WEBSITES AND ADVOCACY CAMPAIGNS: DECISION-MAKING,
IMPLEMENTATION, AND AUDIENCE IN AN ENVIRONMENTAL
ADVOCACY GROUP'S USE OF WEBSITES AS PART
OF ITS COMMUNICATION CAMPAIGNS

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ABSTRACT

Professional communicators designing websites need to know more about common barriers to good decision-making they might face. They also need to know how the websites they make function rhetorically and how audiences interact with them. Current publications on web design do not answer some of the designers' most important questions, especially for non-commercial websites. I begin to answer some of these questions through a case study portraying how an environmental advocacy group plans and uses websites as part of its advocacy campaigns.

I interviewed and observed group staff, investigating barriers to good decision-making including not having clear goals, not knowing the consequences of one's choices, and dealing with cognitive constraints such as time and technical knowledge. My findings suggest using a more defined publication management process may lead to better decision-making.

I also conducted a rhetorical and content analysis, studying how the websites functioned rhetorically. My analysis demonstrates the importance of visual elements for emphasizing more important web material. In addition, by comparing the content of the websites to the group's goals for the website, my analysis also shows how groups might check whether their websites reflect their goals. My analysis of the websites provides a foundation for building a definition of the unique genre of an environmental advocacy site.

I also surveyed audiences for the group's websites, learning who visits the websites and why and completing a comprehensive portrait of how the group's websites function within a larger communication context that includes face-to-face, email, and other contact with the organization. The survey respondents demonstrated a heartening interest in taking action for the environment online and offline.

Finally, my dissertation provides an in-depth analysis of how one group plans and uses its websites that can guide website planning and use in environmental advocacy organizations and other small groups that are likely to suffer from similar decision-

making barriers (such as not having a full-time web designer on staff). More systematically analyzing web audiences, using better routines to plan, create, and maintain websites, and evaluating the effectiveness of web communications might lead to more successful web discourse.

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CHAPTER I

AN INTRODUCTION TO A RHETORICAL STUDY OF AN ENVIRONMENTAL ADVOCACY SITE

Introduction

Rhetoricians have been developing theories about rhetoric, how to persuade people in legal, civic, and religious arenas, for centuries. More recently, technical communicators have spent decades developing theories about how to instruct people effectively, efficiently, and ethically, and they and other communication professionals have paid attention to how to develop discourse for use in legal, medical, scientific, commercial, technological, political, and other arenas. While developing these theories, rhetoricians and professional communicators have considered how discourse changes with new media: ancient rhetoricians considered the change from speech to writing, later rhetoricians dealt with the effects of the printing press, and more contemporary communication professionals consider discourse as made specifically for radio and television. Now, email and other electronic media also affect how we use discourse. The WWW is one of these new media options, a communication tool that is increasingly used for commercial, educational, and political communication.

Currently, we have too little existing, rigorous, published research of any kind about **web rhetoric**.¹ Furthermore, most existing research addresses narrowly defined specific applications or issues and deals with the use of the WWW for either educational or commercial purposes. The lack of rhetorical—holistic, contextual—studies of the use of the WWW for non-educational and non-commercial purposes prevents **web designers**²

¹ Throughout this work I will use “web rhetoric” and “web design” to refer to both the rhetorical and design aspects of websites. The term “web rhetoric” refers primarily to the function of the text and design of the site, and not to the programming itself, although how the site is programmed clearly affects its functionality. In addition, note that words that are in bold the first time they are used also appear in the glossary.

² Web designer will refer to people who work with both rhetorical and design aspects of websites. A web designer might or might not also program websites.

and other decision makers from making well-informed decisions about the content and visual design of their websites. Some websites sell products, while others sell ideas or try to compel political and social action. How do sites sell ideas? What ideas do they sell? What goals do these websites accomplish?

Little published information addresses the use of websites for non-educational or non-commercial purposes. Research has not yet sufficiently distinguished different types of websites and how they fit differently into various types of communication campaigns. We need to examine different uses of websites, moving beyond “website” as a genre to looking at different genres of websites, defined by their purpose or the activities they promote, rather than their medium.

We also need research into the decision-making processes that organizations and individuals use to create websites. For example, most current research does not consider the larger contexts for website use, but instead focuses on usability (Nielson) or on technology, as do publications on the use of XML and cascading style sheets. Because we do not know if technological barriers are the greatest barriers to creating effective web rhetoric, we do not know if these kinds of publications are addressing developers’ greatest needs.

Lack of research-based information about how particular kinds of websites function rhetorically and how designers make decisions causes even more severe problems when an organization’s websites are but one part of a larger communication campaign that may also include other, related messages sent through television, radio, newspaper, email, and other means. How can technical communicators developing visual design and content for web pages that sell ideas improve their sales pitches? How do the websites work as part of a comprehensive communication policy? How might designers use the capabilities of web media to facilitate interactivity to meet their goals? The decision makers who plan communication campaigns that involve websites and who develop and design those websites need to know the answers to these questions.

For these reasons, modern communication professionals need more research into the planning, application, and use of web rhetoric in the context of communication

campaigns. This dissertation provides communication professionals with research-based knowledge through an empirical study of web rhetoric in an environmental advocacy context. This chapter will explore the gaps in existing publications on the planning and use of websites for non-educational and non-commercial purposes, explain how a rhetorical study of an environmental advocacy group's websites can begin to fill some of those gaps, and offer an outline for the rest of the dissertation.

Why We Need Research into Web Design

One of the most easily noticed gaps in research into web rhetoric is that most WWW research is not about how to create rhetorically effective web text and visuals. There are some notable exceptions: research into the use of the WWW in political election campaigns (McAndrews, Klotz), for social action (Gurak, Mele), or for environmental advocacy (Killingsworth and Jacobsen) and Bruce Klopfenstein's article about social, political, and economic dimensions of the Internet. These studies explain how the WWW can bring local people together to fight political injustice and how environmental sites from both government and activist sources can fail to deal effectively with political and environmental problems. However, the vast majority of publications about the WWW primarily provide guidance for decisions such as choice of a site metaphor, use of color, use of font, and navigational options. In other words, most current publications deal largely with what I call **micro-design** or delivery issues: important issues, yes, but small ones that researchers often do not place in a larger rhetorical context. When research looks at traditionally rhetorical concerns, as does Wendy Winn and Kati Beck's article "The Persuasive Power of Design Elements on an E-Commerce Web Site," it still may, as this article does, focus more upon the visual and navigational elements than upon the rhetoric of the text or, as might be ideal, upon both the rhetoric of the text and the rhetoric of visual and navigational elements.

Furthermore, although **web design** experts like Jakob Nielsen draw upon usability studies and interviews or surveys with website visitors to shape the advice they give, much existing guidance relies more upon **lore** and personal experience than upon

rigorous research. Jan Spyridakis explains, “In recent years, numerous articles, books, and even Web sites have offered advice for designing hypertext documents, multimedia, and Web sites. This advice is often based on common sense and professional experience, not research, though the same things can be said about any type of instruction” (359). Like Stephen North’s lore, any individual example of the lore that is our current web design guidance is not necessarily knowledge of poor quality, but it is a pragmatic, experience-based contribution to a body of knowledge used by people in the field (24). However, people can adopt and adapt lore in a variety of ways, some of which may vastly transform or even foil the original intentions of a theory or practice (24). In addition, once lore exists, regardless of its quality, it is hard to eliminate it from practice. Finally, while lore can include valuable knowledge, it also often includes experienced knowledge that may or may not have been true originally and may or may not be true in new contexts. In August of 2000, *Technical Communication* published an issue on web heuristics, in which the editors and authors provide the results of research they conducted to make it easier for web designers to use existing web design guidelines. After collecting guidelines from various sources and creating new guidelines based on existing research, the authors tested the guidelines and presented them in an easy-to-use format. In their articles, the authors and editors support the heuristics they offer by explaining how and why to use them. Many of their guidelines promote choices that are still relatively unsupported by research. In fact, to make the guidelines, the authors and editors often had to draw upon what they describe as “so-called anecdotal evidence” and upon research in related issues like interface usability that may or may not apply to web design (305).

Furthermore, most published research on web design looks at focused issues like on-screen readability of sans serif and serif fonts; technical capabilities, like using **stretch text** and other adaptive hypertexts; and online reading comprehension and use of websites for educational purposes. Menno de Jong and Thea van der Geest explain, “the medium is so novel that almost any solution is a nonstandard solution, especially because until now, most attention about Web design has focused on the technical development

rather than on its character as a means of communication” (311). While usability tests also provide guidance, testers tend to address particular uses of particular sites, such as whether someone can find particular information or buy a product, and much of this information does not necessarily apply to other sites. For example, the results of usability tests on one site often cannot inform designers about the usability of another site, nor can they usually provide much information about the use of the site in relation to other resources, the personal or professional goals of the typical visitor, or other functions of the organization sponsoring the website. Moreover, people rarely publish usability test results so that one designer/developer can learn from another’s problems, which makes it only more likely that web designers and developers cannot make the best decisions. Thea Van Der Geest and Jan Spyridakis describe a reality in which, “millions of Web pages and Web sites must be designed *now*, and their designers and developers cannot wait until all their questions are answered by extensive and thorough empirical research” (301). The heuristics the special edition of *Technical Communication* offers are a significant help to these designers, more than merely a stopgap measure. Similarly, the usability tests, focus groups, and other research techniques that currently guide web design are significant aids in developing successful web rhetoric, but they are not enough.

As technical communicators strive to learn more about the effectiveness of information design and expertise required to develop information for paper, electronic formats, and the web, we need to add to the valuable research we have now, such as Jakob Nielsen’s work and the work on heuristics in *Technical Communication*. One important need is for more research that considers web characteristics contextually. As Van Der Geest and Spyridakis explain, “organizations are becoming aware that their web presence should no longer be the responsibility of only their computer people but should instead be treated as an essential and integrated part of their internal and external communication policy” (301). Bonnie Nardi and Vicki O’Day suggest that we study the application of technologies within the larger social and institutional contexts in which they are used. David Russell and Yrjö Engeström encourage us to conduct research through the theoretical lens of activity system theory, which helps us focus not just upon

the final product, but also on how and why it exists and how and why it is used. These researchers promote new, rhetorical approaches to website creation and use. They help us move beyond using technology for technology's sake and into considering why and how we are using technology to affect real people and real problems in the actual as well as in the virtual world.

However, that communicators increasingly may understand that they need to treat websites as part of a comprehensive communication policy does not mean they know how to do so effectively. As Van Der Geest and Spyridakis explain, currently "An approach to Web site design from a comprehensive communication perspective is missing" (301). A broader context may help focus our attention not only upon choices about what to place on a website and why, but upon websites as one element of larger communicative efforts: how do the content and visual design of a website help it interact with other organizational publications and activities and/or external resources? How do websites promote non-web based activities? What goals might developers have for web material versus other published material? Addressing these questions can help us better guide the appropriate selection and combination of communication mediums, such as paper, online, and multimedia.

First, we need to consider the problems designers and developers actually have. We anecdotally know that designers may have to guess what would work best for their audiences and purposes—and often must even guess who those audiences are. However, we have few methodical explorations of how websites are designed, by whom, and what problems, exactly, seem to most interfere with people's ability to design websites for use in advocacy campaigns. Therefore, one research priority is investigating the processes that organizations might use to plan and create their websites. How do organizations learn about web capabilities? What questions most interest their staffs? What problems seem to most hinder them from efficiently creating effective web rhetoric? Where might we focus research and efforts to help groups and individuals be better equipped to make good decisions about their WWW use?

As Chapters IV and V further reveal, much existing web research that does deal more with web rhetoric issues beyond technological and visual design concerns deals with websites that have a pedagogical (such as, research into uses of the Internet for distance education) or e-commerce purpose. Articles with these foci include Diana Dee-Lucas' "Effects of Overview Structure on Study Strategies and Text Representations for Instructional Hypertext," Timothy Herbst's "Environmental Disclosure: Corporate Use of the World Wide Web," and Stuart Esrock and Greg Leichty's "Social Responsibility and Corporate Web Pages: Self-Presentation or Agenda-Setting." Marc Duncan explains that much research into the use of the Internet has investigated marketing issues like how the Internet will be used in retail, how online shopping will work, what products might sell well online, and how the WWW might be used to advertise. He elaborates, "little, if any, has been written regarding how businesses have successfully integrated the Internet into their business operations and overall marketing strategies" (59). Even in the research into corporate use, then, there are gaps in areas like use within a communication campaign.

Because of the focus on e-commerce and pedagogy, the problems caused by the general lack of vigorous web research are exacerbated for organizations that try to sell ideas and compel personal and political action. Many important questions these groups may have remain uninvestigated. For example, research demonstrates that educating people does not necessarily lead to personal or political action: do advocacy websites merely inform, or do the sites also work to directly promote action? The lack of research into non-pedagogical and non-commercial uses of the web is particularly important because these organizations, including many not-for-profit groups, often depend heavily upon the WWW for cheap, accessible mass communication. As Candace White and Niranjan Raman explain, the WWW is, "viewed as a desirable medium for public relations by many organizations. Given the evolving nature of the Web and the mixed findings about commercial successes of Web sites, little is known about the managerial aspects of Web site research, planning, and evaluation" (405). Their study indicated that, in many cases, "Web site planning is done by trial and error based on subjective

knowledge and intuition, with little or no formal research and evaluation” (405). To make better decisions, people working in not-for-profit and other small groups need to know more about the processes through which they make decisions about the use of websites as part of their comprehensive communication efforts. In other words, they need to know how they currently make decisions. They need to observe, analyze, evaluate, and revise their current decision-making processes, fine-tuning them so that they miss fewer communication opportunities.

