DID WE CAPTIVATE THEM? PERCEPTIONS OF SECOND-YEAR STUDENTS ABOUT THE LIBRARY'S INFORMATION LITERACY ONLINE TUTORIALS

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ABSTRACT

At Stellenbosch University the Department of Information Science is responsible for the mandatory Information Skills 172 and 174 programmes for first-year students in four faculties. In 2009 the faculty librarians were asked to create screencast online tutorials on certain library skills, and in 2010 a focus-group discussion was conducted to determine what students' perceptions were of the influence of these tutorials on their ability to find information for assignments. The findings indicate that the tutorials were not as successful as the library had hoped, and that the library should work at not only improving the tutorials, but also bringing them to the attention of the students.

KEYWORDS

academic libraries, information literacy, library instruction, library skills, online tutorials, screencasts

1 INTRODUCTION

"For many students, issues affecting their success include … the successful development of research skills … and access to computing services and information resources. The library is, by far, one of the most important partners in this process" (Kelly & Kross 2002:iv). This is but one of the references in the literature to the importance of information literacy in students' academic success, and to the significant role the library plays in their acquisition of these skills.

At Stellenbosch University (SU), the library collaborates with the Department of Information Science in presenting the Information Skills 172 and 174 programme, a

compulsory credit-bearing programme for all first-year students in the Faculties of Arts and Social Sciences, Theology, Law, and Education. For the last few years the faculty librarians for the above-mentioned faculties have presented the section of the programme pertaining to 'the use of library services at SU' in some way or another. In 2009, Adobe Captivate screencasting software was used by faculty librarians to create online tutorials which the students could view in their own time. In this way, e-learning was used to save on contact time and alleviate the pressure of repeating the same lesson a number of times.

Although the use of online tutorials results in a saving on instruction time, this model of training requires extensive preparation time, and the faculty librarians felt the need to know how effective these tutorials were. This article investigates how a focus-group discussion with second-year students was used to determine their perceptions of the screencast tutorials used in the Information Skills programme during their first year of study, and whether the tutorials were at all helpful to them in finding information for assignments. Unfortunately, the results were not quite what the librarians had expected.

2   BACKGROUND

According to Milne and Thomas (2008), the term 'information literacy' was first coined in the 1970s by Paul Zurkowski of the Information Industry Association. The various definitions that have since appeared in the literature can be summarised in Bundy's (2004) definition of "people who are information literate – able to recognise their need for information and then able to identify, locate, access, synthesise, evaluate and apply the needed information".

'Information skills' in this context is a collective term for the practical skills students need in order to be information literate. On their web page the SU Department of Information Science describes the outcomes of the Information Skills programme as follows:

After completion of this module students will have basic knowledge and skills with respect to the following:

- Principles of information systems, networks and hardware
- The responsible use of the systems and services of SURWUSR
- The use of Library services at SU
- Types and consequences of plagiarism
- E-mail and electronic etiquette
- The attractive and effective use of word processing software
- The attractive and effective use of presentation software
- Spreadsheets for statistical use (MS-Excel)
- The internet and legitimate search practices (Stellenbosch University 2010).[1]

The average number of students in the Information Skills 172 programme presented by the Department of Information Science at SU is about 1 400. Information Skills 174 is a similar programme, aimed at students in the same faculties who follow the Extended Degree Programme, usually around 100.

In 2006 and 2007 the library was asked to take responsibility for the module on library skills. The library was awarded two contact sessions and one online tutorial.

In 2008 the department informed the library that, due to limited class time, the department would once again take control of the entire programme – the module on library skills included. The department was not very clear on the reasons, but the researcher believes they thought they could save valuable class time by combining library skills with another topic, and having one of their own lecturers present the class. In 2009 the library was again given the opportunity to participate in this (for the library) very important programme. This time, however, there were to be no contact sessions and only online tutorials were to be used – it was seen as the ideal way to save on instruction time. Towards the end of 2008 the researcher (the faculty librarian responsible for Information Science) was asked by the Department of Information Science to use Adobe Captivate to create screencasts which would be made available on WebCT (the online learning platform used at SU), where students could view the tutorials in their own time. The Department of Information Science had acquired a licence for Adobe Captivate, but since it was the end of the year and the library had not budgeted for this, it was decided that trials of the software would be used to create the tutorials.

