

Web Groups: A Collaborative Study of IT Mentoring for Students from Regional Universities and Rural Communities

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Abstract

The role of the University is being expanded to address job issues faced by upperclassmen majoring in Computer Science and Computer Information Systems. Two Oklahoma universities are collaborating to meet student needs using an Internet interface. Faculty in the programs at both universities recognized a need to help their students develop an awareness of today's workplace environment. The solution was a web based electronic interface and meeting site. As a cooperative endeavor between two geographically challenged state schools, it has also helped students begin to network with their future IS professional peers.

Keywords: Mentoring, egroups, collaboration, student participation

1. INTRODUCTION

Two of Oklahoma's regional universities are cooperatively using an available Internet interface to meet student-mentoring needs. Faculty in Computer Information Systems programs at both universities recognized a need to help their students develop an awareness of today's workplace environment and make contact with people currently employed in their chosen field. Industry partners were virtually nonexistent and internships in rural Oklahoma are few and far between. With these constraints in mind, the option of using alumni as mentors was introduced. In his book, *Business @ the Speed of Thought*, Bill Gates stated that using information technology to connect customers back to the core business is central to the future success of any organization (Gates, 1999). Use of the egroup

mentoring has had this added benefit for the universities. Our alumni and students (customers) are being connected back to the university and have had an avenue through which to channel suggestions for curriculum and program direction.

2. RECOGNITION OF THE PROBLEM

Originally, the alumni were contacted and asked to come to the respective campuses for visits and meetings. Many program alumni wanted to help, but had no time for the trip due to busy corporate schedules. The reverse situation was true, too – the students would have difficulty missing classes and bearing the expense of visiting to mentors' employment sites. Faculty felt there was a gap that needed to be filled, but how could it be accomplished with economy of time and money?

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A test group of alumni from the two schools were polled via email, and 50% responded with a willingness to help by devoting some time to the project. This was exciting, because without the willingness of the alumni to assume the mentoring roles, this project could never be a success. The response was astounding. Out of the original 18 requests sent, there were 3 bad addresses that could not be resolved, and 9 positive responses. Later, communications with additional alumni increased the mentor count to 16. As of this writing, the egroup has 58 members, 16 mentors and 42 students.

It was determined to use a method that allowed for important issues to be discussed, yet preserved the privacy of participants who wanted to remain anonymous. The project's success was partially dependant on the idea that no one felt threatened or coerced into participating, or that his or her privacy was being invaded. Chat rooms were considered and rejected as a solution. The faculty involved felt chat rooms were too open and that differing work and personal schedules as well as time zones would make meetings difficult to coordinate. Direct email was an option, but was rejected as an irritant in the hectic work schedule of the mentors; most of who are professionals in the industry. A list server on the state OneNet system was considered, but rejected because of control issues as well as the sometimes burdensome nature of maintaining a list server.

3. A TECHNOLOGY SOLUTION

Finally, a solution was proposed with an Internet interface called an egroup. It was implemented at <http://www.egroups.com>. Egroups could be controlled as tightly or loosely as one wanted (Ottenhoff 1999). People could opt for direct email, a daily summary or to view the information only on the web, from any location with web access. Memberships as well as postings could be controlled and moderated.

The egroup, *cismentors*, was founded on February 18, 2000, with two moderators. The moderators represented the two schools involved in the project. The group was tightly controlled to avoid nuisance questions and inappropriate messages. No message or question could be posted without the approval of one of the moderators, and membership in the group was by invitation only through the moderators. As of this writing no problems have occurred. The mentors are all alumni of the two schools, and the student members are mainly junior and senior CS and CIS majors of the two schools. The fact that group mentors were school alumni acted as a 'hook' for the students. They knew the mentors started out just like them, at a small, rural, Oklahoma school. "Guest mentors" have been invited from time to time to address specific issues usually in a one-time post. These

"guests" have not necessarily fit the background criterion that was expected of the on-going mentors. One guest mentor was president of a local bank and wrote an article titled "12 Critical Financial Concepts for Soon to Be College Graduates". We have also had one of the University presidents post an article as a guest mentor.

