

IPRO 320 Project Plan
Fall 2008

**Teacher Knowledge Share: A Professional
Networking Site for Chicago Area Teachers**

Advisors: Professor Jim Braband, Dr. Scott Gehrs

ABSTRACT

The goal of IPRO 320 is to create an online professional network for school teachers at the kindergarten through twelfth grade level to allow for the sharing of ideas, lesson plans and other professionally relevant information. This is a continuing project which saw limited success in the previous semester in that a functioning web site was constructed based on surveys of public school teachers but it saw very little use. This semester, the planned approach is to build on the research generated last semester by performing additional market research with teachers. Following that, IPRO 320 will rework much of the previous web site by refining some of the features, adding additional ones as the research indicates and improving the website in general, both functionally and aesthetically.

BACKGROUND

- A. The target users for our online teacher network are Chicago area schoolteachers, both Chicago Public Schools and the local parochial schools. CPS has over 600 schools and 435,000 students. CPS students have consistently performed poorly on standardized tests and have a significantly lower college graduation rate than the national average. This project will provide an opportunity for teachers to learn from others by sharing their resources and effective practices.
- B. Our main objective is to develop a resource that will be used by teachers to share experiences and ideas. It is our plan to design, create, and test an online network to be used specifically by teachers.
- C. The internet will be the main technology used to construct an online network to improve teacher communication. Several computer programming tools, such as CMS will help to construct the website that will contain this network.
- D. Last semester's IPRO created a functional website for professional networking, though we would like to improve upon it this semester. The website is not user-friendly and does not have enough features to constitute an adequate networking tool for teachers. There was also great difficulty in obtaining research. Surveys were sent via e-mail to several teachers to ask them what they would like to see in a teacher networking website, but very few responded. This lack of good research hindered the attempts of last semester's IPRO to create a finished product. This semester's IPRO will ensure that we get better research data in order to come up with a finished product.
- E. Some potential ethical issues we might encounter are those concerning plagiarism and privacy. Several other online teacher networks exist for other school districts. We must ensure that all of our work is our own and not taken from other websites. There are also potential privacy issues when people

monitor the teachers' forums on the website. We will need to ensure that the website is secure enough to allow only registered users to view the forums. Finally, the survey must be reviewed before it is distributed to ensure that it does not violate rules of the teacher's union.

OBJECTIVES

- A. Create a new website that will serve the purpose of being an online community for teachers. This website will include such things as forums, an online user supplemented knowledge management system, and personal profiles for each teacher.
- B. Meet with teachers from three different schools in order to receive and analyze their input on the website. With this input we should be able to design the website to meet all of their specific needs.
- C. Hold a broad survey including at least ten schools to get further feedback and improve the website we construct to the best of our ability.
- D. Make the website more successful than last semester's prototype by making key changes such as creating a more aesthetically pleasing format, a better logo, and a more useful format.