The faculty librarians for the four faculties involved in the Information Skills 172 and 174 programmes were asked for their assistance and screencasts were created for the following topics:

- The library website;
- How to find an electronic journal article;
- How to find a journal in the library catalogue;
- How to find academic journal articles by means of
  - Academic Search Premier (EbscoHost);
  - SAePublications (full-text South African articles, all subjects);
  - SA Media (South African newspaper articles); and
- Self-help services in the library.

The faculty librarians were so impressed with the product that in 2009 the library bought ten licences, to enable faculty librarians to use Adobe Captivate for all future online tutorials.

The screencast tutorials were programmes of a generic nature, aimed at students in a wide range of programmes – from law and theology to education, languages, psychology,

political science and others. Although SU is known as an Afrikaans institution a large number of English-speaking students attend the university, therefore all tutorials had to be made available in Afrikaans as well as in English. Unfortunately, the Afrikaans version of the tutorial for SAePublications was never posted on WebCT.

Apart from the formal, compulsory programme on library skills, some faculty librarians – particularly the librarian for Political Science and Psychology, and the librarian for Natural Sciences (not part of the initial group) – started creating their own screencast tutorials which were posted on the WebCT page for particular courses, to guide students to find resources for specific academic assignments.

Substantial staff time and effort went into the creation of the screencast tutorials, but the staff did not really know how effective the tutorials were. Therefore it was decided to ask students who had used the Information Skills 172 and 174 programme whether they thought the screencasts were beneficial to them. The researcher also wanted to know what the strengths of the programme were, and whether the screencasts could be improved in any way.

3   LITERATURE REVIEW

The literature review covers the use of screencasts in information literacy training and the assessment of online tutorials.

3.1   THE USE OF SCREENCASTS IN INFORMATION LITERACY TRAINING

Screencasts are "recordings of a series of actions on a computer screen" (Notess 2005). All the actions, such as typing keywords in a search box, mouse movements, and clicking on links, are recorded internally as they occur. Afterwards, the recording can be edited, and text boxes with additional information and explanations can be added. Tutorials can be published in a number of different formats and are especially valuable "when they are posted on a website where they can be accessed 24/7" and where they allow a "person to rewind, fast-forward, and play a demonstration over and over, and over again at their own discretion" (Brown-Sica, Sobel & Pan 2009:87).

The search for literature on the use of screencasts for library instruction is complicated by the fact that "a good portion of ... articles published in the literature since the inception of the term screencast use the more generic phrase 'online tutorial' or similar terms to describe the same subject" (Betty 2008:297). The researcher therefore concentrated on articles dealing specifically with screencasting, but did not exclude articles discussing online tutorials.

The researcher only found evidence in the literature of one other academic library in South Africa (apart from the SU Library and Information Service) that actively uses

online tutorials in information literacy training. In 2007, subject librarians at Durban University of Technology Library used "[a] mixture of both face to face interaction and online interaction in the form of lectures, presentations and demonstrations, discussion and peer teaching, *online tutorials* and exercises" (italics added) in their information literacy programme (*DUT Library annual report* 2008:2). No specific mention is made of libraries in South Africa using screencasts. Naturally, this does not mean that online tutorials and screencasts are *not* being used by other libraries, only that there is no evidence in the literature pertaining to the practice.

Elsewhere, however, the situation is completely different. According to Betty (2008:297), "[t]he term screencasting was first championed by Udell (2005)" and "it did not take long for the library community to introduce the term screencasting into the literature" (Betty 2008:297). Roberts (2005:26) was one of the first librarians to promote screencasting: "Two newer classes of products that have really impressed me are screencasting software and classroom response systems. I think that both will eventually become essential tools for dynamic educators." In the same year, Notess (2005:43) wrote that "screencasting is attracting attention for its use in online instruction and tutorial creation". In his personal and work environment, Notess, a reference librarian at Montana State University, found "many uses for screencasting".

At the LOEX-of-the-West conference in 2006, "Sandy Campbell, from the University of Alberta, introduced her institution's use of … screencasts" (Tran et al 2006:16). Betty (2008:296) describes how screencasting software is used at the Regis Libraries to fill "the need for flexible, portable, asynchronous library instruction". At the Auraria Library in Denver, Colorado "[t]hree academic librarians … use screencasting as an essential and creative technique to instruct all users" (Brown-Sica, Sobel & Pan 2009:81). These three librarians use screencasting not only to teach students research skills, but also to show academic faculty and library employees how to use everything the library owns (Brown-Sica, Sobel & Pan 2009). Farkas (2009) mentions Orange County Public Library, MIT Libraries as well as the library of the University of Wisconsin in Madison, as users of screencasts.

