

An evaluation of the websites of charities and voluntary organisations providing support for young people

Case study: websites funded by the Diana, Princess of Wales Memorial Fund

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1. Introduction

Aims and objectives

This report describes pioneering work¹ undertaken by City University's Ciber group on a research project that evaluated the websites of a number of charities involved with disadvantaged youngsters that were financially supported by the Diana, Princess of Wales Memorial Fund. The project brief was to determine the extent to which the websites of these charities led to improved access to information and advice for disadvantaged young people. In other words we were looking for evidence of how they might have improved the lives of their users. The overall aim of the project was to review the extent to which the original aims of funded projects have been realised through the development of their websites, and to determine how the design of the websites are influenced and driven by the specific needs of young people. A final aim of the project was to develop a 'template' to provide for best practice within the Fund and sector.

More specifically, we wished to examine:

- The extent and pattern of website use
- whether the website met the needs of its users
- whether there were any barriers to use, in terms of information retrieval or understanding
- how the exploration of the above issues addressed and informed good practice

The aims and objectives were met by conducting two studies:

1. an in-depth evaluation of four 'case study' organisations; which had expressly received funds to develop websites namely Mencap/Trans-active, The Eating Disorders Association (EDA), DrugScope, and Rethink's @Ease site².
2. A general survey of all websites emanating from projects funded by the Fund. In other words websites that arose from the work of the projects, but were not specifically funded by the Trust.

Scope

Aspects that were important to consider in the evaluation were predicated on the fact that the websites being investigated are primarily information disseminators and not concerned with 'entertainment' per se, nor were they predominantly communication channels, although - of course - email links and other contact information was were provided. The aspects studied were:

- Site usage
- Information quality
- Information relevance
- Accessibility/usability issues

Site usage: Perhaps the simplest and most powerful metric is whether anyone uses the site. We would also wish to know: what people found most interesting or least interesting; what was their pattern of behaviour when online; who were the people

¹ As far as the authors are aware this is the first study to comprehensively evaluate the websites of different the charity/voluntary organisations.

² Originally there were going to be five case studies, but Winston's Wish were unable to produce their website in time for evaluation

using the site and whether they fitted the profile of the site's designers. Logs and questionnaires were the main methods of obtaining this information.

Information quality: To an extent this aspect of a website - if not measured by the authority or currency of information - is a matter of personal taste. For example, different people may judge the standard of online news reporting by one correspondent differently. This report, therefore, regards quality for current purposes as being principally to do with the issues of authority and currency. These were decided by inspection methods, outlined in the Methodology section later on.

Information relevance: Important criteria here are:

- Usefulness, appropriateness for target group
- Relevance of images, multimedia etc.
- Relevance of hyperlinks

Measures of relevance are most appropriately obtained by consultation with members of the target user-group. In this study this was primarily through online questionnaires, although interviews were undertaken with users of the Trans-active site.

Information Accessibility/usability: A great many factors affect the accessibility and, therefore, usability of a website. Firstly, we can talk about the accessibility of the site itself, and also the material and information on that site. Secondly, there is also the issue of information presentation, many aspects of which relate to accessibility and usability.

Regarding access to the system itself, the key considerations are:

- the reliability of the information server, 'downtime' etc.
- the functionality of different platforms/formats, multimedia etc.;

Considering the accessibility of the information itself, important factors are:

- the readability level (with particular regard for the target audience),
- retrievability (i.e. information retrieval), whether through hyperlinks or search facility,

Presentation issues, as they affect accessibility, include:

- use of background colours and texture, which may aid or hinder readability
- signposting, with icons or other symbols
- page length, layout, and typography
- use of images
- multimedia features

These were examined by undertaking usability tests, enriched by expert inspection.

2. Background to the Case Study Organisations

The main focus of the study was an evaluation of the websites of four organisations that had obtained funding specifically to build and run a website. This was a relatively new trend in funding and management and the Trust were keen to obtain feedback on the success or otherwise of these digital enterprises, so they could take better-informed decisions on future projects. The case study organisations each dealt with a different aspect of youth 'disadvantage', and were of interest to a wide spectrum of user groups including those with eating disorders, severe learning disabilities, mental illness and drug problems. Clearly, also parents, carers, teachers and peers of those people with one of these conditions could also be expected to seek information, and thus turn to the site, in a carer or intermediary role.

The sections below briefly describe each organisation, and what the main issues are perceived by them to be, for dissemination of information generally and, more particularly, for their use of the web to help in this task.

Mencap Trans-active

Mencap works with children and adults with learning disabilities and their families and carers to improve their lives and opportunities. Mencap declares itself to have a vision, values, and a mission, as follows:

- Vision: 'we want a world where everyone with a learning disability has an equal right to choice, opportunity and respect, with the support they need.'
- Values: 'strong values underpin all of the work we undertake'
- Mission: 'we want to improve the lives and opportunities of children and adults with a learning disability, their families and carers'

Mencap has teamed up with the University of East London Department Of Innovation Studies' 'Big Tree' initiative, to establish a multimedia communications and learning service for young people with disabilities. There are two main aims to the project:

- To develop technologies that enable people with severe learning disabilities to participate more fully in the learning process using IT, by facilitating the production, storage and dissemination of electronic information about themselves,
- To establish the information and support materials and network through the development of an online community base.

A major problem facing adolescents, be they disabled or not, is the transition from school to work (coinciding with their passage into adulthood). The project has as its major focus this transition, with the website and personal profiles being geared to helping meet this challenge. The model facilitates peer support between young people with and without a learning disability. One major way in which people with learning disabilities are enabled to be part of a more inclusive society is for them to work with those without learning problems. The plans are to use shared interests such as music, computer games and TV to help disabled children build up a personal profile of themselves to share on the web and with those who want and need to communicate with them.

The major output for the Trans-active project is the development of what are termed as 'Passports' by each participant with a learning disability. This is done via a template provided and is enabled via a password-protected area on the Trans-active site to participating schools. A sample of Passports created during the pilot study is available online.

A Tran-Active kit fully describes the project, and consists of a hand-book, a CD-ROM and a video. The hand-book contains summary and detail lesson plan for each of the six units. It also provides practical and technological support guidelines. The CD-ROM has a vast number of resources for the Trans-active pack and is a vital resource for teachers as it was developed to link closely with the weekly lesson plans in the Handbook. It includes standard letters, checklists and an array symbols used in the Trans-active pack that can be printed out for easy administration during the implementation of the programme. It also features a collection of computer games that complements each unit in the pack. Help tips and technical advice are also included. Finally, the video gives a step-by-step account of the entire project, complete with examples taken from each of the six units undertaken by young people from a variety of schools.

The idea evolved into the application of multimedia technology as the main tools to be used for bridging the communication gap and overcoming obstacles in making this transition. The programme brought together children from mainstream and special schools to work together to achieve stated goals and objectives. The programme is so designed so that participating teachers from both types of institutions act as monitors.

Clearly, the project, unlike the others we evaluated, is, thus, not merely a website, but a whole array of IT communication tools.

DrugScope

DrugScope provides 'authoritative and reliable' information on all aspects of drug policies and problems. It publishes a wide range of reference guides, books and journals for professionals and the general public. The DrugScope Information Service allows access to a library of over 80,000 documents from around the world. It has the following main aims:

- Improving knowledge
- Promoting effective responses to drug use
- Supporting informed policy-making and debate
- Providing drug education and prevention

DrugScope conducts research in areas of the subject where the information base needs improving for policy-making. It has in-house expertise in international drug trafficking, legislative issues and information systems. DrugScope also manages research and development programmes into many aspects of drug use in the UK and the different responses to it. DrugScope 'strives to ensure' that its responses to drug use across treatment and education services and the criminal justice system are of high quality and based on evidence of what works. It does this by developing and promoting: national quality standards for drug and alcohol treatment and professional standards for drug and alcohol practitioners (in conjunction with

Alcohol Concern); national drug policy frameworks; and good practice guidance to inform professionals working in the field.

Areas of particular concern for DrugScope include:

- the provision of more and better young people's drugs services (including within the youth justice system);
- support for drug users in the criminal justice system (in prison and on community sentences);
- better services targeted at Black and minority ethnic groups;
- improved responses to drug use from GPs and primary care teams.

DrugScope uses the knowledge of professional member bodies and its own expertise to influence Government policy-makers on drug-related issues. It maintains close links with parliamentarians and the media to try to promote an informed debate on a subject that, in its own words, provokes strong feelings and much ill informed comment. DrugScope works closely with central government, for example, in helping to operationalise the key performance indicators against which major components of the UK drug strategy will be judged. It has also helped to develop the mechanisms for a national audit of local drug action through Drug Action Teams.

DrugScope is also involved in helping local authorities to gather the information they need to develop local responses to drug-related issues. This is achieved through work with Drug Action Teams (in England and Scotland), Drug and Alcohol Action Teams (in Wales) and the Drug Co-ordinating Teams in Northern Ireland.

Eating Disorders Association

The Eating Disorders Association was formed from the merger of two smaller charities, Anorexic Aid and Anorexic Family Aid, in 1989. The organisation considers this to be a major step forward, enabling the strengths of the two charities to be united and preventing a wasteful competition for funds and confusion amongst those affected as to which organisation, or both, to join or consult. The choice of name for this newly formed organisation was the subject of much debate and it was eventually agreed as Eating Disorders Association.

In 1992, a third charity joined with EDA. This was SARA; the Society for the Advancement of Research into Anorexia, which brought a research element to the organisation. EDA today is much bigger and more diverse than the fledgling organisation of the early 1990s.

EDA's 'Mission statement' is 'to be the leading organisation providing information, help and support across the United Kingdom, for people whose lives are affected by eating disorders' (EDA, undated). It aims to positively influence public understanding and policy, and does this by:

- Providing information, help and support to people affected by eating disorders.
- Increasing knowledge, awareness and understanding of eating disorders.
- Campaigning for improved standards of care and availability of treatment for people with eating disorders.

In keeping with its aims, The EDA provides information and help on all aspects of eating disorders including Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder and related eating disorders. This includes details of specialist treatment available throughout the UK. EDA also provides a Network of Self Help and Support Groups, Postal and Telephone Contacts who offer support to those affected by eating disorders, throughout the UK. EDA operates a telephone Helpline for people with an eating disorder, their family, friends, and professionals, along with a YouthLine that offers information, help and support for young people aged 18 years and under.

Rethink @ease

Rethink is the new name for what was 'The National Schizophrenia Fellowship', changing its name (for reasons discussed in the results section of this document) in July 2002. Rethink is the largest severe mental illness charity in the UK. Its principal aim is to improve the lives of everyone affected by severe mental illness, such as schizophrenia, depression or manic depression, whether they have a condition themselves, care for others who do, or are professionals or volunteers working in the mental health field. The charity provides practical advice, support and information to people who have a severe mental illness, their families and friends.

Rethink boasts 30 years of experience, over 1800 staff, and a wide range of community services including employment projects, supported housing, day services, help lines, residential care, and respite centres. All its services try to help people take more control of their own lives by building their confidence and strengthening their skills. With nearly 400 services, it claims to support around 5000 people every day.

Rethink is not only an information service, but also works 'for a better understanding, breaking down the stigma and myths about mental illness'. To this end it campaigns for changes to policy and practice that it hopes will impact at both local and national levels. It raises awareness of mental health issues, and challenges the attitudes that create stigma. It works alongside other groups including agencies and statutory funders to enhance the effectiveness of all programmes. And uses its contacts with government to provide a voice for users and carers on national mental health issues. In all its work, Rethink is committed to promoting equality, choice, dignity, respect and access to care and support. Most of Rethink's funds come from statutory funders such as health authorities, but these are bolstered by sources including central government departments, the European Social Fund, trusts, companies and individuals. Rethink's income is currently around £30 million per year. The Diana fund financed the development of Rethink's young people's website '@ease'.

3. Research Methods

Our preferred methodological approach is to gather first evidence from the logs as to how the site is being used and in the light of these data follow-up with survey and qualitative methods. This triangulation of data ensures that a robust grip on the problem can be obtained. This evidence-based approach ensures that the study is user-driven and more likely to capture the behaviour of young people, than, say,

questionnaires. Unfortunately, this proved to be difficult because the organisations involved were – and are probably still - unaware of what the log data mean for them. As a result logs were variously not forthcoming, very late coming or lacking (and different) in detail so that they could yield only limited data. In consequence we did employ logs, but not to the extent we would have really wished, and never with a great deal of confidence. Therefore the follow-up investigations went ahead without the information and direction they really needed.

The evaluation methods which were used in this study were, then:

- Log Analysis
- Inspection methods
- User evaluation

Log Analysis

All digital information platforms – the Internet, touch-screen kiosks, digital interactive television and mobile devices - have a facility by which computer transaction logs are generated that provide an automatic and real-time record of use by everyone who accesses them. They represent the digital information footprints of the users. By analysing them you can track and map their information seeking behaviour, and, when enhanced by user demographic data (unfortunately missing from case study organisations), they can tell us something about the kinds of people who use the services and the outcomes that result from its use.

The great advantages of the logs are not simply their size and reach, although the dividend here is indeed a rich and unparalleled one. Most importantly, they are a direct and immediately available record of what people have done: not what they say they might, or would, do; not what they were prompted to say, not what they thought they did. The data are unfiltered and speak for themselves and provide a reality check that both represents the users and complements important contextual data obtained by engaging with real users and exploring their experiences and concerns.

It is worth mentioning that organisations usually contract out a lot of the log analysis to third parties (i.e. ISPs) or rely on proprietary software, like WebTrends, Netracker etc. Notwithstanding the undoubted technical expertise of the third parties and the software suppliers, the analyses performed are very limited and the dangers inherent in this are that organisations are at one remove, and in an information dust storm kicked up by the log data. This means that they do not always have the time fully understand what the 'processed' log data mean, always get the data they need, or what are their limitations. In consequence huge opportunities are missed. For the best analyses the raw data itself should be used.

Logs at the very least can provide information on: the nationality and organisational affiliation of users, number/type of pages viewed, frequency of visits to a site; length of session/view time. However, even these minima were not achieved with the logs of the case studies, although the DrugScope logs came close.

