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# HU4060 Technical Communication Internship Final Report

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**From:** Tiffany Erickson  
**Date:** December 14, 2001  
**Subject:** Educational Opportunity Web Design Internship Report for HU4060

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# Abstract

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While working as a student web designer for the Department of Educational Opportunity I created a web site for one of the department's eight divisions, Special Academic Programs. In order to create this site, I had to:

- Develop a plan
- Research the division
- Learn Macromedia Flash
- Create an introduction
- Design a site layout
- Test the site
- Publish the site

In the end, the internship was a valuable learning experience that I will be able to carry with me in future work.

# **Introduction**

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The purpose of this report is to explain my internship experience as a web designer with the Department of Educational Opportunity at Michigan Technological University. This report covers specifically my work on my main project, the Special Academic Programs web site.

## **Section I: Department and Position**

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The Department of Educational Opportunity (EdOpp) at Michigan Technological University (MTU) is located in the Alumni House at the far west end of the campus. The main goal of the department is to implement educational and outreach experiences that enrich the intellectual, social, and professional growth of students and prospective students of MTU. The Department focuses on increasing access and retention, promoting diversity, and building awareness of social justice issues. EdOpp is divided up into eight divisions such as Special Academic Programs and Outreach and Multi-Ethnic Programs, which each support the mission statement in their own way.

As the web designer for this department, I was not technically apart of any one of the eight divisions. My supervisor is the associate coordinator of EdOpp and the Coordinator for Special Academic Programs (SAP). As the Coordinator for SAP she is in charge of all matters dealing with the computers at EdOpp. Therefore I was considered her student worker. In this position I was allowed to work 20 hours a week and needed to have all of my work approved by my supervisor, the system administrator, and the appropriate division my work was for.

My specific job duty as the web designer was to maintain the eight different web sites for the divisions of EdOpp. I was in charge of creating logos, designing layouts and graphics, updating information, organizing the web site structure, and deciding which software to use to create each site. I also wrote and edited the content for the majority of the web sites and in some cases had to conduct research for this information. As stated before, all of my work had to be approved. This approval happened after the planning and drafting stages and then again before publication. Besides maintaining the web sites I also attended meetings regarding the web sites, the department computers, and matters for the student workers within EdOpp.

## **Section II: Development Process**

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During my employment at Educational Opportunity, the largest project I worked on was a web site for Special Academic Programs (SAP). This division had never had a web site before and their mission statement was really the only information made available. The process of creating the site was entirely up to me. Thus, I had to conduct a lot of planning for this project before I actually began work on it.

## Constraints

Work on the Special Academic Programs site began in the fall of 2000, before I even started working at EdOpp. When I began working in late November of 2000, the previous web designer had already been given a few specifications for the SAP site – the main one being to create a logo. She created a plan to follow, which was to create a logo, have the logo approved, define the site structure, create a Flash introduction, and finally create the web site.

I began working on the SAP site in February of 2001. The previous designer had graduated and her work was passed on to me, which was the newly approved

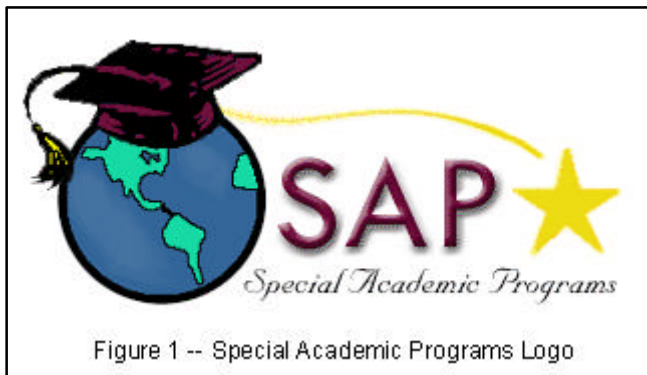


Figure 1 -- Special Academic Programs Logo

logo (see figure 1), the SAP mission statement, and a few notes about what she was planning to do next. I don't know much about what she was told regarding the content of the SAP site, but the only specifications she was given for the logo was to make it able to move and use the colors teal and magenta. I was not given any sort of time limit, only to make it well done. At this time in

February we also received a lot of new software. I now had Adobe Photoshop 6.0, Adobe Illustrator 9.0, Macromedia Flash 5.0, Macromedia Director 8.0, and Macromedia Dreamweaver 4.0. This new software was in addition to the two relatively new software packages we already had, Microsoft FrontPage and Corel Draw. I had a wide variety of excellent industry standard software to choose from, no time limit, a color theme, a new logo, and a lot of creative freedom.

