by COL. These contributions never register in the accounts of COL but they remain critical to the realisation of project objectives.

COL also successfully leveraged the core funding provided such that it was able to generate significantly more project and programme activity than Governments' direct investments of under CDN\$5.5 million per annum would otherwise have permitted.

For example, COL was able to secure over half the costs of the *Pan-Commonwealth Forum* in Brunei Darussalam from sources outside its core budget. COL estimates conservatively that \$2-\$3 worth of programming is generated for every dollar Governments contribute to its core budget. In a number of cases, the leveraging goes well beyond that. One such case is the feasibility study on the use of broadcasting in the Caribbean for open and distance learning. The study itself will consume some \$217,000 while COL will invest resources of \$28,000 – a leveraging effect of almost \$8 for each dollar of expenditure incurred by COL.

COL has also recently created COL International as a COL affiliate to undertake contractual work funded by international financial institutions and/or national development agencies. Over time, this should generate additional revenues for COL, which will decrease funding pressures on Governments' national treasuries.

## COL in Action

### COL-led consortium wins Mozambique work

A consortium led by COL and including the International Extension College (IEC, U.K.) and the University of Namibia (UofN) have been awarded a US\$175,000, African Development Bank-funded contract by the Government of Mozambique to conduct a feasibility study on the implementation of a fully integrated national open and distance learning system for one of the Commonwealth's newest members.

Mr. Patrick Guition (COL), Dr. Barbara Spronk (IEC), Professor Tony Dodds (UofN), Dr. Gary Coldevin and Professor Greville Rumble arrive in Mozambique this month, joining four local consultants, and will work extensively with local stakeholders and experts throughout the country. Mr. Anisio Matangala, Chief of the Mozambique Distance Education Commission, will lead the team of local consultants.

### COL signs literacy MOA

COL and The International Literacy Institute (ILI) have signed a Memorandum of Agreement on collaboration in the development of literacy programmes. ILI is located at the University of Pennsylvania Graduate School of Education in Philadelphia and is co-sponsored by the University and UNESCO. It's work focuses on international literacy with an emphasis on improving literacy in developing countries.

The agreement recognises the central role that literacy and basic education play in international development; notes the increasing need for communication, co-operation and collaboration among institutions and agencies working to utilise open learning systems and new information technologies to improve literacy, non-formal education and basic education world-wide; and considers the strengths and capacity of both ILI and COL.

ILI's web site includes information on research and events as well as links to other literacy sites world-wide ([ncal.literacy.upenn.edu/ili](http://ncal.literacy.upenn.edu/ili)).

## Guidelines for franchising education programmes

Globalisation of higher education can potentially provide access to education to countless individuals who might not otherwise have an opportunity to study. Unfortunately, quality assurance of franchised courses and overseas provision is not always adequate.

Guidelines existing in some countries are written primarily from the perspective of the *provider*. Guidelines created for the benefit of the *receiving* institution or individual in another country do not exist.

Such guidelines are now being developed collaboratively by The Commonwealth of Learning, the Association of Commonwealth Universities (ACU), the Commonwealth Secretariat and the Commonwealth Higher Education Management Service in consultation with government agencies and experts throughout the Commonwealth.

The guidelines will be a series of critical questions which could be raised when evaluating the validity or appropriateness of franchised or overseas provision. They should be ready by early next year.

*Based on an article by Svava Bjarnason appearing in the October 1999 issue of ABCD, the ACU news bulletin. The entire article is available on COL's web site ([www.col.org/models/fran\\_guid.htm](http://www.col.org/models/fran_guid.htm)).*

## Events

### CHOGM 99

As Chairman of the Board, Dr. H. Ian Macdonald, will lead COL's representation at the biennial Commonwealth Heads of Government Meeting (CHOGM) to be held in Durban, South Africa, from 12 – 15 November 1999. The Board of Governors will report on COL's progress, highlighting its relevance to this year's CHOGM theme:

*Globalisation: The Commonwealth and People-Centred Development.* Dr. Macdonald will be joined by COE's President and C.E.O., Professor Gajaraj Dhanarajan; COE's Director, Mr. Brian Long; and Board member Dr. Ihron Rensburg (Deputy Director-General, General and Further Education and Training, South Africa Department of Education).