Inspection methods

Inspection methods are those by which websites are examined to see how closely they adhere to a pre-specified set of criteria set up to describe and practice. This is

undertaken by varying degrees of site use and scrutiny by domain and/or web or IT specialists. A search of the web itself will reveal literally hundreds of lists of what to look for in a good website. Inspection methods can be used in considering aspects related to accessing information or its quality.

Health on the Net Foundation (HONF) is one of the organisations that inspect medical websites, looking in particular for quality indicators. HONF is a Swiss based organisation operating from Geneva with the support of local health authorities (HONF, 1997). The foundation has devised eight principals that make up a code of conduct for prospective medical and health website authors, which prospective users can consider when deciding on whether the site is authoritative. These include authority, whereby information not offered by medically qualified professionals is accompanied by “a clear statement” to this effect; attribution, so it is clear where the information comes from; and confidentiality, meaning that patient information entered online is treated as per the legal regulations on privacy pertaining in the country hosting the site (and mirror sites);

Similar guidelines to those of HONF were established by the British Healthcare Internet Association (BHIA, 1996). The BHIA list, of “recommendations” rather than “principals”, is very similar to that of HONF, although the category names are different. Authority, for example, is termed Provenance, and there are slight differences in content and emphasis.

For the current project, the following aspects of each website were examined by the inspection method, by the researchers.

Information quality:

- Sources used/attribution
- Currency
- Hyperlinks: quality (NOT functionality)
- Breadth/depth

[note that it was considered beyond the scope of the evaluators, as information rather than subject specialists, to consider 'Accuracy']

Accessibility/usability

System accessibility:

- the functionality of different platforms/formats, multimedia, hyperlinks

Information accessibility:

- Readability level (considering the target audience) was assessed using the Flesch Reading Ease score³ and the Flesch-Kincaid Grade Level score⁴. Flesch score measures the ease with which a document can be understood and is rated on a 100-point scale. Standard documents are expected to have a score of approximately 60 – 70. The higher the score, the easier to read the document. A Flesch-Kincaid score rates text on a U.S. grade school level, where a

³ The formula for the Flesch Reading Ease score is: $06.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$, where ASL=Average Sentence Length

⁴ The formula for the Flesch-Kincaid Grade Level score is: $(.39 \times \text{ASL}) + (11.8 \times \text{ASW}) - 15.59$ where ASL=Average Sentence Length

document with a score of 8, for example, means a child at age 13-14 yrs should be able to comprehend the document

- Retrievability, whether through hyperlinks or search facility

Presentation issues related to accessibility:

- Use of background colours and texture
- Signposting, with icons or other symbols
- page length, layout, and typography
- Use of images
- Multimedia feature

As an aid in this part of the evaluation, the team used the web accessibility tool 'Bobby'⁵, designed to help expose barriers to accessibility and encourage compliance with existing accessibility guidelines. It offers prioritised suggestions based on the World Wide Web Consortium's (W3C) Web Access Initiative. Bobby allows developers to test web pages and generate summary reports highlighting critical accessibility issues before posting content to live servers.

User Studies

'User studies' is a broad term used to describe both usability work with users and also surveys of opinion, regarding wider issues such as information relevance, site appeal etc.

Usability tests

The principal method for undertaking a usability test is to devise a series of relevant user tasks, and determine the degree of success in undertaking them - noting the different methods employed and any difficulties encountered. Task selection depends upon the specific use intended for the site. Where there is a high degree of user input and interaction, for example, tasks will include writing, posting and receiving messages, online form filling etc. Where the site contains a bibliographic database, its interrogation will naturally form part of the task selection. For the purposes of this evaluation, users were asked to find specific information that could be found on the site.

Each user was given various information retrieval tasks to perform, in addition to being asked for their opinions with regard to site organisation and content. Test sessions lasted forty-five minutes to one hour. Some subjects were observed, although others, who were not able to meet the researcher in person, completed a form that asked about their experiences in using the site and the tasks undertaken. Those observed were subjected to pre and post interview sessions where a variety of questions were asked; e.g. in what context is the information been sought and to describe their experience performing the tasks given. Participants were heavy users of the Internet and were comfortable with menu hierarchies and navigation etc. None of the participants had prior knowledge of the site being tested.

Recruitment: An optional section was provided on questionnaires posted on websites of the case study organisations, for respondents who wished to partake in usability sessions to submit their contact details. Those who did so were invited to

⁵ <http://bobby.watchfire.com/bobby/html/en/index.jsp>

the University to take part in a controlled searching session. However, none of the users contacted were able to do this. Hence, participants were sought within the school community and eight persons volunteered. This sample included expert web users; however all were first time users of the site been tested, For quantitative data, where the object is to infer generalities from samples, this would constitute a low number of respondents. However, in the literature on evaluating information technology applications, even single figure evaluator numbers are considered adequate. Nielsen and Mack (1994) recommend the use of between three and five evaluators. They argue that only a small number of evaluators are required to elicit the major issues that arise in, for example, navigation or text size. In keeping with this, the commercial IT evaluation company Serco, who are looking at digital TV health information initiatives in tandem with the present writers, typically invite around 10 viewers to their evaluation sessions.

Surveys

Online questionnaires were used to collect data from site users at the sites of three organisations; namely DrugScope, EDA and Rethink-@ease. A link was placed on each site pointing to the questionnaires, and was active between May – August 2003. Questions pertaining to the frequency of visit to the site, information sought and action taken were some of the question asked to establish user behaviour and how they use the information provided. Users were also asked other questions relating to other types of information sources and other website used to obtain similar information. They were also asked to give an indication of the general look and feel of the site. Response rates were variable, as can be seen in the results section - the range was between 156 for DrugScope, to only 5 for @ease.

In addition, a questionnaire was sent to 30 Diana-funded organisations which had websites but whose sites were not specifically funded by the Trust. The questionnaire sought to obtain an overview of current activities, experiences and opinions. Respondents were asked seven open ended questions pertaining to the impact of their website on the organisation. Only eight organisations responded with detail information in response to the questions asked. Examples of the questionnaires can be found in the Appendices.

Interviews

Interviews were carried out where possible with users and employees of the charities involved. This included teachers acting as project co-ordinators, utilising the Trans-active material, and with the website developers of all the case study sites. Telephone interviews were also carried out with those working for other organisations whom the Diana Fund had financed to produce a web presence. Results from the latter appear under the heading 'issues identified by the site developers'. Numbers involved were quite modest but does include the key figures responsible for organising the websites, (such as the Youth Education and Training Officer at Rethink, Drugscope webmaster and the Project manager at Trans-active). In the case of the latter organisation, the project co-ordinators at each of the two fieldwork sites, and another participating teacher were interviewed. In all, 14 key workers were interviewed. Twelve users of EDA responded to an open email survey and entered into an email dialogue that could be classed as an online interview, but they were more concerned with discussing their personal situations rather than address the issues posed by the researcher, and for ethical and

practical reasons these communications were politely curtailed. No significant data emerged from them.

Observation

Videos were taken of Trans-active sessions at one of the participating schools, which were available to the evaluation team for viewing. As well as being used as observational data, students were seen on tape being interviewed about their experiences by teachers and project staff. Information provided was also used in the evaluation.

Findings

Survey of all Diana Sites

Although the main focus of the study was on the case study organisations and their websites, thirty organisations receiving funding from The Diana Princess of Wales Memorial Fund were contacted and invited to participate in the research by completing an open questionnaire. Data accrued helped us benchmark the case study findings. The names of these organisations were obtained from The Fund website (theworkcontinues.org.uk), and questionnaires were either surface or electronically mailed. Initial contact was also established with some of these organisations via the telephone. A listing of the organisations contacted appears in the appendices. A sample questionnaire is also reproduced there. Despite re-sending the questionnaire, and giving telephone reminders, only eight organisations completed the survey. This very much reflects the apparently low priority in the sector regarding the need for user evaluation and feedback. However, the open nature of the questions, and the detailed answers by those who did complete the survey, provided substantial data compensated for the low response rate.

Responses to the questions were grouped into categories and are presented below.

Impact of having a website

Organisations indicated that the use of websites has enabled them to reach a wider audience, with the web serving as an initial introduction or taster to their services. Other benefits were listed as:

- boosting the identity of the organisation
- providing quick and easily accessible information and advice
- having the facility to provide more information on the organisation than possible with hard copy, for example providing links to other useful websites
- Increasing organisation awareness and range of services it provides

With regards to the latter point, this awareness lead to a reduction in the number of calls to the organisation in, for example, enquiring about their role and set-up. As a result of providing such information online, organisations now receive more 'meaningful' calls, that is, callers now call in to request a specific service, which the website may already have told them operates, or to seek assistance with a specific matter. This is a case really of websites educating the user.

Design Issues

One of the more challenging tasks organisations reported facing in the online environment is that of providing easy access to information. This challenge was overcome by 'using clear and simple language' and organising the links to other pages 'in a logical manner' This generally appeared to mean not having too many hierarchies of information, and always showing users where they were on the site. Some organisations mentioned favouring splitting lengthy text into separate pages. A common problem faced by all organisations was that of designing a website that would be suitable for teenagers, 'lay' adults and professionals. One organisation reported designing their site so that they could provide information separately to two target groups, professionals and lay users. However, no clear indication was given on how this was achieved, or whether 'lay' access would be suitable for a young audience. Another organisation is building a unified identity across diverse projects within the organisation. This approach was taken because they wanted to preserve the identity and brand that they had already created, which was aimed primarily at adults. When this is accomplished, a second site that will be linked from each page of the existing site is currently under construction. This new site will be designed by teens for teen and will allow a more flexible approach in the presentation of information. Finally, another organisation addressed the issue by employing the services of a young adolescent to build and maintain the site, which targets teen and young adults.

In-house Monitoring

Different levels of expertise in the area of web ownership and monitoring were noted among respondents. Only two organisations stated that they used web statistics to monitor activities on the site, taking note of user activity patterns and IP addresses. One of these organisations reported using web logs to gather hit counter statistics on a monthly basis on popular pages visited. They used this and other information gathered to re-launch the site six months after its initial appearance. By using the information the log statistics provided they reported that they were able to overcome initial design issues and provide a more professional look, resulting in an increased number of hits after the re-launch. The same organisation also reported having a feedback form online. However, they pointed out that comments about the site via this medium were rare - reflecting the difficulties the current writers had in coaxing information from what are clearly reluctant, as well as vulnerable, groups. Instead they received frequent feedback via word of mouth from events, which they organise. One other charity also mentioned utilising log statistics. However, no indication was given as to how the information was used. No other organisation reported having any form of monitoring. No surveys of users were given, nor mention of feedback forms or automatic monitoring. In general terms it seems the field appears to be lacking an evaluative culture.

website development tips

Respondents were happy to provide a number of tips for other organisations that wished to develop their websites. These are grouped under a number of headings including 'Content', 'Navigation/structure' and 'Attracting users'. Advice included the following:

Content

- Keep information simple, clear and concise ('of course much easier said than done')
- Provide downloadable documents in PDF format

Navigation/Structure/accessibility

- Carefully review each link to make sure they work.
- Always have back links so the user can understand where he is and how to get around easily
- Have a site map as well as a search facility
- 'beware of frames' – they do not allow you to give direct URL links to certain pages.
- Ensure visually impaired users can use the site, by - for example - being able to increase the font size without it throwing design 'out of synch').

Attracting users

- Use of bright colours (but why this should be is not clear)
- Providing updates, useful information, 'things that people will want to consult often'
-

Communication with users

- Try and communicate with users often. This can be achieved by leaving messages and information for users on a regular basis. This can be done via discussion board or the main page.
- Ask the users for opinions and ideas through forms, so they can feel valued (plainly a piece of advice not taken up by many)
- Use discussion boards, voting forms, competitions

Cost Implications

- Employ an in-house web designer so that they will have an intimate knowledge of the organisation. This ensures faster updates and keep the site alive and fresh
- Be selective in choosing the host organisation. Always invest in a reputable company. It is more effective to pay more to get reliable hosting with all the perks, than have a website that goes down all the time or cannot handle what you want it to do.

Case Study 1 - Mencap/Trans-active

Issues identified by the site developers

The website forms only a small part of Trans-active, and those involved were keener to talk about the overall package. A major issue for the site developers is, reflecting the main concerns of the full Trans-active materials, that of equality of access to information and learning for those with learning disabilities. The project developers consider that multimedia applications in general, and the Internet in particular, offer such people and their carers/teachers etc. a number of opportunities. These are principally to enhance communication, improve the accessibility of information, and to promote their visibility and positive representation. The website can only do this in a small way, and is considered more as a showcase for the full Trans-active product.

Inspection

[Pages inspected: <http://www.trans-active.org.uk/adult/index.htm> and links]

Information quality:

- Sources used/attribution

Much of the Trans-active site describes the project and the participation of youngsters with disabilities. However, there is a fully referenced section containing newspaper articles about Transition and the involvement of Mencap in the process. In addition, the site acts as a portal to other relevant information sources, on subjects such as employment, advocacy, support etc.

- Currency

Newspaper 'cuttings' are all dated. Other pages discuss the Trans-active service and process, and are not as date-sensitive as with, for example, DrugScope.

- Hyperlinks: quality (NOT functionality)

The site contains an enormous number of links, to relevant and authoritative organisations, such as the Disability Law Service, The Independent Panel for Special Education Advice, and the Equal Opportunities Commission. In each case, a postal, telephone and web address is given, together with a short description of the organisation.

- Breadth / depth

The site is not an information service as such, but more of an explanation of the Trans-active service. The links out to other organisations, which do provide information, are extremely comprehensive.

Accessibility/usability

System accessibility:

- the functionality of different platforms/formats, multimedia, hyperlinks

The section of the site under scrutiny (the adult, carers' and teachers' section 'The Information Zone') does not contain any multimedia features. The hyperlinks all worked well when tested by the research team.

