The feature article in this issue of MmIT is Andrew Lewis's report on the use of computer games to teach information literacy to children, and is featured on the cover of the print version (left).

Kevin Curran and Michelle Murray of the University of Ulster contribute an introduction to Library 2.0, and MmIT hopes to develop this theme in 2007.

Space in the news column is also devoted to high altitude broadband at the University of York and high-tech information kiosks at the Royal Gordon's University.

The Multimedia Britannica for 2007 is reviewed, while Olwen Terris applauds Broughton's book on thesaurus construction, and Lyndon Pugh savages a book on change management.

Jane Rowlands, whose reluctant decision to stand down reached the editorial board too late for us to acknowledge in print her many years of committed service to the group and the journal in particular, covers news and technology, including slimline projection, mini pcs, flat screens and media storage for digital cameras,

Jane leaves with our thanks and very best wishes for the future.

Ken Cheetham assesses Coolfan, Video Station Plus and Movie Factory (right)

DVD & Video News reports on the early cinema of Edwin S. Porter, Céline and some pre-sound versions of Dickens' classics. Man of Aran, distributed by MovieMail, completes the column.

Credits: Images used in this issue are by kind permission of Andrew Lewis and the Royal Borough of Windsor and Maidenhead for the cover image and Big Bad World; Breakfree From Technology Andrez Rodriguez for Library 2.0; unset Above Clouds Dreamstime.com for High Altitude Broadband; IT Board Dreamstime.com for Technology; Girl With Books Diego Cerva Agency for Reviews; bfi Video and Moviemail for DVD & Video News; Agency – Dreamstime.com.

News ☛

News

Jane Rowlands & Lyndon Pugh

Student Management Software

High Altitude Broadband

Digital i-Kiosks

Student Management Software

Tribal has been awarded a significant new contract to provide the University of the West of England (UWE) with a new enquiries and admissions system.

Based in Bristol, UWE is the largest higher education provider in the South West, with around 30,000 students and 3,000 staff.

Tribal's SITS:Vision software will allow UWE to improve the service delivery of the admissions and international recruitment department. Potential students will be able to make online enquiries via a specially designed web portal, which is known as e-Vision.

The system will provide comprehensive support for the management of the admissions process, including scheduling of interviews, visits and open-days, marketing and enquiries via the web. The management of the university's course enquiries, direct applications and UCAS applications for both home and overseas students will be improved as part of the enhancement of the University of the West of England's customer relationship process.

Through a secure login, staff will be able to access current information relevant to their own roles in the university. Tribal's enquiry and admissions system, combined with e-Vision, a self-service web portal, is currently used by over 60% of the UK higher education market. This includes the University of York, University of Bristol, University of Bath, University College London and the University of Warwick, along with a number of key Scottish further education sites, including the UHI Millennium Institute. Steve Hope, Tribal's software sales director, said:

UWE is a prestigious and exciting new client for Tribal – UWE's values of providing a high-quality, student experience together with innovative collaboration with industry and research excellence fit well with the Tribal ethos, and it is hoped that this contract will be the first of many opportunities to work together.

email: media@tribalgroup.co.uk

High Altitude Broadband

HAPCOS Partners

University of York, UK

Jozef Stefan Institute, Slovenia

CERCOM/Dipartimento di Elettronica - Politecnico di Torino, Italy

EuroConcepts s.r.l, Italy

Universitat Politecnica Catalunya/Department.TSC, Spain

Carlo Gavazzi Space S.p.A., Italy

Budapest University of Technology and Economics, Hungary

BT UK

Deutsches Zentrum für Luft- und Raumfahrt e.V., Germany

Centre Suisse d'Electronique et de Microtechnique SA, Switzerland

Contraves Space AG, Switzerland.

National Institute of Information and Communications Technology, Japan

Japan Stratospheric Corporation Inc., Japan

Broadband's high altitude revolution recently gathered pace at York, where a conference held from the 23rd-27th October reported progress on the work of an ambitious consortium aiming to revolutionise broadband communications.

The University of York-led consortium, drawn from Europe and Japan, has spent three-years demonstrating the use of balloons, airships or unmanned solar-powered planes as high-altitude platforms (HAPs) to relay wireless and optical communications. The project is also working on steerable antennas which will use the latest digital signal processing, and on the techno-economic aspects of HAP-based systems.

A number of business models, for communications applications from HAPs, have been developed. European and Japanese partners specialise in various other aspects, including the development and construction of equipment for trials, and free-space optical communications.

HAPCOS was established in 2005 as a collaborative discussion forum funded by the European Science Foundation's COST initiative, following the initial success of CAPANINA, a €6 million project involving 13 partners from across Europe and Japan. The majority of the funding for this came from the EU's Framework 6 Programme.

More information on HAPCOS is available at http://www.hapcos.org, and on CAPANINA at http://www.capanina.org/partners/partners.php.

HAPCOS has three working groups, specialising in Radio Communications, Optical Communications and Platform. The Secretariat of HAPCOS is based at the University of York, and it draws on the expertise of experts from 17 European countries.

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The consortium has demonstrated how the system could bring low-cost broadband connections to remote areas, and even to high-speed trains. It promises data rates 2,000 times faster than via a traditional modem, and 100 times faster than today's "wired" ADSL broadband.

The results of the CAPANINA project were revealed in a final exhibition at the York HAP Week conference, which showcased the applications of HAPs as a springboard for the evolution of this new high-tech sector. The project received funding from the EU under its Broadband-for-All FP6 programme. The first objective of the project was to show how broadband can be delivered to rural areas across Europe.

The event, at historic Kings Manor in York, featured a number of keynote speakers including Rosalie Zobel, Director of Components and Systems in the European Commission's Directorate-General for Information Society and Media, as well as speakers from other major HAP projects worldwide, including NASA.

Following the CAPANINA event, a HAP Application Symposium provided a forum for leading experts to illustrate the potential of HAPs to opinion formers and telecommunications providers. The first (HAPCOS) Workshop, featuring leading researchers from across Europe, completed York HAP Week. It focused on wireless and optical communications from HAPs, as well as the critically important field of HAP vehicle development.

The CAPANINA and HAPCOS activities have helped to forge collaborative links with more than 25 countries, including many from Europe, as well as Japan, South Korea, China, Malaysia and USA. They seek to develop existing partnerships and forge new ones, with researchers, entrepreneurs, industry, governments as well as end users.

Free Global Internet From High-Tech iKiosk at RGU

The Robert Gordon University's (RGU) state-of-the-art sports centre in Garthdee was the venue for a world first in September, as free global internet calls, both within the UK and internationally, were made from its new high-tech iKiosk.

The iKiosk situated in RGU: SPORT is one of a network of touch-screen information points around Aberdeen, developed by the City Council. It offers free email, videomail, internet access and a wealth of information on council and local services. Software embedded in the iKiosks has been developed to allow students, citizens and visitors to Aberdeen to make free internet calls from any of the iKiosks, to others with compatible Voice Over Internet Protocol (VOIP) software.

RGU: SPORT will run trials, and the results will then be evaluated by all other iKiosk partners, including: NHS Grampian, VisitScotland, Grampian Police and Traveline Scotland.

Library 2.0 – Bringing the Library to the User

Libraries as we know them today can be defined by the term Library 1.0. This describes an environment in which resources are kept on shelves or in a computerised database. While these resources are portable and can be used flexibly to some extent, dictated by the systems and procedures of the library, Library 1.0 is a one-directional service. It takes people to the information they require.

Library 2.0 – or L2 as it is now more commonly known – aims to take the information to the people. This paper by **Kevin Curran** and **Michelle Murray** of the University of Ulster School of Computing and Intelligent Systems, presents an overview of Library 2.0 as an introduction to a mini-series to be published in MmIT over the coming months.

The term L2 is believed to have been coined by Micheal Casey in his blog LibraryCrunch, and denoted a library service which was the antithesis of that described as L1.0 (popposite). Chad and Miller (2005) describe Library 2.0 (L2) as a concept, very different from the service we know today, which operates according to the expectations of today's users.

By bringing this concept to life, the library will make information available wherever and whenever the user requires it. One point to note here is that L2 is not about replacing the 1.0 technology already being used, but rather about adding additional functionality.

Libraries were never the primary source of knowledge, but they have always played a major role as institutions where people of all ages, gender and religion could go and engage with various forms of resources. 96% of the population have been to a library at some point in their lives, and 89% of the UK population trust libraries (Chad and Miller, 2005). L2 sets out to build on this foundation and enhance it.

One of the aims of Library 2.0 is to encourage feedback and participation from the community. The obvious way in which his can be done is via blogs. Miller (2006a) defines a blog as being similar to an on-line diary, which usually contains entries of what is happening in an individual's life, as well as topics they find interesting. L2, aiming to be easy to use, attractive to new users and constantly re-evaluated and updated, obviously shares these characteristics with the best blogs.

L2 is also built on the principles of, and indeed is a direct result of, Web 2.0. This development offers a means by which data and services previously locked into websites can be liberated and then reused, in ways sometimes referred to as "mashing up". Importantly, it also provides a platform. Other developers can establish applications on the existing foundations, and thus benefit from economies of scale without reinvention.

Chad & Miller (2005), of the UK-based library management system provider Talis, discuss the issue of the importance of libraries in the community, and how L2 would be of benefit. While Talis are taking a leadership role in L2, they argue that for L2 to work, it must not be a Talis-only creation. L2 requires all relevant providers to come together to create an application which can work for all.