3.2 LITERATURE ON THE ASSESSMENT OF ONLINE TUTORIALS

The literature reveals that libraries tend to evaluate their online tutorials, but mainly through quantitative assessment. Already in 1999 the instruction librarians at Radford University used a questionnaire with 31 questions to evaluate their CAI (computer-assisted instruction) tutorials (Michel 2001). Wong, Chan and Chu (2006:386) assessed the enduring impact of the library instruction programmes at the Hong Kong University of Science and Technology by means of a "perception survey". Washington State University Library used assessment activities to evaluate the "usefulness and effectiveness" of four

of their online tutorials (Lindsay et al 2006:432). At Regis Libraries, Google Analytics is used to "track usage statistics for each tutorial" (Betty 2009:302).

Brown-Sica, Sobel and Pan (2009:94) believe that "[g]athering feedback through both formal and informal methods will help improve the just-completed tutorial, as well as plan for the future". These three authors "sometimes either link a satisfaction survey to Web-based tutorials, or send a link to a survey in an e-mail introducing the tutorial," or they merely count the number of visits to a tutorial embedded in a web page.

In their 2008 annual report, the Durban University of Technology Library staff felt strongly that "[a]n area that needs urgent attention is the measurement and evaluation of IL interventions" (*DUT Library annual report* 2008:5).

Although some evidence was found of libraries using focus-group discussions to evaluate online library tutorials and other library training programmes (Bailey et al 2007; Carter 2002; Spackman 2007), no evidence was found of libraries using focus groups to assess screencasts specifically.

Betty (2008:310) concludes his article with the following remark: "Qualitative analysis will also be necessary to determine the efficacy of the tutorials, and direct feedback from students and faculty will need to be solicited." This researcher came to the same conclusion and this is why it was decided to use a focus group discussion to ask students directly how effective they thought the tutorials had been.

4 RESEARCH METHODOLOGY

In this study, qualitative data were collected by means of a focus-group discussion with a number of students, to determine how they felt about the online tutorials. Quantitative data were gathered in the form of the usage statistics of the different tutorials.

4.1 FOCUS-GROUP DISCUSSION

According to Courtois and Turtle (2008:161), "[t]he basic framework of a focus group is an open, in-depth discussion with a small group of individuals purposely selected to explore a predetermined topic of shared interest". Furthermore, focus groups can provide "qualitative data on participants' feelings, values, opinions, and attitudes" as well as "more detail than can be obtained with other survey techniques" (Courtois & Turtle 2008:161). Since the researcher's goal was to determine students' perceptions of the screencast tutorials used in the Information Skills programme, and because limited time was available, it was decided that a focus-group discussion would be the most suitable research methodology to use.

The researcher conducted a focus-group discussion with second-year Political Science students who had completed the library module on WebCT in 2009 as part of the Information Skills 172 and 174 programmes and who had access to the screencast

tutorials created by the faculty librarian for Political Science. The students wrote at least two essays for each of their four Political Science modules during their first year, and would need to know how to locate and access reliable scholarly sources of information. It was therefore believed that they should have an opinion on the influence of these programmes and tutorials on their ability to search for information, and on the manner in which they then used that information.

The research was done in the year after the students had completed the information literacy programme, i.e. in their second year of study. It was believed that students would, at that stage, have had a chance to use the skills they had acquired in the programme, and would be able to apply those skills when searching for information pertaining to academic assignments. Furthermore, the fact that (at the time of the research) they were in the second year of their studies of the subject, indicated that they had been successful in the first year.

The Political Science 212 lecturer was asked to invite students to participate in the focus-group discussion. All interested students were provided with enough information to help them make an informed decision. They were assured that pseudonyms would be used to ensure anonymity and that the data would only be available to people directly involved in the project.

Only five students out of a class of 280 turned up for the discussion. It was assumed that this was due to the discussion taking place in the week before the June 2010 examinations.

The students were asked to give their impressions of the screencasts available to them on WebCT: Did they deem these to be beneficial to them? What were the strengths of the programme? What, according to them, could be improved? As was evident from the research findings, the researcher did not get answers to these questions, because most of the students did not know about the tutorials and therefore never used them.