Additionally, people working on websites whose purposes are defined as something other than commercial or pedagogical need to know how to best design the sites they decide to create to meet their goals, which often require active visitor participation. To determine the answers to the questions these groups may have we also need to expand and redefine usability, looking not only at how site visitors can navigate and perform particular actions on a site, but at how a site facilitates actions and meets needs beyond itself. In short, we need to investigate how a site functions rhetorically, meeting particular purposes for particular audiences. Does a site meet the goals and needs of its planners and designers as part of a communication campaign? Encourage visitors to join the group, donate money, attend real life events, or change their personal habits? Does a site meet the needs of its audiences as they define them, rather than as the organization would—does it help them access local and regional information, offer them multiple perspectives into an issue, or facilitate their participation in making policy decisions?

Studying websites that try to educate, change people’s minds, or compel action might help us see what some real designers and decision makers do while making websites, why they do what they do, how their goals and values are reflected in their sites, how the sites seem to meet the groups’ needs, and how people interact with the sites. Knowing the answers to questions like these, especially for neglected non-commercial and non-educational sites, might help designers creating these sites in particular make better decisions and might help all web designers think about web development more holistically and contextually: more rhetorically. Web design and web

designers will benefit from more rhetorical research approaches that investigate visual design elements, communicative goals, and audiences contextually, considering how they interact, just as document design for printed documents has benefited from research that moved beyond production of the page to how texts are used in real contexts. As websites can enable audiences to interact with one another, the sites, site developers, and others, this research is especially important. A study that analyzes how an environmental advocacy group (as an example of a not-for-profit group using the web for non-educational or non-commercial purposes) develops its websites, what its websites are like, and who uses them in what ways, can begin to address these needs and answer the questions listed below. Note that question one is an author question, questions two and three are text questions, and question four is a reader question, so that together the questions address the comprehensive communication situation.

1. *What decision-making processes shape the design and development of the group's websites as part of a larger communicative campaign?* For instance, how, by whom, and for what reasons are decisions made about how to use the group's websites?
2. *How do the group's sites meet the goals and reflect the values of their developers?* For example, how do website characteristics pertain to the advocacy campaign? How do website characteristics create and sustain dialogue, promote action, or encourage visitors to join or donate money?
3. *How do the group's sites reflect or fail to reflect common goals of environmental advocacy communication?* For instance, how do they enable public participation in public policy formation? If we consider advocacy sites to be a genre separate from educational and commercial sites, what genre characteristics do they have?
4. *Who visits the group's websites, and what do those visitors want to find, learn, and or do?* What on the sites interests them? What do they use on the sites, and what do they want that is not present? What do they do when they leave the sites?

The answers to these questions provide information useful to other advocacy groups and not-for-profit organizations and even small commercial entities, such as how

to use visual and written rhetoric on websites to compel people to act, what kind of information and interaction visitors may desire, and how to plan for a website to relate to other sources of information. The knowledge this investigation provides will help web designers and other technical communicators in general by providing more comprehensive foundations for designing and redesigning sites and establishing communication policies.

Environmental advocacy websites are an example of non-e-commerce and non-pedagogical sites that may be particularly interesting to study to expand our understanding of web design and development. One group that has such sites is the group I studied: the SEED (Sustainable Energy and Economic Development) Coalition based in Austin, Texas. At least five characteristics may make studying this group especially informative:

1. It has an interest in compelling personal and political change, goals that a variety of other groups share (especially not-for-profit groups).
2. Its goals tend to lead it to use, on its websites, many of the characteristics of websites that separate online and print sources.
3. It is a coalition.
4. It is a grassroots coalition akin to others across the nation, including SEED coalitions in other states, such as Iowa and Minnesota.
5. It is a small organization that, like many small organizations, does not have a full time employee devoted to web design and maintenance.

That the SEED Coalition is a grassroots organization and a coalition are important in helping the SEED Coalition be representative of the most rapidly growing environmental organizations most likely to depend upon websites as one of their primary means of communication. Diane Faris explains that many environmental groups participate in coalition work: about 97% of the groups she studied in 1995 had participated in a coalition in the previous year (61). Much recent literature discussing the environmental movement indicates the most interesting, most rapidly growing environmental groups are currently grassroots groups. Marcy Darnovsky asserts that we need to pay more attention

to the actions and concerns of non-mainstream environmental groups, as these tend to be active groups with a broader social and more racially diverse membership (50). Thus, that the SEED Coalition is a local grassroots organization is important; moreover, while the SEED Coalition in Austin is its own, local entity, other states have SEED coalitions as well, lending credence to the fact that the SEED Coalition is a relatively representative grassroots environmental advocacy group.

Similarly, it is important that the SEED Coalition, like many small not-for-profit groups and small businesses, does not have a full time web designer. Many groups hire part-time web designers, contracting out their web work; many web designers work freelance. However, much existing web design literature caters mainly to people who are insiders in an organization, who have time and resources to conduct audience analysis research and usability tests. Because we do not know if these expectations are realistic, studying the interactions between an organization and its contracted, part-time web designer might yield valuable information. Indeed, Chapter III explains that group may miss communication opportunities when full-time employees cannot benefit from the specialized knowledge of an in-house designer who is available to discuss and carry out important and timely website additions and revisions.

Duncan notes that larger groups are more likely to be studied: their size makes observations easier, they are easier to study longitudinally, and they are more likely to help fund studies (2). Despite the attractions large groups may have for researchers, a growing number of small businesses and a large number of small not-for-profit groups commonly use the Internet, and we need to know how these groups use the WWW. In addition, we need to know what decision-making processes small groups use, as the problems they face and the solutions most likely to work for them may be different from those appropriate for the larger corporations which most publication management literature considers. The SEED Coalition and other small groups may, for example, function better than a large organization would at JoAnn Hackos' ad hoc level of publication management, where the organization has few set routines about how to

proceed through the process of planning, creating, and evaluating texts: small groups have fewer people and tasks to coordinate.

Why Study Environmental Advocacy Sites to Learn about Non-Commercial and Non-Educational Uses of the Web

This section first addresses how studying an environmental advocacy group's web use can provide valuable information about websites in general. The goals most environmental advocacy groups share make them likely to depend upon many of the characteristics of websites that we want to learn more about. For example, hypertext allows us to meet a need for easy access to a variety of information: environmental advocacy groups may wish for their sites to link to reports and other sources of information online that they cannot afford to reproduce in print for a casual visitor. Websites can facilitate interpersonal communication and interaction through chat and email: environmental advocacy groups can use their websites to inform people about local and/or upcoming events and enable interpersonal communication, at a lower cost than through mail, telephone, and most mass media outlets. Potentially, environmental advocacy sites can bring decision makers and citizens together to discuss issues or can help individuals deliberate in a social setting with others of like and/or unlike minds. T

Technical writers, rhetoricians, website designers, campaign managers, environmental advocacy groups, and other stakeholders in the success of advocacy or other web-based communications campaigns should, then, pay some attention to who is publishing what on the WWW and to who is visiting these sites to retrieve what information or use which options, and why. Research into these issues can benefit technical communication by providing a new perspective on web design that has the potential not only to advance our understanding of web development and design, growing areas of interest within the field, but also to affect how people use websites as part of broader communication efforts. Research findings from research focusing on environmental advocacy group websites should apply also, generally, to other small group websites, such as those of religious organizations, about which Robert Fowler,

Allen Hertzke, and Laura Olson explain, “effective religious organizations commonly develop smaller lists of key contact people who can be reached by fax, e-mail, or phone trees for quick [political] responses,” making them likely to be attracted to some of the same web features that attract environmental advocacy groups (57).

In addition, environmental issues should be of interest to technical communicators because, as Susan Ross and Bill Karis note, “perhaps no other type of public policy issue offers researchers and theorists such excellent opportunities to observe technical professionals engaged in discourse with others who are not from similar discourse communities” (249). Wendy Michele Simmons explains that technical communicators are particularly qualified to analyze environmental discourse because of their training in multidisciplinary and in user advocacy (viii).

Most environmental groups use WWW pages, so studying their use of websites is easy and immediately of relevance to other environmental groups, as well as other advocacy and not-for-profit groups and their web designers. Susan Jacobson, building on Faris’ data, reports that the majority of major environmental advocacy groups (all twenty-five of the groups Jacobson surveyed) state that they use the WWW to distribute information frequently. This makes the WWW a more commonly used media/method for the groups than public service announcements, paid ads, letters to the editor, media roundtable sessions, or fact and tip sheets (181-182). Many smaller environmental advocacy groups also have websites. Furthermore, people still predict the impact of the Internet on advocacy movements with statements like Marcia Aronoff’s (in J.W. Anderson 21), “With the arrival of the Internet, technology has given the environmental movement a powerful new tool. A worldwide communications system offering instantaneous speed at almost no cost, it promises to be a significant force...in shaping green politics.” Environmental advocacy sites are a growing, popular use of the web worthy of attention, especially because attention given to them will also provide information applicable to other uses of the web.

Studying how organizations plan their sites and what their sites allow audiences to do helps us understand more about the goals and values of those organizations.

Similarly, knowing the goals and values of organizations can help us better understand the characteristics of their websites. Specifically, examining goals common to environmental advocacy sites can help us understand what characteristics their sites will have and how their sites are apt to try to function as part of a comprehensive communication campaign. Knowing these things can help us see how studying an advocacy group's planning processes and sites can augment our understanding of web planning processes and website design in general.

For example, building on the communication theories of Jürgen Habermas and the suggestions of Tarla Rai Peterson and others, environmental advocates often believe that political and corporate policy decisions affecting local communities are better when a variety of people in local communities are involved in making those decisions. Environmental advocacy groups are often interested in involving locals in policy-making (a process often referred to as participatory decision-making). Desiring participatory decision-making requires that groups provide locals with access to information, access to the ultimate decision makers, and a desire to voice their opinions. Environmental advocates work to remove barriers (such as lack of knowledge or lack of access to policy makers) to people's abilities to participate in decision-making and take political action. Therefore, advocates are likely to use many characteristics of websites to support communications that might help remove these barriers, in order to better reach their short-term goals (affecting specific decisions) and their long-term goals (affecting values and behavior, gaining long-term members and support). These goals and characteristics of environmental advocacy sites mean that studying them yields rich information regarding web design.

Lack of access to information, time for researching an issue on one's own, time for locating others with whom to discuss issues, and time for formulating letters to send to decision makers are merely a few of the barriers that prevent environmental action and participation in environmental decision-making. The next sections discuss how websites can help advocacy groups overcome these barriers, demonstrating the characteristics of web design that a study of environmental advocacy sites might address.

Facilitating Access to Local and Individualized Information

John Pavlik posits that online reporting goes through three stages (34):

1. A repackaging of material created for other media for the online environment.
2. A combination of stage one material and material created specifically for websites, which may include hyperlinks, search engines, and “degrees of customization.”
3. Material produced for an online environment that “is characterized by a willingness to rethink the nature of a ‘community’ online, and, most important, a willingness to experiment with new forms of story telling” (34).

Pavlik provides an example of the third stage of site that uses characteristics that seem likely to help advocacy groups. His example is a *Dateline* episode on dangerous roads in America, supplemented by MSNBC web pages where visitors learned about dangerous roads in their own communities. This example demonstrates how websites can help individuals find local information to which they may otherwise lack easy access: the television show could not provide local information for viewers across the nation.

Websites can also help people gather information by linking to newspaper articles, reports, maps, and other publications. Communicopia Environmental Research suggests that companies help visitors understand their environmental impact by providing several levels of specificity on environmental topics, by cross-referencing these reports to the annual report, and by establishing more links to research sites and community groups. As Matthew Applebaum and William Tedder argue, multimedia communications—unlike meetings and fact sheets—can offer people varying levels of detail or increased or decreased amounts of information on an issue (3). Web visitors can target exactly the information they want and can, if given options, read it in more or less detail, or request or choose not to request additional information, depending upon their previous knowledge, their resources, and their needs. People planning websites need to know how they wish to use their websites to communicate information; in order to make good visual design and content decisions, they need to know their options and the consequences of each option.

Supporting Interpersonal Communication

Websites can bring people together to discuss issues through chat rooms or listservs. Anna Ollier argues that the online medium can promote participatory decision-making because it encourages email contact, allows interactive forms, and provides a means for monitoring visitors. Communicopia Environmental Research reiterates that web reporting allows employees to be in direct contact with the public through email, answering questions about environmental concerns, something my own analysis of a 1999 Sierra Club report suggests may be true for advocacy groups as well. The Communicopia paper contends that the Internet may help companies serve some of their largest target populations—professionals and academics—who tend to have Internet access and who tend to be vocal and active in environmental issues. The Communicopia paper also draws a distinction between the use of print and online discourse, saying, “annual reports will remain an important communications tool... however, the increased dynamic approach to this strategy fostered by the use of electronic communications will both augment and inform the free-standing reports.” Finally, the authors include detail about the kinds of interaction Pavlik (34) suggests may occur, extending his ideas to online reporting for a different purpose. The authors recommend hosting chats with a company spokesperson as a discussion group participant, incorporating feedback mechanisms into annual reports published electronically, providing several levels of specificity on environmental topics, with these reports cross-referenced to the annual report, and establishing more links to research sites and community groups.