The box on the next page shows the principles of Web 2.0, from which L2 was directly developed. All of these principles are needed to create an effective and efficient L2 which will lead to a comprehensive facility embracing a web browser, Web 2.0 applications and connectivity, providing an OPAC. The key elements are:

- Freeing data: this will allow the application to be uncovered and manipulated in different ways.
- Building virtual applications: data and functionality can be taken from various different sources. Web 2.0 permits users "mash-up" different applications, available on the web, to create new applications.
- Participation: by blogging or sharing files, users actively participate on-line. The feedback which results from this is available, through the application, for all users to comment on.
- User-centred: Web 2.0 locates and assembles content which meets the needs of the user.
- Modularity: developers and users are able to select features in order to build the tailored application they need.
- Sharing: Web 2.0 is about sharing code, concepts and ideas, while still earning revenue
- Communication and creating communities: alone, Web 2.0 could not support the interplay and exchange involved in true communication, although it did so to a degree through the use of blogs and similar applications.
- Remixing: instead of moving from one area of the Web to another, and navigating through numerous intrusive advertisements, for example, the user can choose what they require and incorporate it into something new.
- Smart: Web 2.0 applications will use knowledge for the user, will know where the user has been and will know what the user is doing. This will then help the application to deliver a service which will meet the user's needs.
- Long Tailed: this phrase is used to describe business and economic models such as Amazon.
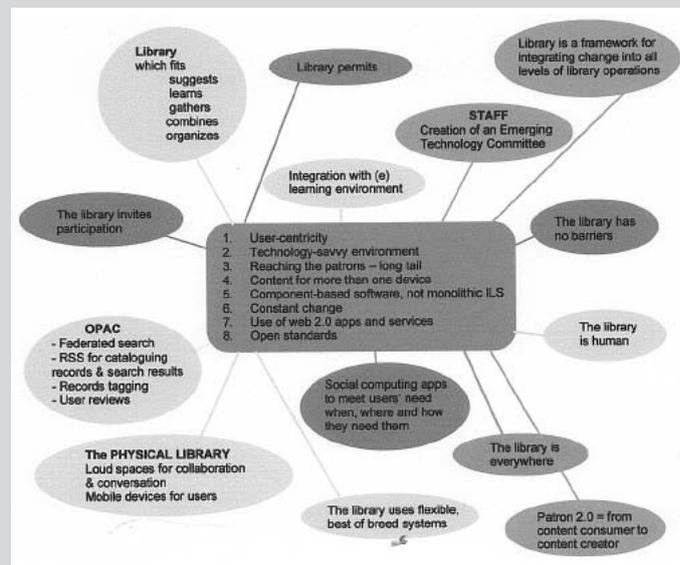

Figure 1: Principles of Web 2.0

The term long tail is also generally used in statistics, and is applied to wealth distribution or vocabulary use.

Figure 1 shows an L2 Meme Map derived from Biancu (2006), which reveals all the principles and important parts of L2. These are the features which need to be in place for it to be as efficient and effective as possible, and to enable the community to grow. Users would be able to:

- View online
- Borrow locally
- Request from afar
- Buy or sell as appropriate to their needs and circumstances

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Library 2 Key Features:

Frees data

Builds virtual applications

Encourages participation

User centred

Modular

Encourages sharing

Improves communication

Stimulates community development

Supports remixing

Smart software

Long tailed

Key Advantages:

Online

Local accessibility

Accesses distributed material

L2 is all about change, and ultimately the survival of the library. When looking back to what the first libraries were, and comparing them with the library of today, there have been many changes, albeit gradual ones.

These developments have come about in order to keep up with changing needs and expectations. As society becomes more and more reliant on technology and the Internet, L2 is just another method of ensuring the attractiveness, responsiveness and the effectiveness of the library.

Some of the competitors are internet-based services such as Google, providing access to information, from anywhere at any time, at the point of need, at a click of a button.

These developments challenge the idea of the physical location of the library, and bring with them many advantages in terms of accessibility (Chad and Miller, 2005).

For L2 to work effectively and efficiently, the entire community needs the willingness to change, to try new things, to re-evaluate services constantly, and to look outside our own world for solutions.

Public librarians have been the most influential movers in the development of L2, with services determined and formed by librarians and users.

The Ann Arbor District Library in America, for example, is currently making use of the functionality of L2. The Catalog page of the Ann Arbor District Library sets out a number of options for the user (http://www.aadl.org/catalog).

The search page carries a general blog, covering items as diverse as the hustings for the local council elections, the International Space Station, Lemony Snicket and the Ann Arbor Police Department News.

As well as the standard search options, three additional options are for an audio blog, books blog and video blog. They all enable the users to give their views of the relevant aspects of the service, and encourage feedback.

The audio blog solicits opinions on popular music releases; the books blog provides the latest from the New York Times Bestsellers List and also gives patrons the opportunity to contribute their own reviews; the video blog offers the same service for video and dvd. These features complement the conventional library options also available.

The promoters of L2 wish to develop it in such a way that library users can access it from sites like Amazon and Yahoo, and this will represent a further extension of the reach of the concept.

While it is possible that a highly successful organisation making money from bookselling might baulk at a connection with an advertised library service, which allows users to borrow books without charge, the general conclusions concerning L2 are positive. The major difference between Library 1.0 and L2 is that Library 1.0 is based on a one-way flow of information, while L2 is a read-write library giving users the power to decide the service features they get. L2 reinforces the role libraries play in the community by building on today's best practice, and continually improving. It is also a user-driven and effective way of retrieving information.

References:

Biancu, B. (2006) Library 2.0: Key Principles. Wikipedia. http://en.wikipedia.org/wiki/Image:L2-meme2.gif

Chad, K. Miller, P. (2005) Do Libraries Matter?

Miller, P. (2006) The challenge of disruptive innovation.
http://www.talis.com/resources/documents/447_Library_2_prf1.pdf

Miller, P. (2006) Library Web Chic – The Web 2.0 Challenge to Libraries.
http://www.librarywebchic.net/wordpress/2006/03/25/the-web-20-challenge-to-libraries/

Coolfan, Video Station 10 Plus

Ken Cheetham Uwic Student Support

The Coolfan Coupled Up

The Coolfan Notebook Stand with Cooling Fan is the first of three product reviews in this issue.

Overheating is possibly one of the lesser, though certainly significant, problems with laptops and notebooks when in use. It has a slowing effect on the processor speed, as a protecting device comes into play when a preset temperature is reached, cutting down the work rate.

Overheating also reduces the lifespan of the hardware, adversely affecting the hard drive and battery.

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Keyboards can also become over-heated, causing user discomfort. The more powerful the equipment, the greater all of these hazards will be. I think that the design and construction of portable devices ought to take these issues into account, and so provide for the required relief within the units themselves. Where this has not been the case, some help is at hand.

Port Designs' stand with cooling fan is an ingenious device which can actively help in reducing heat, by circulating a current of air beneath the portable computer. The stand is slightly dish-shaped, front to back, thus creating increased clearance to assist the fan's cooling capability naturally. The 70mm fan is positioned at the bottom of this shallow dish, and is powered by connecting directly to a USB port, using the short cable supplied. It proved to be virtually silent when running, and of course it only runs when the computer is switched on. When not in use, the cable stows away neatly in a flap underneath the unit.

Another flap under the rear of the unit (right) opens to reveal the power input socket, and also becomes a leg which raises the back of the unit by about 5cm. This raises the screen height, helping to alleviate the strain to the neck which is often the result of continual laptop use. It should also help to reduce strain to the wrists caused by inputting on a level keyboard, the slope created being about 8°.

The whole thing is of lightweight, plastic construction and should easily fit into any laptop or notebook carrying case.

There should be no difficulty in using this stand on the desk, nor indeed on the lap, as there are no trailing cables, heavy or cumbersome batteries nor mains units to get in the way. The unit weighs a little over 400 grams.

I have to admit, that without a suitable laboratory, I was not actually able to test for temperature reduction levels, nor does the manufacturer make any specific claims. I do think, however, that it is fair to say that any cooling is bound to be useful. Although the fan on the stand I tested was not hugely powerful, the product has some positive aspects, as I hope to have shown. The suggested retail price being £22.95, VAT included, I think it is worth the experiment, for increased peace of mind.

The UK distributor is Portlaptopbag: contact info@portlaptopbag.co.uk or visit their website at http://www.portlaptopbag.co.uk.

These versions of the editing and DVD authoring packages, Video Station 10 Plus and Movie Factory, are the most recent updates of those supplied with the Grabster AV150 video capture device, previously reviewed in these pages.

The versions supplied (7SE and 3 respectively) have long been superseded, and the newer versions reflect developments in the whole video and TV technology, most particularly in high definition TV/video and in the field of video sharing via popular mobile devices such as video-enabled cell phones and Apple iPods.

Both packages provide capture and playback functions, with editing and authoring in between. The essential difference is that VideoStudio 10 Plus has more powerful editing utilities and extended effects facilities and filters. It is, therefore, the VideoStudio package that receives most of my attention.

It will suffice to say that the MovieFactory application allows video capture from any source and provides a set of tools to tweak and augment the video, adding titles and selected background music. Commercials can be detected and removed automatically from broadcast TV programmes.

A range of filters and effects allows text manipulation –- for example, repositioning, resizing and rotation – as well as transitional effects for menus and titles. Slideshows can also be generated from stills, including those from mobile telephones (must you?). All material can be burned onto any disc format, high capacity, high definition discs included.

Turning now to the second piece of software which is reviewed for this issue, the principal features of this version of VideoStudio 10 Plus are:

- HD Video capture and edit from an HD camcorder
- Dolby Digital 5.1 Surround Sound for edited video
- Future support for HD DVD and Blu-ray disc burning
- Storyboard or timeline editing interface with Audio Waveform Display to synchronise audio and video
- Large preview screen and customisable editing interface
- Full DVD authoring with motion menu creation
- It will capture from any source, including digital TV, DVB-T and ATSC broadcasts
- MPEG-4 and DivX support to output video to portable devices, such as Video iPod or PSP

Installation is absolutely straightforward. The opening screen offers just three options (see image on previous page). The Movie Wizard option uses templates to create an edited video. This is a good method for those needing to get on with basic editing, without any of the higher skills or frills of the process. The Video Studio Editor option is for advanced users who are confident in using powerful editing features. The third option, DV-to-DVD Wizard, allows the transfer of an entire DV tape to DVD in a few simple steps.