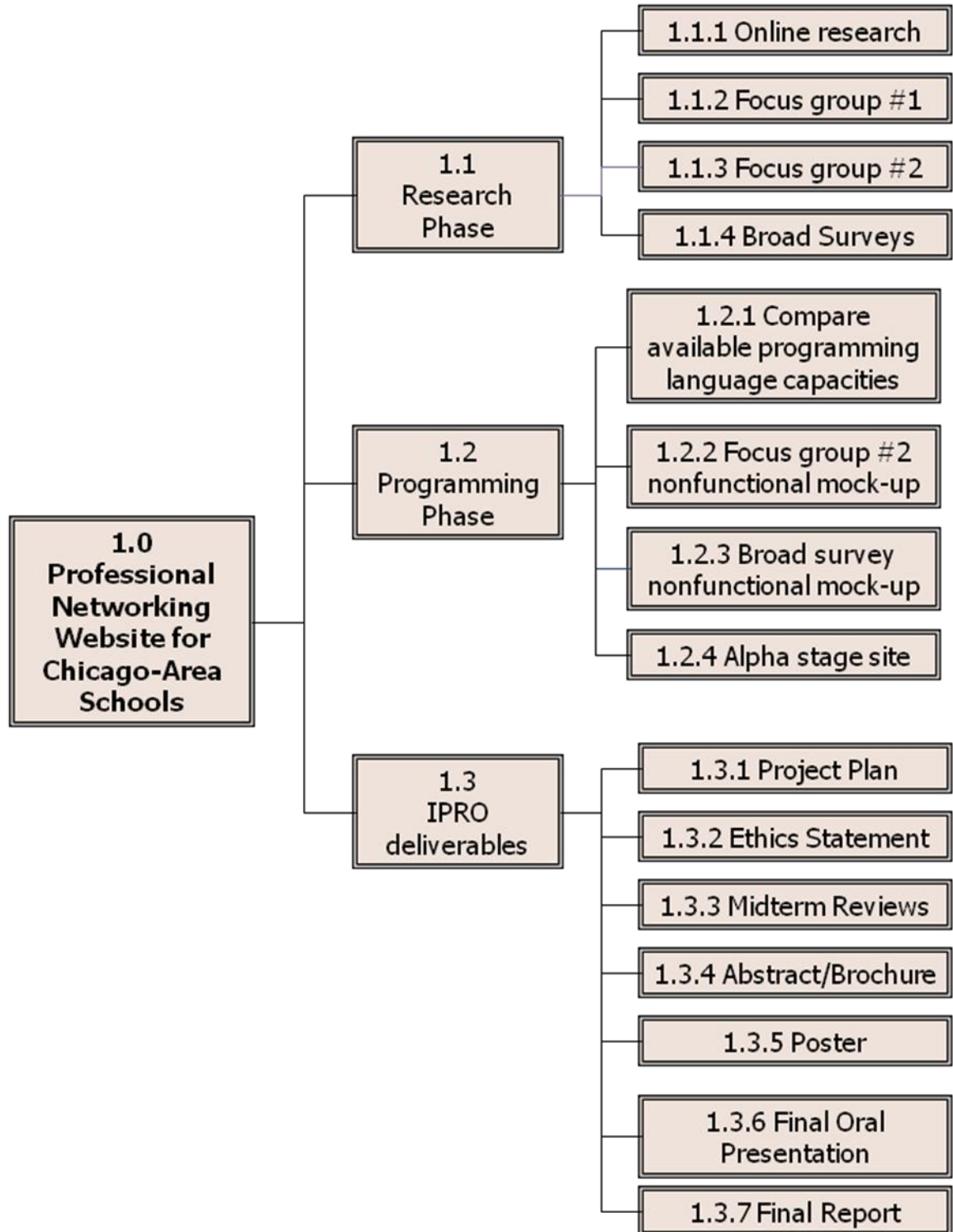
METHODOLOGY

- A. An online professional networking community must be created and tested online for Chicago-area schoolteachers to access.
- B. Research must be conducted on existing networking sites available for both teachers and professionals in general. This will provide an outline for basic website formatting and potential features. Sloppy formats or infrequently used features on other websites can be avoided. Research must also be conducted in order to obtain the desires of teachers and to gauge their satisfaction of our developing online community.
- C. The development of our website will begin with the input of participating teachers. Due to the nature of web design, it is most important to outline the website and perfect its format before beginning the programming of it. Our intent is to compile a wish list of teachers' desires, obtain feedback on nonfunctional demos, and then to build an alpha stage website based on collected feedback.
- D. Information will be gathered and our products will be tested beginning with organized focus groups. Three local schools, De La Salle Institute, Drake Elementary, and the Chicago Bronzeville Military Academy, will be contacted to participate in brainstorming focus groups at their respective schools. At these sessions, the website will be discussed and teachers will be prompted to share their desires for such a website. This discussion will be guided by questions focusing on the struggles teachers face as well as the sources of aid

they currently turn to or envision themselves turning to in the future to relieve aforementioned struggles. Based on responses gathered from these focus groups, a visual, nonfunctional prototype of the website will be constructed using PowerPoint. This will be used to receive feedback in a second set of focus groups. After this point, a broad survey will be distributed to receive optimal participation on the features of our developed alpha stage site.