4.2   USAGE STATISTICS

Some of the disadvantages of focus-group discussions are that they do not provide quantitative data and that a researcher is easily tempted to "generalize or draw sweeping conclusions based on opinions expressed by only a few individuals" (Courtois & Turtle 2008). The researcher therefore decided to gather usage statistics for the different screencast tutorials, in order to strengthen the veracity of the conclusions drawn from the focus-group discussions. To this end, the help of Morris Samuels, WebCT Administrator at SU, was obtained. He provided statistics with regard to the number of visits paid to each screencast tutorial, as well as to the average time per visit.

4.3   EVALUATION OF METHODOLOGY

The researcher realises that some mistakes were made in the way the research was conducted. In the first instance it was not a good idea to wait more than a year before conducting the focus-group discussion. The results of the discussion would have been much more pertinent if it had taken place at a time when the students could remember more clearly the online tutorials and what these had involved.

Another mistake was arranging the focus-group discussions at a time that was not convenient for the students, i.e. the week prior to the mid-year examinations. Although students were assured that the discussion would not take up more than an hour of their time, the researcher now realises that even half an hour at a stressful time like this is too much.

5   RESEARCH FINDINGS

5.1   FOCUS-GROUP DISCUSSION

Very early on in the discussion it became clear that most of the students were not aware of the screencast tutorials made available to them as part of the Information Skills 172 and 174 programmes. Even in the e-mail in which he confirmed that he would attend the discussion, one participant said:

> *Ek is gewillig om te help, ek is wel nie seker van watter 'programmetjies' daar gepraat word nie, en kan ook nie regtig die deel van IV172 oor die bib onthou nie, en ek is bevrees dat dit die algemene gevoel onder die ander studente is. Dit is dan sekerlik iets om te bespreek.*

> [I am prepared to help, but I am not sure which 'programmes' are referred to, I can also not really remember the part of IS172 about the library and I am afraid that is the general feeling among the other students. This is then surely something that can be discussed.]

During the discussion one of the students also admitted: "*I don't remember anything about the library at all.*"

Only two of the five participants remembered that there had been an online tutorial on library skills. One of them thought it had been useful since it was practical, and that she now felt competent in using the databases to find information.

The participants also made it clear that the Information Skills programme as a whole was not taken seriously by the students. Very few students attended the classes and they wrote the tests on general knowledge. Here are some of their comments:

> "*The one biggest problem is that nobody goes to class ... it's not a module we take serious at all .... You hear from the old people that it's a joke subject.*"

"I wouldn't say it wasn't useful, but eish, it wasn't one of the most exciting things a person can do."

When asked why they thought students were not aware of the tutorials on WebCT, one participant responded that WebCT was the best place to place the tutorials, but that students avoid clicking on links when they are not sure what they will find there. This means they need someone to tell them to go to a certain link. In response to the question who students would trust, who they would listen to, one student answered:

"Maybe the people who have done the module ... Me and a lot of the people I know, we learn these things from asking our older brothers or sisters."

The participants also agreed that students are only really interested in something if they know they are going to receive marks for it.

"We are hunting marks, not trying to get information."

For this reason most students prefer to use Google and specifically Wikipedia – it is familiar, easy to use and saves time. They also know that at first-year level the lecturers do not pay that much attention to the sources the students use in their essays.

"The library sources are not hard to find, but it takes about five steps to get to the journals, while my peers take one step to type it into Google or Google Scholar. Not hard, just not as easy."

"With assignments I don't even think about the library, I first go to Google, if I don't get anything there, then I go to the library. I know it is not right, because all the information here [library] is legit, so it is not a very smart choice, but it is the easiest."

"The lecturers should mark the sources strictly, give academic sources double the marks you get for other sources. We know they don't really look at the sources, so we don't really care. You might lose one mark for not having the right sources, but it is not worth the ten hours of work to get them."

Two of the students suggested that practical, hands-on training sessions would work better for them:

"Every first-year class should have one tutorial class where you go to the library and you get sources and you get marks according to the sources."

"If we could come and do it here in the library where there is assistance and where you can do it yourself without help from a friend, then you will be sure that you really know how to do it."

Although the students could not answer questions on the effectiveness of the tutorials because they had never used them, this in itself was an answer – something had to be done to make students aware of the tutorials. It was also made clear that the students wanted something that would save them time, was easy to use and for which they could receive marks.

5.2 USAGE STATISTICS

The usage statistics confirmed what the students reported during the focus-group discussion: not a great number of them visited these tutorials, and if they did, they did not stay very long.