### Reddy Memorial Lecture

The fourth annual Professor G. Ram Reddy Memorial Lecture was held on 2 July 1999 in New Delhi and telecast to national and state learning centres throughout the country. Dr. Ian Mugridge, former COL Director of Programmes, delivered the Lecture on *Quality Assurance in Distance Learning*.

The event is jointly sponsored by the Indira Gandhi National Open University and COL in memory of the late Professor Ram Reddy, who was the first Vice-Chancellor of IGNOU and first Vice-President of COL.

## Quality assurance workshop

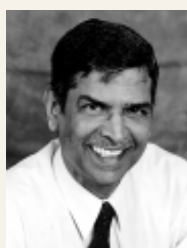
A national workshop on Quality Assurance in Distance Education for Malaysia took place in September 1999. It was hosted by Universiti Sains Malaysia and presented with support from The Commonwealth of Learning. Workshop facilitators were Ms. Andrea Hope, Associate Vice President (Development), Lingnan University, Hong Kong and Dr. Michael Robertshaw, Associate Professor, School of Science and Technology, The Open University of Hong Kong. Participants developed a strategic approach towards quality assurance in distance education in Malaysia. Complete details on the workshop and its outcomes are available online ([learn.oubk.edu.hk/~u123/workshop.htm](http://learn.oubk.edu.hk/~u123/workshop.htm)).

## TVET teacher training

COL has developed a core curriculum designed to improve the pedagogical skills of technical and vocational teachers that have been hired for their competency in the particular content area.

## People

**Mr. M.K. Kaw** has been appointed Education Secretary in India's Ministry of Human Resource Development. The Government of India has also named Mr. Kaw as its representative on COL's Board of Governors. He succeeds Mr. P.R. Dasgupta in both roles.



*Krishna Alluri*

**Dr. Krishna Alluri** and **Ms. Helena Fehr** have joined COL's staff in Vancouver.

Dr. Alluri has been involved in agricultural research, training and development for almost 30 years. Starting his career in India, he was later associated with the Consultative Group on International Agricultural Research (CGIAR). As Project Co-ordinator, he is responsible for developing activities where distance education and open learning applications could be promoted and encouraged in the agricultural, forestry and fisheries sectors.



*Helena Fehr*

Ms. Fehr succeeds Mr. Greg Zador as COL's Governance and Programme Officer. With an academic and practical background in international education, she is now administering COL's Canada Caribbean Distance Education Scholarship Programme and supporting the activities of COL's Board of Governors.

Implementation of the programme has taken a leap forward. At a meeting of representatives from the Commonwealth Caribbean, all member countries agreed to adopt the curriculum. Jamaica's University of Technology has been appointed by COL to act as regional co-ordinator.

Dr. Dennis Irvine, Regional Adviser to the President of COL, chaired the meeting. Mr. John Bartram, COL's technical/vocational education and training (TVET) specialist, acted as facilitator. Further details on the programme and the recent meeting are available on COL's web site ([www.col.org/tvet](http://www.col.org/tvet)).

## Knowledge management

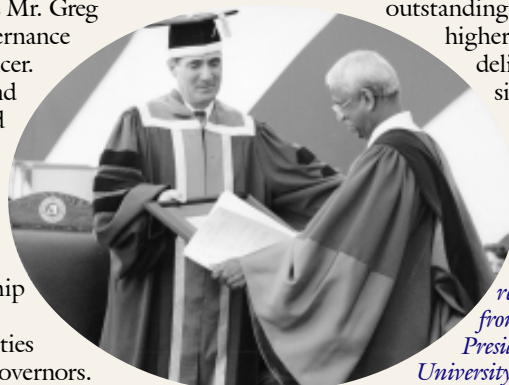
COL will host a "Knowledge Management Roundtable" at its Vancouver headquarters 19 – 21 October 1999. Experts in distance education libraries and information databases will discuss the changing nature of knowledge management and available technologies and will examine how COL and its Information Resource Centre can best meet the needs of stakeholders around the Commonwealth.