While it may be clear that MovieFactory 5 offers a great deal to the average home looking for quick solutions to video editing and DVD authoring, VideoStudio 10 Plus really does offer a lot more. It is not so different from its forerunners, but has a lot more content. One ready example of this is a feature called Smart Proxy. This converts HD video material to smaller proxy files, which can be edited in real-time on computers less powerful than might normally be needed for processing video of such quality. Smart Proxy then refers back to the original material before output of the edited version, leaving the final quality undiminished. High-definition capture, editing, output, authoring and playback are all supported, the last using InterVideo WinDVD playback software, which is included in the package. Ad-Zapper is also included, as with DVD MovieFactory, to remove commercials from off-air recordings automatically.

It is VideoStudio 10 Plus which enables sharing on popular mobile devices such as the Apple iPod and video-enabled cell phones. The Export to Mobile Device feature lets users choose from a selection of MPEG-4 and WMV (Windows Media Video) presets and then finds connected devices.

Advanced editing features, for users who wish to develop their video production skills, include six overlay tracks which make it possible to create multiple picture-in-picture and montage effects. Precise mark-in and mark-out points can be set with the Multi-Trim editor, via the AccuCut navigation controls, with fast zoom controls right down to frame level.

New filters include Anti-Shake, to ameliorate unsteady clips from hand held shots, while Enhance Lighting adds fill-in light to underexposed material.

Many special effects are included, but perhaps that should read "too many". The danger with effects is that users think they should apply them all, and videos and presentations turn into shows of effects, the content being buried between surrealistic doors and flying boxes or blurry flashbacks and 3-D transitions. There is nothing wrong with any of these, but they should be used with moderation.

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The choice is enormous – and that makes it difficult to locate the particular effect required. The list includes, 3D, Album, Audio, Build, Clock, Colour, Decoration, Film, Filter, Flash Animation, Flashback, Image, Mask, Peel, Push, Roll, Rotate, Slide, Stretch, Title, Video, Wipe and there are options within each.

Overall, working within the package is not as bad as that may suggest, but where there are faults or difficulties, it is worth pointing them out, alongside the good points, and these are not lacking. The software is both speedy and efficient, even when working with large video files.

Storyboard view or timeline view may be chosen for working with clips: dragging and dropping clips into the timeline automatically reveals them in the storyboard view as the default. In that view it is easy to select and rearrange them to suit the sequence required.

A clip may then be selected and, in the viewing screen above, markers are dragged to establish in and out points. The downside of executing this process in the timeline view is that it is not possible to view the video running while altering a clip's length. This will not suit some users at all, but for many the storyboard view will be so effective that this will not really matter (see the image on the next page).

It is also true that VS 10 yields smoothly-playing real-time previews, so that after inserting an effect, such as a transition between clips or perhaps a text overlay, it can be reviewed immediately. There is no waiting for the computer to catch up, even when adding several effects at the same time.

Here we have what I claim to be a very usable and versatile package, and one which is so extensive that many users are going to need help with it. Now where is Help? Ah – that tiny, faded-out question mark top right of the main window. It could be clearer.

There is of course a user manual supplied with the software, but my point-scale rule tells me that its body text is printed in 5pt.

On-line help is available too, but I find that kind of provision a poor substitute for good, local help. Users should not have to log-on every time they have a query. However, the CD on which the software is supplied has a pdf version of the manual, and this will be my preferred source.

System Requirements

AMD Athlon or Intel Pentium 4
Microsoft Windows 2000 SP4, XP SP2 Home/Professional
256MB RAM minimum (512MB or more recommended)
1GB available hard drive space for programme installation
1GB of available hard drive space in addition for video capture and editing
Windows compatible DVD-R/RW, DVD+R/RW, DVD-RAM, CD-R/RW for burning recordings to disc
Non-proxy HDV editing requires Pentium 4, 3.0GHz or higher with hyper-threading technology supported: 2GB RAM recommended: 16x PCI Express display adaptor also required
An appropriate capture card will be required to accommodate the types of devices that one is likely to use to source material.

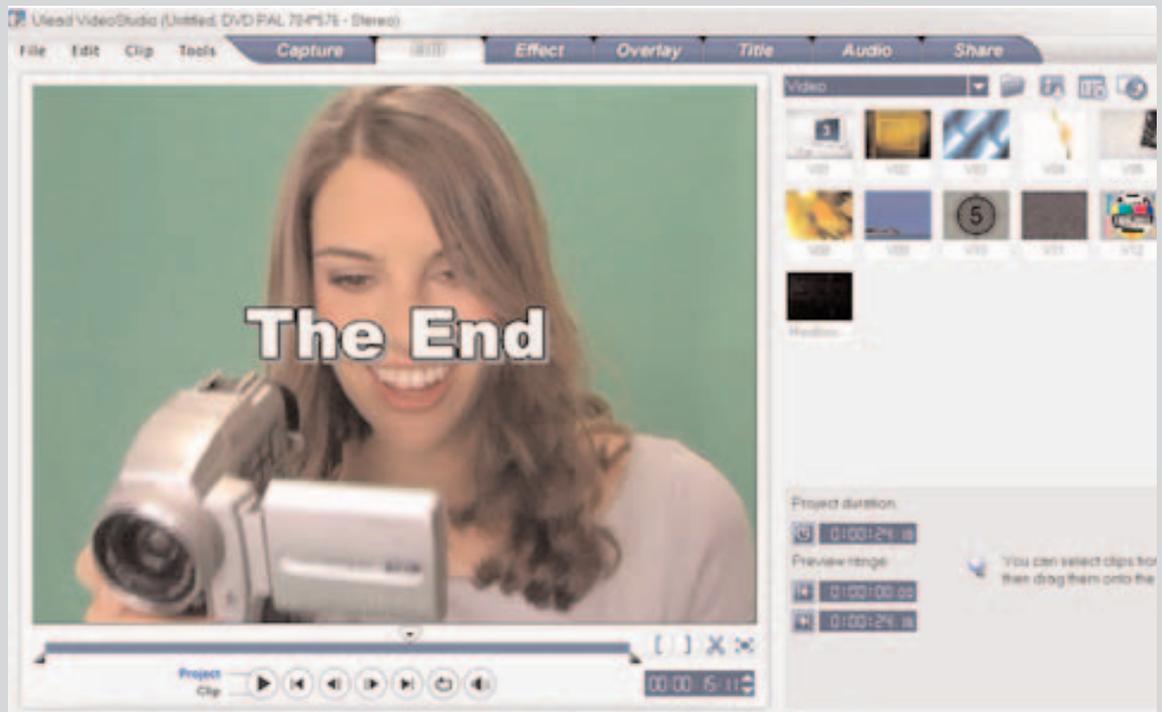## Contents

I applaud, of course, the inclusion of HD facilities, but have to say that I am not equipped to test them. Others, who are, have claimed that the package is unstable with HDV footage, even on powerful machines equipped with dual Intel Xeon 3.6GHz processors and 2Gb of RAM. Perhaps the expectation of success in that area is wishful thinking, and one may hope that a future reincarnation will deliver as it claims.

In the meantime, I think it fair to conclude that, innovations apart, it is the powerful editing tools which enhance the VideoStudio 10 Plus software. I would add that while there are a few points about which I have expressed some negative feelings, they are more than made up for by its positive attributes. Experience as an external moderator for the Open College Network Wales (OCNW) for a variety of visual media-related courses, including video, largely in Community Education and Further Education curricula, indicates that providers are usually short of the funds necessary to keep up with developments in the industry.

This is true for professional-level hardware and software requirements. A package such as this provides a very low-cost, alternative solution which still allows both the groundwork and development of production skills to proceed, conceivably facilitating entrance to study at a higher level for those who wish to enter the industry. Education at these levels in visual media generally teaches processes and concepts, rather than individual tools (or software packages), and this application can certainly accommodate that approach.

VideoStudio 10 Plus and DVD MovieFactory 5 are available from all the usual retail outlets and on-line from http://www.ulead.co.uk, retailing for £60 (upgrade £40) and £30 (upgrade£20). More information is available from KL Associates, telephone 0044 1327 844880.
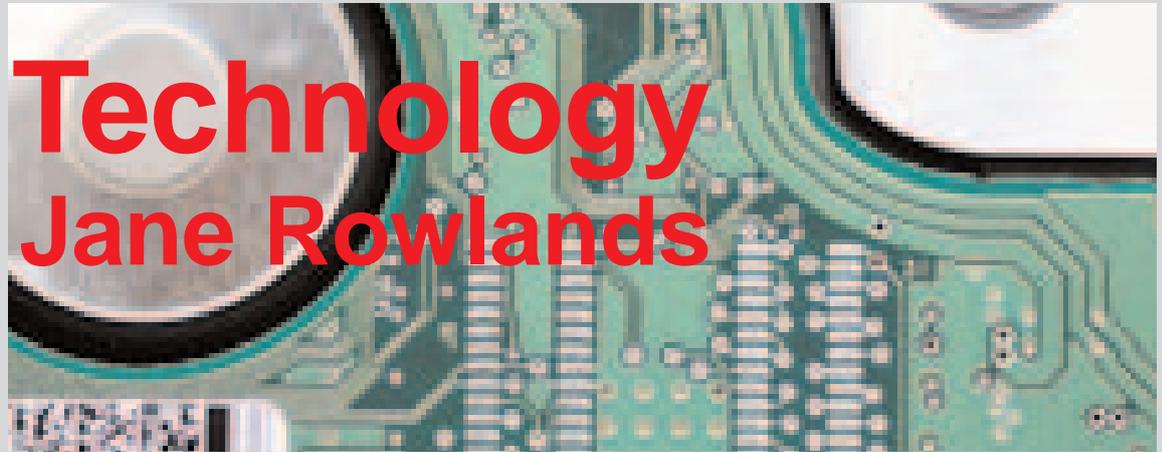
Technology
Jane Rowlands

New Slimline Projection from JVC

Media Storage for Digital Cameras

Lite-On Has it Both Ways

Son of Mini-PC

New Slimline Projection from JVC

PDP and LCD flat panel displays rapidly penetrated the global market for large screen TVs, but there were issues of power consumption and costs for supporting full HD for PDP and LCD sizes which exceeded 50 inches. In contrast, Micro Device Displays (MDDP) are known for brightness with low power consumption, as well as for supporting full HD without significant cost increases. However, because they were deeper than flat panel displays, issues remained regarding the space they require.