Information accessibility:

- Readability level (considering the target audience)

Three sample pages were examined, scoring an average of 62 on the reading ease test and grade of 8.7 on the Flesch-Kincaid Grade Level, being generally readable by 90% of 13-14 year olds. As the section examined is for carers, parents and teachers, this is a level at which the target group would clearly have no difficulty. Indeed, keeping the language at this level means that youngsters (perhaps not those with the learning disabilities Trans-active is designed to help, but their peers) can also consult the site without difficulty

- Retrievability, whether through hyperlinks or a search facility

There is a basic search facility on the site. However, the site contents are so well organised with regard to the display of entries and sub-entries, that anyone

requiring general information or an overview would probably prefer to use this display.

Presentation issues related to accessibility:

- Use of background colours and texture

The site is generally based on black text on a white background. As such, there are no problems in reading the text or accompanying images.

- Signposting, with icons or other symbols

Photographs and folder icons accompany internal menu entries. When a main menu item is activated, a sub menu drop down list appears, with page icons indicating that activating the link leads straight to a document (i.e. and not another sub-menu). In addition, there are also five icons on the top right of each page, depicting a camera, microphone, TV screen etc. These could easily be mistaken for links.

- Use of images

Photographs are used extensively, and provide excellent examples of Trans-active in action.

- Multimedia features

There are no multimedia features on the site.

Although most pages are static, the site is more interactive than others examined, as one section enables users to set-up their own passports. This is an excellent feature, although more could have been done to direct users in their passport creation - there is no introduction, for example. When the 'Do Trans-active' link is activated, the first sub-menu is 'Make passport'. Those who worked through the pages logically (from the top menu item down), will understand the meaning of this. However, Internet users rarely read in a linear manner, so an explanation or a back-link would be recommended here. Also, it is not immediately clear that users have to provide input, nor whether a completed passport is published onto the web, or is stored only on the 'client' computer.

User studies

Unlike with the other case study sites, it was possible in the case of Trans-active, to meet 'real' users of the system. Extensive interviews were conducted with the project co-ordinators from two participating schools: Fox Hollies Special School and the Mayfair Special School, and short conversations were undertaken with some of the participating children. A brief interview with four students who had taken part in the second implementation of the programme was also conducted. In addition to this, a form of remote observation was possible. Fox Hollies video-taped some Trans-active activities and an evaluation session with participants from mainstream schools. Three videos were watched by one of the current researchers, and impressions of what was seen are related in this report.

At the Mayfair School, students participating in the programme gathered to take part in a 'show and tell' about their 'Passport'. During the session they were asked about their experience on the programme.

The Fox Hollies

For the initial staging of the project, a group of eight pupils were selected from each school. At the beginning, students went through a series of sessions where they

took part in activities aimed at fostering a relationship between themselves and their peer support. After this was achieved, students worked through each module under the supervision of their teachers. The Trans-active pack was developed further over the duration of the project.

Following the conclusion of the programme, the school undertook their own evaluation and concluded that, while the field project was exciting and students were benefiting, they preferred a different approach. This was for Trans-active to be more embedded in the school's curriculum. In short, teachers wanted more ownership. They saw the kit as more a tool for inclusion, rather than as a tool for transition.

Following the pilot, the programme was implemented in the school, and is still continuing. Two different groups are taking part:

- a small group of six students, with four having complex (profound) learning disabilities;
- nine students, one with a complex learning disability.

Students are undertaking one module per year. During the academic year 2002-2003, year 8 pupils completed the "All About Me" module in the Autumn term and year 7 students completed the same module in the Spring term.

The Fox Hollies Trans-active co-ordinator spoke highly of the project and made the following points;

- Students became skilled in taking and saving digital images.
- They became more involved in the making decisions i.e. they had to select which photos they wanted in their portfolio.
- They improved communication skills, in describing their choices etc.
- Students from mainstream schools also benefited because they learned how to interact with peers challenged with a disability. They became more sensitive and aware
- All students built their confidence and developed their decision making skills

There were some constraints, however:

- Distance, the schools are 3.5 miles apart which limits the number and duration of sessions.
- Time: It is time consuming

Following the Trans-active sessions, a researcher met and spoke with a few students from the exercise who had learning difficulties. All were able to recall who their peer supporter was from the mainstream school. Some were able to say what activities they had undertaken and also share information about their peer supporter, such as their favourite game and place of interest. All said they were looking forward to seeing their peer supporter again.

The video presentations gave a clear indication of students' interacting with each other. The tape revealed free open interaction with special school pupils and their peer supporters as all students allowed themselves to be photographed and video taped. Included in the batch of videos were the initial 'getting to know you sessions' where students played highly interactive social games. They also included one-on-one sessions with students from mainstream schools learning to communicate with

their peer with a learning disability. In one particular scene a mainstream student worked with a special student for almost one hour before finally obtaining a response. During this time, the peer supporter remained calm and patient as he tried to establish some type of communication.

Teachers and project staff asked mainstream students in the video how they felt about the programme, what they had learned from it and whether or not they would participate again. Responses given were as follows:

- All indicated that they had had 'a good time' and would love to do the programme again
- Some students stated, however, that after initially volunteering for the exercise and visiting the special school, they had felt afraid and did not think they would be able to do it. However, after playing the ice-breaker games they became less intimidated and enjoyed the project as much as other, less inhibited participants.
- Students felt that the exercise taught them how to interact with students with special needs. They also realised that despite their challenges, at times those with special needs also do enjoy the same things as their counterparts.
- They all stated that they have now become more sensitised to issues surrounding learning disability.

The Mayfair School

The Mayfair School is another institution catering to the needs students challenged with learning disabilities, from nursery to 19 years. The school has adopted the Trans-active pack as a part of its school curriculum. They selected two groups, an older and younger set, to participate. Both groups have completed Module One "All About Me" and are now working on the Module Two, "Advocacy". At the time of the field trip, the older group got together to show what work they had completed. Members in this group suffered from severe learning disabilities. Nonetheless two students got up to talk about their passports and show them to the group and the researcher. Others participated by offering information about their passport as their classmates went through theirs.

In both instances the students were able to systematically go through their passport, relating information about themselves, by viewing the graphic images and relating the story behind the images. They also gave other information about themselves and were able to state what similarities they had with their peer supporters. The students demonstrated proficiency with the use of the application.

The Trans-active co-ordinator at the school also told of the heightened awareness of computer applications by one of the students as a result of participation on this programme. The student had learnt how to set up the various devices peripheral to the computer. One of his favourite pastimes is surfing the Internet and playing games. He stated his interest in surfing the Internet is to find information about his favourite thing, his mobile phone, and other technological interests.

The Mayfair co-ordinator felt that the project was a tremendous success. Even though students were assisted in loading the photographs, they took their own photos and made the selection for their passports themselves. This was expressed as a great achievement because the programme had helped to enhance communication between themselves and their peer supporters from the

mainstream school. The implementation of Trans-active in the school also caused participating students to become more mentally focused. The co-ordinator believes that this is because students have become fascinated with the idea of viewing things about themselves online. The Trans-active pack received high praise. It was described as making teaching/working much easier - it eliminates any further planning because everything is provided in the pack.

It is important to state that it was felt inappropriate to post an online questionnaire, for two reasons. Firstly, the section of the site being examined was for people with learning disabilities, a group who would be unable to complete a questionnaire (or who would perhaps be confused by one for adults posted on the site), and secondly, the website is really only an explanation of the Trans-active package, which was examined as a whole by the project team in visits to participating sites and interviews and observation with users.

Log Analysis

Clearly, the Trans-active project is about much more than the website. However, it was felt important to examine the site, as this was the major role of the evaluation and also the site was a valuable showcase and an example of the Trans-active package. A log report was obtained for the Trans-active site, showing a summary of activities for the period February – August 2003 (Table 1).

Table 1: Trans-active Log summary

Month	Feb	Mar	Apr	May	Jun	Jul	Aug
Request ⁸	123,606	307,522	230,785	315,099	233,313	278,857	237,664
Pages ⁹	15,212	46,165	39,972	57,044	43,073	45,799	50,879

Clearly, substantial interest is apparent in these statistics, with getting on for 50,000 pages being viewed per month, for what is a very specialised topic. The logs also showed the Trans-active server remained quite active through out the day from 9:00 am to 5:00 pm, with a peak activity at 1:00pm, interestingly; this time is the most busy, no matter the nature of the website. Table 2 shows the most sought after pages.

Table 2: Most popular pages on Trans-active

Number of requests	Name of page/directory	Description of page
796935	Adult	Home page of the area designed particularly for adults (parents,

⁸ Request or Hit: This is a browser request for any one web resource, example, web page or graphic. A web page containing two graphics for example will take three hits to display the page been requested by the client's browser.

⁹ Page: This term refers to the number of pages accesses occurring in a given visit to a website. This is the more reliable use metric and shows some volatility. No real growth trend can be identified at this particular time.

		carers, teachers etc.)
350560	transac	Top level Trans-active home page
252969	teenz	Home page of the area designed particularly for persons with learning disabilities is the area most frequently visited
148447	Front	Index page of contents – for site developers.
122538	Passport	Page describing how a 'Passport' is made
35072	root directory	Index page, for use by site developers
12195	tools4tran	Page on Trans-active conference launching Transition (linked from Adult one)
2220	cgi-sys	Unavailable page – users refer to site developers
1154	Search	Index page, for use by site developers
5349	others	

The most heavily used page is the home page for the adult section of the site. The Teen Zone, which is the area designed particularly for persons with learning disabilities, is also frequently visited. Because of many unresolved URLs the number of unique visitors could not be ascertained. The organisation report in the logs did not give the full URL of the visiting user so it was also not possible to tell what type or which organisation visited. Generally, then, the logs are not very illuminating in terms of detail or clarity.

Summary

The Mencap/Trans-active project generally appears to have more than met its stated objective of providing a tool and support system for young adults affected with a learning disability. The co-ordinators of the project have successfully produced the Trans-active pack and website, and use of these in schools has been very productive. Importantly, the Trans-active team has made feedback and evaluation an important part of the project development, seeking constant input from potential users (or their advocates). A questionnaire, for example, is currently circulating project participation sites. The team is also mindful of the benefits of having a Web presence, and as Trans-active is rolled out on a larger scale next year (2004) plan to utilise log data and seek large-scale user feedback. This is plainly needed to pilot the innovative service.

Looking specifically at the Trans-active website, this is simple to use, informative, and most importantly, appears to cater well for the needs of young adults with learning disabilities. The site has two main sections; the TeenZone, which is specially constructed to inform youngsters with a learning disability and the Information Zone, which targets parents, carers and teachers. The TeenZone proved to a frequently visited area on the site, and was the one specifically funded by the Diana Fund, albeit not exclusively.

Case Study 2 - DrugScope

Issues identified by the site developers

Two digital issues were considered important by the team at DrugScope. One was the accuracy of information posted. Medical advances and legislation both changed rapidly, requiring constant site updates. Despite a small number of staff available at the organisation, this was considered the priority. Secondly, staff were very concerned not to preach or to be seen to be against (or pro!) drug use. However, at the time of writing a news item on the 'Home' page of the site states: 'Police recently smashed a large Columbian drug cartel. Click title to email us any evidence of the impact of the bust on the price and quality of cocaine ... ', clearly acknowledging that at least some of its users do indulge in illicit drugs.

Inspection

[Page inspected: <http://www.DrugScope.org.uk/druginfo/home.asp>] and links

Information quality:

Sources/attribution: DrugScope does not source the information on its site. However, in a section about the organisation, it says that it '*provides authoritative and reliable information on all aspects of drug policies and problems. We publish a wide range of reference guides, books and journals for professionals and the general public*'. Users may feel, therefore, that no further proof of the authority and trustworthiness of information are required.

Currency: Pages are not date stamped on the site. As both the law and medical advances are likely to require frequent updating of information on this particular site, this is a significant omission. There is, however, a news section that is reasonably current. On the day inspected the latest story was from two weeks previously (one does not expect relevant stories on drugs top appear every day), and each story was date-stamped.

Breadth / depth of information: Information on the site is very comprehensive and wide ranging. There are, for example, 139 entries related to 'Drug terms'. Entries are very comprehensive. That on alcohol, for example, is over 2,700 words long. Typical areas included are:

- Types available, (i.e. beers, spirits etc.)
- Latest UK news (including latest use statistics, trends etc.)
- History (for the entry on alcohol starts 'Making and drinking alcohol goes back many thousands of years ...')
- The Law
- Effects/risks

There is also a good system of internal cross-referencing hyperlinks. For example, in the text on alcohol, a paragraph describes long term effects. Within the paragraph appears the words 'withdrawal' and 'tolerance', both of which are hyperlinked to their definitions.

Unusually, the site does not act as a gateway to further information, rather it tends to self-sufficiency. Given the volume of sites in the same field and the nature of the Web this is rather unusual. There are, however, links from the Drug information section to the HMSO site where full text legislative documents can be found.

Accessibility/usability

System accessibility: Being primarily a database of information, there are no multimedia elements in the site. Both the internal and external hyperlinks worked when inspected by the evaluation team.

Readability level: Four pages were tested for readability. Despite a number of official drug names included in the text (such as gammahydroxybutyrate) the average scores were 51 (which is only 'fairly difficult') and 10.7 (reading age of 15 to 16). One page was stripped of all uncommon drug names by the researchers, and here the level of difficulty was reduced to 64 ('Standard') and 8.1 (13-14 year old reading level). As the drug terms are explained fully, the information providers appear to have done an excellent job of giving detailed and comprehensive information at a readable level.

Retrievability: The site has both a 'simple' and an advanced search facility, the latter of which enables searching of different sections of the site. Users are invited to enter a word or phrase. However, the search works with separate keywords (i.e. two words entered are not searched as a phrase), although it is not made clear how to enter words to be considered as a phrase. There is also a search engine for the section 'Drugsearch'.

The links are well organised via a comprehensive menu list on the left side of the page and a main menu bar at the top (although the latter could be criticised for its use of images - see below). There are also embedded cross-references and links. Overall, the site is very well organised for retrieving information - a view supported by the usability study reported below.