Communicopia’s web design tips indicate that websites could facilitate Craig Waddell’s social constructivist model of decision-making, where technical experts work with the public to make decisions so that lines between the technical experts and the public blur (“Saving the Great Lakes” 141-2). The social constructivist model contrasts with the more commonly used one- and two-way Jeffersonian models. In the one-way Jeffersonian model, experts communicate to the public with little chance for the public to share its opinions except too late in the process to develop plans. In the two-way model, experts and the public communicate with one another, but each from their own sphere of

expertise (“Saving the Great Lakes” 141-2). Laura Gurak would tend to support Communicopia’s belief that websites can support a different kind of communication. She explains that we can usually send email to others regardless of our or their social or political position. As advocacy sites may post email addresses for decisions makers or even provide ready-made email to send to decision makers, more people may be able to communicate directly with policy makers (259). Again, organizations and their employees need to know what their goals and options are regarding promoting participation, and they need to know what will work for their situations, with their audiences.

Coordinating Events and Information-Sharing

Websites can facilitate face-to-face and online meetings and conferences. Christopher Mele discusses a website which helped people in an underprivileged community contact architects, lawyers, sympathetic listeners, and people willing to make donations to help them influence the design of a new housing project (292). The website also helped the residents coordinate meetings with and communicate with one another, despite varying work schedules. In addition, meetings can occur online or people can disseminate information given or produced in face-to-face meetings online to compensate for the barriers of time and distance that prevent people from attending meetings.

Promoting Action

Websites can provide people with time-saving ways to take action or make their voices heard—like donating money online or sending a pre-written fax or email to a legislator or business executive with a click of the mouse. Gurak describes how chat, email listservs, and the communities they built drove an online campaign against the Clipper Chip by helping like-minded people rapidly share information and circulate electronic petitions (244). She also believes that while “social and political action on the Internet is still somewhat novel...the trend seems to be toward an ever-increasing use of cyberspace as a political arena” (245). Therefore, she thinks we need to study how

people conduct traditional rhetorical activities—including debates, speeches, and protests—through the Internet, especially focusing upon issues of exclusion and dominance (245). Such research might help organizations and their staffs know how to use their websites to promote political action.

What We Still Need to Know about Web Design for Non-Commercial and Non-Educational Purposes

By removing barriers to action and promoting education, discussion, and action, websites seem to have the capability to be particularly helpful communication venues. Theoretically, websites can support participatory action in ways few other media can. I have cited examples of web design that apply some of the methods online media offer to reach participatory and other goals. However, these websites may be exceptions, not the rule. These examples are primarily anecdotal and/or hypothetical, not based in sound research. For instance, we do not know whether people really share information better or interact better on the WWW.

In fact, despite the examples I have cited, some of the capabilities of websites to reach participatory and other goals may not work as well in practice as in theory. Stuart Esrock and Greg Leichty address corporate environmental reporting as one of many items they searched for in corporate web pages (308-9). They learned that few corporate websites included features such as those Pavlik mentions in his stage three, where sites become more interactive and explore new narrative forms (34). Instead, Esrock and Leichty conclude, “the Web pages are primarily utilized to disseminate corporate social responsibility information in much the same way as other traditional, one-way corporate communication vehicles” (315). Less than 30% of the corporate sites Esrock and Leichty studied had any characteristics to encourage dialogue with site visitors (315). Although no studies have addressed the issue across advocacy sites as across corporate sites, M. Jimmie Killingsworth and Martin Jacobsen’s narrative model may illustrate the problems with the typical advocacy site. Their example shows the difficulties a person exploring on the WWW might have obtaining information about a local environmental problem (172), contacting a governmental or advocacy agent or like-minded people with whom to

share information and concerns (172-3), and taking action or participating in decision-making processes (173).

Environmental advocacy sites might underutilize multi-directional communication possibilities such as those Waddell would advocate, involving dialogue between site visitors and with decision makers. They may do so because of a widespread cultural belief that environmental problems are largely rooted in people's attitudinal or factual misconceptions and can be fixed if we give people more information. This perspective remains prevalent in what George Myerson and Yvonne Rydin refer to as the "answer culture" (211), despite evidence that educating people does not necessarily lead to improved environmental behavior. In fact, John Carroll and Eric Johnson explain that people are apt, whatever they read, to leave with their preconceived ideas more firmly cemented (110). Additional information is more likely to validate people's opinions than change them, regardless of the content and stance of the information. James Cantrill adds that giving people more information on environmental issues often makes them less likely to act: instead of acting, they choose to gather more information ("Communication and our Environment" 82). Too many sites may throw information at a problem to solve it, despite evidence that this method is ineffective. It is also possible that groups underutilize interactive possibilities because they are not aware of them or do not have the time or technical skill to create or manage them.

Promises of increased opportunities for participatory action and decision-making online may also be overstated. Obviously, despite theoretical and a few actual promises offered by websites toward participatory decision-making, action facilitation, and community building, we need to know more about what communication actually occurs on websites that are trying to affect behaviors, ideas, and values. For example, a study can see whether sites fall into the "answer culture" trap or tie their education to action in ways that may overcome the information-replaces-action trend that Cantrill observes. Chapter IV will explain how the SEED Coalition provides several examples of how websites can tie education to action opportunities. We can also determine whether websites seem to take advantage of hypertext's abilities to let people access information

in differing levels of detail, according to their needs, and study how their audiences perceive them. Finally, we can learn, as I explain in Chapter V, that real web audiences may, indeed, take advantage of online information and action opportunities.

Why Study Web Audiences

In addition to examining the goals the SEED Coalition has for its websites and the web characteristics that may or may not reflect these goals, one might also consider the audiences for the SEED Coalition's websites. Cantrill posits that advocates should help their campaigns succeed by identifying stakeholders, identifying the self-interests of stakeholders, identifying the beliefs of stakeholders, linking action to human-centered needs and a technological orientation, allowing people to see common ground between their views and the advocate's, and helping them take easy action toward the policy ("Communication and Our Environment" 87-89). To do these things, groups need detailed information about their web audiences. However, published information about web audiences is almost nonexistent, making this area a large knowledge gap. Many groups may lack a clear idea of who visits their websites and why because demographic and use-and-gratifications research on the WWW are not very advanced, and, as Roger Wimmer and Joseph Dominick explain, the information available tends not to be valid for any but the most popular sites (362). When applied to environmental groups, audience queries include the following: are online audiences the same as audiences for other environmental discourses? If not, how do they differ? What classes, races, ages, and other categories of visitors visit the sites, and to whom do the sites appeal the most, and why? What do people want to find on environmental advocacy websites? What resources do they use, why, and how? Current resources, even those interested in audiences for environmental discourse, like Jacobson's book, do not thoroughly discuss web audiences or how websites might work with other media, except to suggest print media might direct people to websites. If groups do not know about their audiences, how can they make good rhetorical decisions about their WWW use?

Maybe most advocacy groups do not yet use the WWW to target particular audiences for particular purposes, but instead use it to reach general audiences for general

purposes or use it wishing they had more audience information. Therefore, one might expect to discover that environmental advocacy groups currently use the WWW for reasons of cost, convenience, and a desire to follow another group's lead, rather than because they have thought through how Internet use might fit into the activity system of an advocacy campaign.

Although most groups may not have carefully planned how their websites function in a larger communication campaign, this does not mean that they have not considered the issue at all. Indeed, many advocacy groups may advertise documents and events on their websites and use other documents and events to advertise their website. For example, many organizations include their URL in television and magazine or newspaper ads and on brochures and flyers, and their websites may advertise television specials, radio broadcasts, protests, or parties. Additionally, groups may publish much of the same information online as in paper reports, newspaper press releases, and other media. Although groups may use tactics like these, they probably do not know how much their audiences overlap—for instance, they probably do not know how many of the same people receive direct mailings and visit the website. The most advocacy groups may be able to guess about a web audience is that it would include the overlap between WWW users and those most sensitive to environmental issues, who tend to be young, well-educated, relatively wealthy liberals. However, the SEED Coalition's audience, as Chapter V explains, is actually older and (despite the fact that more people online are male), more than 50% is female. Discrepancies like this between what we might expect and what we see could affect how organizations create their websites and how effective their web rhetoric is.

Despite the basic lack of audience information most groups probably experience, some sites encourage or force registration and can collect demographic and use data during registration or through surveys of registered users. Indeed, some groups have been able to collect this information. For instance, Earthshare, a fundraising group representing many environmental advocacy groups, used Prodigy to learn about its web visitors. Earthshare's executive director explains, "we were able to look at how our

screens tracked with people by age breakdown, by demographic breakdown, by ZIP code. The ability to know precisely who's looking at your messages ... is an enormous capability that you simply don't get in traditional media" (Stein in Aho 26). When groups do gather this information, they can learn basic audience characteristics rapidly. However, Stein's comment does not indicate Earthshare knew much about whether these visitors were members of advocacy groups, interested citizens, accidental visitors, or opponents. In addition, there is no indication that Earthshare learned anything about whether their website met the needs of those visitors. Richer audience descriptions and more of them would help groups make better communication decisions. For instance, knowing whether online audiences were more representative of James Grunig's all-issue (people interested in a wide range of environmental problems), single-issue (people interested primarily in only one environmental issue), or involving-issue-only (people interested only in issues that directly involve them) publics would provide advocacy groups with better background information for decision-making (57). The SEED Coalition, armed with the knowledge (from audience surveys, see Chapter V) that their web audiences are interested in environmental justice, can tie more of its online action opportunities to environmental justice and might choose to involve itself more heavily in environmental justice issues.

We also need published research reporting on audiences. Most of the audience information that groups currently may be gathering is not published, so it can benefit only one group, not other groups and web designers.

An imaginary narrative Killingsworth and Jacobsen offer illustrates that more research into audience can help environmental groups make better decisions. In the narrative, a hypothetical citizen searches for local information on both the EPA and Greenpeace sites. She learns that although the EPA site disseminates its reports, it does not provide her with accessible local information (172). Her experiences demonstrate that Greenpeace, like many groups, seems to use its site primarily to advertise itself rather than to answer readers' questions or help visitors (172). In fact, the site announces that the group cannot reply to most of its email (172-3). This imaginary narrative points to a

need for real narratives that can demonstrate how visitors do interact with websites. Real narratives can also show whether advocacy groups do as Killingsworth and Jacobsen suggest, and aim to advertise more than communicate, whether they miss the mark with some users, and whether, in reality, what they do satisfies most users, despite Killingsworth and Jacobsen's hypothesis.

What are my Research Questions

To answer the questions and address the issues raised above, I conducted an exploratory, primarily qualitative, case study investigation of an environmental advocacy group's websites. My investigation aimed at answering the following questions, which I also listed earlier in this chapter:

1. *What decision-making processes shape the design and development of the group's websites as part of a larger communicative campaign?* For instance, how, by whom, and for what reasons are decisions made about how to use the group's websites?
2. *How do the group's sites meet the goals and reflect the values of their developers?* For example, how do website characteristics pertain to the advocacy campaign? How do website characteristics create and sustain dialogue, promote action, or encourage visitors to join or donate money?
3. *How do the group's sites reflect or fail to reflect common goals of environmental advocacy communication?* For instance, how do they enable public participation in public policy formation? If we consider advocacy sites to be a genre separate from educational and commercial sites, what genre characteristics do they have?
4. *Who visits the group's websites? What do site visitors want to find, learn, and/or do?* What on the sites interests them? What do they use on the sites, and what do they want that is not present? What do they do when they leave the sites?

The rest of this section provides an outline for this document, explaining where I address these questions.

What will Each Chapter Contain?

Chapter II: Research Methodology

Chapter II delineates the methods I applied to investigating the SEED Coalition's websites and other campaign materials, its communication campaign planning processes, and its web audiences. First, it describes my research philosophies and locates my research in relation to critical action research and participatory design. It explores my goals for this research project, both those aimed at acquiring knowledge and those that tried to help the SEED Coalition. It offers detail about how I interacted with the SEED Coalition, how I triangulated my research methods, and how my research methods yielded valid and reliable findings. In particular, Chapter II explains why I used a case study methodology and then focuses on why and how I conducted interviews, observations, textual analysis, and surveys. Chapter II also describes my research philosophies. It demonstrates that I saw my qualitative research as an ever-evolving plan, not as a pre-set plan to which I could make no modifications. For instance, I explain how my final research deviates from that I originally envisioned, in which the SEED Coalition would have been a more equal and active research partner, rather than a site for study.

Chapter III: An Investigation of Research Question One, The SEED Coalition's Campaign Planning Processes

Chapter III addresses question one, focusing on the planning processes that the SEED Coalition used to create and update its websites and use them as part of a larger communication campaign. Through interviews, observations, and analysis of planning documents, I learned why the SEED Coalition chose to use the WWW. I investigated the SEED Coalition's primary goals for its websites in its advocacy campaigns and determined the primary barriers the SEED Coalition employees face when trying to make good decisions about how to use websites, such as not being able to compare options readily because they do not know how successful those options have been in the past. Determining whether these assumptions about why and how a group uses its websites are true may lead to a new understanding of how a typical, small, grassroots, not-for-profit group may use the web.