JVC pursued various technological developments to make MDDPs slimmer. The problem of creating a higher screen with a lower edge height, and the need for a special screen, made it particularly difficult to create a slim projection TV which met consumer needs. They eventually succeeded in developing a new Slim HD-ILA Optical Engine for image projection, based on a stylish tabletop design approximately 40 percent reduced in size compared to other JVC products. The slim 60-inch full high-definition (HD) projection TV is only about 27cm deep including the stand. This is equal to, or slimmer than, PDP or LCD TVs. The unit can fit in spaces which previously could not accommodate such a large screen size.

In addition, the TV's unique side heat dissipation design enables the rear of the TV to remain flat so that one can place it flush against, or mount directly onto, a wall. This greatly increases its flexibility in use. The prototype, using JVC's own D-ILA reflective LCD technology in the optical engine, has already been displayed in the JVC booth at CEATEC Japan 2006. This was held at the Japan Convention Center at Makuhari Messe during October.

The new optical projection system of a projection lens and concave mirror is the key to the slim dimensions and the tabletop Design.

JVC adopted an innovative approach to the projection system within the lens unit, and this enlarges the image and projects it onto the screen. Combining a new concave mirror with the existing refracting lens created a projection angle approximately 138° wider, and about 1.5 times greater, than previous JVC technology.

This wide projection angle reduces the projection distance by about 40 percent, enabling JVC to produce what is a considerably slimmer TV set.

Typical optical projection systems use a convex mirror, so the optical engine core must be positioned lower than the beam axis. This makes it difficult to reduce the size below the screen of the unit. This led people to believe it would be difficult to create a slim tabletop projection TV design. JVC solved this problem by using a concave mirror and also miniaturising the optics engine core (see below).
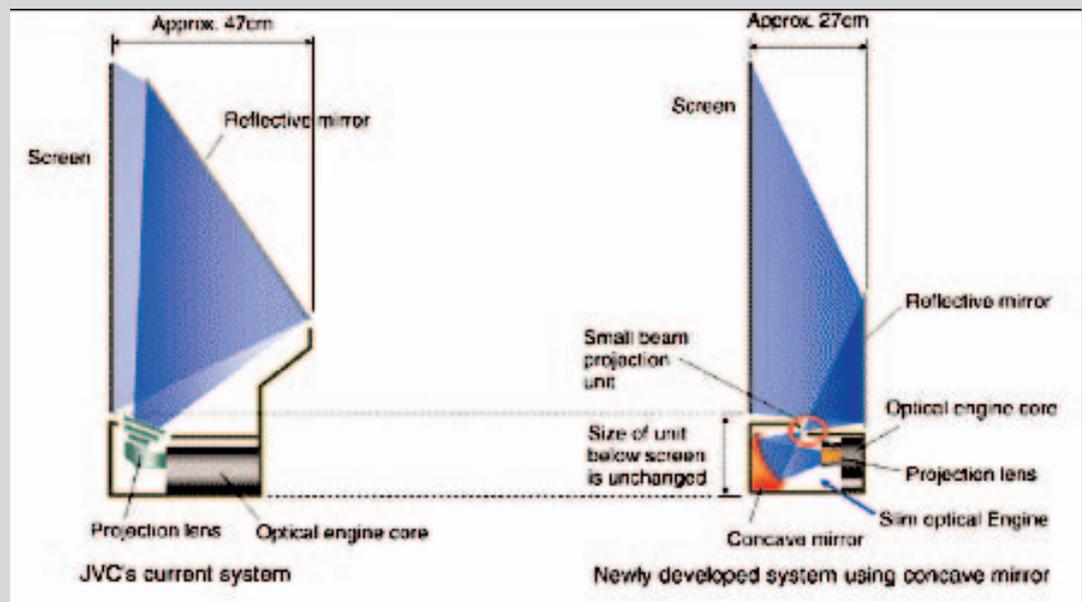
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Since the optical projection system uses a concave mirror, the beam is focused prior to hitting the screen, allowing JVC to make a small beam projection unit. The shield design prevents unnecessary light from entering the optical engine interior, thereby increasing contrast. Dust particles cannot easily enter the interior, also leading to a sharper image.

The rear plane of the TV set is designed for unique side heat dissipation. The flat surface also allows the set to be wall mounted, making it adaptable to a variety of situations.

At the same time, production costs have been kept down because the optical projection design does not require a special screen or distortion correction circuit. The miniaturised reflective mirror is a quarter of the size of current models. In addition, JVC have used a relatively inexpensive injection molding method to construct the newly-developed concave mirror. This holds down the cost of the optical engine.

The high resolution D-ILA image display device uses JVC's own original 0.7" full high definition Direct-Drive Image Light Amplifier (D-ILA). This results in a bright, high contrast yet silky-smooth high-resolution image.

A key benefit is the ability to use the slimline TV in locations and spaces which were previously difficult to manage. Wall mounting also increases the flexibility of the unit, which will fit stands currently available.

For further information, go to http://www.jvc.co.jp/english.

JVC's New HD-ILA Projection TV

Media Storage for Digital Cameras From Canon

Canon has launched two portable devices designed with EOS and other digital photographers in mind. The Canon Media Storage M30 and Canon Media Storage M80 devices feature a large ultra-bright 3.7" TFT screen with 160º viewing angle for image and video review, and a 30Gb/80Gb hard disk to store digital images, movie and sound files of various file formats. Both units feature a USB 2.0 Hi-Speed interface and also slots for CF and SD cards.

With their tough, robust magnesium alloy bodies, and easy navigation familiar to EOS owners, the devices add an important link to the workflow chain of professional photojournalists and photographers on location, outdoor and expedition shoots. They are also expected to be popular with the increasing body of everyday photographers looking for new ways to store and display favourite shots and extend storage capacity whilst away from the computer.

The Media Storage M30 and M80 feature:

- 30/80 Gb hard disk
- 3.7" ultra-bright TFT screen with 160º viewing angle
- CF and SD card reader
- USB 2.0 Hi-Speed connection
- Support for multiple image, video and sound file formats, including Canon
- RAW, MPEG, MP3 and WAV
- Extended PictBridge functionality
- 4 – 8 digit image file password protection
- 1/8" audio-out headphone jack

In addition to the capacity to store Canon RAW and JPEG images, the Media Storage M30 and M80 units can also store, display and play back a variety of multi-media files. A headphone jack is provided for audio playback of MPEG as well as WAV and MP3 files.

Designed for professional use, the units are robust, reliable and secure. The 1.8" HDD is chosen for its stability and superior protection features.

Both units are protected with a tough, rugged magnesium alloy outer casing. To avoid corruption, files are validated during upload from the memory card.

To prevent unauthorised access, images and other files can be password-protected.

For EOS photographer convenience, the units take the BP 511A battery used in various EOS models including the EOS 5D, EOS 20D and EOS 30D, as well as professional products such as the WFT E1 Wireless File Transmitter.

Go to http://www.canon-erc.com/uk

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Lite-On Has it Both Ways

Lite-On IT has announced its support of both Blu-ray and HD-DVD technologies, with the planned production of two new players to support the playback of High Definition (HD) content.

The BDP-X1 (for Blu-ray playback) and the HDP-Z1 (for HD-DVD playback) were to be presented for the first time as pre-production samples at this year's IFA show in Berlin. At present, Lite-On IT's belief is that the market will decide which technology will win the battle. Until that time, they have chosen to adopt a neutral stance and support both formats.

Lite-On Blu-ray HD DVD

Blu-ray and HD-DVD technologies both share the same goal: to provide a greater storage capacity capable of supporting the upcoming demand for High Definition content and playback. Both work by replacing the traditional red laser in DVD devices to a blue-violet laser, which operates at a shorter wavelength, thus allowing greater precision in writing data and ultimately larger quantities of data storage. Whilst the aim is identical for both technologies, there are some differences between HD-DVD and Blu-ray. HD-DVD has kept the traditional disc structure of a standard DVD, which provides less storage space but is less expensive to manufacture and for end users to buy.

Lite-On HDP Z-1

Blu-ray has altered the thickness of the disc surface and protective material, resulting in a higher storage capacity but leaves it slightly more vulnerable to damage.

Both players are expected to be launched in the first half of 2007, with Blu-ray first in line for production.

At present there is no pricing information available, as this will be determined closer to the market launch date.

The players are amongst the first HD devices from Lite-On IT, alongside the Blu-ray triple writer drives LH-2B1S (internal) and LX-2B1U (external). Both drives are backwards compatible with DVD and CD formats. There is a future possibility of HD-DVD writers from Lite-On IT also, but, as yet, no details are on general release.

Lite-On has obtained the Blu-ray and HD-DVD technologies through joint ventures and cross-licences with other manufacturers such as Philips, BenQ and Toshiba.

Go to http://www.liteonit.com

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Son of Mini PC

Evesham Technology has also announced the 2nd generation of its Mini PC, not surprisingly known as the Mini PC. Following in the footsteps of its predecessor, the Mini PC is light, small and stylish, as well as powerful, transforming the average dull, grey box into a PC-style icon (so they say).

The new Mini PC is ideal for rooms where space is limited. Impeccably designed, inside and out, it boasts the latest hardware, a well-engineered chassis, simple but smart looks and quality.

Compliant with Intel Viiv technology, and Running on Windows Media Center Edition, the inclusion of a Dual Layer DVDRW allows the sharing of films, photographs and music. A built-in Digital TV Tuner gives access to all free-to-air TV channels, such as E4 and the most recently added FilmFour. Although only a petite 50 x 165 x 165mm box, the Mini PC offers 1 x S-Video, 1 x IEEE1394, 2 x USB 2.0, DVi and audio connections including SPDIF out. It will retail at £799 including VAT. Go to http://www.evesham.com.