Presentation issues related to accessibility:

Signposting, with icons or other symbols: The only symbols used are directional arrows, an email icon, and images to represent 'news', 'history', 'law' and 'effects', each of which includes the appropriate word and does not, therefore, rely on a picture to convey meaning.

Use of images / colours: The site is predominantly text based, although signposting images are used, as described above, along with photographs where appropriate (e.g. of heroine preparation). The researchers agree with 'Bobby' that any images used as hyperlinks should be accompanied by text, to enable screen readers to detect the words and links. Two of these images are next to text boxes requiring user input (name and password, to access additional content). It is possible to use the alt-text tag to describe an image - which will be picked up by a screen-reader - but the added complication of embedding a link is not recommended.

Use of background colours and texture: Only the banner menu bar across the top of the page may be questioned here, for its use of white on orange, a problem because of the lack of contrast between colours.

User studies

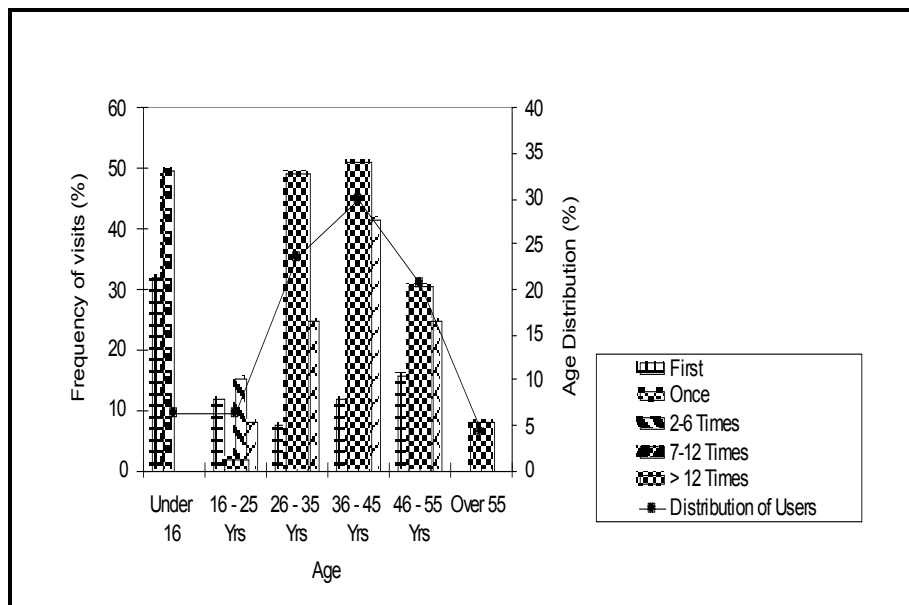
User survey

User questionnaires were posted on the site for a period of three months. The initial response rate was good as after one week over twenty responses were obtained

and by the close we had obtained well over 150 responses. At the end of the three month period the data was cleaned and prepared for analysis.

Respondent characteristics: Forty eight percent of respondents were males and 39% were females. The remaining 13% chose not to indicate their gender. Of this figure, only 17% were first time visitors to the site and only 1% had reported using it once before (2% gave no response). The remaining were quite frequent users with 52% indicating they had used the site over 12 times since discovering it. The most frequent users were in the 36-45 age range (30%) with those under twenty five accounting for 12%, and over 55 accounting for 4% (Figure 1). Only 9% gave no response to this question.

Figure 1: User Age Distribution vs. Frequency of Visits



Seventy four percent of respondents had qualifications of at least a GNVQ/NVQ/GCSEs/O Levels, with 57% having a first degree or higher. Most respondents indicated they worked in a drug related field or with the government - they were not people who had a drug addiction problem, nor were they casual drug users. This is, perhaps, unsurprising. Although drug users might be expected to be interested in much of the material on the site (side effects of drugs, drugs and the law etc.), The section on the website entitled 'About DrugScope' indicates at various points that it is 'for professionals and the general public', (particularly the former) rather than for young people specifically who take drugs. For example, the organisation 'conducts research ... where the information base needs improving for policy-making ... develop(s) and promote(s) national quality standards, national policy frameworks and good practice guidance for specialist and general agencies involved in drugs issues'.

Table 3 shows the percentage distribution by profession of respondents in the survey. Apart from the previously mentioned dominance of drug workers, the most noticeable aspect of the table is the apparent failure to reach the general public, but this could be something to do with the unwillingness of the public to fill in the questionnaire.

Table 3: User Distribution by profession

Capacity	%
Friend/family of a drug user	1
Drug user	6
General interest user/Private individual	3
Student/Pupil	1
Academic	10
Teacher	5
Journalist	0
DAT Member	6
Civil servant	6
Drugs worker	32
Policy Maker	6
DrugScope member	3
Other	9
No Response	11
<i>Total</i>	100

Method of accessing the site

Respondents were asked how they accessed the website, that is, whether they did a general engine search, knew the URL or had it bookmarked (Figure 2). The data indicated that, in general, users had employed search engines to find the term “DrugScope”, rather than, say, use a bookmark. Searching by URL was the second most popular approach.

There were big differences between occupational groups (Figure 3). Academics, civil servants and drug users used the URL most, policy makers and DAT members favoured the book mark and Drug workers employed the search engines to search for DrugScope. To understand what this means, and why these different groups behave differently online, requires further exploration. In general it appears that the organisation is well known - hence putting ‘drugscope’ and not ‘drugs information’, ‘drugs advice’ etc. in a search engine.

Figure 2: How users located the site

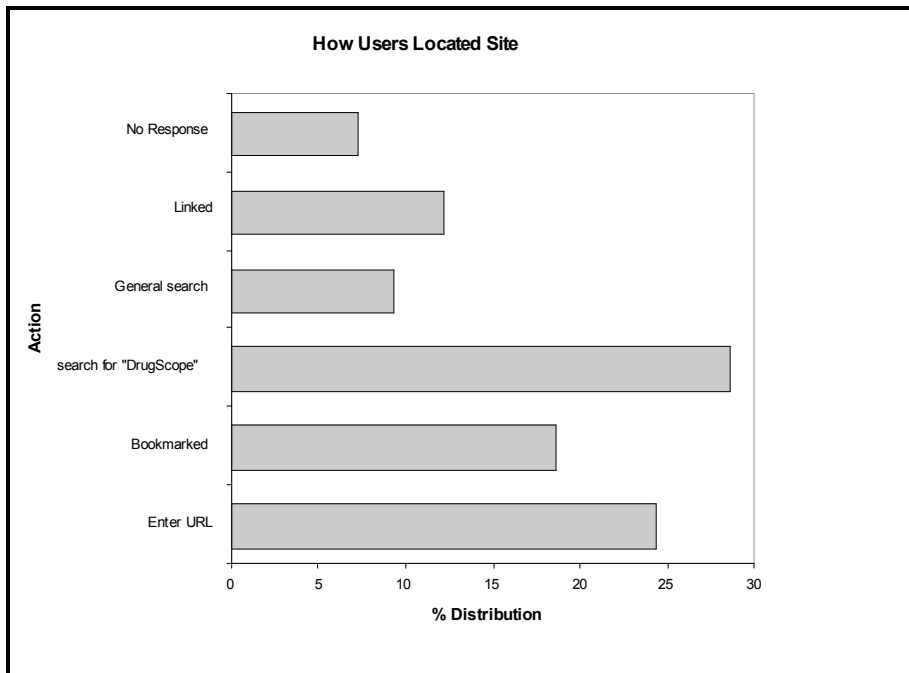
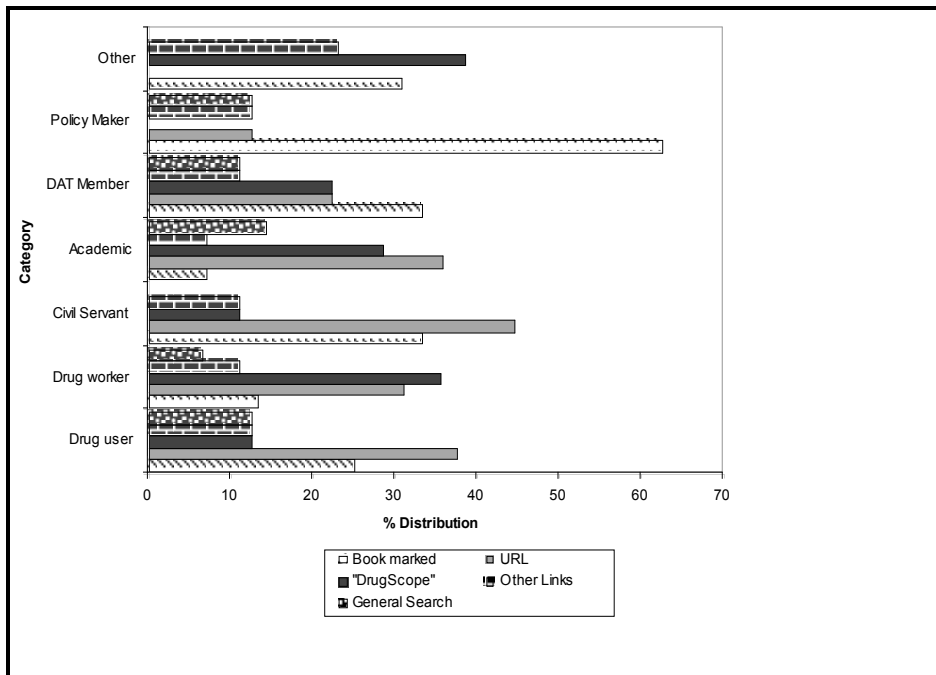


Figure 3: Type of user by method of accessing the site



What people were looking for?

Users were asked an open ended question as to what information they had been looking for the last time they visited the site

Table 4: What users were looking for when they last visited the DrugScope Site?

Category	Example (quoting from responses)	No. of comments (n)
----------	----------------------------------	---------------------

Current awareness	Recent articles concerning drug issues	8
Drug information - specific drug, general enquiry	Ecstasy info	12
Drug information - specific drug, legal / policy issues	Cannabis law	8
Drug information - specific drug, statistics	Statistics on benzodiazepines	1
Events and training	New events and training courses	2
General drug information - Legal and policy issues	policies and legal issues for young people	8
General drug information - miscellaneous	The length of time certain drugs remain in the users bloodstream and suitable methods of detection/testing	9
General drug information -Effects of drugs	Effects of cocaine on nasal passages, occasional v regular use.	6
General drug information - Identifying drug users	Signs and symptoms of drug use	2
General drug information -Safer drug use	On safer injecting disposals for local employers	2
General drug information - Statistics	abuse/frequency of prescribing'	3
General drug information - Treatment/withdrawal	Information of drugs prescribed to support withdrawal beyond methadone and buprenorphine	6
Other topics	The links between youth criminality, mental health and drug use	5
Pubs/referral to other info	Where to get help	2
Services available	Information on YP services	2

n > respondent total because some respondents cited more than one information need

As can be seen from Table 4, the principal reason given for using the DrugScope site was to find information about a specific drug. Most respondents simply indicated that they were interested in 'information about, for example a specific drug, service etc' or just gave the name of the drug. A minority of respondents gave more detailed responses, enabling their answers to be more clearly classified. One respondent, for example, sought information about the effects of cocaine on nasal passages. Another required statistics on benzodiazepines, and a third was looking for information on the law as it related to cannabis use. Several (six) also stated an interest in treatments and medication.

Apart from specific drug information, the next most common reason for consulting the site was for information on legal and policy issues. Sixteen out of the 101 respondents who answered this question indicated specifically an interest in the law, legislation, or policy. Of these, eight cited specific drugs (the reclassification of cannabis was an issue with three). It can be assumed that many of those not specifically mentioning policy/legal issues - particularly those who indicated a need for 'up-to-date information, general information, or simply named a particular drug, were also interested in policy issues.

The website was seen by some as providing current information. Eight respondents mentioned requiring some kind of news or current awareness service. Other respondents, again, may have required more current information than they had - such as with regard to the law, for example.

One of the general areas of interest for site users was the 'Talk to Frank' campaign recently launched by the government. This is a £3m drugs education campaign, delivered through a series of light-hearted television and radio adverts. The campaign is aimed at young people and parents, and is built around a confidential helpline and website where young people and parents can 'Talk to Frank' and access well-informed advice, information and support (website www.talktofrank.com).

When asked to state whether or not they were satisfied with the information found, almost 80% expressed satisfaction with the information found.

Usability study

The four participants who undertook this usability study were, as with those who undertook similar sessions with the other websites evaluated, heavy Internet users, spending an average of forty hours per week on the Internet, surfing and conducting research.

Site Layout and Presentation: The overall layout and presentation of the site was reported by users as excellent, with good use of colour and space. The fact that the information presented was precise and to the point made it clear and easy to follow. However, there were some comments made that indicated areas requiring attention;

- Too much text on the home page which might be a deterrent for people who have trouble reading
- The presence of two menu bars made things a bit confusing, as users were worried about menu options being duplicated, and whether one link led to the same page as another entry with the same label.

Site navigation/ information retrieval: The site has its own search engine, which is always visible along the top of the page, along with the main menu items. There is also another search facility which appears on the homepage of the 'Drugsearch' section.

Both facilities were well used by test participants (although no-one used the advanced search box), as were the drug index entries (accessible by clicking the 'Drug search' entry on a left-side contents list). One user pointed out that there was no site map or index to give the option for the user to see what information they would be accessing and from where. However, the other means of navigating around the site did seem perfectly adequate. All users were able to find appropriate information with regard to the set retrieval tasks, without any problems.

Information quality: Most users thought it of sufficient quality to use the site again and that they would recommend it to others. However, one user mentioned the fact that it was not clear from where the information provided has come, and another said that they would not recommend the site to a teenager because they felt it was geared more towards professionals.

Log Analysis

Processed log data¹⁰ was only available for analysis for the period February – September 2003. The log data (Figure 4) showed apparently high levels of use over the period. Over the nine month period 21,320,975 hits were made on the DrugScope server. However, (illustrating a problem working with processed data supplied by the ISP), actual page views, a more accurate indicator of use, tended to be much lower. These were in the order of 300-400,000 a month - a still respectable figure. An average of 4 pages was viewed per session, a session lasting approximately 4 minutes.

