Online research, simplified: COL's Knowledge Finder

Managing knowledge in the digital information age is neither convenient, nor simple. The deployment of information, especially through quick-as-thought Internet-based resource sites and databases, guarantees that the judicious mining of knowledge is a prerequisite to managing it – and that the success of any knowledge-finding effort relies on the efficiency of both.

Providing the Commonwealth and the world with an integrated approach to knowledge management is the Knowledge Finder (www.colfinder.org), a new Internet-based search, retrieval and cataloguing service initiated and managed by The Commonwealth of Learning (www.col.org). This service will make online research more convenient and efficient by distilling the massive body of information on open, distance and technology-mediated learning (ODL) into an edifying, digestible package for the end user.

Integrated knowledge management

With more than a decade’s experience in the educational trenches, COL is very much aware of the tremendous demands and responsibilities the rapidly changing knowledge economy places on any educational initiative. True to COL’s mandate to facilitate and support the Commonwealth-wide development of ODL resources, tools and technologies, the Knowledge Finder harvests and filters the Internet’s boggling array of ODL information – providing users with one-stop access to a database of the most salient, relevant, and quality resources available. Once the needed information is found, a user can apply the Finder’s integrated tools to interpret, sort, store and pass along the knowledge gleaned.

Focus on ODL

Launched in July 2002, the Finder is designed to be most useful to anyone involved with or interested in ODL, including government policy makers, educators, developers, trainers, researchers and learners. All content comes from online sources in the public domain, filtered so that only the resources most relevant to educational development, curriculum content and learning are included in the Finder’s current index of more than 250,000 web pages. The type of information available also includes timely and critical development topics such as poverty alleviation, gender equity, food security and health. ODL sites are sorted by regional interest while other development topics are sorted globally. The COL Knowledge Finder has also been linked to other key ODL information sources such as the Global Distance Education Network (GDENet, www.worldbank.org/disted), and national and regional “schoolnets.”

Usability and efficiency

Designed to be user-friendly and efficient as well as comprehensive, the Finder’s search capabilities – based on the proprietary RetrievalWare data-mining software developed by Convera Technologies Inc. (www.convera.com) – intuitively compensate for alternative spellings (“cheque” or “check”), meanings (“banking” or “finance”), and typos (“colur” or “colour”). The Finder will execute many different types and combinations of searches, using pattern, concept and Boolean, and it also works whether a user’s language preference is English, or otherwise. In addition to English, the Finder also searches in French, Portuguese and Spanish.

More language capabilities are planned, as the Finder has the capacity to accommodate searches in 20 languages. The site will also provide links to online translating services, if needed. Programmed to recognise and index about 200 document types, including all widely used formats such as .doc, .pdf and .html, the Finder will soon include audio and graphics file formats in its searches.

SPECIAL ISSUE: NEW WEB-BASED KNOWLEDGE RESOURCES

www.col.org/kf

THE COL KNOWLEDGE FINDER IS THE OPTIMUM TECHNOLOGICAL TOOL FOR "MINING" AND REFINING THE RESOURCE BASE OF OPEN AND DISTANCE LEARNING INFORMATION REPOSITORIES AVAILABLE THROUGH THE INTERNET.

THIS KNOWLEDGE FINDER SERVICE IS DESIGNED FOR OPEN AND DISTANCE-LEARNING PRACTITIONERS. IT SEARCHES THE MAJORITY OF WELL-REGARDED SOURCES OF INFORMATION IN OPEN AND DISTANCE LEARNING FROM A CENTRAL LOCATION AND PROVIDES TOOLS TO ORGANISE THE INFORMATION GLEANED.

SEARCHING CAN BE AS EASY AS TYPING IN A KEYWORD OR PHRASE. FOR ADVANCED USERS, IT’S POSSIBLE TO COMBINE BOOLEAN, CONCEPT AND PATTERN SEARCHING INTO THE SAME SEARCH STRING BY USING THE SERVER’S ADVANCED FILTERING TECHNIQUES.

COL ALSO OFFERS THIS POWERFUL TOOL TO ASSIST USERS IN IDENTIFYING INFORMATION ON THE PRIORITY INTERNATIONAL DEVELOPMENT GOALS LIKE POVERTY ALLEVIATION, HEALTH AND EDUCATION FOR ALL. THE COMPLETE LIST IS ACCESSIBLE ON THE SEARCH PAGE.
Advanced management ability

Users have access to advanced tools for storing, cataloguing and disseminating their research through collaboration with 3waynet Inc. (www.3waynet.com), which developed the Finder’s online interface and remains an integral implementing stakeholder in its hosting and technological management. As a reseller partner for ThoughtShare Communications, 3waynet provides the Thoughtscape suite of PC-based knowledge management utilities developed by ThoughtShare Communications (www.thoughtshare.com). A freeware Thoughtscape reader downloadable from the Finder’s site works with the Finder’s Thoughtscape Server component, via a user-friendly file management system that users can interface with to download, edit and catalogue the results of any search.