## Planning, research, and drafting stages

The planning, research, and drafting stages for this project took the longest to complete. At first I felt like I needed to research before I could even make plans for the web site. I did not know much about Special Academic Programs and I also needed to learn the capabilities of the new software. I made an initial plan to learn Flash intensely, learn Illustrator quickly (I felt it was somewhat similar to Corel Draw and the tools were similar to the ones in Photoshop), and learn the new features in the new version of Photoshop quickly (since I was already fairly proficient in the previous version).

I spent about a month going through a Flash tutorial book. Every day that I worked I would go through different lessons to learn about all of the different things that Flash offers. The book was a great help and I obtained a good, initial understanding of the software. Also during these initial stages, I continued to work on other minor projects for the other web sites at EdOpp. I took advantage of these "real-life" lessons to learn Photoshop 6.0 better. After a couple of these projects I felt comfortable using Photoshop, so I eliminated the time I was going to specifically spend learning that software.

Around the end of March I started to apply the Flash lessons to real material for the SAP site. I experimented with different techniques, such as fading in and out and “tweening.” It was at this point that I started to make plans for the actual layout and design of the web site. I started by looking at some other web sites that use Flash. Now that I knew the features, I could analyze these sites to see how they were combined to create a whole site or introduction. I was surprised at how some of the sites I liked the best actually used fairly simple techniques.

After researching a lot of other web sites, I wrote down some of my ideas onto notebook paper and drew out some potential layouts. I still needed to do something with the logo though to make it move. I dug through some of the previous designer’s papers and found that she had written down some ideas on how to make the logo move. She wanted to make the star follow the yellow path. Then, once it got into position, burst open to spell “Special Academic Programs” below. I decided to incorporate this movement into an introduction for the web site.

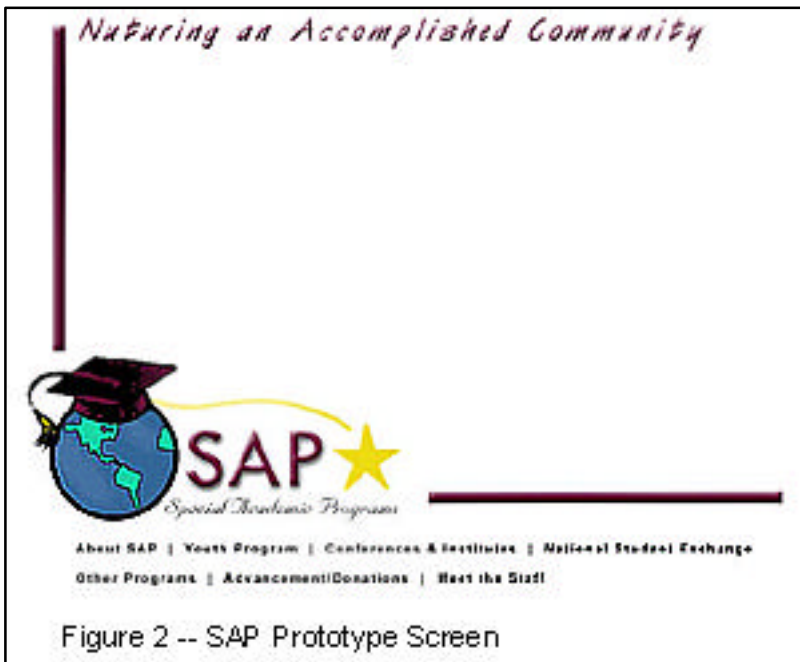


Figure 2 -- SAP Prototype Screen

In April, I planned out the layout and the rest of the introduction for the site and made up a prototype screen in Photoshop for my supervisor to approve. Normally, I create several very different screens for her to look at. With the SAP site though, I had already done a lot of planning and research for the site, which made me have a very specific idea of what I wanted it to look like. I placed the logo in the bottom right

corner with a line extending upward and a line extending along the bottom of the screen. Running along the top of the screen was a phrase used often by SAP “Nurturing an Accomplished Community.” The screen size was fairly small at, 640x480, because I wanted to use scroll bars in flash for the textual content in the center of the screen (see figure 2). I also wanted to ensure that users with these smaller monitor resolutions would be able to view the site.