Figure 4: User Activity for survey period (logs)

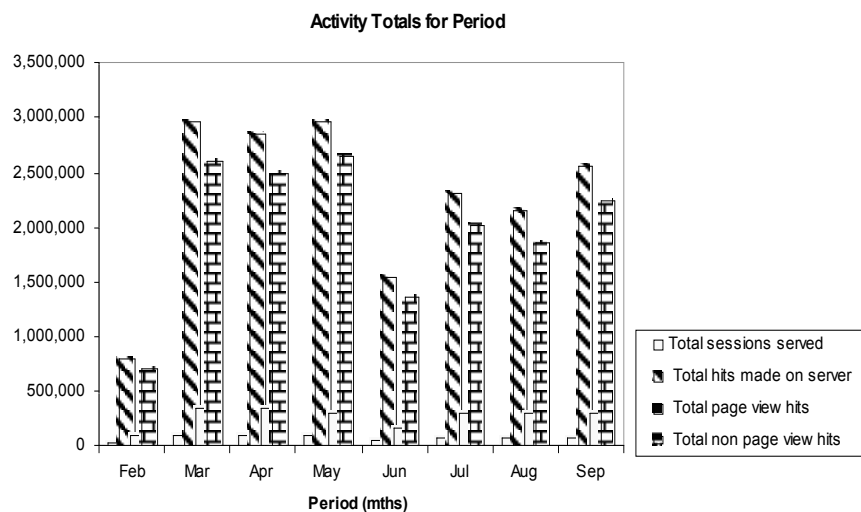
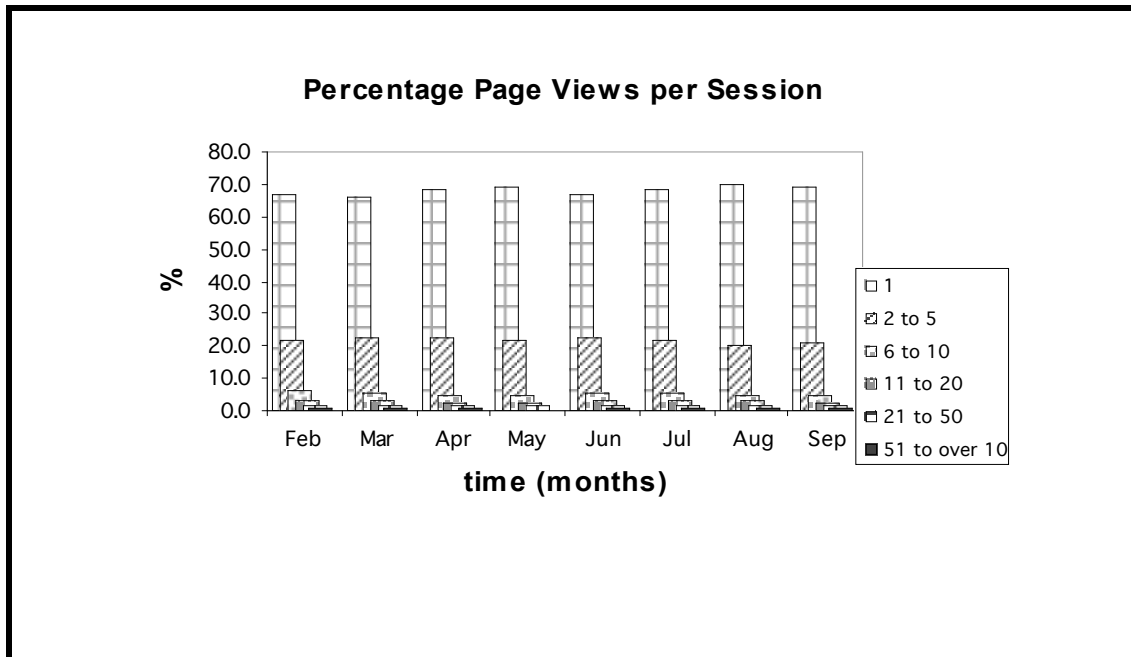


Figure 5 shows that approximately two-thirds of all users were what the researchers call 'bouncers' – they visited just one page before going somewhere else. Few people appear to be exploring the site to any depth; in fact only 11% viewed six or more pages. However, the latter figure may indicate that only this number of pages were required to fulfil users' information needs - an indication of the effectiveness of the organisation of the site and the ease with which information can be retrieved, as well as the specificity of the need. Indeed, as outlined, above, the site has very good retrieval facilities.

Figure 5: Pages Viewed per Session (site penetration)

¹⁰ ciber prefer to work with raw log data but they were not available



The most frequently visited pages are given in Table 5. As can be seen, 27% of all traffic directed towards drug information results page or 'hitlist' A news page is the next most popular page, albeit accounting for under 10% of the volume of traffic, followed by the drugsearch facility¹¹, These results match closely the questionnaire findings. It is important to note that the site uses active server pages (ASP) and because of how the log data was processed it was not obvious which page under each section was selected.

Table 5: Most frequently visited pages

Most frequently visited pages (directory details)	Page contents	% of Traffic
/druginfo/drugsearch/ds_results.asp	Search results pages	27.43
/news_item.asp	Unspecified news item	8.67
/home.asp	Site home page	7.92
/druginfo/drugsearch/home.asp	Drugsearch section (home)	3.05
/druginfo/drugsearch/faq_template.asp	Drugsearch FAQ page	2.62
/druginfo/home.asp	Drug information (home) page	2.17
/dat/contacts.asp	Contacts page	2.09
/query.asp	Search hitlist page	1.57
/druginfo/drugsearch/home2.asp	Drugsearch section (home) - as above)	1.53
/dbtw-wpd/exec/dbtwpub.dll	Page accessible to DrugScope site developers only	0.67
Note: None of the other pages making up the full list of pages visited accrued more than 0.6% of traffic, and so are not listed		

¹¹ This search facility is available from the 'Drugsearch' page, and is not the same as the main search box visible from all pages.

From other log findings, it is clear that in general people found the site via a search engine - as the questionnaire results also suggested. The top referring domains were google.com and yahoo.com and the top search engine was yahoo.com (google.com was not listed as a search engine, although it is not known why this should be so). Among the most frequent key words used on yahoo.com were drug, oxycodone, drugs, legal and treatment. Considering log and questionnaire results together, there appears to be evidence here that, perhaps unsurprisingly, users initially found the site from a search engine, but those who return, do so either having bookmarked the URL, or, less commonly, manually inserting it into the address box.

Summary

The DrugScope site was primarily used by people working in the drug profession and by policy makers. Log data also revealed acceptable usage levels of the site. DrugScope still needs to attract a wider range of users, such as friends and families of drug users and even drug users themselves.

There seems to be a general awareness of the existence of the site, in that there is a relatively high percentage of regular users, who either know the URL, have it book marked or they simply find it by entering "DrugScope" in their favourite search engine. Participants in the survey and the usability tests made no comments pertaining to the reliability of the information found on the site. This maybe indicative of the fact that a general statement can be found on the site, in the section on information about the organisation, which emphasises the organisation's commitment to authoritative information, and which boasts of publishing a wide range of reference guides, books and journals for professionals and the general public. It appears that this reassurance seems to have sufficed to the extent that no one felt the need to mention or question the authority of the information.

The majority of users said they were satisfied with the site. The general layout and presentation of information was found to be acceptable to all users. However, while no negative comments were made, a number of suggestions were put forward. An example was to have reports with graph and charts depicting issues such as the effect of drug abuse on teenagers.

Log analysis also confirms user perceptions of their behaviour, in that information about drugs was found to account for almost 30% of all traffic to the site. This is only to be expected, as the site states that it is about providing reliable information and widening knowledge. The log data also reveal that, per session, users are more likely to spend between 2 to 15 minutes viewing between 2 and 20 pages.

Case Study 3 - Eating Disorders Association

Issues identified by the site developers

Many issues were raised at meetings with EDA staff. These included those pertaining to:

- Anonymity of enquirer
- The provision of sensitive information
- Dealing with people in 'denial'

Anonymity, confidentiality: Many issues relate to the preservation of the enquirers' anonymity. For example, age information is required to tailor appropriate information to various age groups. Incorrect information by the user is, however, often given - staff reported that people often gave a false (or presumed, by their language or other clues to be false). Ironically, there are sometimes problems even when correct ages are given. This is because some people with eating disorders are affected mentally, to the extent that their mental age is lower than their real age. Writing style, vocabulary and other indicators reveal discrepancies but it is difficult to ascertain whether the mis-match is between stated age and correct age or between correct age and mental age.

Some people sending emails (or telephoning the service) may be suicidal. It is sometimes difficult reconciling a policy of anonymity with the desire and need to provide help and assistance. What happens, for example, when a clearly suicidal co-respondent wishes to remain anonymous, at what stage does the charity try to trace messages back to source and break its pledge, or ask a person who is dying for their contact details, in order to alert health services to provide urgent medical aid? This problem is starkly illustrated by the fact that 18% of sufferers do not survive the condition.

Finally, with regard to anonymity and confidentiality, the EDA, like most other charities, operates on a tight budget. It finds it difficult to cope, therefore with the international correspondence it receives as a result of its Web presence. To limit demand on its service from the US and other English speaking overseas Internet users the organisation advertises its English origin on several pages on the site. It also declines to answer queries from email addresses clearly identifiable as from overseas, although there is a problem with AOL users who have US based addresses but who maybe from the UK. Sometimes US users can be discerned from the language used (such as 'grade school' or 'sophomore') but generally, if there is any doubt about enquirers' origins, the organisation does its best to answer queries, in case they miss genuine UK-based service users.

The provision of sensitive information: The website contains pages written for particular groups such as the press and researchers, which the organisation does not wish to disseminate widely. This is because it contains information that might be considered more damaging than helpful both to sufferers and their carers. This includes, of course, mortality statistics. There used to be a password system to access this area, but this proved to be impractical. Now the pages are, one suspects reluctantly, included on the site.

Dealing with people in 'denial' or celebrating their condition: A big problem for the EDA is reaching people who have an eating disorder but who either do not recognise this, actively deny it or, in extreme cases positively celebrate it. There is also the inverse of this, whereby common eating 'fads' are mistaken, often by parents or carers, for disorder symptoms. Cases whereby mother of toddlers who, for example, refuse to eat anything but Marmite sandwiches were cited. The approach in both cases is to attempt to provide comprehensive and accessible information. However, with regard to the problem of denial or celebration, the EDA has had to do more than educate through its own website. It has actively lobbied

ISPs (Yahoo was mentioned by name) to remove the apparently substantial number of 'pro-anorexic' sites flourishing on the Internet. This does appear to be at odds with the nature of the Web.

One future feature of the site that will have to confront the problem of 'denial' is the planned message board. At the time of writing this is currently in the development stage¹² - the page set to host the messages currently advises 'visitors' to go to BBC Health site where there is a heavily used eating disorders message board. To pre-empt any problems a number of conditions have already been devised. These include to not expressing any of what may be described as 'pro-eating disorder' opinions. Messages will enter a queue before being posted, to be read and accepted or rejected by a member of staff in the role of moderator.

Inspection

[Pages inspected: <http://www.edauk.com/>; http://www.edauk.com/young_home.htm and links]

Information quality:

- Sources used / attribution

Some pages are not attributed at all. Attribution would not be necessary if the organisation produced the information itself, naming staff and the qualifications they had to do this. There is, however, no indication of this.

- Currency

Few pages are dated. The two mentioned above are not, nor are any of the top level pages (e.g. those on FAQs, 'How can I help' and other information pages) Interestingly, the 'Home page', which only has a brief introduction to the organisation and signposts to various other pages and sections, does have a date stamp.

- Hyperlinks: quality (NOT functionality)

The hyperlinks are all to very reputable organisations, and manageable in number. Organisations included are:

British Dietetic Association

Children's Society

NHS Direct

In each case, web links are accompanied by a short description of the organisation and telephone help numbers. The links are also grouped in themes (Children, legal issues etc.) for easy orientation.

- Breadth / depth

The most extensive area on the website is 'Student information', which has a 900 word summary on eating disorder statistics and similar on the effects of the media on body image. There are a number of shorter accounts, such as information on men's health. The site does not set out to be a comprehensive information resource, and directs serious students to its bookshop and to other appropriate websites.

Accessibility/usability

¹² The message board commenced as this report was being proof-read for submission.

- the functionality of different platforms/formats, multimedia, hyperlinks

The site consists of text with a few images for interest (e.g. a 'Graffiti board' with handwritten advice drawn on). There were no problems opening pages itemised in the menu. However, researchers found instances of broken internal hyperlinks. On the page: http://www.edauk.com/sub_young_recovery.htm it invites users to 'Click on the questions to reveal an answer'. However, the questions did not appear to be hyperlinked when accessed the first time. They worked, however, on a second inspection. Similarly, users are invited to click on images on a page entitled 'Where to get help' (http://www.edauk.com/sub_young_where_to_get.htm), to access further information. However, these links appeared to be inactive on first inspection. Subsequently it was found that a new, small window opened on activation, with both this and the main window showing a linked page.

Another point with regard to links, the site uses the same phrase 'click here' in several places on the same page to access different URLs. Although this may seem acceptable, as there is always accompanying explanatory text, it is generally recommended that the different phrases are used inside the link itself. This is because of the way some text or screen readers, used by people with visual impairments, work.

There are instances of images that do not have accompanying text equivalents. The most serious of these is the main menu list down the left-hand side of the page. There are other instances, however: 'Join, shop, donate' image and the page header 'EDA: Home' itself. The PDF fact sheets in the Young people section (such as that on bullying) are made up of scanned leaflets rendered as images. It is important to have text equivalents for users who may rely on text readers.

In the page coding, absolute sizes are used instead of relative (%) ones. Relative units, such as percentages, ems (a unit of width relative to a font size), etc. are automatically scaled when the base unit is scaled. This allows the text to change size and the page layout to flow without creating extra space or running off the edge of the screen or paper.