Thoughtscape works in tandem with the Finder’s search features, automatically sorting results into an at-a-glance filing system organised by customisable topic groups instead of the more general (and generally less helpful) simple list commonly used to display search results. Capable of more functions than what the freeware version allows the average user to access, Thoughtscape’s full complement of tools is available by subscription, for a nominal annual fee. To help users with any queries about the software, a tutorial link is provided on the Finder. Thoughtscape’s more advanced suggestions, comments or questions by emailing the team through a Feedback form on the site; ongoing stakeholder and user input is part of the Finder’s system of checks and balances.

Nuts and bolts

COL maintains the Knowledge Finder, together with a 3waynet technical team, from a secure site. The service operates on two servers, one dedicated to conducting searches and the other exclusively for cataloguing search results and delivering these to users. High-speed data transfer cable links the two servers to each other, as well as to the Internet (100 megabit). Two physical, backup servers will be initialised if a significant problem was to occur with the primary hardware, and the entire system is regularly backed-up to tapes that are stored off-site. The cages housing the servers are individually padlocked and bolted to the floor in case of natural disasters such as earth tremors, among other contingencies for electrical power failure and fire. The high security site is card-accessible only, and is monitored around the clock with ceiling cameras.

In perspective

The Knowledge Finder enhances COL’s existing ODL resourcing services through its online Information Resource Centre (www.col.org/irc). It is also one of a suite of knowledge management efforts include the creation of a permanent knowledge management position on its in-house staff of education specialists, and the development of a Commonwealth Open Learning Interactive Network for Knowledge Sharing (COLINKS, www.col.org/lmr/#COLINKS).

Other recent stakeholder-level content and administrative contributions to knowledge management initiatives include a Gender Training Resources database (www.col.org/GenderResources) in collaboration with UNDP, UNIFEM, UNICEF and the Commonwealth Secretariat, as well as the World Bank-hosted GDENet and Development Gateway (www.developmentgateway.com). COL’s significant involvement in GDENet and the Gateway is also profiled in this special edition of Connections.

www.col.org/kf

COL’s knowledge finder Partners:
COL collaborates on online DE network

Rising world-wide access to the Internet is increasing its viability to the international development community as a valuable way to communicate, inform and educate. To foster the Internet's knowledge management potential, the Commonwealth of Learning has partnered with other leading distance education (DE) organisations and the World Bank on the Global Distance Education Network (GDENet, www.worldbank.org/disted).

COL and GDENet

GDENet caters to the distance education needs of developing countries; specifically, it contains globally and regionally sorted information on how to design and implement a national, regional or institutional DE system. The Network's resources also focus on content that demonstrates how

using information and communications technologies (ICT) can enhance both the quality and development of the general education arena, as well as DE-oriented systems. Conceived as a comprehensive research tool for policy makers, decision-makers and practitioners in the field, the multilingual GDENet database is built and maintained with ongoing input and feedback from partner organisations, in addition to other contributors with a proven capacity and commitment to knowledge management in DE.

Such a DE-forward manifesto made GDENet an attractive collaboration for COL – mandated by Commonwealth Heads of Government to facilitate and support the Commonwealth-wide development of open and distance learning – when initially invited by the World Bank to be an implementing project partner. COL’s continuing involvement with GDENet is also part of the wider knowledge management initiative described in its current Three-year Plan (www.col.org/3yearplan00), that includes the recently launched COL Knowledge Finder (www.colfinder.org) and a similar project implementation role in the Development Gateway portal site (www.developmentgateway.com).

Targeting seminal sources

GDENet currently comprises a core World Bank-hosted site and five region-based sites, each hosted by an implementing partner organisation. The core site contains

internationally relevant DE resource material organised into four topics – Teaching and Learning, Technology, Management and Policy and Programmes – searchable by author or by sub-topic, including the option for a text-only display mode. From these succinct topic groupings you can search for information from designing a learner-centred DE course, to the educational applications of ICT and traditional technologies, to organising, setting up and maintaining a DE programme.

How are these resources found, and how do they find their way into GDENet? A 52-member team of content managers and editors from implementing partner organisations, co-ordinated by Dr. Michael Moore of The American Centre for the Study of Distance Education, Pennsylvania State University (www.ed.psu.edu/ACSDE) – which originally helped develop and design the core site – handles the monumental task of collating GDENet's resources.

Individual site content management teams scan for existing published online and print case studies, readings, databases, reports of good practice and other information on distance education; works considered seminal to a topic are identified for review by a group of four editorial boards, comprising member representatives from all partner institutions, before being indexed in the GDENet database. If the item is not within the public domain, copyright is secured before posting. This process of information retrieval and sorting is ongoing, and is supplemented by feedback from other contributing organisations and users of the Network. In addition to English, resources are available through the regional sites in about 34 languages, including Spanish and Chinese.

In addition to the sorted DE database, each site in the Network also includes a separate directory of links to other DE institutions, conferences and information sources, a brief glossary of DE terms, and a detailed Feedback form.