Left above and right
Evesham's new
Mini PC, the T1505

DVD & Video News

Man of Aran
Céline and Julie Go Boating
The Early Cinema of Edwin S. Porter
Dickens Before Sound

Man of Aran

Moviemail First's Film of the Month is the atmospheric documentary Man of Aran (above), directed by Robert J Flaherty. It was filmed on Aran over the period from 1932-33, and processed in the primitive conditions of a shed on the island itself. The film was said to be inspired by a conversation between the director and another traveller on a liner crossing the Atlantic:

> The results are some of the most powerful shots of man battling the elements ever filmed and Man of Aran was acclaimed for the grandeur of its cinematography – Sight and Sound said that there were moments in the film "among the greatest things that cinema can show".
> (Moviemail Monthly film catalogue, October 2006)

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The theme is the story of one family's struggle against the elements, in an environment where everyday tasks alone present difficulties, and where wresting a living out of the barren land and the hostile sea makes heavy demands on the physical and mental strength of the inhabitants.

Flaherty even commented that the actors, who were local people, were placed in danger, as they played their roles in many of the superb shots which made up the stunning photography. From the rock-breaking, the shark fishing and the gathering of seaweed to fertilise the fields, the whole is played out against a background of the "relentless battering of the wind and the sea."

Man of Aran is available exclusively from Moviemail, and the price for the DVD is £14.50. It was released on the 24th September, and extras on the DVD include Industrial Britain, completed by Flaherty and John Grierson in 1933, as a song of praise to the skills and craftsmanship of the new industrial age. There is also a 22-page set of notes for Man of Aran.

Céline and Julie Go Boating (above) is also recommended by MovieMail this month, and reviewed by Michael Brooke. This film, which they find difficult to categorise, said by David Thomson to be "the most delightful narrative film since Citizen Kane" is described variously as slapstick, a female buddy film, a "simultaneous tribute to the very different worlds of Lewis Carrol and Henry James", an essay on the analysis of film, a love letter to Paris and much more; the conclusion must be that it is all of these things, enlivened by many interesting diversions.

The story is one of the developing friendship between two women – a librarian and a magician – who together set out to investigate a murder mystery. Full of fun and humour, the film, directed by Jacques Rivette, has become difficult to obtain after over 20 years of consistent success since its first release in France in 1974. This release also comes with extras: Toute la Mémoire du Monde (Alain Resnais, 1956); The Haunted Curiosity Shop (R. W. Paul, 1901); Illustrated Booklet.

Go to http://www.moviemail-online.co.uk

The Early Cinema of Edwin S. Porter

Before the Nickelodeon (below), an award-winning and intricately-detailed documentary on the genesis of early cinema, focuses on one of the craft's most ingenious pioneers: Edwin S. Porter. The film is based on the research of one of the leading scholars of early American film, Charles Musser, who also co-wrote and directed it.

Edwin S. Porter (1870-1941), director, cinematographer and cameraman, was America's pre-eminent filmmaker before dramatic artistry in film production became a necessity.

He was a product of a system which was emerging out of the years of invention, and would feed the thousands of nickelodeons, or cheap cinemas, which mushroomed across American from 1907.

For Porter and his kind it was a technician's approach, putting together the pieces of what would succeed as narrative cinema, in the same way as the inventors of cinema's technology had learned how to put motion pictures before an audience.

Having played his part, he was eventually succeeded by D. W. Griffith and his contemporaries, who built upon this template, replacing efficiency with poetry.

As narrator Blanche Sweet – one of D. W. Griffith's Biograph starlets – acknowledges, to study Porter's fortunes is to witness the emergence of the American cinema industry, and Before the Nickelodeon charts Porter's illustrious career from telephone operator to projectionist and finally to prestigious film director.

Porter made over 200 films between 1901 and 1908. His work is often held up as a precursor of Griffith's The Birth of a Nation, through the way in which it established the structure and codes of cinematic language and classic filmmaking. Griffith even made a star appearance in Porter's Rescued from an Eagle's Nest (1908), which is featured here.

Before the Nickelodeon includes excerpts from the hugely popular and imaginative Life of an American Fireman (1903), Jack and the Beanstalk (1902) and Porter's finest, The Great Train Robbery (1903).

First shown at the New York Film Festival in October 1982, it was complemented in 1991 by Musser's exhaustive book Before the Nickelodeon: Edwin S Porter and the Edison Manufacturing Company (University of California Press).
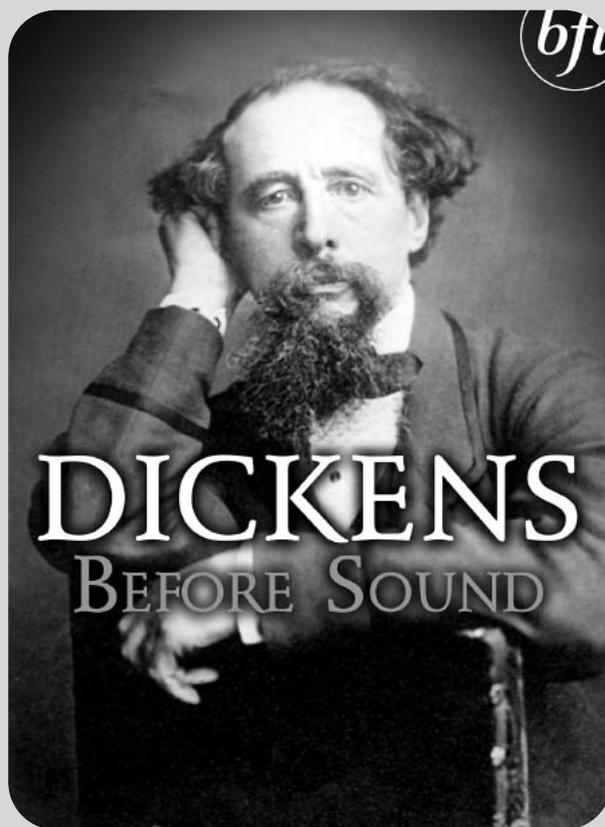
The DVD contains an illustrated booklet with an introduction, credits and biographies of Edwin S. Porter, Charles Musser and Blanche Sweet.

Inspired by the popular success of the bfi's Silent Shakespeare films, Dickens Before Sound is a unique collection of early adaptations of perhaps Britain's favourite and (after Shakespeare), most adapted author.

Almost one hundred film versions of Dickens' stories were made before the coming of sound, predominantly in Britain and the USA, but also in many other countries.

Sadly, only about a third of them have survived, and these have rarely been seen.

This collection, the majority of which are previously unreleased, shows how early cinema storytelling developed, as practitioners of this new art struggled to transform a tale from page to screen.

This DVD includes the first existing Dickens adaptation – Scrooge; or Marley's Ghost (1901) photographed a mere thirty-one years after the author's death.

It also includes: an entirely original attempt to animate a series of lantern slides depicting the story of Gabriel Grub; the first Dickensian sound film, with Bransby Williams as the character Grandfather Smallweed from Bleak House, and perhaps the centrepiece of the collection – a version of Oliver Twist (1922) featuring two iconic performers of the silent screen, Jackie Coogan and Lon Chaney.

The films are presented for the first time, with new scores by the composer and pianist Neil Brand.

Disc One (90 mins)

- Gabriel Grub (date unknown – 8 mins)
- Scrooge; or, Marley's Ghost (W R Booth, UK, 1901, 4 mins)
- The Cricket on the Hearth (D W Griffith, USA, 1909, 14 mins)
- Oliver Twist (J Stuart Blackton, USA, 1909, 9 mins)
- The Boy and the Convict (David Aylott, UK, 1909, 12 mins)
- Nicholas Nickleby (George O Nichols, USA, 1912, 20 mins)
- The Pickwick Papers – The Honourable Event (Larry Trimble, UK/USA, 1913, 15 mins)
- David Copperfield (Thomas Bentley, UK, 1913, 8 mins extracts)

Disc Two (98 mins)

- Oliver Twist (Frank Lloyd, USA, 1922, 74 mins)
- Dickens' London (Frank Miller and Harry B Parkinson, UK, 1924, 12 mins)
- Grandfather Smallweed (Hugh Croise, UK, date unknown, 12 mins)

The *bfi* Video films were released at the end of the summer.

The film notes in this column are provided by the bfi and Moviemail. Images are by courtesy of Moviemail for Man of Aran and Céline and Julie go Boating, and the bfi for Before the Nickelodeon and Dickens Before Sound. *bfi* Video releases are available from all good DVD retailers, by mail order from 0845 458 9910 or online at http://www.bfi.org.uk/video. Moviemail is at http://www.moviemail-online.co.uk

Reviews

Edited by Lyndon Pugh

Britannica 2007
Thesaurus-Building
Change Management

Sleeker,
Smoother,
Better –
Multimedia
Britannica
for 2007

Multimedia Britannica is sleeker, smoother and better for 2007, with more frequent updates, homework aids and enhanced timelines. Knowledge-hungry children, struggling students and inquisitive adults now have new ways to explore information thanks to the improved 2007 edition of Encyclopaedia Britannica's Ultimate Reference Suite on DVD.

With better homework tools and over 100,000 articles, the Ultimate Reference Suite cannot be beaten for depth or range of coverage. Key improvements are:

●Explore, which provides engaging, Flash-based tours of videos, classical music, yearbook entries and historical Britannica articles by famous contributors.
●Virtual Note Cards allow the user to take notes and link them to specific Britannica articles.

Other homework-tool enhancements include:

●Science-fair: help and direct links to Britannica's multimedia spotlight features.
●Enhanced Historical Timelines: time literally flies thanks to the new Flash interface with Britannica's classic timelines.
●A simpler mouse action sends researchers hurtling across the centuries as they browse or find a particular event.
●More frequent updates: users can go to Britannica's online update to see revised articles.

The redesign is user-friendly, and allows search results from articles and multimedia to be viewed in any way the user chooses.

The Ultimate Reference Suite has three encyclopaedias: the entire 32-volume Encyclopaedia Britannica, Britannica Student Encyclopaedia and Britannica Elementary Encyclopaedia – all on one disc.