Information accessibility:

- Readability level (considering the target audience)

Pages tested:

http://www.edauk.com/sub_young_what_is_an.htm;

http://www.edauk.com/sub_young_are_you_worried.htm and others)

fell within the 7-8th Grade (12-14) year readability level, and as such are easily readable for the target audience (notwithstanding EDA concerns that some people with an eating disorder do not develop well mentally and can fall behind in mental age. A page tested in the 'Student information' section of the site gave a score of 42, which was 12th Grade, or 'Difficult'. However, this section contains academic reports and writing for the serious scholar, and so one would expect such a reading level. Indeed, it is indicative of how the site varies content to appeal to its different audiences.

- Information retrieval

There is an unchanging main menu on the left side of each page, and sub-menu entries in each section on the right of each page. There also some links within the

text to related pages (for example, to illustrate a point on the 'What is an eating disorder' page, users are invited to follow a link to 'Tessa's story'). The site is, then, well organised and user-friendly in respect of finding information.

Presentation issues related to accessibility:

- Use of background colours and texture
- Signposting, with icons or other symbols
- page length, layout, and typography
- Use of images
- Multimedia feature

Pages were tested using Bobby criteria. This recommended a bigger contrast between the text and background colours. The signposting is good, with the fixed left-hand menu column helping to orientate users (although menu entries were composed of images, which may cause problems for the visually impaired as noted earlier in this report).

Page length is small, and the information in very manageable chunks. However, those choosing to print pages for a more permanent information source may have difficulties with regard to sizing, because of the absolute units used in the page coding, as identified earlier.

The use of images has been discussed earlier. With respect to aesthetics and the appropriateness of images an attempt has certainly been made to liven the appearance of the site, and it is more interesting than simple text reading to pass the cursor over an image to reveal information 'underneath' (although, again, it might be useful to have an equivalent page with text-only).

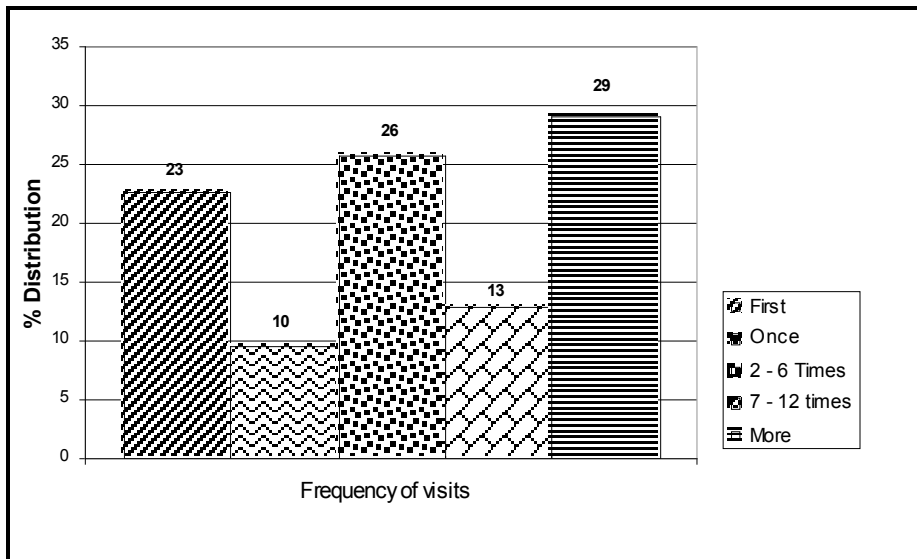
User studies

User survey

There were 42 responses obtained from an EDA questionnaire survey, with 31 usable responses after filtering the data. Ninety four percent of respondents were female and the age range was under 16 to 55 years. The modal band was 16-35, with 64% of respondents being within these ages. Eighty-one percent of respondents had qualifications of GNVQ/NVQ/GCSEs/ O Levels or higher.

Nearly a quarter (23%) of visitors were using the site for the first time and 10% had used it once before (Figure 6). Nearly a third (29%) of visitors may be classified as quite frequent users having indicated that they have used the site more that 12 times.

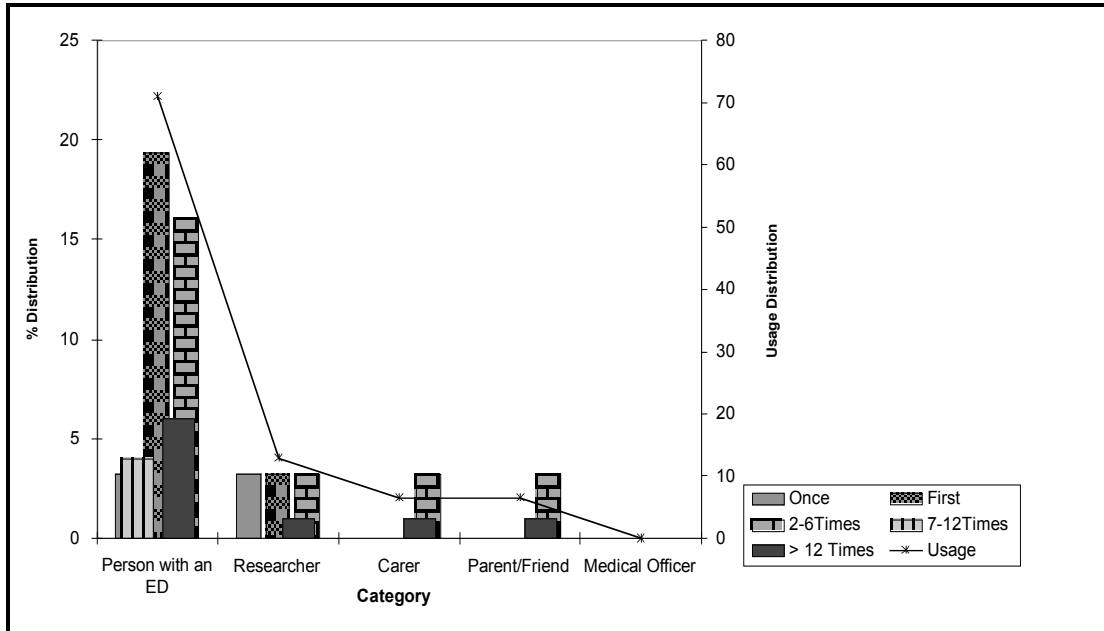
Figure 6: Frequency of visit to site



User Type and Information Sought

Response from the survey indicated that people suffering from an eating disorder were the more frequent users of the site, accounting for 71% of all users (Figure 7). This is quite different from the DrugScope site, where professionals were the main users.

Figure 7: Frequency of visit per user group



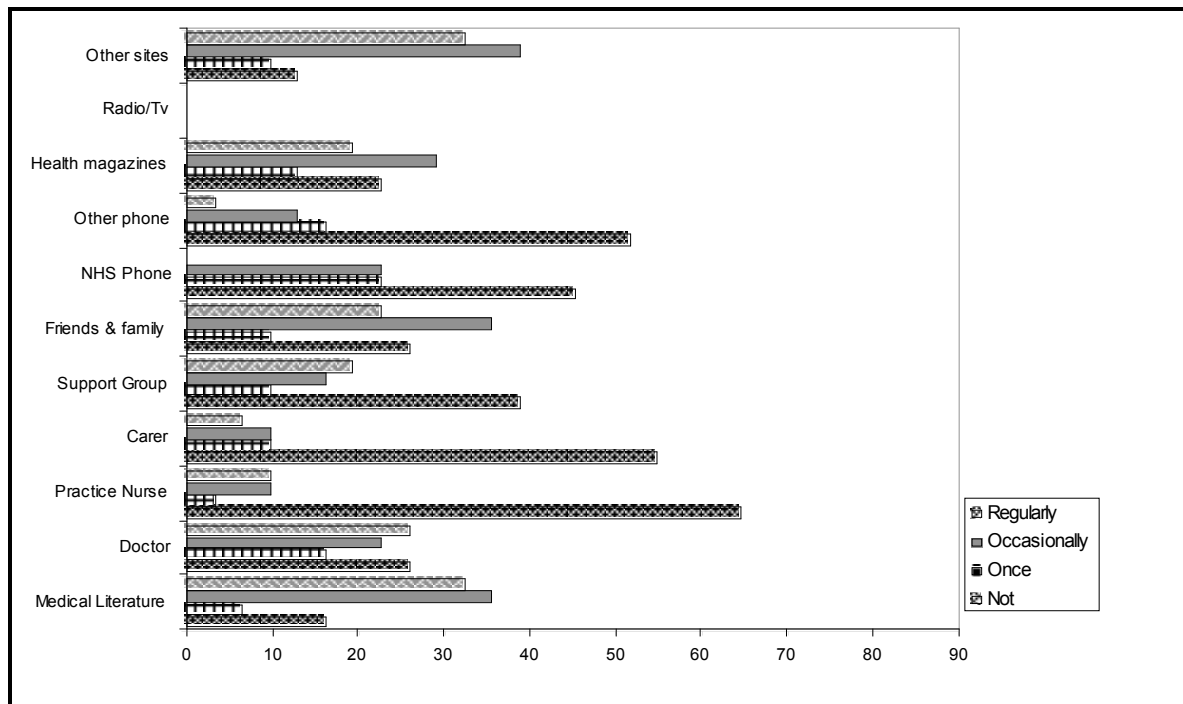
Over 50% of users expressed an interest in obtaining support information and anonymous information about their condition. The implication here is that the anonymity of the information source is one of its attractions. This is borne out by other findings, discussed below, in which users showed a reluctance to engage health professionals with their problems. (Figure 8).

Nearly half of all respondents (48%) indicated that they did not find the information for which they were initially searching. However, indications are that they did obtain other pertinent information from the site. This was evident because 58% of users said that, although the information they acquired was not what they originally sought, it was nevertheless useful. Respondents were asked to indicate how they responded to the information found. Fifty eight percent answered this question, giving the following actions undertaken as a result of information found on the site:

- Visiting other links (89% of respondent to this question)
- Called the helpline (83%)
- Visited their GP to get help for their condition (67%)
- Joined (and regularly attend) support group meetings (44%)
- Shared their problems with partners and family members (11%)
- Ordering recommended texts (6%)

Other information source: Users were asked to indicate the importance of obtaining information from various sources other than the EDA website, and their frequency of use, in order to put their use of the EDA site into context and to look at the importance of various information types - such as consulting health professionals, magazines etc.

Figure 8: Information sources used



The most interesting finding was the relative lack of use of health professionals and health care organisations to obtain information. This tendency can be best

¹⁴ Example: 'Your best friend Lilly is 17 and is trying desperately to become a model. Although she is slim and attractive, she has almost stopped eating. She has fainted a few times at school and has revealed she is trying desperately to remain under 8 stones or less. What information can you find about the significance of Lilly's habits?'

explained by the preference of people with eating disorders users, expressed above, to be anonymous in their information seeking.

Usability Studies

Participants in this usability study were heavy Internet users, spending an average of forty hours per week on the Internet, both for recreational surfing and conducting research for their studies or employment.

Presentation and Content: Content was reported to be informative and easy to read (as found by the readability test carried out by the research team). There were differing views about the presentation. One user felt that as the site provided what he felt was pertinent information, it was a pity it was not more visually appealing 'I don't like the pages and pages of text'. This remark was made whilst she was looking at the more information-intensive 'Student information' section. On looking at the other sections of the site, she appreciated the images and the question/answer format. Another participant criticised what she felt were the insufficient contrast between colours - a view shared by 'Bobby'.

Menu Structure and Navigability: One user of the site thought that the menu was poorly constructed, because it contained too many entries. He felt it was best to have a hierarchical structure. This would facilitate ease of use by keeping the root directory small and nesting related items into submenus. However, he acknowledged that as the information provided was not spread over many pages, the flat construction of the menu used did not impact too negatively on the navigability of the site. Another participant felt that a search facility on the site was needed in order to aid retrieval. In fact, there is a search engine, but it is only accessible from the 'Student information' pages (and so, presumably, only searches that section).

As with the other organisations' websites evaluated, participants in the user study were able to answer the scenario-questions¹⁴ without difficulty. Participants used the section 'What is an eating disorder' section almost exclusively. In fact, as one user pointed out, the section actually offers far more information than just answering the 'what is ...' question. There are also pages in the sections on 'Treatment for an eating disorder' and 'Telephone counselling programme for people with bulimia', plus 'Information for carers'. A case may be made here for giving the section a more suitable name - or dividing the section, so that the 'What is ..' questions are answered in one section, and information about treatment etc, in another.

Log Analysis

EDA log reports were characterised by their lack of data and inconsistency and the following results should be read in that light. There was an average of 964,527 hits made on the EDA server over the period January – October 2003 (excluding July, which was missing). The number of visits over the period represents only 2% of the total hits made on the server with an average of 13,239 unique visits. On average 55% of all visits lasted less than 30 seconds - classic 'bouncer' behaviour - and only 2% lasting over 1hr.

Taking use for the month of October, it rises gradually from 9am then peak between 2 – 4 pm before gradually falling again. The top most frequently visited pages are shown in Table 6

Table 6: Most frequently visited pages (EDA)

/cgi-bin/eda/messageboard/jump_forum.cgi
/what_is_eating_disorder.htm
/young_home.htm
/getting_help.htm
/student_info.htm
/default.htm
/fighting_anna.htm
/self_help.htm
/whats_on_whats_new.htm

This table shows that people do seem to be looking at the site for information and help, with the page ‘What is an eating disorder’ high on the list. However, perhaps the most interesting result here is the use of the message board. This is a new innovation from the EDA team, but already it is attracting more ‘hits’ than any other page. However, despite this, no messages related to eating disorders have actually been posted (as at 19.01.04), although a section on ‘message board info and feedback’ has attracted traffic (albeit one message and a reply) on people’s personal experiences with an eating disorder. This seems to represent another example - highlighted throughout this report - on the unwillingness or reticence of people to engage in dialogue about their condition.