- E. Feedback from focus groups and surveys will be analyzed. The first focus group will be used to compile main features to implement on the website. Repeatedly expressed desires will be noted, as well as trends in the types of tools desired by teachers. The second focus group will be used in a similar way. The spoken feedback of teachers and the frequency in which comments are made will be considered. Following, the broad survey will then steer away from the qualitative analysis of our developing website and focus more on the quantitative reception of potential users. A specific Research Team will be responsible for the collection of information and conclusions from these steps to be implemented in our website.
- F. The design of our website will develop in response to the feedback obtained from focus groups, interviews, and surveys. Nonfunctional demos of our site will be developed and changed continuously. Once confirming a good format for the website and good content, a site can then be built. All major modifications to our site will come before the actual programming of it. The design of the website will be done by a Technical Team.
- G. The presentation and preparation of all IPRO deliverables to be completed before IPRO Day will be the responsibility of the entire team. To be fully prepared, our group must have practiced both our formal presentation as well as our informal poster presentation. All members should feel comfortable with their roles and represent the group cohesively by being able to answer questions and explain our groups' work using similar answers.

Work Breakdown Structure



Details of Work Breakdown Structure:

1.1 Research Phase

1.1.1 Online Research

1.1.1.1 View current:

1.1.1.1.1 Professional networking sites

1.1.1.1.2 Teacher networking sites

1.1.1.1.3 IPRO 320's old site

1.1.2 Focus Group #1

1.1.2.1 Contact 3 schools to find go-to person

1.1.2.2 Create invitations for focus group

1.1.2.3 Send out invitations for focus group

1.1.2.4 Determine meeting times for each school

1.1.2.5 Send follow-up emails/phone calls/invitations for focus group

1.1.2.6 Create list of questions to guide discussion based on teachers' struggles and where they currently turn to for support and ideas

1.1.2.7 Hold focus group #1

1.1.2.8 Draw conclusions from focus group #1

1.1.2.9 Send feedback to Technical Team

1.1.2.10 Send thank-you letters to participants

1.1.3 Focus Group #2

1.1.3.1 Obtain nonfunctional website mock-up from Technical Team

1.1.3.2 Contact go-to people at 3 schools to inform them of follow-up focus group #2

1.1.3.3 Create invitations for focus group #2

1.1.3.4 Send out invitations for focus group #2

1.1.3.5 Contact previous participants to commit their participation in focus group #2

- 1.1.3.6 Determine meeting times for each school
- 1.1.3.7 Send follow-up emails/phone calls/invitations for focus group #2
- 1.1.3.8 Create list of questions to guide discussion based on reception of mock-up website
- 1.1.3.9 Hold focus group #2
- 1.1.3.10 Draw conclusions from focus group #2
- 1.1.3.11 Send feedback to Technical Team
- 1.1.3.12 Send thank-you letters to participants
- 1.1.4 Broad survey
 - 1.1.4.1 Obtain new version of nonfunctional mock-up from Technical Team (or alpha site?)
 - 1.1.4.2 Create survey questions to perfect site.
 - 1.1.4.3 Create survey on survey website and paper form.
 - 1.1.4.4 Distribute survey within many Chicago schools in paper form and with ¼ sheets holding the URL to our online version.
 - 1.1.4.5 Pick-up paper forms.
 - 1.1.4.6 Analyze survey results
 - 1.1.4.7 Draw conclusions from survey.
 - 1.1.4.8 Send feedback to Technical Team.
 - 1.1.4.9 Distribute mass thank-you notes with out website URL.
- 1.2 Programming Phase
 - 1.2.1 Create feature list from focus group #1 input
 - 1.2.2 Create Non-functional (PowerPoint) Mockup
 - 1.2.3 Review feedback from focus group #2
 - 1.2.4 Create design document
 - 1.2.4.1 Analysis

- 1.2.4.1.1 User Hierarchy
- 1.2.4.1.2 Use-cases
- 1.2.4.1.3 Content analysis
- 1.2.4.1.4 Interaction analysis
- 1.2.4.1.5 Functional analysis
- 1.2.4.1.6 Configuration analysis
- 1.2.4.2 Architecture design
- 1.2.4.3 Navigation design
- 1.2.4.4 Interface Design
- 1.2.4.5 Data model
- 1.2.5 Functional mockup / demo
- 1.2.6 Build Alpha Site
- 1.2.7 Select Alpha Site test users
- 1.2.8 Launch Alpha Site
- 1.3 IPRO deliverables
 - 1.3.1 Project Plan
 - 1.3.1.1 Abstract
 - 1.3.1.2 Background
 - 1.3.1.3 Objectives
 - 1.3.1.4 Methodology
 - 1.3.1.5 Project Budget
 - 1.3.1.6 Team Structure and Assignments
 - 1.3.2 Ethics Statement
 - 1.3.2.1 Team charter
 - 1.3.2.2 Ethics statement