Mr. Zador has been appointed Economic Development Co-ordinator by the city of Winnipeg, Canada.

COL Director, **Mr. Brian Long**, was invited to Moscow to receive one of five Awards of Merit conferred by the Russian Association for Canadian Studies on the occasion of its 10<sup>th</sup> anniversary. The awards recognise those who have played a critical role in the life of the association. Mr. Long has received similar honours from the International Council for Canadian Studies, the German-speaking Association for Canadian Studies and the Spanish Association for Canadian Studies.

COL's Chairman, **Dr. H. Ian Macdonald, O.C.**, was recognised by the Open University of Sri Lanka for "his eminence in the fields of academia and government and his special contribution to distance education." OUSL awarded him an Honorary Doctor of Letters in June 1999. COL's President, **Dato' Professor Gajaraj Dhanarajan**, was meanwhile also receiving an Hon. D. Lett., conferred on him by Canada's Athabasca University "in recognition of his distinguished service to open and distance education throughout the Commonwealth, and his

outstanding contributions to higher education." Speeches delivered on these occasions are available on COL's web site.



*Gajaraj Dhanarajan receives Honorary Degree from Dominique Abrioux, President, Athabasca University*

## COL Board to meet in Victoria

COL's Board of Governors will meet in Victoria, British Columbia, Canada from 27 to 29 October 1999. Local government and education officials will be invited to a break-fast meeting with the international dignitaries that will be in attendance. His Honour, The Honourable Garde B. Gardom, Q.C., Lieutenant-Governor of BC, will speak at the meeting.

## Using technology in agricultural training

Immediately prior to *TEL-isphere 99*, COL is convening a regional consultation on using technology for the enhancement of learning in agriculture in the Caribbean. The meeting will take place in Barbados from 23 to 24 November.

Through pilot studies, COL has made a modest beginning in the use of information and communication technologies for the enhancement of learning in agriculture in the Commonwealth. A more thorough review of literature, sharing of experience and exchange of views are needed.

Findings and recommendations will be presented at *TEL-isphere 99*. Further information: ([www.col.org/tel99/agrmeet.htm](http://www.col.org/tel99/agrmeet.htm)).

## Gender barriers to ICTs

In many regions of the developing Commonwealth, increasing opportunities exist to use information and communications technologies (ICTs) to deliver education. There is evidence, however, that there continues to be impediments to the access of these ICTs based on gender differences. These differences will also vary greatly depending on where a person lives (e.g. urban vs. rural).

In view of these challenges, COL is convening four regional "expert group meetings" to identify these impediments and to arrive at strategies to overcome them. The Caribbean regional meeting will be held on 24 November, preceding *TEL-isphere 99*, and will include representatives from Barbados, Belize, Dominica, Guyana, Jamaica, and the Eastern Caribbean.

## Global Knowledge II

The second Global Knowledge Partnership conference will be hosted by the Government of Malaysia in Kuala Lumpur from 7 to 10 March 2000. The conference theme is: *Building Knowledge Societies: Access, Empowerment, Governance*. The first Global Knowledge conference was hosted by the Government of Canada in Toronto in June 1997. COL is part of the planning team for the KL meeting. ([www.globalknowledge.org](http://www.globalknowledge.org))

## World trade in education

The World Education Market, an international conference and trade show, will showcase practical, effective and innovative approaches for the delivery of education,

training and lifelong learning. The Reed Midem Organisation, a large international event operator, has chosen Vancouver, Canada, to host the inaugural WEM. It will be held from 24 to 27 May 2000 and is expected to draw between 3,000 and 5,000 decision-makers and education leaders from around the world.