Chapter IV: An Investigation of Research Questions 2-3, Regarding Website Characteristics

My analysis of the SEED Coalition's websites looked for the presence or absence of website characteristics intended to meet any of the group's goals. This analysis allowed me to compare what the authors intended for the sites to how the sites actually might function. It also allowed me to see how the SEED Coalition's sites function rhetorically compared to what we would expect based on studies of similar discourse, both on- and offline. For example, I expected that the group would, as it does, share some of the goals outlined in the literature review, including educating people about general and local issues, inducing and facilitating action, and facilitating interpersonal communication. I used a rhetorical/content analysis to discover whether its websites had characteristics that seemed likely to help it meet these goals.

I assumed the SEED Coalition would expect its websites to reflect its goals. Therefore, another way to investigate potential problems in the decision-making processes the SEED Coalition used to develop its web materials was to consider and analyze the reasons for any discrepancies between the SEED Coalition's stated goals for its efforts and its websites and the goals the websites themselves seemed likely to facilitate.

In addition to considering how well the websites reflect the SEED Coalition's goals, research question two, Chapter IV also considers research question three, exploring how the SEED Coalition's sites further or neglect commonly held goals of environmental advocacy communication, such as promoting public participation in decision-making. Michael Kraft and Diana Wuertz suggest that most advocacy groups want to either educate or inspire people to action (97). Some critics suspect that because advocacy groups desire to retain corporate sponsors and attract moderate members many of them may have tempered these goals, using less inflammatory rhetoric than they did before they had corporate sponsorship. In addition, environmental discourse literature indicates that advocacy groups currently tend to be committed to participatory decision-making and consensus-seeking processes such as those Habermas promotes. Similarly, Waddell,

an environmental discourse scholar and environmental advocate, promotes social constructivist communication models in which lines between expert and public are blurred, rather than the more traditional communication models in which experts communicate decisions to the public or the public and experts communicate in other fairly limited ways (“Saving the Great Lakes” 144). Because the SEED Coalition is a smaller, grassroots group, it seemed that it would be less likely that it would have been affected by the need to temper its rhetoric that Kraft and Wuertz address. For instance, by comparing the SEED Coalition’s websites to these characteristics, I was able to demonstrate how and to what extent the SEED Coalition’s websites encourage multi-directional communication: they allow communication from visitors to them and from visitors to policy makers, but they do not enable communication between site visitors or encourage sustained dialogue with the employees of the organization.

Chapter V: An Investigation of Research Question 5. Regarding the SEED Coalition’s Web Audiences

Chapter V provides the results of an analysis of the audiences for the SEED Coalition’s websites. The Sierra Club suggests that local chapters define their primary audiences and, whenever possible, piggyback onto national Sierra Club campaigns (1998). To know how important various website characteristics that web designers implement are, especially in the cases of advocacy and not-for-profit groups that tend to be heavily dependent upon web communication, we must know more: what do visitors to the site want? To discuss issues? To obtain information? To take action with little effort? How often and why do visitors return? For more information? For newer information? To see the calendar and plan to attend real life events? To take more action? Or do visitors seldom return to the website? What determines whether they will subscribe to the website? Donate money to the group? Send faxes and email through the site? Which leads to more long-term personal or political commitment—community on the site, or ease of action through the site? Which do visitors value more?

My investigation considered how the SEED Coalition defined its audiences and surveyed the audiences visiting the websites and others targeted by the group to learn

how well the group has defined its audiences, how the audiences define their needs, and how well the websites seem to meet their audience's needs. For example, I learned that most of the people visiting the website consider themselves to be environmentalists and have deep interest in environmental issues. However, I also learned that some of the people visiting the website were frustrated because they did not think that they could adequately answer their questions about the mission of the SEED Coalition through the website.

Chapter VI. An Investigation into the Spaces between and Conclusions and Questions for Future Research

I also learned how the SEED Coalition used its sites in relation to other published communications as part of an advocacy campaign: how carefully does the SEED Coalition plan its campaign elements to interact with one another, and how does the group define the role of its websites as part of a campaign? Jacobson's book (1999) about advocacy campaign planning, written for environmental advocates, seems to point at a need for advocates to learn more about communication campaigns, which inclined me to enter the investigation assuming that the group may not have thought carefully about the websites in relation to other media efforts. Chapter VI explores these issues and develops the spaces between the other chapters. While chapters III, IV, and V focus, in turn, upon the authors, the texts, and the readers, Chapter VI explores where these overlap, intersect, and interact with one another, using activity system theory to see, for example, how tools can simultaneously be goals, or actors can be tools.

In addition, this final chapter reviews the major conclusions of the study and explores their implications for web design and web designers. Then, the chapter develops questions for future research.

How This Research Can Benefit Technical Communicators

My investigation should help technical writers producing websites or working on design or content for web pages, not only in environmental advocacy but also in other non-commercial endeavors, do the following in a more informed manner:

- Understand, evaluate, and revise the decision-making processes they use to develop communication campaigns and websites.
- Reflect upon short- and long-term goals of their sites and how to reach those goals using websites as part of larger communicative campaigns.
- Consider and reach goals beyond providing information.
- Consider how their sites communicate their values.
- Develop better ways to share information with site visitors.
- Implement methods for online interpersonal communication that audiences appreciate.
- Consider how they actually use the potentials of online media.
- Implement new communication techniques, taking fuller advantage of offerings of online media than they currently may.
- Analyze and study their audiences.
- Understand the needs of their audiences.
- Meet the needs of their audiences.

My research can also guide web design and communication campaign development specifically for advocacy and other not-for-profit groups by providing information about the following:

- How to plan campaigns more effectively.
- How to evaluate their decision-making processes.
- How to design their websites to meet their goals.
- How willing audiences may be to subscribe to sites.
- How willing audiences may be to donate to groups online.
- How to better motivate audiences to subscribe, return, and donate money online.
- How to motivate audiences to take social and political action.
- How to motivate audiences to take actions in real life.
- To what extent audiences desire to be educated or communicate with others about issues.
- What information audiences most desire to be given, in what detail.

Conclusion

This chapter has explained why we need to explore web design to help web designers, other communication professionals, and the public that visits websites. In addition, the chapter explored why studying an environmental advocacy group would be a good way to learn more about web design. The chapter also explained why the SEED Coalition in particular would be an interesting group to study and reviewed literature relevant to web design and environmental advocacy discourse. Furthermore, it stated my research questions and provided a summary of the forthcoming chapters in this document, and, finally, it explained how this research could benefit both technical communication as a field and environmental advocacy groups in particular. Each chapter, in turn, will revisit the list of how this research can help professionals and the public. More immediately, however, Chapter II provides a detailed explanation of my research methodology and research methods that explains how I conducted the research.

CHAPTER II

METHODS AND METHODOLOGY

Because, as I explained in Chapter I, little published empirical research focuses on the use of the WWW for non-pedagogical and non-commercial purposes, we need to know more about who uses other kinds of websites, how, for what intended purposes, and for what actual purposes. In order to learn these things, I investigated an environmental advocacy group's use of the WWW as a tool for disseminating information. I examined its use of websites in a communication context with decision makers, authors, texts, and audiences, in which web designers and other group employees and web visitors have particular goals and may use the websites as tools to meet those goals. In this chapter, I will explain my research methodology and discuss my research methods, outlining how and why I did my research and explaining how I made it rigorous and valid.

My general research orientation, which is heavily influenced by critical action research, participatory design, contextual inquiry, and feminist research ideologies, influences all my research choices. From participatory design research and critical action research I adopted the concept that the ultimate goal of my research should be to help my research participants as much as they help me. As many feminist researchers do, I see research as ideally playing an active role in social change (Blyler 41). With Patricia Sullivan and James Porter, I believe that "research ethically begins... with the involvement and personal commitment by the researcher to research participants... has as its ultimate aim the betterment of research participants.... [and] positions researchers and participants in a reciprocal relationship... giving and getting" (ix-x). My ultimate research goal, then, was to help my participants learn to do what they already do even better and see new decision-making and communication options. When I contacted the group with which I worked, I made it clear that they could enter a research partnership with me, and throughout the research project I provided opportunities for partnership (offers to have them help develop survey questions, questions about what else they would like to learn about). However, the group's staff was, understandably, concerned about investing any more time than absolutely necessary into the research project and so chose

a more traditional participant role than what I had envisioned my participants having. They wanted me to make decisions about the research project. Therefore, although I created some questions in the surveys because of comments the SEED Coalition staff made to me, and in other small ways the staff contributed to the research design, I cannot say that the group and I were really research partners. Nonetheless, I tried to maintain the spirit of my research ideology by allowing my research participants to choose not to be more involved, reporting data in their voices and serving their interests.

Not only am I ideologically committed to seeing research as playing an active role in our society and to making my research participants co-researchers, but also I am concerned with analyzing my own perspectives. While my study does not focus on gender, it draws from the feminist research methodology tenet that the researcher herself must be placed “within the frame of the picture that he/she paints” (Harding in Sullivan 51). In other words, I must admit and consider my race, class, culture, gender assumptions, and political beliefs, as they may affect how I see what I study, what Michael Patton and others refer to as **epoche** (407). As Patricia Sullivan explains, “The researcher’s own race, class, culture, and gender assumptions are not neutral positions from which he or she observes the world but lenses that determine how and what the researcher sees” (56). Therefore, I explain my biases where I think that they might be relevant. The main relevant bias I have is that I am concerned with environmental issues myself. Not only, then, was I sympathetic with the SEED Coalition’s goals, but I had a personal desire to see it reach those goals. In addition, I used my background in biology and my long-time interest in environmental issues as ways to gain entry to the group, so at least the director of the group was always aware of these, and I made no effort to hide my interests from any of the research participants.

As I developed a multi-modal methodology for a case study that could help me obtain a rhetorical understanding of the communication situation, I strove to answer the research questions I had and those that my participants would add to the study. Case studies can be particularly helpful in exploratory research that seeks to describe a situation about which relatively little is known (Yin 16), which describes my research,

because, as Chapter I explains, there is little empirical research available on website development and use, especially by smaller organizations such as not-for-profit groups. John Carroll and Eric Johnson explain that case studies are good at staying close to the richness and naturalism of actual cases and are excellent for exploring new areas, as case studies are strong in discovery, understanding, and local prediction and prescription (44). In addition, a case study seemed to be a likely site for deep involvement with an advocacy group that could later help me advise the group in a meaningful manner. Finally, as Robert Yin notes, case studies can answer how and why research questions about contemporary events over which a researcher has little control (17). My research questions were primarily how and why questions: (1) how and why the decision makers in the advocacy group made decisions about how to use the WWW in the advocacy campaign, (2) how some of the sites the group developed reflect the values and meet the goals of the group, (3) how those sites reflect the values and meet the goals of environmental advocacy communication, and (4) who visits the sites and why, who uses site material and how they use it. In other words, I aimed to obtain substantial information about advocacy campaigns developed by one group, and a case study is the most appropriate approach research methodology for this task.

My case study methodology combines a variety of methods—primarily qualitative and rhetorical, with some quantitative methods—to explore these issues. Through my investigation, I hoped to provide technical communicators, especially those involved with web design and development, with information that might guide their work. I also desired to provide the advocacy group with which I worked, as well as other advocacy and not-for-profit groups, with information that might influence its decision-making and web design. Furthermore, I hoped to help technical communication, as a field, build a body of knowledge that can inform web design and lead to better decision-making processes. Finally, I wanted to practice critical research, as defined by Patricia Sullivan and James Porter, involving myself in a set of praxes that are “sensitive to the rhetorical situatedness of participants and technologies and that recognize themselves as a form of political and ethical action” (ix).

Figure 2.1 introduces and summarizes my research methodology. It defines the three general areas with which my research questions were concerned (authors, texts, and audiences) and summarizes the methods I used to explore those questions. One important characteristic of my methods is that they attempt to provide checks and balances for one another, to prevent the problems that case studies can have with lack of validity and/or reliability. While Figure 2.1 captures the essence of my research concerns and the methods I used to address them, it cannot fully capture the complexities of the interactions between audiences, texts, and decision makers/authors that I examined. Instead, like any model, it functions well as an overview but cannot fully explain that which it simplifies to clearly represent.

Figure 2.1. Overview of Research Interests and Methods to be Applied to each Interest.

Selecting the Participants

I worked with the SEED (Sustainable Energy and Economic Development) Coalition based in Austin, Texas. While each SEED coalition is a regional grassroots group, several states, including Iowa, Minnesota, and Texas, have SEED Coalitions. The Austin-based SEED Coalition dedicates itself to educating the public and notifying the

public about policy decisions regarding renewable energy, global warming, and related environmental issues. The coalition includes individuals, industries, and organizations that wish to ensure that all Texans can provide informed input regarding policy decisions about energy use. I studied two of the SEED Coalition's websites: its main website, www.seedcoalition.org, and its <http://www.toxictwostep.org> website, a related website that concentrated on just one advocacy campaign. John Carroll and Eric Johnson explain that when little is known about an issue, a case study researcher may choose cases because they appear typical, while when more is known, cases might be chosen to expand knowledge (39). Therefore, I selected the SEED Coalition because its sites seem typical (like many advocacy sites, they seem to provide information, make use of electronic ways to take political action, and make connections with other groups).

Perhaps more importantly, the SEED Coalition's sites are the efforts of a local, grassroots group, so the processes that created them are likely to be similar to those used in small advocacy and not-for-profit groups across the country. Moreover, much of the recent research in environmental advocacy and other advocacy efforts has focused on how grassroots groups have become important political and social forces. That the SEED Coalition is a grassroots organization and a coalition is important in helping the SEED Coalition be representative of the most rapidly growing environmental organizations most likely to depend upon websites as one of their primary means of communication. Diane Faris notes that many environmental groups participate in coalition work: about 97% of the groups she studied participated in a coalition in 1995 (61).