1.3.3 Midterm Reviews

1.3.3.1 Attend midterm review session

1.3.3.2 Create presentation

1.3.3.2.1 Statement of purpose

1.3.3.2.2 Organization of the team

1.3.3.2.3 Goals of the project

1.3.3.2.4 Progress toward goals

1.3.3.2.5 Major obstacles encountered to-date and their resolution

1.3.3.2.6 Anticipated major challenges that lie ahead

1.3.3.2.7 Needs/questions/requests of other IPRO teams and attendees

1.3.4 Abstract/Brochure

1.3.4.1 Prepare 1-page handout or brochure to be handed out at IPRO day

1.3.5 Poster

1.3.5.1 Create poster

1.3.5.2 Submit poster to be printed

1.3.6 Final Oral Presentation

1.3.6.1 Plan 20 minute oral presentation for IPRO day

1.3.6.2 Prepare for 10 minute Q&A session

1.3.6.3 Practice presentation

1.3.7 Final Report

1.3.7.1 Abstract

1.3.7.2 Background

1.3.7.3 Objectives

1.3.7.4 Methodology

1.3.7.5 Team structure and assignments

1.3.7.6 Budget

1.3.7.7 Results

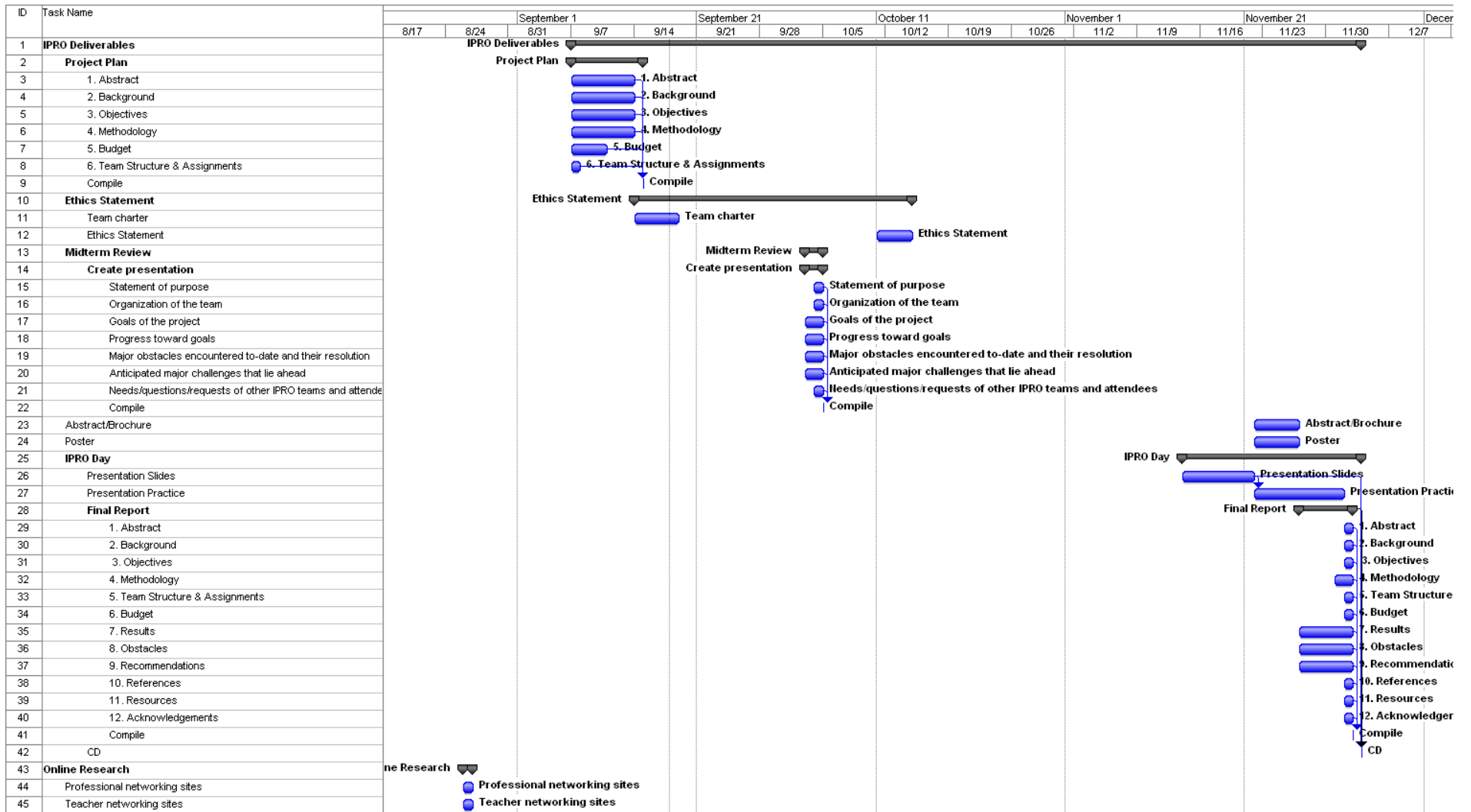
1.3.7.8 Obstacles

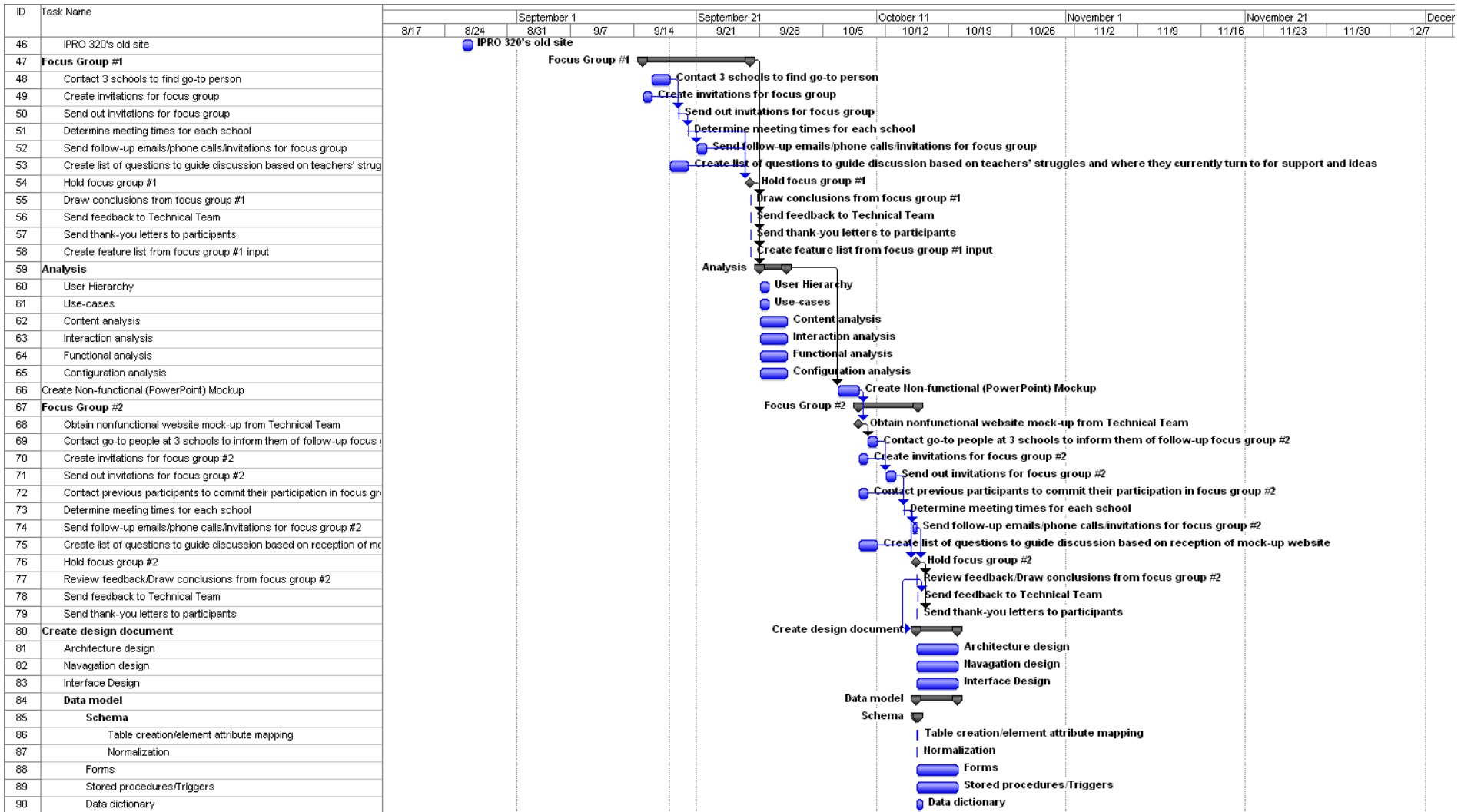
1.3.7.9 Recommendations

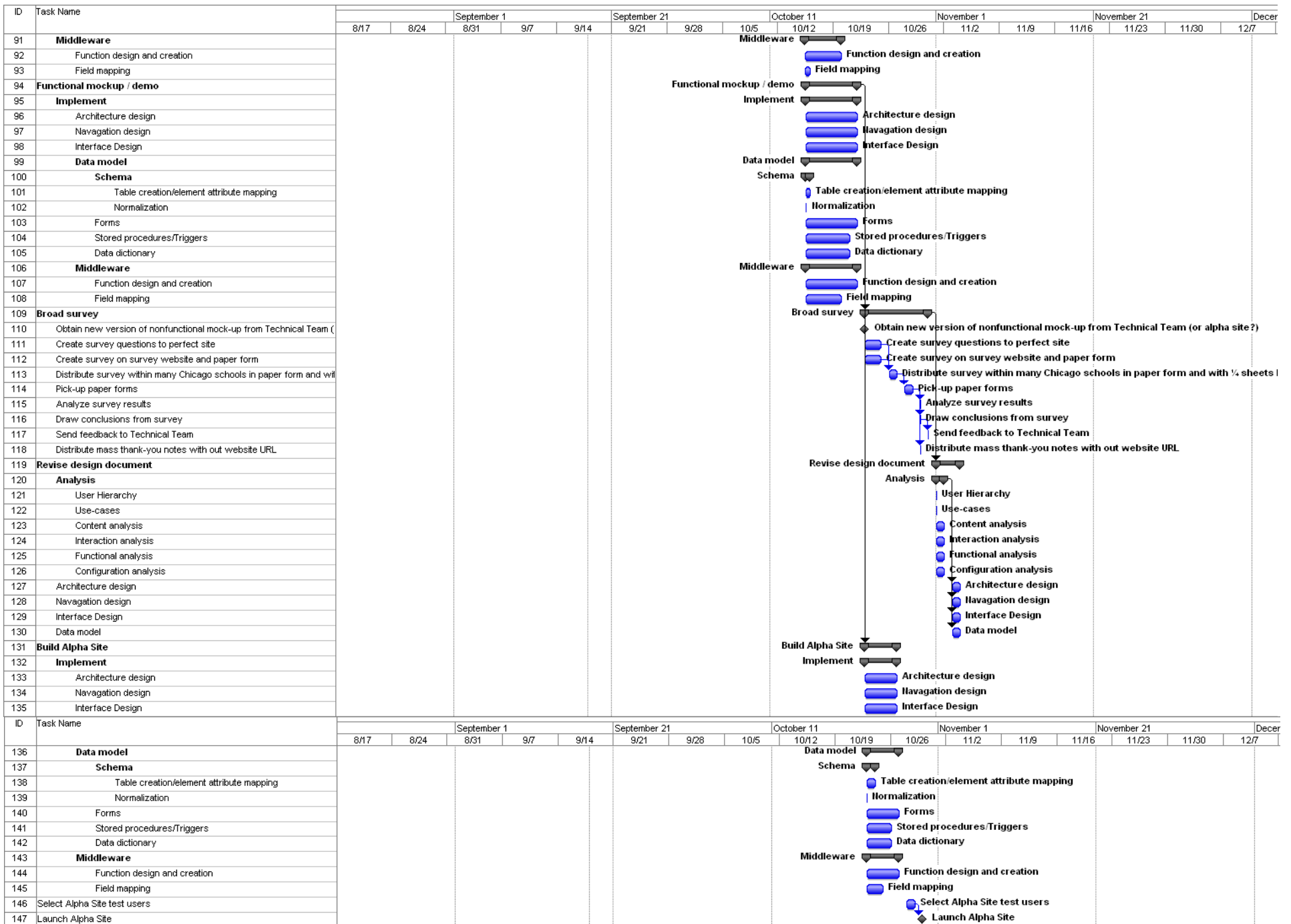
1.3.7.10 References

1.3.7.11 Resources

1.3.7.12 Acknowledgements







BUDGET

Item	Unit Price	Qty	Total Price	Purpose
Web Hosting	\$150.00	1	\$150.00	To host the website.
Domain Name	\$10.00	1	\$10.00	There is a ten dollar fee to register a domain name for the website for a period of one year.
Printing	\$100.00	1	\$100.00	General printing throughout the semester, including but not limited to flyers, invitations to the focus groups, and agendas for these groups.
Food	\$400.00	1	\$400.00	We will provide the teachers with snacks at both focus groups, which will hopefully increase their willingness to participate. This accounts for forty attendees at \$10 apiece.
Transportation	\$50.00	1	\$50.00	For transportation to schools to hold focus groups, which may be necessary if the teachers cannot come to campus.
Total			\$710.00	

TEAM STRUCTURE AND ASSIGNMENTS

Name	Major, Year	Skills & Strengths	Experience & Academic Interest
Bern, David	BME, 3rd	Good foundation in computer programming.	Worked with technology setups for teachers
Bochantin, Marike	Psychology & Humanities, 4th	Administrative, networking and organizational skills.	Founded and spearheaded the Alumni program at her NROTC unit.
Hartline, Julian	CS, 3rd	Extensive programming in several languages.	Run multiple websites, many programming projects from ground up.
McCall, Ian	CS, 4th	Java, perl, PHP, SQL, AJAX, Databases, Linux, etc.	Leadership experience including Eagle Scout, Order of the Arrow Brotherhood.
Mick, Emily	Chemistry, 4th	Reading, time management, prioritizing and collaboration.	Collaborative skills from working in labs & restaurants.
Peake, Andrew	CS, 4th	Variety of topics within computer science and programming background.	CS focused IPRO creating web application.
Pierce, Alison	Psychology, 3rd	Excellent team collaboration skills.	Member of various teams for several years.
Pindrik, Dmitriy	CS, 3rd	Confident speaker & presenter. Java, PHP/MySQL, Flash, XHTML/CSS.	Several years of web development and sever-side maintenance.
Quinn, Michael	CS, 3rd	Several years of various programming languages.	Run own website, programming for several years, proficient in many prog. Lang.
Stanford, Carly	Political Science, 4th	Team collaboration skills as well as strong writing skills.	Interested in public administration and social affairs.