Successful partnerships

The GDENet Island States site is hosted by COL, and a COL team co-ordinated by Paul West, COL’s education specialist in knowledge management, also assists with overall Network management; Dato’ Professor Gajaraj Dhanarajan, COL President and Chief Executive Officer, is a member of the Network’s editorial group. Content for the core site is managed by the International Centre for Distance Learning (ICDL), Open University, UK (www.icdl.open.ac.uk).

Other regional hosting/content management partners include the Centre for Research in Distance & Adult Education (CRIDAI), Open University of Hong Kong (www.openh.kbu.edu.hk/cridal) for East Asia; Indonesian Distance Learning Network (IDLN, www.idln.or.id) for South East Asia; Universidad Estatal a Distancia (UNED, www.uned.ac.cr), Costa Rica, for Central America; and The South African Institute for Distance Education (SAIDE, www.saide.org.za) for Southern Africa.

Future friendly

COL’s involvement with GDENet is ongoing, as it finds partnerships with development-related organisations with similar goals. In its second year of full implementation, the Network currently registers more than 80,000 hits per month. Forward-looking plans to widen the GDENet resource base and increase regional responsiveness include establishing more regional sites in South Asia, Eastern and Western Europe and West Africa.
The Commonwealth of Learning is actively expanding its knowledge management and resourcing capacity, and has partnered with the recently launched Development Gateway – an interactive Internet portal for information and knowledge sharing on sustainable development and poverty reduction – as part of this initiative. COL is one of the Gateway’s major content contributors, and co-administers a section of the site dedicated to e-learning.

Global reach, local focus

Initiated in early 2001, the Development Gateway (www.developmentgateway.com) is a locus of useful, practical links and information targeted to the needs of the international development community. Global in concept and scope, it is also firmly committed to serving regional and individual needs; under the Gateway model, teams of specialists in particular fields from around the world contribute to the portal’s ongoing growth and development. With a US$7.2 million start-up budget, funding pledges of up to US$82 million and a growing international roster of major public and private sector partners, the Gateway opens the door to the world’s wealth of development resources to everyone.

COL’s contribution

The Gateway’s commitment to development issues and accessibility, along with its information and communication technology-based (ICT) approach, makes the portal an ideal collaborative project for COL; its partnership with the Gateway coincides with a multifaceted initiative to expand its knowledge management network, outlined in the current Three-year Plan (www.col.org/3yearplan00).

A content partner in the portal’s E-learning section with World Links (www.world-links.org), Paul West, COL’s education specialist in knowledge management, and the COL team work closely with an international group of independent specialist Guides, Advisors and a content Editor to manage and filter the steady stream of contributions.

With more than 1027 resources in the E-learning folder already available in five languages, hits on the site are increasing: E-learning has more than 1,200 registered users, and the site dedicated to e-learning.

Responsive, comprehensive

Now well into a second and final phase of initial development that will continue through mid-2003, the Gateway is proactively user friendly and responsive to user feedback on its content and design. It uses open-source technology and an easily navigable interface, designed for quicker loading into web browsers. Its comprehensive listings of development resources, including information and links to education, health and business management topics and projects, are directly contributed and managed by the stakeholder governments, NGOs, corporations and individuals it serves.

Through the Gateway you can browse the Development Knowledge directory, searchable by its constantly updated and revised list of 28 topics and areas of timely focus. Or perhaps access the dgMarket (www.dgmarket.com), a global online marketplace of 25,000 donor and government-sponsored tender notices, before scanning through AiDA (Accessible Information on Development Activities), an exhaustive directory of about 400,000 current development projects (www.developmentgateway.com/node/100647). Other resources include a section for data and statistics on more than 200 countries, an online bookstore and a frequently updated news and events area. Linked to the Development Gateway are its affiliated Country Gateways (www.developmentgateway.com/node/137849), local-content portal sites with a similar structure and purpose. With 48 of these national portals in development, the project is on track to meet the original target of 50, fully operational Country Gateways by mid-2003.

Collaboration for the benefit of all

The Gateway portal is one of several projects administered and funded by The Development Gateway Foundation (www.dgfoundation.org), an independent, non-profit international organisation of public and private partnerships embracing national governments, corporations and the World Bank Group. Start-up funding for the mirror Country Gateway sites is provided by infoDev.

In the spirit of collaboration, COL finds its ability to act as a catalyst for educational development within the Commonwealth is enhanced through strategic co-operation with global organisations that share a commitment to the universal development goal of “Education for All.” The Gateway Foundation’s invitation to COL to help develop the portal site tacitly acknowledges its more than a decade of expertise in e-learning and educational applications for ICT, in the Commonwealth and beyond. COL’s involvement also brings to the Gateway an extensive, education-related network of international and regional governments, NGOs, academe and other specialists and organisations.

For the present time COL’s contribution will continue to focus on educational development, especially in the area of e-learning. As the portal’s network grows, COL’s content management role may expand to include resourcing individual Country Gateways.