

ED147 Intro to Human-Computer Interaction

Design Review

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Site: the Stanford Learning, Design, and Technology (LDT) Portal

URL: <http://ldt.stanford.edu>

Introduction

The Stanford LDT Portal provides information about the Learning, Design, and Technology Master of Arts program within the Stanford University School of Education (SUSE). It contains profiles of every past and present student and faculty of the program, with links to their personal pages. It has information about the program's structure, requirements, and application process. And its design includes relevant links to other resources.

The LDT Portal is one of the only program sites within Stanford University's website that is maintained by its members, who by the nature of the program possess some level of fluency in both education and technology.

Learner Profiles and Problems

The learners for this site include several distinct groups with overlapping learning problems. These groups include:

Prospective Students – Incoming students want to learn as much about the program as possible before applying, and the LDT Portal offers the most detailed information about its people, projects, classes, and requirements. There are also links to the University's application process.

Current Students – Students in the LDT program keep basic information about themselves, as well as links to their personal pages, on the LDT Portal. These learners want information about the members of their cohort, faculty members, and program requirements.

Former Students – The LDT Portal, along with individual home pages hosted at Stanford, is a lasting record and repository of students' work during the program. It's also a listing of contact information. These learners want an accessible place to store their work and want to be found by each other and by those interested in their work.

Faculty and Staff – The University's professors and staff members can find information about current students through the Portal. They can also confirm that one of the program's requirements, that each student maintain a portfolio, is met.

Prospective Employers – (Hopefully) prospective employers come to the Portal to find information about members of the cohort.

Researchers – It is unknown whether any researchers or members of other institutions use the site.

Unfortunately, little data exists to suggest which groups are the most frequent visitors to the site and how they use it. Common sense and personal experience suggest that prospective students are the largest learner group by far, and that current and former students are the next largest groups.

Site Features

As a learning product, the Portal has only one main feature: static information about the Program and its members.

Analysis of the Current Design

The Portal lacks overall cohesion. The organization of the site is not readily apparent and learners cannot immediately decipher the site's purpose.

From an aesthetic standpoint, the site is fairly plain and does not reflect the "Design" aspect of the Program. It lacks impact.

The current design meets most needs of the Portal learners, but only adequately. The information provided allows prospective students to learn a bit about the program, and more about members of the program.

Special Considerations: Maintenance

One additional constraint on the site's effectiveness as a learning tool is the maintenance scheme. A member of the cohort volunteers to maintain the site each year, and the outgoing webmaster hands off the site to the new webmaster during the summer.

Each webmaster brings his or her own idea of how to best implement new content. The site has therefore grown organically, with little consistency. The organization of the underlying files has become messy and difficult to navigate. There is a wealth of orphaned content, poorly named files and folders, and empty subfolders.

Members of the LDT program have huge time constraints. The webmaster has little time to do more than basic maintenance, and members of the cohort do not see the Portal and the information they are requested to provide for it as a priority.

This problem will only get worse over time. The Portal grows incrementally in content and exponentially in fragmentation behind the scenes.

Suggestions for Improvement (Initial Ideas)

Several initial ideas for improvement, based upon my own ideas and feedback from the class, present themselves. They include:

Standardize Content

With the changing format of content from year to year, the site can be confusing to learners unfamiliar with it. For example, the People page has some years on distinct pages and others are combined. The detailed internship pages list a few years and group the rest into “past” projects.

Standardizing the content and its organization will make navigating the site easier.

Show the Hierarchy Clearly

The existing hierarchy is easy to divine upon first entering the Portal, but the underlying areas do not necessarily match up to the labels presented. For example, the “People” area contains information about current and past students, and faculty, but it also has information about internships. The “Program” area duplicates the information about the internships exactly.

One simple change is to show, at all levels, what area in the hierarchy the learner is viewing relative to others. This can be done with an improved navigation element, such as an expanding tree tool.

Update or Eliminate Unused Areas

The “What’s New” and the “Resources” sections are presently unpopulated, and have been for at least the past year. These sections should either be updated and maintained with useful information, or eliminated outright.

The “What’s New” section should be eliminated. The lack of fresh content makes this area unnecessary and the infrequency of regular updates make it impractical.

The “Resources” section serves a useful learning need: information about learning sites, programs, people, and concepts external to the LDT Program. This information does not require frequent updates, and is therefore feasible. It should be updated as soon as possible.

Implement a Content Management System

Every year, content is added for that year’s cohort. Occasionally, content for past members of LDT is updated. In addition, content is often duplicated in different parts of the site.

This data is presently entered and maintained by hand using text editors. While the amount of content per year is not large, this scheme makes updating it tedious and rearranging it very difficult.

Content Management Systems (CMS) provide maintenance tools that allow webmasters to dynamically display content kept in a separate file, such as a simple text file or a relational database, via a middle tier such as ASP, XML, or PHP. CMS applications range in cost from free in the case of text files or thousands of dollars for high-end out-of-the-box solutions.

A low-cost CMS that provides basic data entry and maintenance tools would suit the needs of the LDT Portal well. Dreamweaver or other web-authoring tools provide easy ways to hook into these solutions and create the middle tier easily.

Next Steps

Given enough time and resources, the next logical step in the redesign of the LDT Portal is a learner study. This consists of identification of the target learner groups, selection of willing participants, authoring of an interview protocol, and perhaps observations of tasks performed by those participant learners.

Conclusion

The current site isn't terrible, but it could use an overhaul to reorganize its content in more discernible ways. The site isn't scalable, nor is it easy to maintain, and these are problems that will only get worse over time. Finally, the site lacks impact and does not represent the varied and broad skills of the members of the Program, making it a poor testimonial to the Program's effectiveness.