Because this is a case study, it does not aim for representativeness, as a quantitative study would. As Yin notes, case studies are generalizable to theoretical propositions, not to populations or universes (21). However, as Norman Denzin contends, we can use a single case to find propositions that pertain universally (200). Therefore, case studies can provide not only local information, but also understandings that we can then test for application to other similar situations.

Thus, the goals of this study include: (1) obtaining a deeper understanding of how the SEED Coalition works, (2) gathering information to support or complicate

traditional understandings of how environmental advocacy communication and web communication work, and (3) raising further questions. While much research, especially research into decision-making, tries to predict, Carroll and Johnson explain that predicting without understanding cannot much help further decision research (71). Similarly, predicting without understanding is not very helpful in response to any of my research questions. Therefore, I did not try to select cases that would help predict, beyond a local level (what I learn might help the SEED Coalition make predictions). Instead, I followed the tradition of case study research that often involves either selecting a fairly typical group or selecting extreme groups. I selected an advocacy group typical of grassroots groups, rather than large groups like the Sierra Club, in part because my interest lies primarily in studying website use by those who do not have a team of public relations professionals to design their advocacy campaigns, typical of many small organizations, including many not-for-profit groups and small companies. Also, a grassroots group should be interesting because these groups are rapidly growing and capturing scholarly attention, although relatively little attention has been given to the communication campaign strategies of small, local groups—and almost no attention has been paid to their use of websites, except to determine whether or not they use them.

The next sections explain how I investigated the SEED Coalition and its websites, specifying what research methods I applied to address each of my research questions.

Studying Decision Makers: Observations, Interviews, and Content Analysis

This section addresses the methods used to answer Research Question 1, What decision-making processes shape the design and development of a group's websites as part of a larger communicative campaign? To determine how decision makers decide to use the WWW in a particular advocacy campaign, I applied a combination of methods: interviews with people making decisions about the websites, observations of planning meetings and the daily work habits of the SEED Coalition staff, and content analysis of internal email communications relating to the websites.

Interviews with Decision Makers

Interviews helped me gather information I could not obtain in other ways. They helped me understand the thinking behind the decision-making processes the SEED Coalition used, as well as the SEED Coalition staff's philosophies about communication in advocacy campaigns. Carroll and Johnson suggest that the only methodologically and ethically sound approach is to first interview decision makers to see what those closest to the situation say (37). Interviews are fairly inexpensive and easy to obtain (Carroll and Johnson 37), and Carroll and Johnson think that even when self-report data disagrees with other data, it can be useful. Self-report data can frame issues early in the research project, provide a test of the researcher's understanding, keep the researcher from overlooking something, and raise questions about discrepancies: self-reports can be particularly useful for revealing possibilities and suggesting ideas (44). Carroll and Johnson explain, for example, that case methods and self-reports represent natural or implicit methods because they have "everyday, commonsensical origins and uses" (31).

Therefore, I first interviewed the following major decision makers and web-author/designers involved in the SEED Coalition's campaigns: Peter Altman, Director of the SEED Coalition; Karen Hadden, Clean Air Coordinator; Alex Tapia, Climate Coordinator; Laurette Garcia, Karen's assistant; and Sonia Santana, Webmaster.¹ This list does not reflect a sample of the SEED Coalition employees; instead, because of the small size of the organization, I was able to interview all the full-time employees except for the office manager, with whom I spoke informally on several occasions.

I proposed to conduct one- to five-hour interviews with each person in one-hour increments. I planned to interview each person in separate one-hour interviews over time both to reduce my intrusiveness into their daily life and work and to allow me time between interviews to analyze data then construct new questions based upon my evolving sense of the organization, its decision-making processes, and its websites and other materials. As my study began, however, I also made arrangements to use email to send

¹ I use the term "Webmaster" throughout this work because it is the term the SEED Coalition uses. I am aware of its gender implications, but I appreciate the irony that, as is often the case, the SEED Coalition's Webmaster is female.

and receive interview questions and responses, because of the geographic distance between my participants and me and because their hectic, changeable schedules often made this interview format easier for them than setting aside an hour. Therefore, my final interview format was a combination of face-to-face and email interviews.

While email interviews are still fairly new, research supports it as a viable method for gathering data. Chris Mann and Fiona Stewart point out that email or other Internet interviews almost eliminate transcript bias, provide for a quicker turnaround of data (22, 23), help the participants give their perspectives at their convenience (24), and give people a safe environment for communication (24). Many of the drawbacks of Internet research include problems of technological access, competence, and compatibility. However, when working with people who already have and use email and the Internet, these problems are minimal or non-existent. Because all the SEED Coalition employees regularly use email to communicate, communicating with me through email seemed to be a natural extension of their communication with me face-to-face (31).

Other problems with Internet communication can include ethical implications of researching in online spaces like a chat room, where people may not be expecting their writing to be the object of study. Therefore, I used clear subject lines and introductory sentences in my email to clarify which email messages I sent to prompt interview transcripts and which I sent for scheduling and other conversation, and email messages were distributed only between the author and myself. (I also studied copies of emails that were carbon copied to me, with the permission of the author.) Because I also met with my participants face-to-face, I was able to explain the research and get signed informed consent forms in person. The combination of face-to-face and email interviews also helped me counter the problems that other researchers have had feeling that they could not connect adequately with computer mediated communication (Mann and Stewart 77). In other words, the main difficulties with online interviews did not fully apply to these interviews because I also met with the participants face-to-face. In fact, the mixed methodology made it possible for me to ask more questions (because I was less constrained by distance and cost), saved me time and error by preventing some need for

transcription, and allowed me to converse with participants at their convenience. See Table 2.1 for a list of the interviewees and the dates on which I conducted the interviews, plus my notes when there were special circumstances.

Most of my interviews used the interview guide approach (Patton 289). This interview format provides a good balance of pre-planned questions that helped me focus the interviews and keep them within one hour while it allowed me the flexibility to clarify unclear questions, follow-up on unclear, incomplete, or interesting responses, and otherwise respond to participants in ways that would let the participants help shape the interview. However, in a few cases, I had to interview on little notice, and so the interviews were more conversational. With permission, I recorded the interviews with a small tape recorder and took notes. Appendix A contains a sample interview protocol.

Table 2.1. Interviews Conducted.

<i>Peter Altman</i>	<i>Karen Hadden</i>	<i>Alex Tapia</i>	<i>Laurette Garcia</i>	<i>Sonia Santana</i>
<i>May 11</i> 50 min	<i>May 11</i> 20 min., time constraint	<i>May 11</i> 20 min., no prep possible, as did not know interview would occur until directly before	<i>May 11</i> 20 min.	<i>October 8</i> Emailed ten questions
<i>June 19</i> Emailed five questions	<i>July 9</i> 20 min.		<i>July 9</i> 50 min.	
<i>July 9</i> 60 min.	<i>August 13</i> 15 minutes			
<i>September 4</i> Emailed ten questions				

I increased the validity of my interviews by adhering to the following guidelines:

- Pilot testing my first set of interview questions with an educated professional who is not in my field, but has some background in public relations and marketing.
- Resisting asking “why” questions (Patton 313).

- Asking open-ended questions the majority of the time (Patton 295).
- Asking singular questions (Patton 307).
- Leaving time for respondents to answer.
- Demonstrating interest in my respondents' answers.
- Being curious and sympathetic with my participants' activist goals.
- Opening the interview with general, non-threatening questions (MacNealy 189).

I also tried to strengthen the validity of my interviews for understanding decision-making by minimizing the problems these kinds of interviews often may have. One problem that interviews about decision-making can have is that people cannot remember what they did, so asking about recent or memorable events can help (Carroll and Johnson 37). Therefore, I asked general questions about the SEED Coalition activities for the last two years, and more specific questions about the Texas Two Step site, which the SEED Coalition created while I was conducting my research. I also tried to address an issue Wendy Hollway and Tony Jefferson raise: can participants in qualitative research always "tell it like it is" (3)? These researchers suggest that we commonly assume a respondent,

is knowledgeable about his/her experience... can access this [his or her experience] through an imaginary scenario... can capture it satisfactorily in a single concept... shares meanings with the researcher, is knowledgeable about him or herself... can access the relevant knowledge accurately and comprehensively... can convey that knowledge to a stranger listening, is motivated to tell the truth. (12)

They question whether these assumptions, can actually be accepted in a typical case and suggest that interviewers therefore try to elicit a respondent's gestalt, the whole-that-is-more-than-the-parts that informs each person. We may do this by (1) using open-ended questions, (2) eliciting stories, (3) avoiding why questions, and (4) following up using a respondent's phrasing (35-6). They also suggest we use multiple interviews: one to establish a baseline, another to check it, having allowed respondents to reflect (43).

I tried to apply their questioning advice, and I used their model of multiple interviews. In each subsequent interview, I asked new questions, but I also asked former questions in new ways to try to stimulate reflection and to deal with a problem that

Carroll and Johnson report as typical with decision-making self reports: that people's initial and later, more lengthy responses about how they make decisions often differ (31). For example, I asked Pete in my first interview "What information about websites and their use do you think has most helped you make good decisions about the website?" He explained that he mostly applies information he learns from his experiences with other groups' websites. Then, in an email interview later in the research process, I asked, "How often do you read or otherwise learn about ways to communicate with people through your website or develop or design your website? What are your main sources for this information (particular publications, websites, people, etc.)?" Although Pete had already partially answered this question, I hoped that by asking it directly I might prompt him to list other sources of information that did not come up in the first conversation about website information. Again, he indicated that he learned primarily from visiting other websites, but he added that about twice a year he reads about website design.

My first interview was with Peter Altman, the director of the group, so that I could further investigate the goals and organizational set-up of the group and identify other decision makers who I would need to interview. On the same day, I also conducted initial interviews with Alex Tapia, Karen Hadden, and Laurette Garcia. I later emailed questions to Peter Altman, and then interviewed Peter, Karen, and Laurette again.

Observations of Planning Meetings

Interviewing decision makers is one of the most efficient and most easily interpreted ways to understand how people make decisions, but interviewing also has drawbacks. Carroll and Johnson explain that being interviewed may make people think about what they do, when normally they might not (31). Their reflecting upon their actions in order to respond to a question might change their answers, as might their concern with reflecting well upon the group (Carroll and Johnson 31). Interview respondents may also rationalize what they did (Carroll and Johnson 33) or may reconstruct their experiences, as in how often they have eaten out, based on general principles rather than specific examples (Carroll and Johnson 34). Additionally, it may be hard to get good self-reports on decision-making processes, which may be too

complex for people to know what steps they took (Carroll and Johnson 36). Therefore, Carroll and Johnson suggest that observations can provide a way to see the decision-making process without affecting it as much, as can reviews of internal documents (38).

Robert Dingwall argues, “an interview is not a conversation. It is a deliberately created opportunity to talk about something that the interviewer is interested in and that may or many not be of interest to the respondent” (59), and that, therefore, interviews “are the documents of the researcher-researched relationship” and they often construct data (60, 61). Dingwall then explains that observations can find, rather than construct data, as observation “is a document of the transactions between members themselves” (61). For example, he thinks that we are usually more selective when we interview than when we observe, and so we are more likely to construct a situation rather than describe it (64). David Silverman and others, too, contend that we should not be too quick to treat interviews as a substitute for observations (15).

Therefore, in addition to interviewing decision makers, I observed planning meetings and studied planning documents. I proposed to observe several meetings about the websites over a ten-month period. Unfortunately, the SEED Coalition staff often does not have weekly staff meetings. Because of this and because their regularly scheduled meetings are often subject to change, instead of observing meetings over a ten-month period, I observed all the on-site activities of the SEED Coalition staff for four days. During this week, the SEED Coalition had a staff meeting and several of the SEED Coalition employees had conference calls, so I was able to observe communication campaign planning in process. I also learned that many decisions about the website are made by a SEED Coalition employee working alone, who then emails the Webmaster, so I depended more heavily upon planning documents than upon observation data for information about decision-making about the websites.

While observing, I focused on the human-social environment as well as upon what people said and decided, because Patton (224) explains that the social environment relates to decision-making patterns and can often help explain differences between researcher observations and participant perceptions. Learning about power relationships,

lines of communication, and general patterns of action is critical to understanding decision-making, one of the foci of my research. I observed formal interactions, such as the staff meeting and conference calls, and I also observed informal interactions to see what happened in organized interactions as well as what happened on the fringes of structured activity. I was particularly interested in looking at both formal and informal interactions because I thought that the SEED Coalition staff might not make decisions about how to use websites in advocacy campaigns according to established protocols. I suspected that the SEED Coalition staff might not be able to make optimal decisions both because Susan Jacobson's book indicates she perceived an audience for it that would need campaign-development guidance and because Carroll and Johnson and other decision-making scholars indicate that most people's decision-making protocols are surprisingly idiosyncratic and nonlinear (25). Indeed, I learned that the SEED Coalition employees make many decisions through informal interactions, as I report in Chapter III.