The event is designed to facilitate cross-border education business arrangements. Estimated at US\$28 billion in 1996, the world trade in education is predicted to surpass US\$90 billion by 2005. In this dynamic marketplace, solutions, systems and expertise are being purchased, products and resources are being adapted to local needs, and new collaborations and initiatives are being launched – involving a full range of public- and private-sector partners. ([www.wemex.com](http://www.wemex.com))

## How real is virtual education?

*The Development of Virtual Education: A global perspective.* A study of current trends in the virtual delivery of education, conducted with funding provided by the Department for International Development, London, U.K. Dr. Glen Farrell, Study Team Leader and Editor. The Commonwealth of Learning, 1999.

The term "virtual education" is something that is heard with increasing frequency as the use of information and communication technologies (ICTs) becomes ever more present in the conduct of open and distance education. To examine the degree to which the "virtual institution" has really arrived, The Commonwealth of Learning, with funding from the British Department for International Development, commissioned an international group of experts to look at this phenomenon and provide a snapshot report.

While it is clear that the application of ICTs to the practice of open and distance learning is growing rapidly, the study team determined that the concept of truly virtual education is still more rhetorical than real.

The report provides a detailed look at the differences in this development around the world through a series of regionally-based papers and concludes with a number of suggestions for policy makers and education leaders regarding the development of models for virtual learning.

The entire study is available online from COL's web site ([www.col.org/virtualed](http://www.col.org/virtualed)). Feedback has been very encouraging. Many have already complimented it on its usefulness and timeliness.

## AAOU conference papers

The Open University of Hong Kong Press has published a book based on a selection of papers presented at the Asian Association of Open Universities (AAOU) conference, *The Asian Learner*, held in Hong Kong in November 1998. As a conference sponsor and partner in the publication, COL has obtained a limited number of copies of

the book that it is making available *free-of-charge*, while quantities last. For requests from institutions in developing Commonwealth countries, shipping charges will be waived. Contact: The Open Learning Agency, Attn. COL Customer Service, 4355 Mathissi Place, Burnaby BC V5G 4S8 Canada; tel: 604.431.3210; fax: 604.431.3381; e-mail: [catalogue@ola.bc.ca](mailto:catalogue@ola.bc.ca).

AAOU '99 takes place this month in Beijing. AAOU '00 will be hosted by the University of the Philippines Open University in Manila. The deadline for submission of abstract presentation proposals is 29 February 2000. E-mail: [ou\\_ovcss@laguna.net](mailto:ou_ovcss@laguna.net) for details.

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## Do we have your e-mail address?

If you would like to receive occasional notices and news from COL via e-mail, please send us your e-mail address. If you have recently received e-mail announcements *directly* from COL regarding the *TEL-isphere 99* conference we already have your e-mail address.

# Connections

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*Connections* is edited by  
Mr. Dave Wilson.

# EdTech News



A supplement to Connections • October 1999

This edition of *EdTech News* is the last one before the start of the new millennium. It discusses some of the issues that will be relevant in the coming years and looks at one particular technology that should have a profound effect on the use of computers in education, commerce and the home: voice recognition.

## Telecommunications and government

Within the first decade of the millennium wireless connectivity will be available from any point on the planet. Connectivity costs will continue to decrease and low-priced, portable, voice recognition computer systems will be the norm. But as wireless connectivity becomes available, human issues, both social and governmental will be critical to the development of a country's standing in the world. If regulators choose to limit telecommunications infrastructure development within a given country then its citizens may not be able to fully participate in the global information economy that has characterised the last decade of the twentieth century. In the coming years, there will be no reason why an entrepreneur in Kenya cannot bid on a contract to maintain security system software in a building in Melbourne, Australia, or why a company in Bangladesh cannot maintain the digital projection systems in movie theatres throughout Canada.

Governments are learning that, with the entry of the Internet into the public domain, human resource development has become integrally linked with the telecommunications infrastructure and its progress within a country. This may signal the end of national telecommunications industry monopolies. While it may not have been feasible or desirable in the past, today's economies and technologies can support an open and competitive telecommunications atmosphere to the benefit of all. Deregulation can foster much-needed upgrading of telecommunications infrastructure and can accelerate the progress by citizens to gain the skills that are required to compete internationally.