I divided the site into seven sections About SAP, Youth Programs, Conferences & Institutes, National Student Exchange, Other Programs, Advancement/Donations, and Meet the Staff. Other Programs and Advancement/Donations were two

sections that my supervisor wanted on the page in the future but didn't have specific information for yet. The About SAP and Meet the Staff sections are pretty obvious, but the other three sections are the three divisions of SAP. These pages were to be jumping points. They were to provide a brief summary on the program, contact information, and a link for their own web site.

After approval from my supervisor to start the site, I decided to create the movement for the logo first. I thought this task would be the most challenging. I spent quite a while working on this part of the site, but once I finished I felt like I had an even better understanding of Flash. I used some online tutorials to guide me through some of the tricky techniques. But my Flash book contained most of the information I needed to get it finished.

The rest of the introduction was pretty easy compared to the moving logo. All I wanted to do with it was show pictures of the area combined with important words from the mission statement. This part easily fell together and was finished before I left for the end of the semester in the beginning of May. When I left I had finished the introduction and had imported the graphics into Flash and set up the layout for the rest of the pages. I also moved everything onto our "secret" server. This server is viewable by the public but the address is not made public. Therefore, I can make changes to the web sites and everybody in the department can look at them, but the outside public doesn't see these changes until I publish the data from the secret server to our main server.

A few months later in the end of August I returned to work. I hadn't looked at any of my web sites all summer long; I had fresh perspective on everything. I realized though that all I really had to do to finish up the site was add the content to each page and make an HTML version (this version because of a code I put on the main page, would only load if it was detected that the browser did not have the Flash plug-in). This process took a little over two weeks. There were a few pages that I didn't have information for, but the general layout was there and each page worked when you clicked on the link. It ended up that I only needed to use scroll bars on the first page for the mission statement because there was little textual information.

### **Review, testing, and revision stages**

After I completed the first draft of the site, I sent it out for review by my supervisor. I waited around for input from her for a long time. It took close to three weeks before I was able to fully discuss the web site with her and before she was able to provide me with more information for the site. During this time, I reviewed the SAP site for any glitches and I found a lot. These glitches were mainly small problems in Flash. When I created the site, I made each "page" a scene in Flash. Sometimes when going from page to page, the overall layout of the page would jump a little bit; the logo would move up a little higher or the lines would move farther away. It took awhile to fix this problem and I realized

that I probably should have come up with a better way to organize the site. I also became frustrated with its layout, but decided to wait until my supervisor's review to do any drastic changes.

When we were finally able to meet we discussed adding sound to the introduction and in other places, adding pictures to the "Meet the staff" section, adding more pictures of the area, changing the scrolling text on the first page, and changing the wording on a few pages. My supervisor's input is always beneficial to my work. She often finds problems with the web sites that I have overlooked because of either working with the site too much or taking it for granted that the audience is as "computer savvy" as myself.

The majority of this rework was in adding sound and changing the scrolling text. Initially I couldn't find any legally free sounds to use that were simple and of high quality. I wasn't really sure where to look for something like that. I ended up finding a Flash resource web site though that contained a lot of free and legal sounds to use that could loop over and over, so the actual size of the sound file was fairly small. The scrolling text, which took a little while to figure out initially, was again a problem. By clicking on the arrows, the user could scroll through the long SAP mission statement – but only by clicking each time. The user could not hold their mouse down over the arrow to keep the text scrolling. I ended up finding another tutorial online that explained how to make scrolling text as a movie clip. This technique took almost a whole week to finish, but it solved the problem of having to click each time.

After these changes were made, the SAP site was sent out for review by the rest of the Special Academic Programs staff around the end of October. Immediately I got some surprising feedback. A few people were confused by the layout of the site, which I quickly found out was because they couldn't see the entire screen. My attempts to create the site viewable for all resolutions didn't work correctly. I didn't take into consideration that the page was going to be viewed in a browser. The bottom of the site, where the navigation bar is located, did not show up on their 800x600 resolution monitors. Though I thought I had planned for this type of problem, I never did test it. I probably should have done that though considering my monitor was set for a larger resolution of 1024x768. After this news I wasn't sure what to do except redesign the site. After contemplating what to do, I realized that redesigning the site actually wouldn't be such a terrible task. I had been feeling frustrated with the layout anyway and this job would give me the chance to make some changes.