Table 2.2 indicates the dates of the formal meetings and conference calls I observed, the topics of discussion at those meetings, and the SEED Coalition staff participants in the meetings. For the purposes of analysis, I considered a meeting to involve three or more people (not including myself), although discussions between two of the SEED Coalition employees or a SEED Coalition employee and someone on the phone also often regarded plans, and I do analyze data from these discussions as well as meetings in Chapter III. Meetings usually involved more formal processes, such as set times, pre-set agendas, and more formal decisions about follow-up actions than the less formal discussions, although serious planning decisions were as likely to come out of the less formal discussions as of meetings.

I increased my observation's reliability and validity through these procedures:

- Performed warm-up observations of the SEED Coalition the first several times I visited to interview, which I did not include in my final analysis.
- Used a standard format of bracketing my inferences in my observation notes.
- Pre-selected focus items.
- Reflected upon my observations and revised my selection of focus items.

Table 2.2. Meetings Observed.

<i>Kind of meeting</i>	<i>Purpose for meeting</i>	<i>The SEED Coalition meeting participants</i>	<i>Date and time of meeting</i>
Conference call	Plan inter-group strategies, specifically an event planned in conjunction with the date for Whitman's announcement	Peter Altman, Alex Tapia, and Karen Hadden	August 13, 2001, 9:00-11:05
Informal meeting in hallway	Planning transportation to Friday event	Peter Altman, Karen Hadden, Alex Tapia, Laurette Garcia	Monday, August 13, about noon, for about 10 minutes
Conference call	Planning education board meeting, an inter-group event	Peter Altman	Monday, August 13, 1:00 to 1:35
Informal meeting	Change of plans regarding Whitman's press conference, beginning of plans for Bush rally	Peter Altman, Karen Hadden, Gael Kirtley	Monday, August 13, about 2.45 for about 15 minutes
Conference Call	Planning for new event for Whitman, with other groups	Peter Altman, Karen Hadden, Alex Tapia	Monday, August 13, 3:00-3:35
Conference Call		Karen Hadden	Wednesday, August 15, 1:00-1:50
Informal meeting	Planning for Bush rally	Peter Altman, Karen Hadden, Alex Tapia, Laurette Garcia	Wednesday, August 15, 5:00-5:25
Staff meeting	Planning for Bush rally, report of current and future activities	Peter Altman, Karen Hadden, Alex Tapia, Gael Kirtley, Laurette Garcia	Thursday, August 26, 10:00-12:00

Analysis of Planning Documents

In addition to interviewing, studying planning meetings, and other observations, I studied planning documents to check the validity of my observation and interview data. The SEED Coalition staff's planning seems to mostly occur in conference calls, informal and formal meetings, and through email. Therefore, planning documents consist of email from the SEED Coalition employees to the Webmaster and from other groups to the SEED Coalition. I asked to be copied on email from staff to the Webmaster, and so I collected seven emails from Pete to Sonia, mostly regarding the Toxic Two Step website, that helped me better understand the SEED Coalition's planning processes.

Chapter III discusses the analysis of the interview, observation, and planning document data and what these data suggest about the decision-making practices the SEED Coalition staff uses. The next section of the present chapter moves from how I studied decision-making into how I analyzed the websites themselves.

Analyzing the Websites: Rhetorical and Content Analysis

Analyzing How the Websites Reflect the Goals and Values of their Developers

This section delineates the methods I used to investigate Research Question 2, How do sites meet the goals and reflect the values of their developers? To answer this question, I compared the SEED Coalition's goals and values, as determined from the interviews, observations, and analysis of planning documents, to actual website characteristics. I also investigated how the sites functioned rhetorically. For example, I coded parts of the websites for their apparent purposes, including the following: inform/raise awareness, persuade/build support, ask for political action. I developed codes both based upon my previous research into the SEED Coalition's decision-making processes and through theory. I list the characteristics for which I coded below, and Chapter IV discusses the themes, how I identified them, and which characteristics of the websites seem to relate to them. I coded the websites for the following characteristics:

1. The advocacy campaign to which the discourse bloc seemed most related (i.e., mercury, environmental justice, global warming, sustainable energy use²).
2. The location of the discourse bloc on the site (if the material or the link to the material was on the home page, the media page, or on a deeper level of the site).
3. The purpose of the bloc defined relative to the SEED Coalition's professed goals:
 - Provide a means for taking political or personal action.
 - Provide tools.
 - Ask for donations.
 - Ask for time (invite to a meeting or rally).
 - Provide a fax-action opportunity.
 - Provide means for or request another political or personal action
 - Inform/Build awareness of the environment.
 - Inform/Build awareness of the SEED Coalition.
 - Persuade/Build support.
4. The manner in which the site seems to try to meet the goals
 - Logos.
 - Direct fact-based and other overtly logos appeals.
 - Design characteristics of the site that contribute to the ease of use of the sites (and so affect how they appeal to people's reason):
 - Whether the bloc is actually linked to the site, functions as a navigational tool, and is in a usable format (html or PDF).
 - The number of steps required to take action, amount of time required to take action, whether there is an external personal cost attached to taking action—money, travel.
 - "Invitingness" of text, or relative ease of reading information (length and complexity of discourse (short-less

² I considered the mercury campaign to be a specialized subset of power plant pollution because the SEED Coalition's mercury campaign is ultimately supposed to support their larger anti-coal power plant pollution campaign.

than 250 words, medium-250-500 words, or long, over 500 words/Flesch reading and Flesch/Kincaid grade level).

- Ethos.
 - Branding (use of the SEED Coalition logo).
 - Community building (invitation to join the SEED Coalition staff or other SEED Coalition members; information about a SEED Coalition event in which citizens participated).
 - Contact information.
 - Other features that assure visitors of the quality of the group and its effectiveness in helping the environment (discussion of the success of a fax action, reports on SEED Coalition activities).
 - Perceived quality of information (sound research, outside sources).
- Pathos.
 - Playfulness: entertainment value of the site.
 - Sensory appeal: The bloc containing or consisting of strong visual elements (a photograph, attention-drawing borders).
 - Personalization (an ability to personalize the information or experience one finds or has with the site)
 - Direct appeal to emotion or values (e.g., a story about a person's suffering from the person's own experience).

5 The audience the SEED Coalition appears to target with a bloc.

- The media.
- Citizens.
- Current/potential donors.

Chapter IV includes a discussion of how I defined a unit and coded each unit.

Analyzing How the Websites Reflect Goals and Values
Common to Environmental Advocacy Groups

This section describes the methods used to investigate Research Question 3, How do the group's sites reflect or fail to reflect common goals of environmental advocacy

communication? To answer this question, I conducted a content analysis of the SEED Coalition's websites. First, as Mary Sue MacNealy and others suggest, to triangulate my content analysis, I analyzed the documents from numerous theoretical perspectives, determining which documents, if any, use various narrative techniques such as apocalyptic narrative (Killingsworth and Palmer 65), the loci of the irreparable (Cox 1), or jeremiads (Opie and Elliot 9). I also explored the textual and rhetorical characteristics of the documents as related to theories on website development and use, determining, for example, which of John Pavlik's web stages (34) the websites seem to reflect.

I first made a list of theoretical perspectives to consider while analyzing the websites, then linked them to characteristics I found while initially analyzing the websites. As I continued analyzing, I added and revised the perspectives and the ways in which I linked them to website characteristics. I considered the following to be my units of analysis: linked information or documents, search engines, email addresses and URL's, and discourse blocs. Table 2.3 lists the perspectives included in the final analysis, offered in Chapter IV. It provides the names of the scholars credited with the perspectives and lists the website characteristics I linked to each perspective.

To increase my reliability in all the coding of units on the websites, I trained another coder who then recoded 15% (forty-five) of the units I coded. She coded for the twenty-three more subjective traits (i.e., whether the unit informed, persuaded, or induced action, whether it included a direct pathos appeal, and which of Waddell's communication models it reflected); she did not code more objective information (i.e., unit length, location on the website, or Flesch reading score). She coded nearly all of the units on the Toxic Two Step website in order to allow for a variety of kinds of units. The interrater reliability rate was 94%.

Table 2.3. Theoretical Perspectives Used in Content Analysis of the SEED Coalition Websites.

<i>Author</i>	<i>Description of Characteristic</i>	<i>Related Website Characteristics</i>
Killingsworth and Palmer	Apocalyptic narrative	Narrative about impending doom if we do not change our actions
Opie and Elliot	Jeremiads	Narrative about poor quality of life due to human error, with possible redemption if we change
Cox	Loci of the irreparable	Narrative arguing that taking no action will lead to irreparable damage
Leizerov	Connections to other advocacy groups	Link to or citation of other group
Leizerov	Amount of information provided that may not be provided by mass media	Press releases Reports Other data
Kim	Ways to promote community	Chat rooms, novice vs. expert markers, celebrations, auditoriums, email lists, community history, recognition of contributions
Pavlik	Stage 1: put print information online with little change	Stage 1: print information put online with little change, such as PDF reports available in print
	Stage 2: develop original content, with hyperlinks or interactive features like a search engine	Stage 2: original content for web, with hyperlinks or other interactive features
	Stage 3: original content designed specifically for the web, such as immersive story telling	Stage 3: content on the web that could only exist there

Table 2.3. Cont.

<i>Author</i>	<i>Description of Characteristic</i>	<i>Related Website Characteristics</i>
Yarborough	Build rhetorical power	Examples of compelling others to believe— newspaper articles, picture of participants in a SEED Coalition event, discussion of a successful campaign
Waddell	<p>1) Technocratic: no communication between experts and the public, experts make decisions alone</p> <p>2) One-way Jeffersonian: one way communication from experts to the public</p> <p>3) Two-way Jeffersonian: two-way communication in which experts maintain power, but the public and experts talk to one another</p> <p>4) Social constructionist: two-way communication in which experts and the public communicate, each from their own sphere of knowledge, sharing power</p>	<p>1) Technocratic: SEED does not present itself as an expert in a bureaucratic sense</p> <p>2) One-way Jeffersonian: I noted where the SEED Coalition provides “expert” information to the public</p> <p>3) Two-way Jeffersonian: I noted where the SEED Coalition solicits public opinion, while keeping experts in control</p> <p>4) Social constructionist: I noted where the SEED Coalition uses public opinions in citizens’ own voices</p>

Richard Boyatzis explains that this kind of simple percentage agreement calculation is most appropriate for codes like mine that mostly reflect nominal and ordinal data such as presence/absence of a trait; he also establishes that an interrater reliability rate of at least 70% is desirable (156). On many items (whether a unit provided information for the press, contained statistics, primarily persuaded, asked for money, built a relationship with website visitors, asked for membership, or provided

information about the organization), our interrater agreement was 100%. Agreement was lowest (fifteen of the fifty-nine discrepancies out of the total 1,035 codings compared) for whether the unit was playful, arguably the most subjective aspect for which I coded. With the exception of playfulness, for which our agreement was 67%, all agreement rates were 87% or above, well over Boyatzis' suggested 70%.

The interrater reliability rate helps establish that two of the three main threats to coding reliability that Boyatzis identifies, researcher projection and mood and style, were not significant problems in this study (12). Two major coding inconsistencies became obvious during coder training and were subsequently repaired: units were recoded to make coding consistent on these two factors. The third major threat to coding validity is sampling, and as all units on the websites were coded, sampling was not an issue in the coding process.

Learning about the Audience for the Website: Surveys

This section addresses Research Question 4, Who visits the group's websites? What do site visitors want to find, learn, and/or do? To answer these questions, I used a survey linked to the SEED Coalition website to gather basic information about the visitors to the websites, accepting the limitations of web-based surveys (many visitors to the site may not complete the survey, and the survey must be short to encourage participation). I also sent email to all of the SEED Coalition email members and associates for whom the SEED Coalition has email addresses, including a link to a web-based survey for them. The surveys asked about the sites, visitor expectations for the sites, and visitor actions on the sites, as well as made other inquiries. I present the results of the audience analysis in Chapter VI.

The SEED Website-Linked Surveys

Surveying the site visitors and people registered to the site was one way of gaining ecological validity, finding out what "real people in real situations" thought. Relying upon a survey link from a website is methodologically problematic. Website visitors will self-select, and so survey respondents may not be representative of the

typical site visitor. In addition, web surveys must be very short, so that visitors will be more inclined to finish them, thus limiting the amount of information they can provide. However, web surveys were the only way I could receive the opinions of any of the web visitors who were not also on the SEED Coalition's email list. Because I was mostly only inquiring about the SEED Coalition's website, some problems with web surveys did not exist: because the population visiting the website was the population of interest, I did not need to worry that that population was apt to be different from that of the U.S. population.

Additionally, all web visitors had an equal opportunity to take the survey, so the survey had low coverage error. The sampling error should be low—the only sampling done was that the survey was available only from January 16, 2002 to March 13, 2002, about eight weeks. However, the survey was inoperable because of a server problem for one week of that time in late January. Therefore, the data reflect about seven weeks' worth of opportunity for people visiting the website to take the survey. Unfortunately, while my sampling did not try to exclude any particular kinds of web visitors, it probably did, because who visits the website may be influenced by the campaigns and activities the SEED Coalition is involved in at a current time and by the political activity at that time, items over which I had no control. Therefore, while all survey respondents are actually users of the site, potential site users about whom the SEED Coalition might want more information may not be represented among them. Furthermore, the visitors to the website who chose to take the survey might not be representative of the average visitor to the website. Therefore, I analyzed the information gathered from this survey in conjunction with data from other sources. As the only kind of error over which I had much control was measurement error, I did my best to reduce this by testing the questions and the survey.