4. DATA RESERVE

Contributing to the success of the group was the decision to collect a reserve of advice before 'going live' with the group. Before the egroup was launched, potential mentors were contacted with a preliminary set of questions to have in reserve for posting during slow weeks after the launch of the group. The introductory email and questionnaire was as follows:

As some of you may already know, we are in the process of setting up a mentor group for Students currently in the programs at our respective schools. As the semester moves toward graduation for this year's seniors, I wanted to come up with some way to help the students in their quest for the next step in their careers. As I pondered this situation, I thought of many of you, as you were when I first met you and who you are today. The growth that has occurred in your lives over the years has been impressive, and I think that some of those experiences (both good and bad) would help the current crop of students to find the road that is right for them. I feel like we know some very special people that could fit the mentor profile -- you!

This information is probably going to a web site or egroup, and questions for you and information from you will be filtered -- In other words, we won't give out your email address, or personal information. I don't want anyone to feel that his or her privacy is being invaded, and also, I don't want anyone to be over-run with work. I know you all are busy people and really appreciate any help that you can give to the students and us. If you have any questions, feel free to contact us by email or phone.

To start the ball rolling, I would like you all to respond to the following questions as you see fit -- First, I want a short Bio, not enough detail to be a privacy invasion, but something to give the students a clue about who you are and what you do -- I need a name to refer to you by -- not your real full name, to preserve your privacy. Then, I have some questions that I would like you to answer with two to five sentences. Later, I want to ask you to give a longer answer to specific questions and comments from the students, as those come in.
Bio Stuff:
Age, Degree, Gender, Year Graduated and what ever you want to put in here!

Finish the following sentences:

I wish someone had told me:

I think the most important thing on a resume is:

The best thing that I did when I was an undergraduate was:

The biggest mistake I made was:

Thanks for your help

The group was opened with responses to the first question posted for reading “ I wish someone had told me..” . Students from the two universities were invited to participate and 25 joined the group. The first two weeks were a great success, and the next month both use and membership increased. There are times when the site hits seem to lag, especially around holidays, and examination times, but the database of answers that were stock piled have been portioned out to handle the times of less attention. It has been the moderator’s job to help keep the interest in the site going during the times of slow postings. The use of guest mentors and hot topics seem to help spark interest when the dips in postings have taken place. One widely read guest mentor was the banker cited above that gave advice for a new graduate’s financial picture. It was exciting to see times of high usage when the group becomes very active with no input from the moderators except to approve posts and new members. We have anticipated a lessening of use during the summer months, and perhaps during vacations at school. There will likely be a surge of use when students begin the job search processes and as new students move into the upper division classes during the next semester. The moderators try to encourage the mentors to post when attention seems to lag. Interesting data and posts have been shared in CIS classes when appropriate. The students have benefited from the group by posting questions and receiving answers from the mentors in a non-threatening arena. The mentors seem to enjoy giving advice to help students not make the same mistakes they made and to allow the students to benefit from the mentors’ varied experiences in the job market.

One such discussion evolved around the industry’s mixed view of COBOL. It started with a student’s inquiry “What would be some good languages to know besides COBOL when going out into the working field?” A mentor gave the following advice:

James, You're right, there aren't that many COBOL positions available. But the news isn't all that bad. Corporations are still churning out COBOL compilers and are still alive in this industry. [One of which is in my own backyard of Austin, TX]. I also went out and did a search on Monsterboard.com and found a slew of positions wanting some COBOL experience. But in there is the catch—COBOL experience. Very few firms today are looking for COBOL developers and for those who are, they are heavily weighted in an

MVS, VSAM or similar architecture. Don't get me wrong—these are viable positions and ones in which many of my friends are doing VERY well in—but, the question becomes: "Where do you want your career to be in 1 year, 3 years, 5 years?" If you are looking for something that speaks to the market place now and in the next few years—then turn your full focus to either C++, Java, or HTML {and all it's cousins: XML, DHTML, etc}. Not only are these skills in high demand but they will continue to drive the industry for the next few years. The Client/Server market place of the late 80's/early 90's loved C++. C++ continued to be in the driver set for the onset of the Internet explosion and shaped Java. C++, I personally believe, will continue to drive in the next computer industry revolution.