Each publication contains something for everyone, and together they provide a miniature reference library – including a dictionary, thesaurus, atlas and historical timelines suitable for all ages.

Young students can advance to the next level when they are ready and adults can use the work throughout their lives.

Whether researching jazz, Jupiter or the Jacobeans, the 2007 Ultimate Reference Suite has accurate, up-to-the-minute information and is simple to use. This new and vastly improved version is the ultimate tool for fact finding.

Other features include:

- Britannica BrainStormer. This popular visual browser, based on Britannica's unique classification system, provides an exhilarating ride through the encyclopaedia, making research easier and more fun, and providing searchers with some surprising connections. The 2007 edition benefits from a more powerful search capability for a more engaging experience.
- 166,000 online links to magazine articles and high-quality websites.
- Merriam-Webster's Dictionary & Thesaurus.
- Rich multimedia: thousands of images, audio and video clips which bring subjects to life.

The 2007 Ultimate Reference Suite is available on DVD ROM for Windows and Macintosh computers, and is for sale at a recommended retail price of £59.99.

Customers also receive a free 90-day subscription to Britannica's online premium service, which is at http://www.britannica.com.

The range includes the 2007 Britannica Deluxe Edition CD-ROM RRP and the 2007 Children's edition.

Products have been available since September.
Telephone 0845 075 7000
or go to http://www.britannica.co.uk.

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Broughton, Vanda. Essential Thesaurus Construction. London: Facet Publishing, 2006. v, 296p. isbn-13 978-1-8560-565-0. £39.95 hbk; £29.95 pbk.

Olwen Terris on Broughton – Essential Thesaurus Construction:
The adjective "Essential" is here completely justified; an excellent text which will stand the reader in good stead for many years.

★★★★★

It is always welcome to see a manual on thesaurus construction; there are very few of them. The uncontrolled searching encouraged by internet use, where search engines usually retrieve on textual content, has in recent years downgraded the indexer's task in structuring vocabulary in many areas of information retrieval.

It is especially welcome to see that Vanda Broughton's book is part of Facet Publishing's excellent "Essential…" series which is offering full and practical information and advice on cataloguing and classification schemes and issues. Broughton's book Essential Classification was very favourably reviewed in a previous issue of this Journal.

The book is about the principles and practice of thesaurus construction, with the emphasis on the latter. Broughton generously and wisely acknowledges her debt to the standard text Thesaurus Construction and Use: a Practical Manual (2000) by Aitchison, Gilchrist and Bawden, but gives her readers a less theoretical approach and allows more space to the practicalities of building a thesaurus.

Vanda Broughton is a Lecturer in Library and Information Studies at the School of Library, Archive and Information Studies, University College London, and much of the material in the book arises from her teaching of the MA in Library and Information Studies course at UCL; thesaurus construction is an optional module within advanced cataloguing and classification.

The text covers three main aspects: an introduction to the thesaurus (what it is and where it may be applied); the general principles underlying the thesaurus (structure and navigational aids) and a detailed methodology for the creation of a thesaurus.

There is also a section on maintaining and managing thesaurus software. Each chapter has a summary of issues raised, and there are exercises (with answers) at appropriate points. As the reader should expect, there is an excellent glossary, bibliography and index.

The prose style is clear; the tone is authoritative and friendly, and highly supportive of the inexperienced indexer; there is no dumbing down and the author never tries to ease the load by suggesting that what the indexer is doing is easy. For example Broughton writes in her conclusion:

Often the decisions to be made are not at all easy, because the subtlety and complexity of language does not always permit precise boundaries to be drawn. Don't let this deter you from attempting to construct a thesaurus.

> Often the decisions to be made are not at all easy, because the subtlety and complexity of language does not always permit precise boundaries to be drawn. Don't let this deter you from attempting to construct a thesaurus.

The application of method and logic will provide you with a good and efficient tool, even when the decisions are necessarily subjective, and a little more experience of working with vocabularies will improve your confidence.

The book is aimed at librarians, knowledge managers, records managers, archivists and others who need to organise information in any format. The author is well aware of the rapid developments in machine-driven systems for building vocabularies, but still believes that intellectually created tools have the edge, and acknowledges that for many small organisations the cost of this sophisticated software is likely to exceed the budget.

The adjective "Essential" is here completely justified; an excellent text which will stand the reader in good stead for many years.

Olwen Terris, Senior Researcher, Shakespeare Project,
British Universities Film & Video Council

> There is a case for a straightforward text on change management, which would act as a template. Unfortunately this book is not it.
> ★★

Curzon, C. S. Managing Change: a How- to -do it Manual for Librarians. London, Facet Publishing, 2006. isbn-13 978-1-85604-619-5

One or two reviewers and commentators have occasionally made the case for a straightforward text which could be used as a template for change management. Even if this argument is accepted, unfortunately this book is not it.

Change is a complex matter, and anyone who approaches any textbook on change management expecting it to be an easy read would not be disappointed by this text, but whether reading it would make anyone a better manager of change is a moot point.

I suppose I ought to differentiate between clarity of expression and the ability to put complex issues clearly, and the level of simplicity which some of this book descends to in its 128 pages.

Having said that, the book is consistently practical and concrete, although I found it somewhat forced and mechanical throughout, with some quite superficial scenarios, which might not all be about change management, used to demonstrate the key basic principles.

This encapsulates the work's biggest failing, which is that it fails to convey the nuances and uncertainties of change management. Although logically organised and clearly written, I felt that the root problem with the work, and the feature which caused the most suffering, was the weakness of the theoretical base.

This is seen quite clearly, for example, in the chapter dealing with preparing the organisation for change. This issue is a change project in itself, and is a matter of organisation design, job design, cultural change and an overall systems approach, none of which comes through at all strongly.

What does come through is the seriously flawed impression that change is made up of a series of unrelated projects.

The text also lacks a strategic dimension, and is thin on other essential theory, such as motivation and the psychology of change.

It is also a fundamental error to depict the change process as a finite one with a beginning and an end, as evidenced by the overview of the book. I cannot see many managers benefiting from this approach, and would look outside the professional literature, to writers like Bernard Burnes, for alternatives.

Lyndon Pugh

Andrew Lewis, who contributes the main feature for this issue, is e-Services Officer for the Royal Borough of Windsor and Maidenhead's Library and Information Services.

Games combine high motivational appeal, complex interactivity, networkable communication, and almost universal familiarity and acceptance as a cultural medium amongst children.

Role playing games in particular, require significant problem-solving skills, coupled with the need for both tactical and reflective thinking. These inherent qualities suggested that gaming was an ideal platform from which to introduce children to information literacy at an early age. The reflective skills children require to be information literate are very similar to those needed to engage in certain games.

Use Your Brain to Survive in Big Bad World

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There are also technical advantages in using games. Game data can be designed to reflect the information decisions required to play the game, and this data can be stored to indicate an individual child's actions whilst engaged in a controlled activity. This can then be used as management information to monitor the take up and success of the activity, or for direct feedback to the child, to help him or her reflect on their behaviour whilst engaged in simulated information-gathering activity.

Just because information is free, doesn't mean you can trust it

Big Bad World is a virtual environment, where children control a character called an InfoBot. This world has its own currency called Blinki, and contains various people, objects and buildings, including a library with electronic books.

Gameplay involves using the InfoBot to undertake various activities. Each activity involves a different self-contained outcome which has to be achieved, although how this can be done is not immediately obvious.
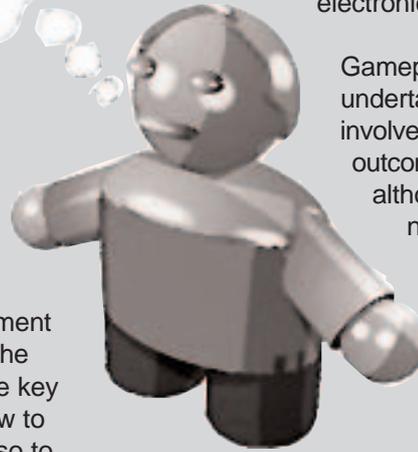
The central common requirement within Big Bad World is that the way information is used is the key not only to understanding how to get about in the world, but also to completing a range of diverse activities.

Information can be found from objects such as signs, adverts or on screen and from the people who live in Big Bad World, who will trade it for Blinki.

As in the real world, all sources of information can be reliable, or not reliable. Similarly, the motives of the people supplying information, and the organisations they belong to, may also be helpful, neutral, unhelpful or harmful.

There are several types of people who live in Big Bad World: Librarians, Merchants, some Rip-Off Merchants, Friends, Dorks and Baddies. Each type represents a generic type of person familiar from real life. It is not possible to tell who is a goodie or a baddie from the way they look, but only from assessing the information they supply.

Also, the player's InfoBot has a brain, which can be used as a store for information which has been bought, and all the pieces of information stored in the brain can be reviewed, along with the name of whoever sold it, and how much they charged. As play progresses, the player can use the InfoBot's brain to evaluate the information collected. They can reflect on whether it was actually helpful or not, and whether it was expensive or free, for example.

Information within Big Bad World is deliberately contradictory, and it is not immediately obvious whether a given piece of information is true or not. The players can record their judgement of individual pieces of information by marking them as reliable or unreliable. These judgments are also stored in the brain.

It is important to note that Big Bad World is not a simulation of information-seeking activities from real life, such as using a chat room on the Internet. It is a game, suitable for the target age range, which has parallels with the generic processes of information handling in real life situations.

Figure 1: Buying Messages for Blinki Stage 1

The activities in Big Bad World are in a sense irrelevant in themselves, but are there to mirror how children attempt to achieve personal goals in life. No matter what children want to achieve, being information-literate will help them to do so.

In short, Big Bad World is an environment where the skills required to achieve competence in handling information are practised whilst undertaking goal-based activities. It aims to develop these skills by encouraging direct use of them, and stimulating reflection upon that use. It is the author's view that this is quite different from the majority of generic learning and marketing materials created by public libraries to support their services. These are frequently text-based handouts, such as help-sheets or frequently-asked questions with standard answers.

