Winter 2005

You Are What You Link: A Guideline for the Enrichment of Information on Campus Portals—A Perspective from Iran

Alireza Hejazi
Malekashtar University of Technology

Mitra Dilmaghani
Malekashtar University of Technology

ELECTRONIC JOURNAL OF ACADEMIC AND SPECIAL LIBRARIANSHIP

v. 6 no. 3 (Winter 2005)

You Are What You Link: A Guideline for the Enrichment of Information on Campus Portals—A Perspective from Iran

Alireza Hejazi, MS in Information Centers Management
Malekashtar University of Technology, Tehran, Iran
hejazialireza@yahoo.com

Mitra Dilmaghani, Member of ICT Scientific Board
Malekashtar University of Technology, Tehran, Iran
mitra_dilmaghani@yahoo.com

Abstract

The main concern over campus portals is quality of data and information they provide for their users who are mainly students. Usually content is so important at universities and colleges that it is regarded as the king, but which factor is the most crucial one for the effectiveness of portfolios? The increasing role of campus portals in directing students to their desired destinations has proved them to be effective tools of worldwide education and research. This makes a challenge for academic portal developers to utilize their portfolios with qualified data and information. It seems that the enrichment of information is the most effective factor in keeping students entrusted in their campus portals.

The writers of this article have suggested a guideline based on four elements through which higher education institutes may link qualified knowledge to their content-based portals.

Portals Enterprise

"Portal" is a term, generally synonymous with *"gateway,"* for a World Wide Web site that is or proposes to be a major starting site for users when they get connected to the Web or that users tend to visit as an anchor site. There are general portals and specialized or niche portals.[1]

The mission of a portal is to present each user with a tailored view of the information surrounding their interests. The most successful portals are able to be customized,

personalized and are an ever-changing mix of news, resources and applications that become the desktop destination for everyone with a common interest.[2]

For some institutions, the term "portal" brings to mind a gateway to an institution's online resources and services. Sophisticated portals and integration technology enable much more than just a unified gateway. Portals have the potential to become the ultimate point of organizational integration, where the higher education community can access electronic services and resources in support of quality teaching and learning.

Many universities have been doing a pretty good job of delivering basic web-based services in recent years. They now offer students complete degree programs online. This has begun in many developing countries, including Iran. Yet, the students cannot benefit from all of knowledge offered them through portfolios. Currently, universities' web-based services have more to do than meet isolated functional needs—they must be woven together to serve the university's overall goal of providing reliable knowledge and convenience in support of teaching and learning.

Upon a preliminary study on campus portals and learners' needs[3], we concluded that some of factors are important in acquiring reliable academic data in order to certify students' continuous use of portfolios. These factors include selection, focus, meta-knowledge and personalization.

This article describes each one of the above-mentioned factors in their appropriate order.

1. Selection

While some portals[4] may take the "everything there is on the internet about ..." approach, most will provide some form of quality control and pre-selection of information and resources. While this is a benefit for most users, it is also the reason why some (typically experienced) netizens[5] have reacted negatively to the upsurge of portals. They prefer to take total responsibility for what they find and look at.[6]

In a similar way, we see that students at universities or colleges prefer to select their desired information from a huge pile of data put on campus web sites. This can be used as a clue for academic portal developers to pay attention to students' interests and needs. So selection has a dual meaning here, one from students' points of view and another from portfolios providers' perspective. In fact, it's the duty of academic authorities to determine and assess information required for students in different levels.

An important aspect of campus portals is that they are typically tailored to specific roles, such as a student or a faculty member. This orientation implies that the user interface

designers themselves have to adopt a new role. They will be less concerned with the proper usage of interface elements but more and more with tailoring the contents and functionality of a portfolio to a specific user group, so to speak, to a role. Important elements of this role are site visits, brainstorming sessions, and prototypes that are evaluated by the prospective users. Only in this combination, usable and student-centric portals can come to life. But user interface designers are not the only players in this field. Information architects care for the structure and content of academic web sites and do a very similar job. On the other hand, teachers and professors also work in close cooperation with interface designers—often visual and interaction design is hard to tell apart. So, ideally every user interface designer should have a firm knowledge of academic information and graphic design in addition to his or her usability knowledge. In small teams, these three roles may indeed be combined by one person, irrespective of his or her original background. In larger teams, however, these roles will be filled cooperatively by people from different backgrounds.[7]

2. Focus

Portals typically concentrate on one subject—an interest, a business sector, or an individual company (external or internal). So users can be more confident of the relevance of anything within the portal—and are likely to find new things of interest that they would not have found otherwise.

Portals are—like any software—built for users. However, portals are more than just a piece of software to be used at an electronic workplace - they are the workplace for the users. Since every user has his or her focus of job or study, he or she likes to find a related and reasonable workplace on portal. So the focus of a portal toward a specific issue or subject can be regarded as the first step in making such web-based environment.

In most universities and colleges, students use a single interface with different contents. It seems necessary for every faculty or department to have its own concentration of materials. This makes such portfolios more interesting and useful to the students. When they receive a special attention from their academic authorities toward their needs or interests, they will spend more time for using web-based services provided on the campus. This is completely different from using a general portal with common interface.