Daren

The discussion was very lively for several days, resulting in the first on line poll of the group. This type of activity was exactly what the developers wanted for the students.

Message archive by month:

	Jan	Feb	Mar	Apr	May
2000		12	61	23	1

Members: 57

5. FEATURES AND OTHER EPIPHANIES

One option that has had good response is an egrouop option for sharing links. This has been utilized for posting useful web sites for job searches and other sites that will be helpful for the upper level student. We plan to extend the use of this area with links for resume writing and cover letter information. Another egrouop feature that has been utilized is a polling system. Students and mentors had the option to create a poll and get feedback from group members quickly in an easy to read and interpret format. A database was available which was used to set up a contact list of group members willing to share names, addresses, and e-mails. Other group options included chat and calendar functions. Although the cismentors group has not yet utilized the chat function, we see that as an addition for future growth. The calendar function has been utilized to post job fair information from various cities.

Originally, the focus of the group was junior and senior CIS/CS majors. But, after reviewing the mentoring advice, it appears that earlier contact may be advisable. Many of the mentors suggestions about curriculum selection and extra-curricular activities are not very helpful to a second semester senior nor to a junior that has an inflexible map toward graduation. Next year, we

plan to introduce the mentor group to majors during the sophomore year to provide additional benefits to the student and the program. With the development and use of online and telephone enrollment, more students were mapping their own college careers and elective curriculum with little or no input from a traditional advisor. While this trend is not encouraged by either of the participating institutions, it is happening. Perhaps the mentoring advice would help direct these students in a productive direction for their enrollment in elective classes and selection of extra-curricular activities available on campus.

For two rural universities on a limited budget, the price was right. Use of the www.egroups.com web site is free. A small, unobtrusive add is placed at the bottom of e-mail daily digests and there is the usual, but not excessive, advertising on the web pages themselves. For a nominal fee, \$4.95 per month per group, the e-mail message ads may be omitted.

6. RESULTS AND CONCLUSIONS

In conclusion, this alumni mentor egroup for upper level students is working to help students focus on some of the work world issues using a tool of their trade. It is a living group that requires only moderate attention and encouragement from moderators to survive. As a cooperative endeavor between two geographically challenged state colleges, it has also helped students begin to network with their future IS professional peers. One of the more important aspects of the special mirror that mentors hold up to their students is its capacity to extend the student's self-awareness (Daloz, p.234). The cismentors egroup has extended its student members self-awareness, as well as their awareness of their chosen occupation. For our departments, students, and alumni mentors – it has truly been a win-win-win project.

DESCRIPTION OF SITE	LINK
ComputerJobs: Leading skill-based IT employment Web	http://www.computerjobs.com/
Manpower: Job possibilities in various locations	http://www.manpower.com/
MonsterBoard: Online network for careers	http://www.monsterboard.com/
Oklahoma Job Search: Search the Daily Oklahoman for job postings.	http://www.jobsok.com/
Oklahoma's Job Net: Oklahoma's Job Net: search for jobs in the state of Oklahoma by occupation, keyword or by local office	http://www.workforceokc.org/main_job.htm
Useful College to Work Transition Info: college to work transition information	http://www.wartburg.edu/careers/transition.html
Web site for jobs, resume & interviewing tips: The Robert Half web site [for jobs in Oklahoma, and other areas as well]	http://www.rhic.com/jobzone/searchf.html

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