It is true that there are a number of electronic resources, which have moved the question-and-answer format from text to a semi-interactive online version, where progress is step by step depending on whether or not the answer is correct, but these are still just tests, and are not games. Kolb's well known concept of learning styles would suggest that text-only learning materials may benefit certain types of learners (e.g. those with a preference for abstract conceptualism) more than others.

The activity-based learning in Big Bad World should, in theory, widen audience reach. On top of this it uses children's familiarity with games as a point of access to the learning experience. This difference alone would make Big Bad World interesting as an experiment, but the fact that the game can and does record evidence of specific activity at milestones during the game is where the real potential lies.

Figure 2: Buying Messages for Blinki Stage 2

Activities in Big Bad World do not have to be completed in any predetermined way. In fact, they can be achieved via different routes which the player selects, and can even be stumbled across by chance exploration. However, they are designed to be much easier if information has been used reflectively.

Help in the game comes from people, objects and books from the library. There are key events built into the activities, such as, for example, finding the library, opening books and discovering signposts and posters.

Big Bad World saves game data about these events in a way which is intended to provide evidence of what an individual did to reach the end goal, so it is possible to know whether these events were completed or not along the way. Other game data recorded includes specific information players have bought, and their personal judgement of this information.

The time at which things happened is recorded, along with the total time spent so far on the game. The number of total separate visits is also recorded, and a record of the specific visit when information was found is kept. There is also a record of when – that is on which visit – the information was assessed.

This data provides a rich summary of activity which has occurred within the game: activity which can be used as feedback for the individual child to reflect upon. The method is extremely interesting, as it may offer an alternative to asking a child to describe what they think about a particular subject.

The data is not in the form of a test score, nor is it a simple answer to a question. Rather, it is a reflection of a player's pattern of behaviour whilst thinking about using information. By comparing this to other behaviours which they could have chosen, there is potential to develop reflection which might lead to more successful changes in individual information-using behaviour. This is the essential concept around which Big Bad World was conceived and developed.

The technical design was based on a total budget in the region of £2000, which came from a portion of a small SEMLAC research grant. This was mainly used to pay for extra development time by in-house staff outside their existing duties. The time represented in the region of 20 days of technical development spread over eight months, although this did not include the considerable extra amount of thinking also involved.

It is not the intention to cover more than the basics of technical development required to bring Big Bad World to the prototype stage. A number of problems needed to be solved, and the budget restrictions meant that these had to be addressed using existing software (Macromedia Flash MX 2004, Action Script 2.0 for programming, Electric Rain's 3D graphics package; Swift 3D, Sonic Foundry Sound Forge for editing, Mind Manager for concept mapping) and hardware (a Sony Mini Disc Recorder and microphone).

The game was structured around modular solutions for each design requirement, which were then integrated into a single whole. A simple example was the need for user authentication via log on, because it was obviously necessary for the game to recognise when a specific player was playing, in order to record data about that individual's progress. A relational database of user accounts was created, and the relevant game data was attributed to each individual by using Flash's shared objects. These are cookie-like data files stored on the PC. This meant that although login was available for multiple users, the files were only visible on a single PC. Remote login to a central server would have been ideal, but this was not possible within project restraints.
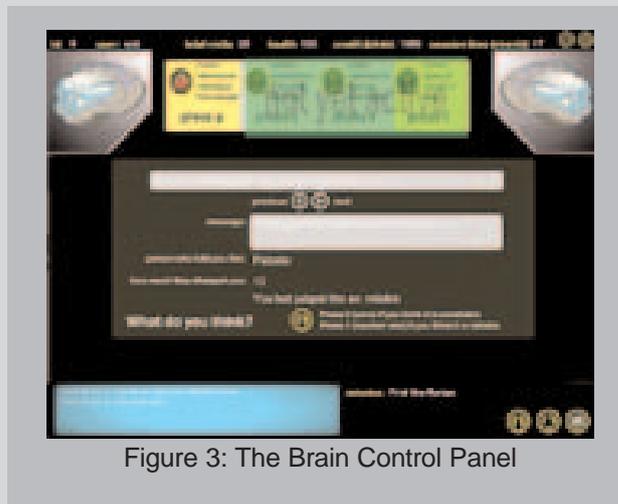

Figure 3: The Brain Control Panel

A pseudo 3-d presentation was used to build the game. Symbols, room interiors, people and objects were created within the Flash-friendly 3D graphics package Swift 3d. These were then imported into Flash, and controlled through ActionScript 2.0 – Flash's object-orientated programming language.

The visual components of the games were designed as generic objects controlled by different functions and data in separate files. This meant they could be reused. For example, one type of person could be presented several times as different people doing different things, having a different name, or saying different things by loading data based upon a simple id number.

A combination of flash movies loading and running on top of each other, much like having multiple overhead projector slides, was required to enable the entire game to function. The data needed by the flash movies was loaded externally from text files, which did not require Flash to amend. To produce the finished game, Big Bad World used a total of 17 flash movie files loading and unloading in 15 separate layers, with 21 external data files.

The generic term computer game belies the variety of game types which exist. It is not intended to define these types here, but broadly the demands on players in games can range from sport-like reaction responses to complex reasoning.

It was decided to create what could generally be described as a strategic role-playing environment-type game. Previous research into games highlighted the characteristics which players need in order to think strategically and reflectively, and so to progress in this type of game. This clearly mirrors the sort of tactical thinking required when using information effectively.

Having chosen the type of game, a main consideration was the data design intended to ensure that game activity could be related to the information literacy concepts underlying it. The CILIP definition of Information literacy is:

> knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner.
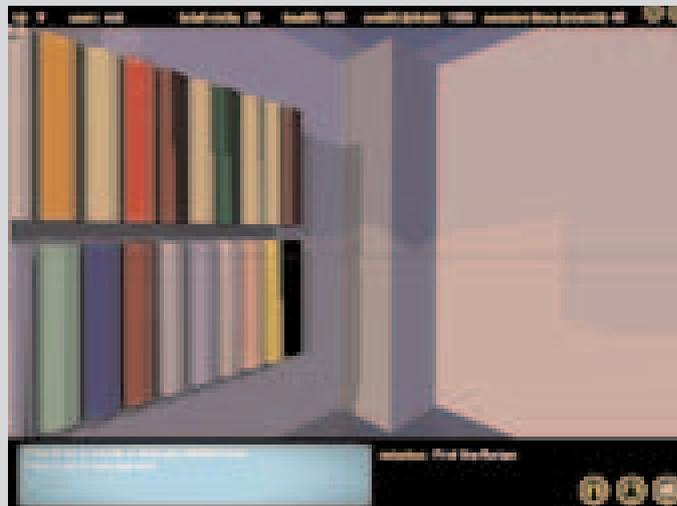

Figure 4: Inside the Library (the books can be activated and contain information about tasks)

In Big Bad World, the entire process of playing the game requires the player to work out how to use information.

This applies as much to the general controls and help features of the environment as it does to the specific requirements of activities within it.

By repeatedly requiring the player to discover information, the game reinforced the concept that to do anything, it was necessary to stop and think about where to obtain the required facts.

The sources of information in Big Bad World reflect the commonest ones available to children of the target age: namely objects, advertising, and people. A library is included, and contains books which of course have definitive information, but it does not contain everything required.

All information from other sources cannot be trusted without either previous experience of the sources providing it, or by considering the implication of believing it. So one person might say something is harmless, whilst another says it will kill you. The InfoBot's brain allows the child to think about these sources, and decide if they can be judged as reliable or not.

The brain also requires that information be saved or it will be lost. This feature is designed to instil a sense of responsibility in the child, and to ensure that he or she looks after his or her own information. There is no autosave in the brain.

The information literacy areas not fully developed for the pilot were the communication of information, and its ethical use. It was intended to explore these issues by allowing children to cause good or bad things to happen to other people. These events were triggered by instructing InfoBots to give out correct or false information, so that the players could experience the consequences. The simulated environment of Big Bad World would make an ideal way to allow children to act unethically and suffer harm or loss in a safe way. Sadly, project resources did not allow development of this.

Figure 5: Pwitty Po-Po and her Rungo

In the pilot, only one activity was finished as a complete game. This involved finding a lost pet called a Rungo, and returning it to its rightful owner. The game was structured so that there were clues on posters, signs, in the library and in the information provided by other people. For key pieces of information, the time of discovery was dated in the game data file. All information bought from people was also recorded, along with corresponding player judgements.

The game's overall style and visual design was made as attractive as possible without being too unusual. This was to some extent governed by development time, and so early on it was decided to make it fun and simple, with no strong styling because this might limit its appeal to only one type of user.

Piloting Big Bad World with real children was clearly essential, and a successful pilot would need to collect real data relating to information-handling behaviour. This would also be an opportunity to obtain feedback on the usability of the game, including the effectiveness of the help, and how enjoyable children found the game.

Gaining access to children was a major challenge, especially as the project would inevitably involve collecting data about their behaviour. To try to create a balanced sample of children from casual library users was considered too complex, because of the problems of contacting parents and gaining permission.

A simple solution was to approach a local school. As we already had connections with a school for which we provided shared library space, this proved to be relatively straightforward.

The school staff agreed to use the pilot sessions as an ICT activity for the whole year 6 class for the Summer term, with seven sessions in the school ICT suite. Three of these were led by library project staff. The remainder were in the hands of the school staff. This partnership arrangement proved to be very successful for both parties. The school enjoyed the benefits of using a structured learning experience which helped reduce their lesson-planning burden for a term. The library gained reliable access to a sample of 22 children between 10 and 11, with equal representation of both sexes.

In addition, the problem of gaining parental permission was avoided, as this was covered by the school's existing responsibility for supervision. This was reinforced by an agreement to use only anonymous data.

Arranging a location and transporting children to it were not required. Overall, the experience also strengthened the relationship and understanding between the school and library service.