The tables below indicate that, in the Information Skills 172 programme, the highest number of visits (457 out of a class of 1 384 [33%]) were made to the screencast for the database Academic Search Premier. All other tutorials were visited by less than 12 per cent of the students in the Information Skills 172 programme, and by less than 23 per cent of the students in the Information Skills 174 programme. The tutorial on the self-help services available in the library and on the library's website received the lowest number of visits (47 out of a class of 1 384 [3.4%]). This might be because information on how to renew or check out your own books is of no value to students who need to find information sources for essays for which they will receive marks.

Table 1a: Number of visits (Information Skills 172)

Item	Visits	
	Afrikaans	**English**
Academic Search Premier	261	196
Electronic Journal Article	97	35
SA Media	71	58
SAePublications		62
Selfhelp Services	102	45
Journal in Library catalogue	77	28
Virtual Library (website)	90	64

In the Information Skills 174 programme, the tutorial on how to use the database Academic Search Premier also received the highest number of visits (48 out of a class of 103 [45%]). The assumption can be made that this is due to Academic Search Premier being a general, international database which is useful for finding sources on a wide range of subjects. Four tutorials (SAePublications, Self-help Services, Journal in Library Catalogue and Virtual Library) were visited by less than 20 per cent of the class (if each visit represents one student).

Table 1b: Number of visits (Information Skills 174)

Item	Visits		
	Afrikaans	English	Total
Academic Search Premier	20	28	48
Electronic Journal Article	12	11	23
SA Media	7	13	20
SaePublications		13	13
Self-help Services	10	9	19
Journal in Library Catalogue	10	6	16
Virtual Library (Website)	7	12	19

When considering the average time per visit (Table 2a), it is clear that many students opened the screencasts but did not stay long enough to view the full tutorials (especially the Afrikaans ones). The approximate time it should take to view the screencast tutorial for Academic Search Premier is at least one minute and forty seconds (00:01:40), but the average time per visit to these tutorials was 45 seconds for the Afrikaans tutorial, and one minute and fourteen seconds for the English. The average time per visit to the English tutorial for SA Media (00:02:43) was much closer to (even longer than) the minimum time it should take to view this tutorial (two minutes). The researcher was puzzled by the fact that the Afrikaans tutorials were visited for such short periods of time.

Table 2a: Average time per visit (Information Skills 172)

Item	Average Time per Visit	
	Afrikaans	English
Academic Search Premier	0:00:45	0:01:14
Electronic Journal Article	0:00:56	0:01:18
SA Media	0:00:45	0:02:43
SAePublications		0:02:29
Selfhelp Services	0:00:56	0:02:07
Journal in Library catalogue	0:00:45	0:01:10
Virtual Library (website)	0:00:52	0:01:19

The same trend more or less applies to the average time per visit by Information Skills 174 students (Table 2b).

Table 2b: Average time per visit (Information Skills 174)

Item	Average Time per Visit	
	Afrikaans	English
Academic Search Premier	0:00:59	0:01:48
Electronic Journal Article	0:00:30	0:01:29
SA Media	0:01:07	0:02:00
SAePublications		0:01:02
Self-help Services	0:00:44	0:02:10
Journal in Library Catalogue	0:01:01	0:00:26
Virtual Library (Website)	0:00:21	0:00:38

6   DISCUSSION

The researcher agrees with Michel (2001:330) that

> an online tutorial can be an effective supplement to, and possibly a replacement for, traditional library instruction. When designed well and adequately promoted … an online tutorial can assist students … at any time of day or night, at their own pace, to focus on learning a specific skill or developing an overall knowledge of library research.

The discussions with the students as well as the usage statistics made it clear that the SU Library and Information Service should make a much more concerted effort to bring online tutorials to the attention of students. Merely placing them on WebCT is clearly not enough, as students do not click on links if they are unsure what value the link will hold for them.

Something that can be investigated in the future is the use of tutors or 'library buddies' to advocate the use of the library and its online tutorials to fellow students. More than one of the participants indicated that students learned from their older brothers, sisters or friends how to use the library and what resources are useful (or not). The library could recruit students in the various faculties and train them as library instructors for their peers. To this end, the work of the 'knowledge navigators' in the Knowledge Commons at the University of Cape Town (De Jager 2004) and that of library peer mentors at the Utah State University libraries (see Fagerheim & Weingart 2005) can be investigated.