The web survey was made using Microsoft Front Page 2000. I made it as simple as possible, with little fancy visual design, because Don Dillman et al. discovered that significantly more respondents completed simple electronic surveys than fancy electronic surveys (4). In addition, plain surveys elicited longer open-answer responses (4).

Therefore, my survey used little color and few html tables, and I designed it to look much like a traditional survey. In addition, I made it simple to make it more likely to perform well under different respondent browser and computer conditions. (See Appendix B for the survey.) I also included computer instructions to try to make it easy for people with a variety of computer literacy to complete the survey, something Dillman et al. suggest, and included a welcome screen with instructions (see Figure 2 2), again, following Dillman et al (6, 7). Dillman et al. also recommend that online surveys give the respondent some indication of how much of the survey remains to be completed, which I tried to do through question phrasing, textual notes, and with a scroll bar (12).

In addition to paying attention to these special concerns for web surveys, I attended to traditional survey concerns, such as comprehensible vocabulary use, non-suggestive phrasing, question order (non-personal and all-applicable questions first), and other concerns. I increased my surveys' reliability and validity through the following:

- Identifying the organization conducting the survey in the invitation (Rea and Parker 29).
- Discussing the objectives of the study in the invitation (Rea and Parker 30).
- Explaining why the invitation recipient's opinion matters in the invitation (Rea and Parker 30).
- Assuring confidentiality in the invitation (Rea and Parker 30).
- Providing an estimate of time required in the invitation (Rea and Parker 30).
- Overcoming one limitation to closed-ended questions by offering an "other" option in almost all closed-ended questions (Rea and Parker 32).
- Using introductory questions, questions pertaining to the survey but easy to answer, to begin the survey (Rea and Parker 36).
- Asking sensitive questions about donation behavior relatively late in the survey (Rea and Parker 37).
- Asking related questions next to one another (Rea and Parker 37).
- Asking particularly important questions in more than one way as a reliability check (Rea and Parker 41).

- Asking open-ended questions late in the survey (Rea and Parker 43).
- Ending with open-ended venting questions (Rea and Parker 43).
- Using less than ten to fifteen options for closed-ended question responses (Rea and Parker 55).
- Clearly stating whether one or several response selections could be made (Rea and Parker 58).
- Keeping all Likert scales in the same order (Rea and Parker 60).
- Asking a series of Likert scale questions on one issue that cover “as many relevant aspects of the subject matter under consideration as possible” (Rea and Parker 60).
- Providing instructions for individual questions at the time they were needed (Dillman 98).
- Restraining the use of color (Dillman 382).

I had the staff at the SEED Coalition review the survey, having knowledgeable colleagues conduct the first pretesting, according to Dillman’s advice (140). I then tested the surveys with members of the Texas Tech University chapter of Students for Environmental Awareness: four of them completed the survey and sent me email commenting on it. Then I revised the survey based on comments from these testers, making mostly small changes: formatting changes and adding the Green Party to the political choices, for example. I also moved the questions about donating to later in the survey to de-emphasize them. I recognize that this is a small number of testers: because this survey and the next I will discuss are very similar, I was able to apply comments from the testers for each survey to the other group. This helped me receive more feedback than it appears that I did, although I would have hoped to have higher response rates from my tester pools.

The survey was published to the Seed Coalition home page on January 16 and remained there until March 13, 2002, during which time only sixteen people completed it.

SEEDCoalition.org Web Survey

Welcome. The SEED Coalition and I urge you to complete this survey, which is being given to visitors to the <http://www.seedcoalition.org> website. The survey can help SEED by providing SEED with information about its web visitors, so that it can better serve you, the visitors to its websites.

In addition, the survey is part of dissertation research that can generate a better understanding of how environmental advocacy groups use their websites, who visits them, and what those visitors desire that can benefit environmental groups in general.

Your responses to the survey questions can help us meet those goals. The survey should take 10-15 minutes to complete.

If you have any questions about the research project, or comments about the survey or this website, please email them to the researcher in charge of this project, Heather Sehmel, at hsehmel@ttacs.ttu.edu. You can also contact Heather at MS 3091, English Department, Texas Tech University.

Heather Sehmel
PhD student, Texas Tech University
hsehmel@ttacs.ttu.edu
Revised: March 28, 2002

Figure 2.2. Survey Welcome Page.

The Email Surveys

In addition to using a web survey, I also used an email survey. Because the web survey was, like most web surveys, subject to a large degree of non-response error (only volunteers who have also visited the SEED Coalition website responded), I also sent an email survey to people on the SEED Coalition's email list. Although this population does not include all of the SEED Coalition web visitors, so it had coverage error, I sent the survey invitation to the entire population so there was no sampling error and surveying this group did provide more information from one of the SEED Coalition's primary web audiences. After developing this survey with help from the SEED Coalition, I tested these surveys by sending them to a list of faculty and graduate students

at Texas Tech University. About fifteen people responded and most of them sent me email with comments. Most of the questions on this survey were identical to those on the website survey, so I could use feedback from each group of testers to improve the other survey. Based on feedback from this group of testers, I added arrows and verbal prompts to the Likert questions on both surveys, provided a pull-down menu with age ranges, allowed people to combine options for several questions, and made more formatting changes.

Then, one of the SEED Coalition employees sent my pre-notification email to the SEED Coalition's email list, 1,368 people. Pre-notification has been demonstrated to increase response rates for both mail and email surveys and to decrease accusations of spamming for email surveys, as well as point out problems with undeliverable email. The prenotification message is available in Figure 2.3. I sent it through the director of the SEED Coalition to increase my ethos and the credibility of the message, and I emphasized the university affiliation because A. J. Faria and John Dickinson's study and their review of literature demonstrate that university sponsorship results in higher return rates than government or commercial sponsors (68, 71), as does Thomas Greer and Ritu Lohtia's study (47). In addition, the prenotification message included a brief discussion of the purpose of the study in general terms and a plea for cooperation as Carolyn Plumb and Jan Spyridakis advise (629).

Then, on February 21, 2002, a SEED Coalition staff member sent an invitation to take the survey to the SEED Coalition supporters for whom the SEED Coalition had email addresses, the same group that had received the prenotification message. The email included a link to a web-based survey. I gave respondents only the choice to take a web-based survey because other researchers' experiences with web and email surveys have indicated there are fewer problems—fewer skip errors and less tampering with the survey form—when recipients complete a web survey (Mann and Stewart 68). In addition, web surveys can be more attractive and have a more consistent format (Mann and Stewart 70). In comparison with mail surveys, web surveys receive responses much more rapidly (72). Responses from a web survey are also categorized automatically, so

they require less researcher effort. Finally, this method guaranteed anonymity, which I could not have guaranteed had I included text surveys to which respondents could reply.

Dear friends of the SEED Coalition,

In the next few weeks you will have an opportunity to help the SEED Coalition better serve your needs. Next week, you'll be emailed a survey about your experiences with SEED's websites that will provide SEED with information about how to improve its websites and other materials to give you the kinds of information and develop the easy participation opportunities that you desire.

Your participation in this survey will help us make our website as effective an advocacy tool as possible.

Your participation is, of course, voluntary. The online survey will be anonymous and will not reflect upon you as an individual in any way. Should you not desire to participate in the survey, simply delete the survey invitation and reminder message when they arrive in the next few weeks

The survey is being independently conducted on SEED's behalf as part of dissertation research through Texas Tech University; if you have any questions about the survey or the project, please contact the principle investigator (hsehmel@ttacs.ttu.edu).

Thank you for your interest and support,

Sincerely,
Peter Altman, Executive Director
Karen Hadden, Clean Air Coordinator

Heather Sehmel, principle investigator

Figure 2 3. Prenotification for Email Survey.

On the other hand, while being able to guarantee anonymity may have helped the response rate, the anonymity assured by the surveys also created a problem, because I could not assure the authenticity of the respondents. Judging from the quality of all of

the responses and the relative unlikelihood of anyone taking the survey who was not interested in the organization, I do not consider this a serious problem.

Although one problem with email surveys can be email access, this was not a significant issue in this study, because the population being surveyed consisted of people who had provided the SEED Coalition with an email address. Unfortunately, this decision prevented me from contacting other SEED Coalition members.

I had reason to believe that the response rates for the email surveys would be comparable to those for paper surveys. For example, David Schaffer and Don Dillman found that, when contacting a population that was 90% online, they had similar response rates for mail and email surveys, but received the email surveys more rapidly (389), and people included longer responses to email survey questions (391), supporting the use of email technology for surveying when the target population has email addresses. Data on email response rates has been difficult to interpret. Some studies, like Lorraine Parker's, reported a better return rate for email surveys (about 30% better) (54), while others, including Barbara Schuldt and Jeff Totten's, found the opposite to be true in their studies. However, more recent studies, such as Raj Mehta and Eugene Sivadas' and Duane Bachmann, John Elfrink, and Gary Vazzana's report similar rates between email and mail. Certainly, the often similar and sometimes improved response rates for email surveys seem to indicate that email is a viable survey method, although it is sometimes problematic

Because research has demonstrated that multiple contacts increase response rate for email as well as other kinds of surveys (Schaefer and Dillman 380), I did send follow-up messages. Schaefer and Dillman indicate, "the response rate for email surveys with a single contact is 28.5 percent, compared with 41 percent for two contacts, and 57 percent for three or more contacts" (380). After a week, I sent a reminder message with a link to the survey. Initially I had hoped that Amy Jo Kim's note that communities with a high degree of loyalty often require little motivation to complete a survey (ivillage found that members would fill out the survey equally often with or without a chance to win \$5000.00) (15) would apply to the SEED Coalition email list. However, because the

initial response rate was very low (forty-three people), I added an offer of \$2.00 donated to SEED for each additional survey up to at least two hundred to the reminder message. Over fifty responded to the second invitation with the financial incentive, and about that many more responded to the third reminder I sent, which also had the incentive message. In addition to an incentive, the reminder messages both appealed to people's sense of social validation, letting them know how many others had completed the survey, which Dillman explains can raise response rates (17). Altogether, the survey had a 9.8% response rate, although one hundred and thirty responses is a fairly substantial number. This response rate is quite low, and I can only speculate why it was so low. It is possible that the small incentive was not large enough, although research agrees that increases in response rates from incentives over two dollars are usually not significant (Dillman 168). Perhaps the incentive did not come soon enough, although I did not receive significantly more responses to the reminders than to the original invitation. Some people did email me with questions about the survey's goals or to see if the results of the survey would later be available online.

The SEED Coalition was very active during the survey time, sending as many as one email a week to its email list for at least one week of the survey time, so it is possible that respondents simply were overwhelmed with email from the group and perceived the survey as less worthy of their time than email about environmental problems and actions. The significant number of responses to the last reminder, sent in a slightly less busy email week, might reflect the accuracy of this guess as at least a partial explanation for the low response rate. Another partial explanation may be that most of the respondents, and, probably, most of the people on the email list, are probably on several email lists for several groups like this to which they belong, so, again, that may make them less likely to respond to any given email. In addition, some people on the email list were casual visitors to the site or a SEED Coalition event; as a few survey respondents explained, they might know little about the group and not know how they were added to its email list. Therefore, the email list likely includes both more committed and more casual members who might be more or less likely to complete a survey. It is also possible that

people who had not visited the website saw the invitation to take the survey as irrelevant to them and so did not complete the survey. Finally, some people may have been concerned about Internet privacy and so unwilling to share their opinions.

Analyzing and Reporting the Results

Through the methods discussed in this chapter, I collected information from various perspectives on various aspects of the advocacy group, its advocacy campaigns, and its websites. I used a variety of methods to approach my research questions from various perspectives in order to increase their validity and improve my understanding of the situation. In addition to triangulating my methods for collecting data, I used a variety of methods to analyze my data. For example, I asked the SEED Coalition to read early reports of my finding and comment on and comment on my interpretations. Many researchers find this a valuable test of validity. Even skeptics like Michael Bloor, who does not see triangulation or member validity as a test of research findings but thinks that we too easily accept these as unproblematically generated when really they are socially constructed, maintain that we should continue to use these techniques, as they are relevant to validity (49). Inviting the SEED Coalition staff to read and comment on drafts also gave them the opportunity to be more active participants in the research project, allowing me to remain truer to my critical action/participatory design research ideology.

Furthermore, while using participant review to increase my understanding of the situation and include participants more actively in the research, I also used various theoretical lenses to analyze my data, and these lenses are explained in more detail in each chapter. The theories that I used to discuss and help explain my findings depended partially upon the kind of communicative situation that seemed to exist in the group, on its websites, and within the context of a particular advocacy campaign. Because my research was a qualitative inquiry, which as Patton contends is contextual (40) and, as Porter and Sullivan assert should involve the active participation of the director and other employees of the SEED Coalition (31), it could not be fully defined in advance. Instead of attempting, as some research methodology scholars dictate, to remain true to the same

theories and questions throughout the research process, I chose to follow Michael Patton, Wendy Bishop, and Valerie Janesick, who maintain that, in reality, many good researchers will modify questions and theories, and that what is most important is to keep a clear, detailed record of what is changed and to be able to defend changes as not risking the validity of the study.

Conclusion

Chapter II has provided information about my research ideologies, methodologies, and methods. I have explained what methods I selected to answer each of four research questions and discussed how I applied those methods reliably and validly.