After an introduction, the data was collected while the game was played over eight weeks. For context, and to gather evidence of related experience, children were also asked about other games they played. They were also actively involved in the design process. As testers, they reported bugs, and features which they did not like about the game. These were fixed during the game, and this helped show the children how games were developed. There was also a content-creation session, where children were directed in making crowd noises which were recorded and incorporated in the game.

At the time of writing, the programme was still in progress, with two sessions left to run. The data is still rather raw and of necessity not fully analysed, but nonetheless is fascinating.

Given that datasets were collected for 18 children, each of which contained 13 simple fields and two unlimited length data fields (e.g. an array of all the information found, on what visit, and in what order) the datasets generated were complex. Full data had not been collected from the test PCs at the time of writing this article, but even the single incomplete dataset illustrated here shows the potential of this method.

User X had visited Big Bad World twice at the time of data capture, and had found the following pieces of information in order:

- Mind out for the strange ones in the red and blue zone!
- I saw a greenish animal some time ago
- Just because information is free, does not mean you can trust it
- Rungos are pink and you can catch them by just getting near them
- I have got a nice big toe, ha ha ha!
- Wormholes are harmless and can take you to other places
- I've lost my Rungo, and do not know where she has gone!

The players had bought some of these items of information more than once (22 times in one case, although this was the first one they found indicating they were working out what to do).

At this point, the children had judged only one piece of information as unreliable although later the same information was twice judged as reliable. They had reached the signpost which says where the library is, had entered the library but not read any books, and had reached a poster appealing for the return of a lost Rungo.

Other interim data collected was about the commercial games played by the sample. Despite being 10 and 11 year olds, several indicated they played 18-rated games elsewhere.

A controlled feedback session also collected some interesting comments, which generally indicated that children liked the game, and the process, but still were able to suggest improvements.

References:

CILIP (Chartered Institute of Library and Information Professionals). Information Literacy: a Definition. 2004. .http://www.cilip.org.uk/professionalguidance/informationliteracy/definition/ Accessed 13 July 2006.

Lewis, Andrew: Marketing Library Computers To Young Children Using Multimedia. New Review of Children's Literature and Librarianship, Vol 1. Routledge, April 2005.

Lewis, Andrew. Review of Multi-Lib Phase One. Library and Information Services, Royal Borough of Windsor and Maidenhead. December 2005. http://www.rbwm.gov.uk/public/051201_libs_rbwm_multi-lib-2-1_multi-lib-phase-one-review_312.pdf Accessed 13 July 2006

Lewis, Andrew. Computer Games Technology and Public Libraries: a Background Literature Review for Service Development. Library and Information Services, Royal Borough of Windsor and Maidenhead. December 2005. http://www.rbwm.gov.uk/public/051201_libs_rbwm_multi-lib-2-2_computer-games-libraries_302.pdf Accessed 13 July 2006

Our first conclusion is that Big Bad World appears to have achieved its aim of capturing data as evidence of information-seeking behaviour. Within the initial data there are clear trails of activity, and of information collected and judged. However, the data is very complex with many variables. The certainty with which it can be said to be a direct indicator of an individual's information-seeking and using behaviour depends on whether or not, for example, they had been conferring with others. In practice, gaming is a very social activity. This was evident within the session, with all players continuously comparing tactics and sharing hints with each other. In summary, the method of data collection worked, but the design of the data collection and its interpretation need to be carefully considered and qualified.

At the time of writing, it was not clear whether or not the game was good enough to attract the players to it easily. As a general rule, the children liked the game, but it was not considered that they would necessarily choose it over other games if they had a totally free choice. However, on computers within a public library, the choice of games can be deliberately restricted.

Therefore this may not be a major issue. Certainly the high use of other Multi-Lib games over the last four years indicates that this is the case.

Do computer game technologies have uses in public libraries? The author believes so, both in marketing, audience development and learning programmes. This is due to their cultural appeal and powerful capabilities, such as automated data tracking. However, game design is complex and specialised, so investment in it requires careful consideration of return on investment. The high initial cost means that core library subjects must be targeted, and aimed at as large an audience as possible. For a commercial game this would mean selling as many units as possible.

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In a public library this means creating a resource which addresses a generic and necessary subject (hence the choice of information literacy), and making it accessible to as wide an audience as possible. One possibility would be to tie it to a national event such as the Summer Reading Challenge. Collaboration with schools, as in the pilot, also has some appeal, as it may help bring information literacy to the forefront.

Was it useful? Big Bad World was the third and last research pilot of Multi-Lib. The case studies stemming from the projects have provided an enormous amount of experience and insight, and these can be expected to assist greatly in creating and developing library services in innovative ways.

This field has very little representation in the literature of the public library sector. Without a risk-based exploration such as this, the potential of new technologies is frequently unclear, and so the findings are offered as shared experience to others working in libraries and related information and learning fields.

MmIT in 2007

2007 will be an important year for the group and for the journal. There are likely to be significant changes in the committee makeup, and appeals for officers to replace those retiring after sterling service have been made elsewhere. We will also be looking for columnists to replace those who have retired during the last two years, including a features editor, news editor and someone capable of contributing a film column. The managing editor would be pleased to hear from anyone who is interested in these areas and who would like to develop their writing and editing skills. Please contact Lyndon Pugh at lyndon.pugh@virgin.net

The journal itself will be entering its 33rd year of publication, which might, by the editor's reckoning, make it one of the most long-standing of Cilip's SIG publications. It also faces the same challenges as the group in general, and there are two vacancies on the editorial board. Anyone with an interest in the technology of multimedia in particular, as well as a general interest in the publication of a professional journal, is invited to contact the managing editor at lyndon.pugh@virgin.net. Main features in the planning stages for next year include an exploration of the future of multimedia, coverage of multimedia research trends and novel applications, innovative library design, the role of multimedia in providing services for disabled users, and the use of audiotours in museums.

Corrections ☛

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The Digital Divide:

Corrections to MmIT vol 32 no 3 pp 86-89

The Digital Divide, or Who Gets to be part of the Information Society? by Linda Berube, and printed in the August issue of Multimedia Information & Technology, contained a number of errors introduced during the transmission of the text and the editorial process. In the pull quote used to introduce the article, the opening quotation mark should be immediately before "in which political . . . and should close after . . . vitality of the public sphere" (p86); the quotation from the United Kingdom's Digital Strategy in the second column is from Connecting the UK 2005 (Prime Minister's Strategy Unit. Cabinet Office); the whole of the last paragraph on the same page should be enclosed with quotation marks; the definition of the digital divide is taken from Wikipedia, as is the identification of the first use of the term in the second paragraph of page 87; in the second column on the same page, quotation marks should enclose the third and fourth sentences, from "The digital divide... to eliminating the greatest portion of the divide."

The reference for the passage referring to the UN's Digital Solidarity Fund is The Real Digital Divide? The Economist, 12th-18th March 2005, as is the reference to the same source at the bottom of the third column, the examples of technology "used to resolve specific local problems" and also the first sentence of the third paragraph on page 88; at the top of the third column on page 87, the url refers to the Athena Alliance and not to the quotation, which is from Jarboe (2001) as quoted in Surmacz (2001); the words marginalising and patronising in the following passage are italicised in the original text by Warschauer (2002). MmIT does not normally italicise.

On page 88, the passage dealing with the potential problem-solving capacity of the transfer of information via technology for the developing nations should also have been attributed to Wikipedia; in the top of the second paragraph on page 88 the phrase beginning "fiction would not overtake theology . . ." should be in quotation marks, with a reference to Rose (2001); in the second paragraph of the third column on the same page, the reference to UK Government 2000 relates to information taken from Government to Speed up Introduction of Online Services (20th March 2000) Directgov. (Retrieved on the 18th April 2006. http://www.number10.gov.uk/output/Page2795.asp); on page 89, in paragraph two, the phrase "outreach should be based . . ." is a direct quotation from Orange and Osborne, as identified earlier in the paragraph.

The full list of readings should be:

Compaine, B. M. (2001). Re-examining the Digital Divide. Center for eBusiness @ MIT.
http://ebusiness.mit.edu/research/papers/130%20Compaine,%20Digital%20Divide.pdf
Government to Speed up Introduction of Online Services (20th March 2000) Directgov.
http://www.number10.gov.uk/output/Page2795.asp
Local Government Employers. Assessment: Workforce and Community Profiling.
http://www.lgemployers.gov.uk/documents/recruitment_careers/recruitment_diversity/profiling.pdf
Leman, N. (12th April 2004). Spheres of Influence: How the Government Helped Build America's
Media Might. (Review of The Creation of the Media: the Political Origins of Mass Communication by
Paul Starr) New Yorker.
Moran, O. (18th January 2005). A Critical Perspective on Access, Content, and the Digital Divide.
Digital Divide Network.
http://www.digitaldivide.net/articles/view.php?ArticleID=93
Narayan, R.K. (1974) Reluctant Guru, as quoted by P. S. Brown (October 2005) (Letter to the Editor).
Harper's Magazine.
Orange, S., and Osborne, R. eds. (2004). From Outreach to Equity: Innovative Models of Library
Policy and Practice. New York: American Library Association.
Prime Minister's Strategy Unit. Cabinet Office (2005) Connecting the UK: the Digital Strategy.
http://www.strategy.gov.uk/downloads/work_areas/digital_strategy/report/pdf/digital_strategy.pdf
Ranganathan, S. R. The Five Laws of Library Science (1963) as quoted in Michele Cloonan and John
Dove (1st April 2005): Ranganathan Online: Do Digital Libraries Violate the Third Law? Library Journal.
(Retrieved 18th April 2006. http://www.libraryjournal.com/article/CA512179.html)
The Real Digital Divide. The Economist. 12th-18th March 2005, p9.
Rose, J. (2001) The Intellectual Life of the British Working Classes. New Haven, Yale University Press.
Surmacz, J. (13th September 2001). Five Thoughts on the Digital Divide. An Interview with Kenan Jarboe.
http://www.darwinmag.com/read/thoughts/column.html?ArticleID=164
Warschauer, M. (July 2002). Reconceptualizing the Digital Divide. First Monday.
http://firstmonday.org/issues/issue7_7/warschauer/index.html