The fact that many students opened the tutorials but did not stay very long (see Tables 2a and 2b) is a certain indication that the tutorials should be revised. Ways should be found to make them more 'captivating'. The library should consider usability testing as a way to determine what students like about the screencast tutorials and what does not appeal to them.

7 CONCLUSION

The researcher is of the opinion that the Stellenbosch Library and Information Service did not succeed in 'captivating' first-year students in the Faculties of Arts and Social Sciences, Theology, Law, and Education in 2009 with the use of online screencast tutorials. With a few changes, however, it may be possible to do just that from 2011 onwards. The library should convince the Department of Information Science of the importance of library skills as a part of information literacy, and should work more closely with the department in an attempt to make the Information Skills 172 and 174 programmes more interesting for students. As Bundy (2004) notes, "academic librarians should engage directly with academic teachers and others to make their own distinctive contribution to students learning those pathways to knowledge, through the development of their information literacy".

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NOTE

1 This web page has since been updated with the new information for 2010 and subsequent years.

REFERENCES

Bailey, P, Derbyshire, J, Harding, A, Middleton, A, Rayson, K & Syson, L. 2007. Assessing the impact of a study skills programme on the academic development of nursing diploma students at Northumbria University, UK. *Health Information & Libraries Journal*, 24(12/02):77–85.

Betty, P. 2008. Creation, management, and assessment of library screencasts: the Regis Libraries animated tutorials project. *Journal of Library Administration*, 48(3):295–315.

Betty, P. 2009. Assessing homegrown library collections: using Google Analytics to track use of screencasts and flash-based learning objects. *Journal of Electronic Resources Librarianship*, 21(1):75–92.

Brown-Sica, M, Sobel, K & Pan, P. 2009. Learning for all: teaching students, faculty and staff with screencasting. *Public Services Quarterly*, 5(2):81–97.

Bundy, A. 2004. Beyond information: the academic library as educational change agent: paper presented at the 7th International Bielefeld Conference Germany, 3–5 February. http://www.library.unisa.edu/about/papers/default.asp#ab (Accessed 23 June 2010).

Carter, EW. 2002. 'Doing the best you can with what you have': lessons learned from outcomes assessment. *Journal of Academic Librarianship*, 28(1):36.

Courtois, MP & Turtle, EC. 2008. Using faculty focus groups to launch a scholarly communication program. *OCLC Systems & Services*, 24(3):160–166.

De Jager, K. 2004. Navigators and guides: the value of peer assistance in student use of electronic library facilities. *VINE*, 34(3):99–106.

DUT Library Annual Report. 2008. http://library.dut.ac.za/2008%20annual%20report%20 final%2026mar09.pdf (Accessed 16 March 2010).

Fagerheim, BA & Weingart, SJ. 2005. Using focus groups to assess student needs. *Library Review*, 54(9):524–530.

Farkas, M. 2009. Your desktop: the movie. *American Libraries*, 40(11):33.

Kelly, MC & Kross, A (eds). 2002. *Making the grade: academic libraries and student success.* Chicago: Association of College and Research Libraries.

Lindsay, EB, Cummings, L, Johnson, CM & Scales, BJ. 2006. If you build it, will they learn? Assessing online information literacy tutorials. *College & Research Libraries*, 67(5):429–445.

Michel, S. 2001. What do they really think? Assessing student and faculty perspectives of a web-based tutorial to library research. *College & Research Libraries*, 62(4):317.

Milne, C & Thomas, J. 2008. Are your foundations sound? Information literacy and the building of holistic professional practitioners. *To Industry and Beyond: 19th Annual Conference for the Australasian Association for Engineering Education.* Yeppoon, Queensland. http://eprints.qut.edu.au/16899/1/16899.pdf (Accessed 23 June 2010).

Notess, GR. 2005. Casting the net: podcasting and screencasting. *Online*, 29(6):43–45.

Roberts, G. 2005. Instructional technology that's hip high-tech. *Computers in Libraries*, 25(10):26–28.

Spackman, E. 2007. Utilizing focus groups to evaluate an information literacy program in a general biology course. *Science & Technology Libraries*, 27(3):3–28.

Tran, A, Babayan, T, Christion, C & Palmer, C. 2006. LOEX-of-the-West conference. *Library Hi Tech News*, 23(7):16–17.

Wong, G, Chan, D & Chu, S. 2006. Assessing the enduring impact of library instruction programs. *Journal of Academic Librarianship*, 32(4):384–395.