The method by which research and scientific knowledge is being produced is also rapidly evolving with telecommunications changes. Up until the last decade, knowledge gained through research was produced at universities. However, with industry under

pressure to produce unique products to meet public demands, a vast amount of research is currently being disseminated from the private sector. And some new knowledge is even being produced at the secondary school level as students rapidly acquire programming and specialised application skills, such as high-end computer animation, to prepare for the competitiveness of the job market.

Successful knowledge development in the future will bring people together as groups across academic disciplines, across cultures and across national borders rather than staying within one specific area of study. Therefore, the building of local network infrastructure will be of prime importance if a country is to allow its own knowledge producers to flourish while remaining at home, instead of being lured to other regions in the world.

The new millennium will see a truly global economy that will allow for greater participation by those regions of the globe that are currently limited in communications infrastructure. Countries will need higher-skilled knowledge workers to participate and compete in this atmosphere. The question, of course, will be, "At what cost?" Countries may well see their own cultural identities fade if they are content to only be receivers and not creators of information and knowledge.

What are the technologies that will allow for this leap into the information age for the general populace of a country? Perhaps voice recognition along with wireless connectivity hold some of the greatest potential for the first decade of the millennium.

## Voice recognition software

The configuration of the personal computer (PC) with a central processing unit (CPU), keyboard and monitor has changed very little since it was introduced in 1980. Because the user primarily interacts with the machine through the keyboard, the fact that many people lack keyboarding skills means that they are unable to take full advantage of much of the power of the computer.

Voice (or speech) recognition software has, until now, been too primitive, inaccurate and expensive to consider by most users of PCs.



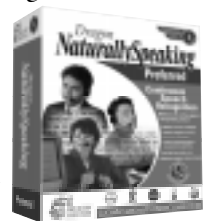
PHOTO CREDIT: DRAGON SYSTEMS

One survey found that in 1998, ninety percent of people who bought voice recognition programmes ended up not using the software due to the amount of training the software required to obtain an acceptable level of accuracy. Also, the computing power needed to run it in a multitasking environment such as MS-Windows, in some cases, slowed the computer down to unacceptable processing speeds.

But the reliability of the software has improved significantly in recent years and prices and the required computer processing power have now both come down to the point where the technology has become a viable option for users.

However, voice recognition advocates still face the challenge of convincing PC users to replace their keyboard and mouse, a concrete system that is now well ingrained. Users still mistrust the concept of speech recognition and are uncomfortable with talking to a machine.

At a recent conference, one presenter drew applause when he demonstrated Windows-based voice recognition software from Lernout & Hauspie. The audience heard this presenter begin his address offstage as he spoke into a microphone connected to a PC. He used a series of short voice instructions to launch the *Yahoo!* web site, find an article in a back issue of *Time* magazine, and insert sections of the article into his *PowerPoint* presentation.



## Voice recognition on the telephone

Voice recognition might have the greatest immediate potential in devices that people are already used to talking to, such as the telephone. Existing voice recognition services let users retrieve e-mail and stock quotations

over the telephone. In the future, voice recognition could replace the telephone's rotary or touch-tone keypad interface.

As telephone companies add voice recognition to their systems, the potential number of users is staggering. The companies will be in a position to encourage their hundred million customers to upgrade to compatible telephones. These single-use computer devices will have an advantage over PCs in that they will not require the installation of software or be prone to "crashing".

One product is called SpeechSite. Modelled after the self-service information and e-commerce transactions available on the web, a caller can dial\* into a computer that hears and guides the requests and answers them using voice recognition technology. The computer can be set up to recognise and answer such questions as where a restaurant is located and its latest reviews or how soon an ordered shipment is expected to arrive. (\*We still use this word when most of us are now "pressing" buttons on a keypad. Will we continue to use it when we are just speaking the numbers or just describing the destination that we wish to reach?)