Summary

The EDA users seem to exhibit a particular pattern in accessing information from the site as most users implied they used the site mainly because they can access the information sought anonymously. There is an element of this with all the case study sites examined, but it seemed more pronounced with this site. There was, for example, further admission by users that they obtain information from impersonal sources such as medical literature or other sites, again emphasising the need to acquire information anonymously. Most users participating in the survey revealed little about the kind of information they sought and only a handful actually commented on how the information helped or how they used the information found. However, a key finding was the fact that those who said they had acted on the information found, also reported to have used their doctor and or friend and family as a result of the EDA information resource. This seems to suggest that persons affected with an eating disorder will first have to come to terms with their own affliction by researching information anonymously, before seeking or accepting the help needed.

Case Study 4 – Rethink @Ease

Issues identified by the site developers

Producing the site raised issues for the @ease team that were common to other sites being evaluated for this study. The main concern of the site developers was to

try and overcome two related problems attached to the condition: stigma and isolation. Staff at the organisation felt that there was still little understanding of mental health issues among the public at large, and a stigma attached to having a mental illness or problem. This meant that people who might be sufferers felt isolated and helpless - the very feelings that would exacerbate any mental condition. To combat these difficulties, the charity has already changed its name to 'Rethink'. The 'National Schizophrenia Fellowship' as a title included a medical term 'nobody understood', and word ('Fellowship') that had too many religious connotations for young people. 'Rethink' is not only a more dynamic name, but encourages people to reconsider their ideas about mental health.

The naming of the website '@ease' continues this process. As with Winston's Wish, and the Eating Disorders Association, there was a recognition that those using the site might be doing so reluctantly and with a certain amount of trepidation. Thus it was imperative to be both interesting and positive. Unlike those other sites, @ease does not have the problem of trying to cater for a wide potential user group that includes carers, older sufferers etc. The site is completely separate from the corporate 'Rethink' one which does cater for these other groups. Indeed, there is no link to the main site on the menu page - one has to go to the 'Contact us' page for one - and even this is buried in a section on volunteering, rather than as an alternative source of information on mental illness. There is also a link on the Student Resources pack, but without an explanatory comment indicating that Rethink is the parent organisation. Similarly, the Rethink homepage has a link to '@ease', but also without any indication as to what '@ease' is.

An important aspect of the nomenclature is that the developers hope it will encourage use even in public places such as Internet cafés, student union bars or libraries, where there may be friends or other prying eyes around. Within the site, use of medical terminology is minimal and 'undue negative portrayal of mental illness' avoided. Nevertheless, it seems to us that such an almost total separation of the '@ease' site from the main Rethink site may be counter-productive. It gives the impression that the organisation would rather not advertise itself to its younger audience, in turn implying - exactly what it is trying to avoid - that there is something negative about mental illness. Also, of course, it may be that those who use '@ease' may also find interesting and useful information on the main site, and vice versa. Although this report points out (see below) that the reading age of some of the material is a little difficult for the younger user, it may well be that carers and others use the site who could gain more from the main Rethink pages, but who simply do not spot the link.

Inspection

[Pages inspected: <http://www.at-ease.nsf.org.uk/siteindex.htm> and links]

Information quality:

- Sources used / attribution

The site does not attribute any of its information pages. However, it does provide links to appropriate organisations, and it might be considered implicitly that information was sourced from these, such as the British Association for Counselling, which gives information on counselling and access to registered counsellors; Turning Point, which offers rehabilitation, counselling and information

for people with drug, alcohol and mental health problems; and the Samaritans, a 24 hours a day confidential emotional support helpline.

- **Currency**

The site does not date its entries. However, although always advisable to date content, in the case of this organisation, the information offered does not become obsolete to the extent that it does in the world of drug legislation and medical advances, for example. Content on topics such as 'What is mental illness' is unlikely to need revising for many months, if not years.

- **Hyperlinks: quality (NOT functionality)**

The site provides an excellent list of contacts under each of a large number of headings, ranging from 'Accommodation' and 'Aggression' to 'Sexual problems' and 'Training'. Under 'Alcohol', for example, links to Alcoholics Anonymous, Turning Point and other organisations are listed, together with a short explanation about each entry.

- **Breadth / depth**

Mental problems can manifest themselves in a great many ways, and have a variety of causes. The breadth of information provided reflects this. Topics are not covered in great depth, but the links enable site users to pursue their enquiries, and there is also a 'Students & Mental Health Resource Pack' which is more comprehensive.

Accessibility/usability

- the functionality of different platforms/formats, multimedia, hyperlinks

Apart from the cartoon story (<http://www.rethink.org/at-ease/movie.html>), the site is very simple and, consequently, easy to use. The story, however, whilst pleasing those who took part in the usability tests, is harder to follow than the other pages. The 'Bobby' system rejected these pages on the grounds that images required alternative text. The instruction to 'click on people, dog or numbers' was very small on the browser used, and it is not made clear what the result of activating these images would be.

Information accessibility:

- **Readability level (considering the target audience)**

Four pages were tested for readability, three from the general information pages, and one from the Resource pack. The three scored between 61 and 67 on the reading ease test and equivalent grades between 8 and 9 on the Flesch-Kincaid Grade Level, being generally readable by 90% of 13-14 year olds. The Resource pack page was, not surprisingly, harder to read, according to the tests, scoring 36 (and Grade 12) and thus considered 'difficult. Given that the younger members of the target audience seem to be catered for in the general information pages, this may not be considered as a major problem with the site. A possible recommendation would be to move some of the resource content to the main 'Rethink' site, which is not targeted specifically at young people, and include suitable links to it.

- **Retrievability, whether through hyperlinks or search facility**

There is no search facility, but the home page has a comprehensive menu list, as do each of the main sections on the site. There is a section entitled 'Info A to Z, which has 94 entries, arranged in two columns, one for those considering they do

have a mental condition, and those who are carers or supporters of someone who has such a condition.

Presentation issues related to accessibility:

- Use of background colours and texture

An issue flagged up by 'Bobby' was the lack of contrast between the background and the text colours, although the black on light green would not present a problem for the great majority of users.

- Signposting, with icons or other symbols

One problem was the use of images as hyperlinks without accompanying text (for example, the top banner menu appearing on information pages ('What is @ease?', 'Contact us' etc.) which can be confusing for those with screen-readers, although, as noted earlier, even with an 'alt' tag.

- Use of images

The cartoon section provides a lively alternative to plain text, but there are usability issues with the pop up text boxes, as mentioned earlier. Other images appear at various pages, but are not intrusive and do not detract from nor hinder the reading of text.

- Multimedia features

There are no multimedia features on the site.

On a general point related to presentation issues. As with the EDA site, described above, sizing and positioning was coded by absolute (pixels) values, rather than relative (% values).

User studies

User survey

Only 5 responses were obtained from the @ease site. This is surprising, as the questions, and the advertising of the questionnaire, were very similar to those posted on to other sites surveyed (that on the Drugscope site attracted 150 respondents). However, due to reasons beyond the control of the researchers, the survey was only available to users for a period of one month. With the exception of one under 16years old, all other respondents were educated to at least GNVQ/NVQ/GCSEs/ O Levels. No indication of occupation was given nor did they state under what capacity they were accessing the information. Two were first time users while the others had previously visited the site 2 – 6 times. Two people found the site by conducting a general search while the others reported to have linked from another site.

The information users sought from the site was quite diverse. This included:

- Recent developments in brain anatomy
- Help in dealing with situations at home
- Mental health in children
- Mental health, mind body and spirit

One first time user was quite impressed with the site; describing it as "*the first and the best*" he has seen. Having struggled with mental health problems for over 13 years, this respondent was delighted that information about such a highly stigmatised illness was available online. He also stated an interest in becoming a

member of the organisation and volunteering to help others. However contact details revealed that he resides in the United States, not only a clear indication of the global nature of the Net, but of the invisibility of geographic barriers.

Four of the five users found the information they were seeking. They all reported to have used all the main areas on the Rethink site, in addition to using the @Ease section. It was also important to note that all respondents indicated they utilised all available resources when seeking information about mental health – not just that from Rethink. This also includes the sourcing of mental information from medical personnel, books and other publications. Other web sources used were www.carersonline.org.uk, BBCi and the Children's Society.

One respondent thought the best thing about the site was its “friendly feel”, although how the site demonstrated this was not described. Another, however, indicated that accessibility was a problem, again, however, failing to state more specifically why this is so. Three of the five users thought the links available on the site to other resources were excellent. Finally, respondents indicated they found the @Ease site by conducting a general search, rather than from prior knowledge of the organisation or the site.

Usability test

Participants for this test spent an average of fourteen hours per week on the Internet, using the email facility and general surfing. They tended to use the Internet for fun and entertainment.

Presentation and Content: The general perception was that the information provided on the site was useful and interesting, the general appearance of the site pleasant, particularly with the portraits of the characters who appear throughout the site. The inclusion of annotated images on other pages was also appreciated and added some diversity to the site. Links that were provided to other sites where information and support can be found were also well received by participants.

Menu and Navigation: The menu on the index page was thought to be good, however the entries were said by two participants to be too ‘wordy’. The lack of a site map and a ‘buried’ sub-index with no search facility, in the words of one participant, could make searching for specific information a difficult task. The set retrieval tasks¹⁵ were undertaken almost exclusively with reference to the ‘Students and mental health resources’ pack, which has pages on ‘What is mental illness’, ‘Support for students with experience of mental health problems’ etc., each one containing a large amount of factual information (around 2,500 words) and was easily navigable, with its own simple menu set out like book chapters. The A to Z

¹⁵ An example of which is: ‘Your best friend Tina with whom you share a flat has been going through quite a few personal problems. She constantly complains about her boss and how much she dislikes her job, she attends classes in the evenings and is constantly struggling to keep up and, worst, she thinks her boyfriend of 5 years is cheating. You tried to lend a listening ear and offer some guidance but now you too feel emotionally and physically drained. Tina has become quite emotional and cries constantly and seems forever depressed. Her entire personality has changed and you are afraid she might breakdown completely. What information can you find on the site to assist you both?’

menu was not consulted, and the lack of search facility did not seem to be a problem.

Log data was not forthcoming for the @ease site within the timescale of the project, just data for the Rethink site, which the team were not evaluating.

Summary

The @ease site appears to have gone some way in providing information for its potential user community, and (apart from the resource pack, which is aimed more at the researcher or student community) the text is easily accessible in terms of readability. The effort to 'de-stigmatise' mental illness is clearly an admirable one, but the present writers would question whether the almost total divorce from the main 'Rethink' site helps this cause. Interestingly, survey respondents had all consulted the main site (in addition to a wide variety of other sources).

Although not many respondents participated in the user survey, the few that did indicated that they were pleased with the information content and made good use of the information. Overall, the site seems to have made an impact on users, in that the few who responded to the survey all expressed various levels of satisfaction with the site. However, certain design issues would have to be taken into consideration should further development of the site be considered. The site illustrates very well the dilemma web developers have in trying to maximise accessibility, by keeping things simple, and at the same time making the site dynamic and interesting - in this case by using cartoon characters and telling a story which highlights the issues. Of course, only a minority of users will have impediments making it difficult for them to use the site, so having text-based alternative pages, rather than stripping the site of these features, may be the answer.

Overall this was an unsatisfactory case study with little help forthcoming from the host organisation, and what was provided was provided (too) late.

5. Conclusions

In general, the case study sites we have evaluated appear to have been designed reasonably well, met a need and their use leads to positive outcomes. Where there are problems we have made suitable recommendations. But what is very clear is that few Fund sponsored organisations are really benefiting from robust user input/evaluation, either in the form of interviews, questionnaires or, more importantly, logs – the CCTV of the Internet. None of the organisations appear to be obtaining valuable intelligence as a result of their foray into a digital and very challenging environment. Indeed, it has proved difficult obtaining user data ourselves, as the mechanisms for user evaluation are not in place, and in some cases, an evaluation culture appears missing altogether. As a result we have not been able to achieve all we wished.

We have also found that in some cases it has been the users themselves - the information seekers - who have been reluctant to offer their views and experiences. This highlights two issues. First, it is indicative of a certain reticence on the part of vulnerable people to engage in dialogue - probably the very reason why they might choose the anonymity of the Internet (or, indeed, other appropriately anonymous source) to consult. Second, it demonstrates the particular importance of computer logging in the special environment in which the Diana funded organisations work. Logs here tell the stories that users themselves are reluctant to discuss. It is a pity, therefore, that only two organisations of all those surveyed stated that they used web statistics to monitor activities on the site. Of course, users can only retrieve the information that exists on any particular site, and whilst logs can indicate the extent to which individuals come back, only engagement with people themselves can reveal opinions about the information presented: its relevance or interest, and the impact it has on those requiring it. Thus the importance of the 'duel track' approach of using logs and human input to create a rich picture.

So, to say that the roll-out of dynamic digital services, that have in them the capacity to change/improve (even ruin) the lives/health of vast numbers of people, is rarely accompanied by a robust user evaluation, which provides organisations with a powerful (and continuous) grip of what is going on would be to exaggerate, but not to exaggerate by very much. As alluded to above, it is not easy to obtain self-report data in an environment where users are seeking anonymity because of the sensitive nature of the data for which they are searching. Of course, the Web offers high levels of anonymity and hence its popularity. However, the absence of user input to web design, content selection and service choice, must be regarded as being potentially very dangerous for all parties involved.

Many voluntary organisations do not really understand the significance or implications of having moved their services into a digital environment. The migration has huge implications. A lack of monitoring and evaluation mechanisms and, more importantly, a failure to recognise why they are so important in the information fog that is the Internet, has meant that these organisations are not fully cognisant of the fact that their community has not only grown enormously, but that it is also probably very different in character and behaviour to that to which they are accustomed. In the digital environment that is the Internet there is huge digital choice, which leads to a form of 'information promiscuity' that Diana-funded

organisations will have to live with and cater for. They are also ignorant, like so many others, of the new, but key concepts, like 'search disclosure' (Nicholas et al 2003), and 'digital visibility', (Nicholas et al 2002) that are so important to understanding how to operate in the new digital environment.