3. Meta-knowledge

Meta-knowledge may be loosely defined as “knowledge about knowledge.” Meta-knowledge includes information about the knowledge the system possesses, about the efficiency of certain methods used by the system, the probabilities of the success of past

plans, etc. The meta-knowledge is generally used to guide future planning or execution phases of a system.[8]

One of key points in developing campus portals is the knowledge we have about it. In other words, it is the knowledge we have about provided knowledge on our portal. It may be interesting to know that many of academic authorities do not know what they have on their portals! They even have a partial usage of capabilities embedded in portfolios by portal designers and developers.

Meta-knowledge is that a system knows what it knows, i.e. that the rules of the system be able to explicitly differentiate between knowledge that the system does have and knowledge that it doesn't. What do we really know about our portals systems? And what does a portal designer know about those information and data which are going to be put on portal?

If we have a vivid understanding of our portal, i.e. "meta-knowledge," we may offer a useful consultation to our portal designer through a RFP[9] while he or she is developing our portfolio. Meta-knowledge applies at both the individual and the organizational level.

For an individual it is fairly straightforward. There are three levels of meta-knowledge, best represented by a diagram shaped like a fried egg.

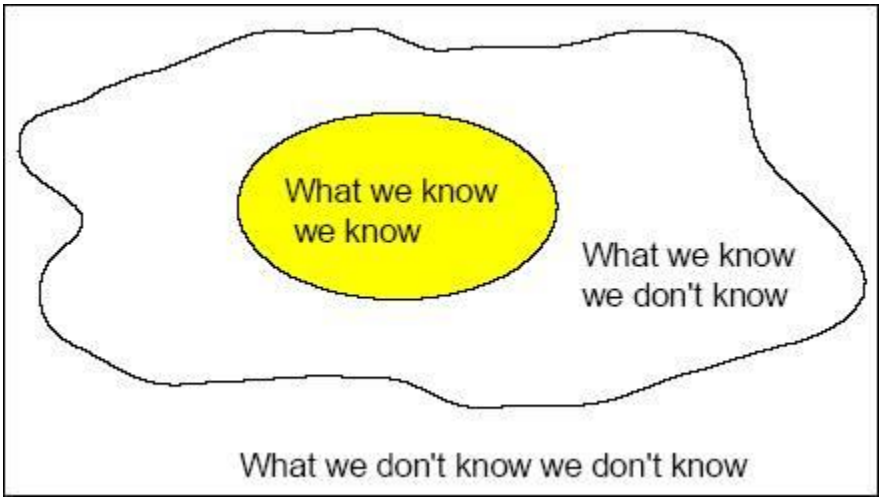

Figure1. A pictorial expression of meta-knowledge

The yolk is knowledge that we know we know, e.g. I know I possess the knowledge that my name is Julian, I know I know how to ride a bike. The white of the egg represents "knowing" what we don't know. Another example, I don't know what Tokyo is like in springtime, but I know that it would be possible for me to acquire this knowledge.[10]

It is obvious that an effective campus portal would be the one that knows what it has and what it has not. This comes back directly to portal authorities and all of those who have sponsored the acquisition of information in an academic portal.

4. Personalization

To avoid students being tempted away by a portal that better fits their needs, many campus portals allow their users to change aspects of the portal to suit them. This might include which components are displayed, the layout of the portal, inclusion of personal information, and so on.

This is taken to extreme by the personal portals—which can be as flexible as a web page design program with a range of plug-in modules for the user to select from. The more a portal has personalization and customization options, the more its users find it enough valuable to spend their times for using it.

Personalization grants a capacity of flexibility with learners' needs in different areas. A rigid portal can never receive the satisfaction of its users. This is that it is worthy enough to put aside an ample time for discussing portal personalization capabilities with our designers and developers.

5. Conclusion

Most of higher education institutes claim that they have been offering qualified information and data to their users through web-based media, while more students show little interest in keeping in touch with their campus portals. In most cases, portfolios become "useless stuff" after students' graduation. This may be an indication of losing our clients. It seems that the time has come for a review of information in portfolios. We recommend a four-element guideline in which selection, focus, meta-knowledge and personalization play important roles.

Long live portals and especially campus portals.

Footnotes

1. Found at: http://www.whatis.com.

2. Found at: http://www.slais.ubc.ca.

3. Hejazi, A. Dilmaghani, M. (January 2005). Aligning campus portals with learners' needs. IEEE Computer Society, *Journal of Learning Technology* 7(1).

4. Vertical Portals.

5. Cybernetic Citizens.

6. Found at: http://www.practicalportals.com.

7. Found at: http://www.sapdesignguild.org/editions/edition3/print_portal_usab.asp.

8. Found at: http://ai.eecs.umich.edu/cogarch0/common/prop/metaknow.html.

9. Request for Proposal.

10. Found at: http://www.seradigm.com/resources/metaknowledge.pdf.

Back to Contents

http://southernlibrarianship.icaap.org/content/v06n03/hejazi_a01.htm.