Callers receive recorded voice responses that are more interactive than voice-mail systems and designed to provide the type of information that is available on many web sites. Voice recognition systems would also offer the option of talking directly to a representative, when such a person is available.

It's still not like reaching a live person, but the answers are there 24-hours a day and a well-programmed computer may represent a business better than some employees might! The potential applications in the education sector for tutorial support may prove to be interesting.

Dragon Systems, Inc. *NaturallySpeaking*:  
[www.dragonsys.com](http://www.dragonsys.com)

IBM *ViaVoice*:  
[www.ibm.com/viavoice](http://www.ibm.com/viavoice)

Lernout & Hauspie *VoiceXpress*:  
[www.lhs.com](http://www.lhs.com)

SpeechWorks International, Inc. *SpeechSite*:  
[www.speechworks.com](http://www.speechworks.com)

## Training farmers through video

COL is currently implementing a project in Jamaica in partnership with the Jamaican Rural Agricultural Development Authority (RADA), on training agricultural extension officers in the production of video training programmes for educating Jamaican farmers. RADA's extension operations for the Ministry of Agriculture are based throughout the fourteen Parishes of the country.

A feasibility study completed in January 1999 by COL, with Dr. George Wilson, a local agricultural expert of international repute, determined that the use of video via a simplistic production system in the hands of the extension worker can be highly effective for just-in-time training. It would also be



*Phase one of the agricultural extension project was a feasibility study undertaken by COL. David Walker of COL and Dr. George Wilson, a Jamaican agricultural expert, interview a farmer in Saint Catherine Parish, Jamaica.*

effective in that the farmers could directly relate to the information as it addresses production problems that are specific to their own region (Parish), valley, field, and fellow-farmers. Farmers, seeing their colleagues as well as themselves in the video, would be further motivated by the information presented to them. The videos that are to be produced by extension officers in the field will also be distributed to other regions of the country through the various RADA Parish offices.

In June 1999, COL completed the installation of field-based video production equipment. The system's ease of use and accompanying training will allow extension officers to be directly involved with the video training process from shooting to editing.

This is one example of how COL is employing creative, leading-edge and appropriate technologies for development projects throughout the Commonwealth and researching models for the use of different forms of media and delivery in various sectors of society. Further information: ([www.col.org/colme](http://www.col.org/colme)).

## Tele-teaching in rural Newfoundland

The reorganisation of education in the Canadian province of Newfoundland and Labrador into ten school districts has provided an administrative structure within which a "Digital Intranet" has been organised to deliver Advanced Placement (AP) science courses to rural schools. In one school district, nine rural schools have been linked with each other and to the Centre for TeleLearning and Rural Education at Memorial University in St. John's to provide senior students with access to web-based courses in AP biology, chemistry, mathematics and physics.

The Digital Intranet is based on a collaborative model within which expertise in the teaching of each of the four AP science courses is led by an experienced teacher and shared across each of the other sites. New technologies and an emerging pedagogy of tele-teaching have combined in this

experiment to bring to rural Newfoundlanders opportunities that have not previously been available. Students in this all-rural school district are now able to engage in university-level courses without having to leave home.

*This article was contributed by Professor Ken Stevens, Chair of TeleLearning and Rural Education, Faculty of Education, Memorial University of Newfoundland (e-mail: [stevensk@morgan.ucs.mun.ca](mailto:stevensk@morgan.ucs.mun.ca)).*

## New online technology journal

We are pleased to draw *EdTech News* readers' attention to a new on-line resource for exploring the use of information technologies in education. *TechKnowLogia* is an international online journal and strategic forum for policy makers, strategists, practitioners and technologists at the local, national and global levels. It is published by Knowledge Enterprise, Inc. in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-operation and Development (OECD) and the Global Information Infrastructure Commission (GIIC). It has just published its inaugural issue (September/October 1999). The Editor-in-Chief is Wadi Haddad, Ph.D. Free subscriptions are available on the web site ([www.techknowlogia.org](http://www.techknowlogia.org)).



## EdTech News



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