'Search disclosure' is a concept that assists in the understanding of the tendency of users to moderate their digital information seeking behaviour as a result of the perceived anonymity afforded at the point of searching and information consumption. Differences elicited by computer logs, in the way people search for health information on touch-screen kiosks, the Internet and digital interactive television have been shown by interviews and questionnaire surveys, to result partly from the anonymity of the place in which the search is conducted. 'Promiscuity' is a typically characteristic form of online behaviour where users 'bounce' from site to site, seldom penetrate a site to any depth, tend to visit a number of sites for any given information need and seldom return to sites visited. They tend to 'feed' for information horizontally, using search engines rather than bookmarks. Whether they search a site or not depends heavily on 'digital visibility'. This relates to the positioning of information within an electronic environment, be they pages on the web, digital TV channels, etc. Our work has shown that the positioning of information pages has a significant impact on, and is therefore a key determinant of, usage. Pages for which access requires the negotiation of two or three levels will be accessed far less than those available by activating just one link. Content may be thought to be king – but in the data fog that we find ourselves in if that content cannot be accessed, its quality, relevance and presentation are as good as wasted. Logs provide the opportunity to discover whether there is a problem with visibility.

These manifestations of the new environment change the information landscape fundamentally. Yet many information providers, because of lack of user knowledge and input or use of web statistics, appear to soldier on as though nothing has happened. The digital presence of an organisation raises questions about the organisation's remit, objectives etc and the services they should be providing on the Web. In fact, the supposed tail (the Web) will come to wag the dog (the Charity) in the not too distant future.

For charities and voluntary organisations of the kind that the Fund sponsors, the Web offers wonderful opportunities. Indeed, you could easily argue that the Web, with its enormous reach, multi-media character, youth popularity, anonymity and relative low cost, offers more to charities than any other organisations, but with the possible exception of Mencap, they do not appear to be taking the opportunity. Largely because they do not understand the digital consumer environment they have entered, and are not even attempting to understand it. The Fund, by commissioning this project, have already done something positive in alerting the community to the problem, but more has to be done in ensuring the community establishes robust mechanisms for user input. No best practice model has been identified, so maybe an organisation seeking funds should be persuaded to set up the necessary mechanisms from the very beginning and then the results can be reported to the rest of the community. This would be a hugely strategic piece of work, which could be of enormous importance in piloting charities and voluntary bodies along what is a very bumpy digital road. Surely no one would say that the

Web is not the future for this sector, but something more strategic needs to be done about it.

Finally, by its very nature this could only be an exploratory, pilot investigation, therefore the negative tone of many of the comments and the disappointment of finding so little robust data should be regarded in this light. Undoubtedly, the most positive thing to be taken out of the study is that we have identified a major failing in involving the user the digital consumer in the design, construction, content and evaluation of the websites in this sector. We have also pointed out a methodology (log analysis) that should help overcome the problems of getting user feedback in an area cloaked with confidentiality concerns. The project should be thus seen as a first step towards the most important goal of putting the user/consumer at the heart of the digital information/advisory enterprise.

6. References

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7. Appendices

Appendix 1: Organisations contacted for Diana questionnaire

Learning Disabilities (3)

<p>Organisation</p> <p>Association for Residential Care (ARC)</p> <p>http://www.arcuk.org.uk</p> <p><i>Project area: UK-wide, organisation based in Chesterfield, Derbyshire</i> £231,495 over three years to develop and promote a resource and information service for young people with a learning disability from a Black or minority ethnic background.</p>
<p>Citizen Advocacy Information and Training (CAIT)</p> <p><i>Project area: UK-wide, organisation based in London</i> £247,875 over three years to provide an independent voice for young people at risk and with learning disabilities. The project is also aimed at helping citizen advocacy organisations provide a service to young people to ensure that they have appropriate services to make the transition from school to adult life.</p>
<p>Who Cares? Trust</p> <p>http://www.thewhocarestrust.org/</p> <p><i>Project area: England-wide, organisation based in London</i> £150,000 over 18 months for a project to develop and manage the Employability Plus project to improve training and employment opportunities for YP with learning disabilities.</p>

Bereavement (7)

<p>Bibini Centre for Young People</p> <p><i>Project and organisation based in Manchester</i> £119,500 over three years for counselling and play therapy for black children and young people who have experienced loss or bereavement, many of whom have been in local authority or foster care.</p>
<p>Acorns Children's Hospice</p> <p><i>Project and organisation based in Birmingham</i> £212,000 over three years for a project that aims to provide a comprehensive network of support to the siblings of life-limited children using the services of Acorns Children's Hospice</p>

<p>Child Bereavement Project (c/o National Children's Bureau)</p> <p>http://www.ncb.org.uk/cbn/directory/all_listing_region.asp</p> <p><i>Project area: UK-wide, organisation based in Trent, Nottinghamshire</i> £221,000 over two and a half years to enable CBP to develop a national strategy, and to establish and promote national standards and good practice, for child bereavement services in the UK.</p>
<p>Cruse Bereavement Care</p> <p><i>Project area: Manchester, organisation based in Richmond, Surrey</i> £316,000 over four years to deliver an accessible bereavement service aimed at boys, deaf or hearing impaired and disabled people, though not excluding girls.</p>
<p>The Child Bereavement Trust</p> <p>http://www.childbereavement.org.uk/</p> <p><i>Project area: UK-wide, organisation based in High Wycombe, Buckinghamshire</i> £159,000 over three years to provide training for healthcare professionals on the needs of families who have lost a child.</p>
<p>Road Peace</p> <p><i>Project area: UK-wide, organisation based in London</i> £60,000 for an infrastructure and capacity-building grant.</p>
<p>42nd Street</p> <p><i>Project and organisation based in Manchester</i> £206,936 over five years to develop services specifically for Black young women who are experiencing loss or bereavement, many of whom will be in or leaving care.</p>

Mental Health (9)

<p>Albert Kennedy Trust</p> <p>http://www.akt.org.uk/</p> <p><i>Project area: UK-wide, organisation based in London</i> £204,363 over three years to provide safe and supportive homes to lesbian, gay and bisexual teenagers who are homeless or living in a hostile environment.</p>
<p>Chinese Mental Health Association</p> <p><i>Project area: London-wide, organisation based in London</i> £255,161 over three years to fund a Chinese youth counselling, family therapy and parenting project in London,</p>
<p>Maya Centre</p>

Project area: London-wide, organisation based in London
£50,000 over one year for a needs analysis to ascertain the requirements of a therapeutic support service targeted at young mothers who are at risk of developing mental illness.

Edinburgh Young Carers

Project and organisation based in Edinburgh
£123,636 over three years to fund a preventative intervention programme for 90 young carers who are looking after a family member who is ill or disabled and are ..

Women in Prison

Project area: England-wide, organisation based in London
£104,412 over three years to extend work with young women in prison with mental health issues by providing appropriate referrals on release to supportive services.

Leap Confronting Conflict

Project and organisation based in Islington (London)
£295,330 over three years for the development of a three-year action-research project addressing the growing social problem of youth gangs and territorialism in the UK.

Shaftesbury Homes and Arethusa

Young Minds

<http://www.youngminds.org.uk/>

Children's Express

£105,282 over three years to bring together a diverse group of marginalised young people who have, or are at risk of, developing mental health problems by providing journalist training and support.

Incare (3)

British Agencies for Adoption and Fostering

Project area: UK-wide, organisation based in London
£210,557 over three years for a project offering young refugees in local authority care and those looking after them, the opportunity to explore the issues affecting young refugees in order to inform and improve social work practice.

ChildLine/National Youth Advocacy Service

Project area: UK-wide, organisation based in London
£299,000 over three years to publicise Child in Care line and expand its hours of operation.

Family Rights Group

Project area: England-wide, organisation based in London

£17,181 over two years to produce a Good Practice Guide for social work professionals who work with black and minority ethnic young people in care,

Prisoners' Families (4)**Young Voice**

Project area: England-wide, organisation based in East Molesey, Surrey

£49,490 over two years for an action research project collecting first-hand material from young prisoners about their experiences and difficulties regarding parenting.

ADFAM National

Project area: London wide, organisation based in London

£108,310 over three years to help those with a family member in prison for drugs offences. It will provide family support sessions during prison visiting

National Council for the Welfare of Prisoners Abroad

Project area: UK-wide, organisation based in London

£35,000 over one year for the development of a family support service that targets the needs of young people between 12 and 18 whose parent or prime carer is imprisoned abroad.

Prison Reform Trust

Project area: UK-wide, organisation based in London

£234,524 over three years to undertake parent education and further post-release support work with young people (up to 25) who are parents and currently serving custodial sentences.

Refugees and Asylum Seekers (4)**Roma Support Group**

Project area: London-wide, organisation based in London

£142,748 over three years for a project for young Roma refugees aimed at combating social exclusion and promoting a better quality of life.

National Information Forum

Project and organisation based in Westminster City (London)

£178,270 over three years to produce and disseminate self-help guides for newly arrived young asylum seekers, sign-posting them to relevant service-providers. It will be produced in relevant community languages.

PhotoVoice

Project and organisation based in London

£39,635 over fifteen months for a self advocacy project, providing photographic and documentary training, in partnership with Save the Children, for young refugees in London.

Save the Children Fund

Project area: England-wide, organisation based in London

£292,652 over three years to develop an England wide network of self-advocacy groups for 200 young asylum seekers and refugees called 'Brighter Futures'. This follows on from a pilot project supported by the Fund.

Appendix 2: Questionnaire to all organisations

Princess Diana of Wales Memorial Fund Funded Projects Questionnaire

- Question 1. How has the use of your website helped your organisation fulfil its original aims? Any examples would be useful.
- Question 2. Do you have any evidence, or do you feel that the site has changed the nature of the demand/audience etc with regard to your charity and its services.
- Question 3. Were there any specific design issues that caused problems in the design of the website, with particular regard to the particular user group to whom the site is aimed? How were these problems resolved?
- Question 4. Have you undertaken any 'in-house' evaluation regarding the impact and success of the website? If so, what has this entailed, what have been the results, and how have the results informed your work?
- Question 5. Do you have any formal mechanisms for obtaining feedback from users of your site? If so, what (online or paper questionnaire, mailto link etc).
- Question 6. Would you have any tips for other organisations that wish to develop their websites? Please answer with regard to any aspect of this topic:

	COMMENTS
content	
navigation/structure	
attracting users	
cost implications	
communication with users	

- Question 7. Whom did you consult with regard to the design and development of your website? This may be in terms of content, navigation/structure, or appearance.

IMPORTANT!

As some of these questions may be difficult to answer briefly, we would appreciate it if you can be contacted further via email (or telephone) so we can clarify any points you have made.

Phone contact: _____

Appendix 1: Sample of online questionnaire

[Note that the online formatting included drop-down menu lists and radio buttons. The following shows only the questions, and not the format of the survey]

DrugScope User Questionnaire

Your input is vital in the evaluation of this site. Kindly assist by responding to the questions below:

1. How often do you visit the site?

- First visit
- Once
- 2 - 6 times
- 7 - 12 times
- Over 12 times

2. Have you used the Drug Information section of DrugScope?

- Yes
- No

3. With regards to the Drug Information section, have you used the following sections?

	Not used	Used once	Used occasionally	Used regularly
DrugSearch				
Safety Study				
Drug Report				
Drug Policy				
Library				

4. What are you interested in finding from the site?

	Interest in finding Information			
	not	fairly	important	very
Drug information				
Drug Advice				
Where to get help				
Library				
Training Information				
News				

Contact information about us				
Professional guidance				
Official documents				
DrugScope books and publications				
Events				
Useful links				

5. Did you find what you wanted?

Yes

No

6. Did any information found lead you to take any action?

Yes

No

6b. If Yes please state the action taken:

Action taken:

7. How important to you are each of the following sources of information?

Please rate the following:

	How important for Drug information			
	not	fairly	important	very
Leaflets in the surgery				
Practice Nurse				
Magazines				
Newspapers or Radio				
Cable or satellite TV				
Other television				
Touch screen kiosks				
Friends or				

Family				
NHS Direct telephone				
Your Doctor				
Other Internet sites				

7b. Please state any other Internet sites used.

First choice	
Second choice	
Third choice	
Fourth choice	

8. How did you hear about DrugScope and the site?

- News paper
- Friend/colleague
- Teacher/lecturer
- Direct contact with DrugScope
- Medical professional
- Phone line
- Support group
- Linked from other website
- Search engine
- Other (Please state)

9. How did you locate the site?

- Typed in the address (URL)
- Got it bookmarked
- Looked for the term "DrugScope" in search engine
- Did a general search
- Linked from other site

10. If selected " Did general search" or " Linked from other site ", please state the word(s) used in search or the site linked from.

Search words or Site linked from:

11. When you were last interested and searched for Drug Information, what information were you looking for?

12. In general, what was the best section on the site?

12b. In general, what was the worst?

13. In what capacity are you searching? Please select one:

- Friend/family of a drug user
- Drug user
- General interest user/Private individual
- Student/Pupil
- Academic
- Teacher
- Journalist
- Civil servant
- Drugs worker
- Policy Maker
- DrugScope member
- Other (please state)

14. What is your gender?

- Female
- Male

15. Where do you live?

- Scotland
- England
- Wales
- Ireland
- Europe
- North America
- South America
- Caribbean

16. What is your age group?

- Under 16 yrs.
- 16 - 25 yrs.
- 26 - 35 yrs.
- 36 - 45 yrs.
- 46 - 55 yrs.
- Over 55 yrs

17. Please select your highest level qualification.

- Postgraduate
- Undergraduate
- Degree/HND/HNC/BTEC/A Levels
- GNVQ/NVQ/GCSEs/ O Levels
- Other
- None of these

18. Please indicate what most closely describes your ethnic origin.

White

Asian

Bangladeshi

Chinese

Indian

Pakistani

Other Please Describe

Black

African

Caribbean

Other Please Describe

Any other ethnic group Please Describe

We are also seeking individuals who would like to assist us further by participating in a 1 day pilot study at the University. Please indicate your interest in participating by supplying the contact details requested below.

Contact details for Pilot Study

Name

E-mail address:

Telephone: