Improving Your Web Site Through a Needs-based Design Approach

James P. Sampson, Jr., & Darrin L. Carr
Florida State University

Copyright © 2004, Florida State University, All Rights Reserved
Credits

Technical Report 28
(Why)
James P. Sampson, Jr.
Darrin L. Carr
Julia Panke
Scott Arkin
Megan Minvielle
Stacie H. Vernick

Technical Report 29
(How)
Julia Panke
Darrin L. Carr
Scott Arkin
James P. Sampson, Jr.
Overview

• Define Resource-based and Needs-based web sites

• Follow eight-step process
  – Instruction
  – Group Work

• Review other design issues
  (time permitting)
Design of Internet Web Sites

• Resource-Based Web Site
• Need-Based Web Site
Resource-Based Web Sites

• Organized by
  – resources and services available
  – the structure of the organization

• Users select resources, services, or links to meet their needs
Welcome to the [Redacted] Health Department's Web Page. We may be new to the Internet, but we've been serving the citizens of [Redacted] continuously since 1931, providing a wide variety of public health services including personal health, environmental health and public health education. We also serve as the county's Vital Records Office for birth and death certificates.

Every county in [Redacted] has a County Health Department. They are operated jointly by the [Redacted] Department of Health and the individual county governments. Wherever you live in [Redacted] there's a [Redacted] Department near you.

- Learn about our Health Department
- What is our Mission
- What is Public Health?
- What are Personal Health services?
- I want to know about Environmental Health....
- How do I get a birth or a death certificate?
- Health Education & Public Health Statistics
- Public Health Statistics
- Other Public Health Links
Resource-Based Advantages

- Fast access for experienced users
- Low development costs
- Short development time
Resource Based Disadvantages

• Difficult for novices to select resources & services meeting their needs
  – Assumes ability to link resources & needs
  – Difficult to predict outcomes
  – Uncertainty about when help is needed
  – May lead to random linking & site hopping

• Users become overwhelmed with options
  – Emphasis on comprehensiveness
Need-Based Web Sites

Organized by

1. list of potential users (audiences)
2. Interactive clarification of needs (simulated conversation)
3. Resources & services meeting needs

Resource-based tools

- Index, site map, text search
- fast access for experienced users
Aims of the Need-Based Design

- Provide *easy access* to relevant, high quality information users *understand* how to use
- Promote *effective use* of relevant resources & services rather than *comprehensive access* to all possible resources and services
Needs-Based Advantages

Users:

• only view resources & services fitting needs
  – Site appears smaller & easier to navigate
  – Users less likely to be overwhelmed with info
• better understand how to use resources
• better understand when assistance is needed
Needs-Based Disadvantages

- Higher development costs
- Long time required for development
- Difficulty in applying the expert knowledge of counselors
Example

- **User:** College Sophomore
- **Need:** Choose a Major
Clarification of audience

Welcome to The Career Center!

What brings you here today?

I am a:

- **Student** seeking career, education, or job assistance.
- **Alumni** looking for help with job, education, and career decisions.
- **Community Member** seeking information about career and education choices.
- **Employer** interested in offering career opportunities to FSU students.
- **Faculty, Staff or Administration member** seeking career resources and services.
- **Family Member** wanting to assist in the career process.
- **Professional** delivering career services or creating career resources.
Clarification of audience

I am a:

**Current Student**
Explore majors, occupations and educational options.

**Prospective Student**
Seek more information on my future career choices.
Clarification of needs

Choose or change my major.
Learn what’s involved in choosing a major and what resources are available in The Career Center.

Explore career options & information.
Match majors to occupations and learn what other options and materials are available to assist in career decisions.

Explore education options after graduation.
Obtain the information you need to make a decision about continuing your education.

Find internships, co-ops or other work experience.
Explore internships, co-ops and a variety of programs available for FSU students.

Find a job/interview on campus.
Register for on-campus interviewing, come to Career Workshops, and learn about FSU’s Career Expositions.

Find academic and advising resources on campus.
Learn about academic and advising support services that exist around campus, and find out how to take advantage of them.
Clarification of needs

I am a current student and I want to choose/change my major. I would like to:

**Know where to begin.**
Learn what is involved in choosing a career or major through the Guide to Career-Decision Making.

**Visit our Career Workshops.**
Participate in the “Choose a Major” workshops we provide.

**Take the "Career Class" at FSU.**
Learn about an undergraduate course that helps you explore your interests, find majors that might fit you, and develop job search skills.

**View the "Career Clock."**
Read suggestions of where you should be in your academic and career development.

**Match FSU majors to occupations.**
Identify computer, Web, and print-based resources that help you to match FSU majors to occupations.

**Explore career options.**
Gather information about occupations to assist you in choosing a major.

**Gain more experience before graduating.**
Explore opportunities for gaining career experience and discover how to get involved.
I am a current student and I want to choose a major.

Knowing where to begin in Choosing a Major or Career.

Guide to Career Decision Making/Choosing a Major

There are several objectives to consider when trying to choose a major, including knowing about yourself, knowing about your options, knowing how you make decisions and identifying/addressing any barriers to your career decision making. The relationship between these objectives is outlined in the diagram below, known as the Pyramid of Information Processing.

Once you realize you need to make a career decision, the next step is to clarify what you know about yourself and your options. In looking at your self-knowledge it is...
Eight-Step Process

Step 1: Define your audience

Step 2: Define the needs of specific audience members

Step 3: Create a list of your organization’s resources and services
Eight-Step Process Overview

Step 4: Define the purpose(s) your resources & services address

Step 5: Match specific audiences to resources & services via needs

Step 6: Write outcome statements
Eight-Step Process Overview

Step 7: Write audience goals

Step 8: Compose other features to help clients link needs with resources & services
Step 1: Define Your Audience(s)

Purpose:

– To link resources and services to the audiences that they serve, you must first have a clear understanding of who you intend to serve
Clarification of audience

Welcome to The Career Center!
What brings you here today?

I am a:

Student seeking career, education, or job assistance.
Alumni looking for help with job, education, and career decisions.
Community Member seeking information about career and education choices.
Employer interested in offering career opportunities to FSU students.
Faculty, Staff or Administration member seeking career resources and services.
Family Member wanting to assist in the career process.
Professional delivering career services or creating career resources.
Clarification of audience

I am a:

**Current Student**
Explore majors, occupations, and educational options.

**Prospective Student**
Seek more information on my future career choices.
Step 1: Define Your Audience(s)

Questions for exploration:

– According to the mission of your organization, who is it designed to serve?

– Who most often requests resources and services or contacts your organization?

– Who may benefit from resources and services that you offer?
Step 2: Define Audience Needs

Purpose:

– Outline and present needs in terms familiar to your audience(s) to encourage them to move further into your Web site
I am a current student and I need to:

Choose or change my major.
Learn what’s involved in choosing a major and what resources are available in The Career Center.

Explore career options & information.
Match majors to occupations and learn what other options and materials are available to assist in career decisions.

Explore education options after graduation.
Obtain the information you need to make a decision about continuing your education.

Find internships, co-ops or other work experience.
Explore internships, co-ops and a variety of programs available for FSU students.

Find a job/interview on campus.
Register for on-campus interviewing, come to Career Workshops, and learn about FSU’s Career Expositions.

Find academic and advising resources on campus.
Learn about academic and advising support services that exist around campus, and find out how to take advantage of them.
Clarification of needs

I am a current student and I want to choose/change my major. I would like to:

Know where to begin.
Learn what is involved in choosing a career or major through the Guide to Career-Decision Making.

Visit our Career Workshops.
Participate in the “Choose a Major” workshops we provide.

Take the "Career Class" at FSU.
Learn about an undergraduate course that helps you explore your interests, find majors that might fit you, and develop job search skills.

View the "Career Clock."
Read suggestions of where you should be in your academic and career development.

Match FSU majors to occupations.
Identify computer, Web, and print-based resources that help you to match FSU majors to occupations.

Explore career options.
Gather information about occupations to assist you in choosing a major.

Gain more experience before graduating.
Explore opportunities for gaining career experience and discover how to get involved.
Step 2: Define Audience Needs

Questions for exploration:

– What questions do individuals typically ask when they come to your organization?

– What is your expert opinion about the needs of your users or clients?

– What resources or services do audience members ask for in which you reply “no, we do not offer that, but you can go to….”? (New need or service to consider)
Step 3: List Resources & Services

Purpose:

– Outlining what you have available is the first step to meeting client’s needs with the resources and services that you offer
Step 3: List Resources & Services

Questions for exploration:

– What resources and services does our organization advertise?

– What resources and services do our audience members most frequently request?

– What “little known” resources and services exist that need to receive greater publicity?
Step 4: Define purpose(s) of Resources & Services

Purpose:

– This is the key to understanding the needs addressed by each resource or service, and therefore where it belongs on the Web site
I am a current student and I want to choose a major:
Knowing where to begin in choosing a Major or Career.

Guide to Career Decision Making/Choosing a Major

There are several objectives to consider when trying to choose a major, including knowing about yourself, knowing about your options, knowing how you make decisions and identifying/addressing any barriers to your career decision making. The relationship between these objectives is outlined in the diagram below, known as the Pyramid of Information Processing.

Once you realize you need to make a career decision, the next step is to clarify what you know about yourself and your options. In looking at your self-knowledge it is
Step 4: Define purpose(s) of Resources & Services

Questions for exploration:

– What is the purpose of the specific resource or service?
– What is it designed to do?
– Who is it designed to serve?
– What gap does it fill in our organization?
– How does it help our organization function efficiently?
Step 5: Match Audiences to Resources & Services via Needs

Purpose:

- The foundation of the need-based process happens here
- This linking of audiences to resources and services via needs provides for the maximum effectiveness of the need-based Web site
Step 5: Match Audiences to Resources & Services via Needs

• Process:
  – Place results from Steps 2 and 4 next to each other
  – Make note of each time an “audience need” is the same as a “need addressed by a resource or service”
  – The result is a link between the audience and the resource or service via needs
Step 6: Write Outcome Statements

• Purpose:
  – Outcome statements provide motivation and realistic expectations for using the resources and services that clients discover on your Web site
Step 6: Write Outcome Statements

• Questions for exploration:
  – How can the resources or services on the next page be described?
  – How will the resources or services on the next page help users achieve goals?
Step 6: Write Outcome Statements

• Questions for exploration:
  – What do the resources and services on the next page have in common?
  – What might the user achieve by using a specific resource or service?
  – What has this specific resource or service helped users to do in the past?
Step 7: Write Audience Goals

• Purpose:
  – Audience goals are a motivational technique to allow audience members to understand the Web site’s potential to meet their needs
Step 7: Write Audience Goals

• Question for exploration:
  – What are the major themes that the outcome statements identify for this audience?
Step 8: Create Additional Features

• Purpose:
  – Facilitate the process of linking resources and services to needs by providing clients with expert advice on how to use what they have found
Step 8: Create Additional Features

• Example: How-To Pop-up Window
  – Provides context sensitive help about resource or service the client has found
  – Key elements include:
    • Resource name
    • Audience name
    • Definition of the resource
    • Procedural steps for using the resource
    • Description of where to find additional help
Review Other Design Issues

- Design to promote learning
- Evaluate for efficacy
- Manage politics
- Apply simple strategies
Design to Promote Learning

- Consistency
- Cognitive aspects
- Accessibility
Design to Promote Learning

• **Consistency**
  – Templates
    • Clarification of audience, clarification of needs, and information delivery
  – Page design
    • Fonts, colors, styles, headers, footers, etc.
Design (Continued)

• Cognitive aspects
  – Limited demands on memory
    • $7 \pm 2$ options on any page
  – Browsability
    • Group and classify similar information or items
  – Readability
    • Language level suitable for audiences served
Limited demands on memory
Design (Continued)

• Cognitive aspects (continued)
  • Legibility
    – Font size, type face, colors, etc.
  • Items ordered by developmental sequence or most frequent use
Services for Employers' Facilities

- Facilities
  Career Placement Services encourages on-campus interviewing in the Fall (first of October through November) and Spring (first of February through April). Our facilities are located on the fourth floor of the University Center and in Room 233 of The College of Business.

- Planning And Scheduling Your Visit
  To review The Career Center's recruitment policies or to discuss your recruitment trip, we encourage you to contact the Associate Director of Career Placement at 850/644-4023. To schedule your interviewing date, please contact our Scheduling Coordinator at 850/644-6493.

- Information Sessions/Receptions
  For those employers who wish to schedule information sessions or receptions, our Scheduling Coordinator will make any necessary room arrangements. Please note that audio visual equipment will not always be available. If you need on-campus catering, please contact Marriott Catering at 850/644-2404. For additional advertising, please contact the newspaper, FSView/Florida Flambeau, at 850/574-2500 Extension 204.

- Seminole Futures Career Expo
  Seminole Futures is held in September and January and is open to all employers are interested in recruiting FSU students and alumni through Career Placement Services. Over 200 organizations and approximately 1,500 students participate in this event. This expo is open to all majors. Fall Seminole Futures is typically held the third Friday after classes begin in September from 9:00 AM to 4:00 PM.
Items ordered by developmental sequence or most frequent use

I am a current student and I want to explore Graduate and Professional Education. I want to:

1. Decide if I should continue my education
   Understand the steps involved in deciding whether to pursue graduate education.

2. Search for a degree program and school
   Identify sources for finding the professional or graduate program or school that fits your needs.

3. Learn about the application process
   Identify the steps necessary in applying for graduate school.

4. Finance my degree
   Seek information on fellowships, assistantships, loans, grants and scholarships.

5. View a suggested time line for the graduate process
   Know where you should be during your last two years as an undergraduate.

6. Visit the office of graduate studies
   Apply for graduate school at Florida State, request graduate materials and explore available programs.
Design (Continued)

Accessibility

– Alternate text tags for persons with visual disabilities
– Selecting colors for persons with color blindness
– Coding for screen readers
Evaluate for Efficacy

- **Usability testing**
  - Observation

- **Evaluation**
  - Perceptions of audiences, staff, stakeholders

- **Site design documentation**
  - Authorship, design strategies, technical specifications

- **Tracking of Web site usage**
  - Statistics and patterns
Manage Politics

• Control the site - control the service
• Narrow design - expertise of one individual
• Limited collaboration - limited integration
• Web site reflects the organization instead of the individuals served –

“My work and my office are important and should be shown on the web site.”
Apply Simple Strategies

• First focus on **content**, then design web site functioning based on technology

• Ask the following questions:
  – Who does (or should) the web site serve?
  – What are the needs of users?
  – What resources are available (or could be available) to meet user needs?

• Link the needs of audiences to resources
Apply Simple Strategies

• **Collaborate** rather than delegate design to one staff member
  
  – Groups tend to make better decisions, which can result in a more complete and better functioning web site
  
  – “people support what they help create.”
Conclusion

• Resources and services should match needs
• Use instructional design to create effective Internet resources
• All staff contribute to design and integration
• Focus on content first and design second
• Staff development and training key to success
• Technology provides an opportunity to examine and enhance current practice
Need-Based Web Sites

• Elements of each link
  – Description (Not actual title)
  – Potential learning outcome
  – Recommendations on the use of resources provided as appropriate

• Number of links limited by working memory requirements and quality
Need-Based Web Sites

• User identifies need - for example
  – beginning student selects a program of study related to interests
  – graduating student identifies employers recruiting for specific occupations

• Resources, services, and links are then related to needs
Web Site Design Strategies

• Use staff experience to visualize what individuals say (or could say) when they enter a service delivery center, and then
  – respond with additional statements to clarify user needs, or
  – link to resources and services that relate to the user needs you have identified
Web Site Design Strategies

• Make the web site “intelligent” by incorporating staff expertise as well as delivering information
Web Site Designs to Avoid

• A long single list of links and FAQs
  – Overwhelming to use & hard to remember
  – Links should be need-based or categorized

• Home pages with organizational information & slow-loading graphics
  – Good information - bad timing

• Busy pages with little blank space
Alternate text tags for persons with visual disabilities

I am family member and I want to:

Learn about services provided at The Career Center.
Discover how The Career Center can assist my family with career decisions.

Support a family member making a career decision.
Explore ways of supporting family members who are making career decisions.

View The Career Center's parent orientation.
Review a slide presentation on an overview of FSU.

Obtain information on the "Career Class".
There are many ways for family members to support a student's educational and career experience.

Serve as a networking contact for students and alumni.
Learn how to become a participant in the Seminole Connection program.

Copyright 2000, Florida State University
Page Modified December 18, 2000
Privacy Policy and Accessibility Statement
Bobby Approved (v 3.2)
Page can stand alone if person links from elsewhere

Choosing an Occupation

Choosing an occupation is an important decision. When making a decision such as this, it is first important to look critically at yourself, and examine your values, interests, and skills. There are many activities available at The Career Center to assist you in this process. See what activities are available for "Looking at You."

Gaining knowledge about occupations is also very important in order for you to determine how well each occupation will fit with your values, interests, and skills. Obtain more information about a particular occupation.

Once you have clarified your self-knowledge and examined potential occupations, it is time to make a decision. A useful tool to assist you in this process is the Guide to Good Decision-Making Exercise available at The Career Center. This guide can help you weigh out your options and choose the best option for you based on your values, interests, and skills, as well as the impact of your decision on yourself, your family, your community, and your culture.

To access these resources or to get assistance deciding which resources would work best for you, come to The Career Center and speak to a Career Advisor.
Navigation (Continued)

• **Resource-based tools**
  • Search
  • Site Map
  • Index
Content

• Writing for the Web
• Graphics
• Help
• Organizational information
• Time-based features
• Place-based features
Content

• Writing for the Web
  – Info chunking, page length, etc.

• Graphics
  – Related to content, short download time, sensitive to diverse audiences
    • Icons/symbols
    • Photographs

• Help
  – Help information, first time user orientation, how to pop-up window (sequence and use information; circumstances when help is needed)
Content (Continued)

• Organizational information
  – About us, privacy policy, contact information

• Time-based features
  – Calendar, what’s new, page modification date

• Place-based features
  – Maps and images of physical environment
Navigation

• Links
• Feedback
• Resource-based tools
Navigation

• Links
  • Audience
  • Descriptive labeling
  • Learning outcomes

• Feedback
  • Clarification of path chosen
  • Breadcrumbs
Welcome to The Career Center!
What brings you here today?

I am a:

Student seeking career, education, or job assistance.

Alumni looking for help with job, education, and career decisions.

Community Member seeking information about career and education choices.

Employer interested in offering career opportunities to FSU students.

Faculty, Staff or Administration member seeking career resources and services.

Family Member wanting to assist in the career process.

Professional delivering career services or creating career resources.
Descriptive labeling

I am a current student and I want to:

Choose or change my major.
Learn what’s involved in choosing a major and what resources are available in The Career Center.

Explore career options & information.
Match majors to occupations and learn what other options and materials are available to assist in career decisions.

Explore education options after graduation.
Obtain the information you need to make a decision about continuing your education.

Find internships, co-ops or other work experience.
Explore internships, co-ops and a variety of programs available for FSU students.

Find a job/interview on campus.
Register for on-campus interviewing, come to Career Workshops, and learn about FSU’s Career Expositions.

Find academic and advising resources on campus.
Learn about academic and advising support services that exist around campus, and find out how to take advantage of them.
Learning outcomes

I am a current student and I want to:

Choose an academic major.
Learn what’s involved in choosing a major and what resources are available in The Career Center.

Explore career options & information.
Match majors to occupations and learn what other options and materials are available to assist in career decisions.

Explore education options after graduation.
Obtain the information you need to make a decision about continuing your education.

Find internships, co-ops or other work experience.
Explore internships, co-ops and a variety of programs available for FSU students.

Find a job/interview on campus.
Register for on-campus interviewing, come to Career Workshops, and learn about FSU’s Career Expositions.

Find academic and advising resources on campus.
Learn about academic and advising support services that exist around campus, and find out how to take advantage of them.
Clarification of path chosen
Clarification of path chosen

I am a current student and I want to:

Choose a major.
Learn what's involved in choosing a major and what resources are available in The Career Center.

Explore career options & information.
Match majors to occupations and learn what other options and material are available to assist in career decisions.

Explore education options after graduation.
Obtain the information you need to make a decision about continuing your education.

Find internships, co-ops or other work experience.
Explore internships, co-ops and a variety of programs available for FSU students.

Find a job/interview on campus.
Register for on-campus interviewing, come to Career Workshops, and learn about FSU's Career Expositions.

Find academic and advising resources on campus.
Learn about academic and advising support services that exist around campus, and find out how to take advantage of them.
I am a current student and I want to choose/change my major. I would like to:

Know where to begin.
Learn what is involved in choosing a career or major through the Guide to Career Decision Making.

Visit Career Center workshops.
Participate in the "Choose a Major" workshops we provide.

Take the "Career Class" at FSU.
Learn about an undergraduate course that helps you explore your interests, find majors that might fit you, and develop job search skills.

View the "Career Clock."
Read suggestions of where you should be in your academic and career development.

Match FSU majors to occupations.
Identify computer, Web, and print-based resources that help you to match FSU majors to occupations.

Explore career options.
Gather information about occupations to assist you in choosing a major.

Gain more experience before graduating.
Explore opportunities for gaining career experience and discover how to get involved.
Tips for A Successful Career Exposition Experience

• Know Your Audience

Knowing the student demographics and population characteristics is important. If you want to know more about the FSU student population, refer to page 16 of this guide or visit our website at www.fsu.edu.

• Send Your Alumni Back to Campus

FSU alumni are proud of their institution and love to return to their alma mater. Alumni who are outstanding communicators are great advertisements for your organization.

• Your Campus Team Should Reflect Organizational Diversity

Homogeneity in a recruiting team may cause suspicion or wariness among students of color. FSU boasts a 24% multicultural student population. Make sure your team sends the right message.

• Staff Your Booth Appropriately—Prepare for the Peaks & Valleys

As you arrive, you will notice students eagerly gathered outside of the Exhibition Hall. Our peak hours are 10:30 am- Noon and 1:00 pm - 3:00 pm. Design an overlapping shift schedule, so there is always adequate staffing at your booth.