While I started working on making the screen 700x400, I received some more useful feedback on the site, which helped confirm my desires to reorganize things. The Coordinator for Youth Programs suggested getting rid of the scrolling text entirely by moving the mission statement to "About SAP" and the information from that section to the main page. He also suggested some other minor changes

that both my supervisor and I had overlooked. His comments were a great help to the site; I only wish that everybody's comments could have been as useful.



After taking into consideration all of the reviews, I reorganized the site and remade it to a 700x400 size. I ended up making the lines a little smaller, for a more modern look, and moved the navigation bar above the lines (see figure 3). Because the pages were now wider, the content fit better on each page and the scrolling text really was not necessary.

After I completed the rework, I sent out another e-mail to my supervisor and to the rest of the SAP staff again that the site had been redesigned a little bit. I mainly received good comments, such as that the site fit on their screen and was organized better. We had some discussion if whether the Youth Programs, Conferences & Institutes, and National Student Exchange web sites should open in their own browser window – but there was nothing too major that needed changing. We decided to let the sites open in their own window and changed the wording again on a few pages.

### **Publication stage**

I finished the rework on the site by the middle of November. In order to publish the site to the main server, I had to gain approval from my supervisor again and from the system administrator. I was granted this approval a couple days before I went home for Thanksgiving break. Before I left, I posted the site to the main server and then when I returned I made a link to the site from the main Educational Opportunity web site. The publication stage is the shortest and easiest stage to complete in the whole development process.

## Section III: Evaluation

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### Final web site

My work on the SAP site was defiantly more of a learning experience than anything else. The final web site is a little nicer than some of the other EdOpp sites, but I don't think that it is completely representative of the time spent on it. I know that I could now create a similar web site in much less time.

I was able to try out a lot of different techniques in Flash and I found out what works well and what doesn't. I found it humorous that in the end I never ended up using the scrolling text I spent so much time on. The text was my initial idea for the page, but in the end the site was better without it. I also have found that the site is slow to load from off-campus. The entire site is in one file, which I now know is not a good idea. Separating the site would actually have helped make it more organized as well.

Though there are a couple problems with the site, I do like how it turned out. I was given few specifications and I think I took advantage of that. I created a site that was a little bit different from other web sites I had seen. It works well with the logo, which was pretty big and difficult to deal with at times. Though I probably wouldn't create a site like it again, it shows how my knowledge in web design has progressed over the past year.

### Development process

The whole development process was new to me. This project was one of the first projects that I started from its initial stages and carried out to its completion. I had to figure out the best way to approach every situation. Though, at first it took awhile to figure out how to approach the project, I now have a pretty good understanding of how to prepare for big projects such as this one. I don't think its possible to spend too long planning a project, because little things always pop up. The more you plan out, the easier it will be when these little surprises happen.

I thought I had planned a lot – especially for a lot of the issues that occur because of different browsers, platforms, and monitor resolutions. It was a little bit of a shock to me to find out that there were still problems with this site. The review stage of this project was the most valuable part of the whole development process. I have learned about the importance of testing and reviewing before in classes, but this project was the first one that I had actually finished entirely before review. Often in class we put projects up for review half finished and get comments about things we already knew were wrong.

At the end of this project I feel a lot more prepared to take on a big design project by myself again. Because I was not given a certain process or plan to follow with this project, I had to figure out a process of my own to follow.

## **Internship experience**

My internship experience as a web designer has been invaluable. Not only have I gained some incredible real world experience and built up my portfolio, I confirmed my desires to continue in web design after graduation. I enjoyed my experience largely because my work tasks were so varied. I was given a lot of creative freedom in my work, but sometimes I received specific design requirements. With this work I was able to experience a variety of different design tasks. I was able to start a project from concept and carry it through to completion as well as work on many other smaller redesign projects. The skills I learned during my internship experience at EdOpp I will carry with me in work on future projects.

# Appendix

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See <http://www.edopp.mtu.edu/sap> and attached work.