Tilatti, Michael	Aerospace, 4th	Proficient in MS Office.	Interested in Finance and Aerospace Engineering

Name	Major, Year	Team	Additional Roles
Bern, David	BME, 3rd	Research & Web Development	
Bochantin, Marike	Psychology & Humanities, 4th	IPRO Team Leader, Research Sub team Leader	Master Schedule Maker
Hartline, Julian	CS, 3rd	Web Development	
McCall, Ian	CS, 4th	Web Development Sub team Leader	
Mick, Emily	Chemistry, 4th	Research	Schedule contact for Focus group scheduling
Peake, Andrew	CS, 4th	Web Development	Minute Taker
Pierce, Alison	Psychology, 3rd	Research	Invitation Maker
Pindrik, Dmitriy	CS, 3rd	Web Development	
Quinn, Michael	CS, 3rd	Web Development	
Stanford, Carly	Political Science, 4th	Research	
Tilatti, Michael	Aerospace, 4th	Research	

IPRO 320 Team

Team Leader: Bochantin, Marijke

Research Sub team

Leaders-

Bochantin, Marike
Mick, Emily
Pierce, Alison
Stanford, Carly
Tilatti, Michael
Bern, David

Development Sub team

McCall, Ian
Hartline, Julian
Peake, Andrew
Pindrik, Dmitriy
Quinn, Michael
Bern, David