The next chapter, Chapter III, begins to report my research findings. In it, I review decision-making literature and discuss my findings in relation to the SEED Coalition staff's decision-making processes, explaining which barriers to good decision-making most affect the organization. Finally, I offer suggestions for making better decisions and explain the implications of my findings for technical communication and small organizations.

CHAPTER III

DECISION-MAKING AND THE SEED COALITION'S WEBSITES

Introduction

This chapter responds to Research Question 1, What decision-making processes shape the design and development of a group's websites as part of a larger communicative campaign? For instance, how, by whom, and for what reasons are decisions made about how to use the websites?

As Jane Allen and Lynn Deming note, J.C. Mathes argues that most communication models do not take into account how communication works within an organization or how decisions are made there (vii), a problem they explain we need to address in general and one we need to address in organizational decision-making about websites, as well. James Souther elaborates on the situation, positing that publications units now have new functions, as technical communicators are asked to produce online material, movies, and video presentations and conduct user testing (4). He contends that the writers in these units will tend to choose the first sensible pattern they find, rarely considering other options, and the publication manager must learn to help the writer think of and evaluate other options (6). Currently, however, we have little research to guide these managers and writers as they try to practice making better decisions in increasingly complicated professional contexts.

The need for decision-making guidance will be difficult to meet. Herbert Simon, speaking about research into business practices, notes that we too often focus on how to do something, rather than how we decided to do something (Simon 1). This means that we rarely take the opportunity to reflect upon and revise our decision-making processes, so any mistakes we make we are apt to repeat. Even when our final decisions are fairly good, studying our decision-making processes can help us feel more confident about them, can help us make them more efficient, and can help us address problems more systematically so that we miss fewer communication opportunities. Simon's comments

are also applicable to research in technical communication. Although technical communication research addresses audience assessment, storyboarding, and other planning processes, it, too, often leaves gaps in its research into decision-making processes.¹ The largest gaps in this research are the following:

- Research into planning processes used by small organizations.
- Research into planning processes used by organizations that produce documents primarily for reasons other than supporting products with instructional information.
- Research into how communicators might plan documents to interrelate with other documents and communicative tools.
- Research into how these planning processes proceed with reference to web design and development, for which we have less available research for people to use to inform the decisions that they make.

Note about Terminology

I will consider the often (although certainly not always²) neglected process of decision-making in web design and development to be part of invention, a process of

¹ Notice that I indicate here that research does not pay enough attention to invention, not necessarily that technical communicators do not. This is a small but important distinction, particularly because it is possible that technical communication researchers, often experts in technical communication, find invention processes to be so internalized, so implicit, that they have difficulty making them explicit for others and/or find them relatively uninteresting sites for research except when combined with other factors. Some of the best articles about invention understood as decision-making processes in technical communication in recent years, for example, have been about collaborative writing and design processes.

² Some examples of recent publications that more directly address invention include Ann Blakeslee's *Interacting with Audiences* and other publications which discuss the process of audience analysis in detail; Karen Shriver's *Dynamics in Document Design*, Robert Johnson's *User-Centered Technology: A Rhetorical Theory for Computers and Other Mundane Artifacts*, Jakob Nielsen's *Designing Web Usability: The Practice of Simplicity*, and other publications that discuss audience analysis through usability testing; and Karen Burke LeFevre's *Invention as a Social Act*, which explores

making decisions about texts and campaigns that involves Aristotle's "faculty of observing in any given case the available means of persuasion" (153). I will use the term **invention** to refer to setting goals, selecting means to meet those goals, and the information gathering and communication processes that support goal setting and selection. This definition is similar to Karen Burke LeFevre's:

conceiving of rhetorical invention as a search for wisdom—a search that involves analyzing subjects, audiences, and problems as well as generating and judging ideas, information, propositions, and lines of reasoning—aligns rhetorical invention closely with inquiry or with “invention” in the generic sense: the creation of what is new in any discipline or endeavor. (2)

Furthermore, I will consider decision theory's concepts of **decision-making** and **problem-solving** to be parts of invention. Although decision theorists sometimes define decision-making and problem-solving as distinct processes, and certainly many would consider them separate from rhetorical invention, I will maintain that the three processes have much in common.

Research into Planning Processes Used by Small Organizations

While some research in technical communication focuses upon documentation management, which closely parallels decision-making research in its concerns, much of this research, such as that represented by JoAnn Hackos in *Managing your Documentation Projects*, seems most applicable to mid-size and larger organizations. This is demonstrated by Hackos' book listing as the main way in which organizations move from the lowest level of document management processes (not having any at all) being to hire full-time technical communicators (47). This suggestion, while worthy for

the culturally and socially cumulative nature of the invention process. Despite these excellent publications, however, technical communication tends to mainly address invention in detail as it regards working with clients and audiences, and less as it regards gathering information about how people decided what communicative techniques would best meet various goals, especially in situations where they may not have research results to guide their decision-making.

most of the audience for her book, does not seem to accurately reflect the needs of small organizations with small budgets that might not be able to hire a full-time technical communicator. While many companies and organizations now hire full-time, in-house technical writers, web designers, and other communication experts to help make design and content decisions for their websites, some groups do not have this luxury. Many not-for-profit groups may fall into this category, especially those that mostly work on local and regional issues. These groups often depend upon a skeleton staff to accomplish their work, and they do not have money to hire full-time employees for web design. Instead, they may hire freelance designers to create their websites, and they may try to maintain the websites themselves or with minimal outside help. When they can hire experts, they may not have time or money to devote to full-scale collaboration with the experts. When they cannot hire experts, they may not have time and/or money (or may not perceive that they have them) for training their employees in web design, at least enough for them to be able to help maintain the groups' websites. Their employees probably will not have time (or will perceive that they have no time) to read about recent research into web design or to conduct usability tests or campaign evaluations. They may not even know where to look for this research.

Additionally, Hackos' book and other publications on publication management rarely, if ever, directly address the audience of freelance communicators that would include those that advocacy groups might be most able and most likely to hire to work on a part-time or project-by-project basis. Of course, not every publication need address this audience. I do not point out these gaps in Hackos' book to demonstrate weaknesses of her book, but as examples of how our literature on document management processes often does not address the needs of small organizations.

Smaller organizations may be more likely to hire free-lance experts for short times, and managers and other personnel in many organizations may continue to make many design and content decisions themselves because they lack full-time, in-house designers or other full-time communicators to maintain their websites and develop their other documents consistently. Furthermore, when small groups hire experts part-time,

the experts often know more about and concentrate more on web design than on the organization's goals or techniques for meeting those goals. Unless the group's other employees collaborate closely with the experts they may find that the experts help them technically implement changes to their web pages, but do not advise as much as they might about content and other issues. On the other hand, if they hire experts who also know more about the organization's goals—who maybe have had across-the-board experience in similar organizations—the experts may, as a training trade-off, have less expertise in web design than those who have devoted all their time to web design.

Research into Planning Processes Used by Organizations
Producing Documents Primarily for Other Reasons than
Supporting Products with Instructional Information

In addition to neglecting small organizations, most research into document management processes is not as clearly applicable to groups that produce documents as one of their major foci, or, as environmental advocacy groups do, to support political and social action, as to organizations that largely need documentation to instruct people on how to use products. For example, Hackos often discusses usability and almost all of her examples of usability refer to instruction use. Although many technical communicators work for companies that largely need instructional materials, and so research and advice into how they might streamline and improve their documentation production processes is extremely valuable, we have less research into the processes that people may need to use to produce other kinds of materials. Much of our recent research into invention and production, for example, focuses on how interdisciplinary teams might collaborate or how technical communicators can work with other departments. This does not adequately address the needs of organizations that do not have technical experts like engineers or scientists with whom communicators need to collaborate but instead have staff with expertise in communication, marketing, public relations, and other skills who need to gather technical information from other sources and share it with legislative and industrial decision makers and with the public, a more typical scenario for an advocacy group.

Research into How Communicators Plan Documents to Interrelate with Other Documents

Technical communication almost entirely leaves study of how documents interact within a communication campaign to the field of advertising, although technical writers often work on websites and other texts that are part of a larger system of texts. Technical communication research into web design has usually attended more to how to build websites and to technical aspects of the development process than to how to think about why to build a website or how to think about how to use a website in conjunction with other communication tactics to meet particular goals. For example, the chapter in most web design books that discusses how and why to consider the purpose for a website often neglects rhetorical invention as applied to campaigns and systems, rather than individual documents. We leave the study of these larger efforts largely to advertising and marketing even though we have little reason to believe that communication for non-sales purposes affects people in the same way as does communication for sales or branding purposes, the foci for advertising and marketing research. Technical communication already assumes responsibility for style manuals, which help make documents consistent with one another system-wide, but style manuals focus mostly upon the quality of individual texts and the consistent look and feel of documents in a set. What style manuals do not do, which technical communication should do more often, is take more responsibility for the rhetorical effectiveness of systems of documents and other communication tools that interrelate, especially when they are primarily used to convey technical or scientific information or ideas, rather than to sell products and companies.

One notable case in which technical communicators have taken a major step in this direction is Sandra Harner and Tom Zimmerman's *Technical Marketing Communication*. Harner and Zimmerman explore the variety of communication options available today (5) and describe a process in which technical communicators would help with needs and audience analyses that they would then use to develop a strategy that might combine print, online, and other communication media in a campaign designed to market technical documents. Technical communicators who are not producing technical documentation but who are, for example, producing communication about scientific,

policy, and social issues such as that an environmental group would need might use a similar process and consider many of the same issues.

Research into How Planning Proceeds in Web Design

Finally, research into planning processes in technical communication rarely focuses upon web planning processes in a descriptive manner. As Robert Klotz explains about political groups, “each group had to decide whether to establish a site, and, if so, how to use it. The decisions made by these groups have been the subject of some speculation, but very little systematic analysis” (108). While plenty of literature prescribes to people how they might plan their websites, little describes how real people do plan their websites in ways that help us understand what the primary barriers to good decisions about website design and development might be. The general lack of research into web rhetoric may raise concerns that people designing them often must operate relatively blindly, with little understanding of their potential audiences, their rhetorical alternatives, and the likely relative values of those rhetorical alternatives. As Menno de Jong and Thea van der Geest explain,

Little is known about “what works” in Web site design. Designers of any communication system, product, or policy try to apply the best available knowledge from fields such as linguistics, social and cognitive psychology, and human factors research. But the research findings of these fields are often contradictory; furthermore, it is questionable whether findings from research in these fields can be generalized to the design problem at hand. They rarely are so specific that they can help the designer in making decisions during a particular project. (311)

They continue to describe the web decision-making problem, explaining that web designers have more options than most other communicators, and many of their choices about text, color, sound, tone, etc. interact with one another. This places web designers in complex decision-making situations with little guidance. However, because we seldom read published analyses of web planning processes, we cannot know which decision-making problems occur most often or seem to present the biggest problems.

Summary of Problem

To summarize to this point: Technical communicators, web designers, and others trained in rhetoric, design, and other communication issues often struggle to design websites to meet an audience's needs: they continue studying web design, they conduct usability tests, and they otherwise strive to learn more about design and their audiences. Their training and experience make them more likely than the average person to think about audience concerns and to make good design decisions. However, many organizational traits may prevent advocacy group staff from being able to make better decisions about how to use websites. For example, groups may not have employees trained in web design, but they may have to or choose to make decisions about web design anyway. Then, they may make decisions based on inadequate knowledge, one of the constraints to decision-making described in organizational decision-making literature. Although small not-for-profit and other groups need to be able to make decisions about their websites and communication campaigns, these groups are likely to suffer more severely from decision-making problems than large groups are. Therefore, researchers studying them might more easily identify the decision constraints in the groups' decision-making processes. Studying decision-making in these groups will, then, yield information that can help many organizations, including larger organizations that probably have many of the same problems, although perhaps to a lesser degree.

In this chapter, I first explain why I combine rhetorical and decision-making theories to explore the SEED Coalition's decision-making processes. Reviewing applicable literature, I then describe common barriers to good organizational decision-making. Next, I analyze the SEED Coalition's decision-making processes and explain which barriers interfere with its optimal decision-making. Finally, I explore the implications of these findings for technical communication and web design.

Combining Decision-Making and Rhetorical Theories

This chapter uses the results of interviews with the SEED Coalition staff, observations of the SEED Coalition staff, and analysis of planning documents produced

by the SEED Coalition staff to address Research Question 1, What decision-making processes shape the design and development of websites as parts of a larger communicative campaign? For instance, how, by whom, and for what reasons are decisions made about how to use the group's websites? In addition, the chapter draws upon organizational decision-making theory and rhetorical theory to analyze the qualitative data and draw conclusions about the SEED Coalition's decision-making practices. These theories can provide us with a holistic and accurate sense of the SEED Coalition's decision-making processes.

While few technical communicators, who often draw upon rhetorical tradition, have also drawn upon organizational decision-making theory, there are some exceptions. Carolyn Miller, for example, connected organizational decision-making theories and rhetorical theories, primarily arguing that rhetoric can help supplement organization decision-making theories. I will discuss some of her main points here, but I would like to clarify that I draw upon both theories because I think decision and rhetorical theory complement one another. My perspective differs from Miller's, as she sees decision theory as inherently flawed without rhetoric. In addition, I may be defining decision-making more broadly than Miller does, and so I draw upon decision-making theories that she may not have addressed.

Carolyn Miller argues that Herbert Simon, one of the earliest and most important theorists in organizational decision-making theory, is a rhetorical theorist (163), largely because his early work on decision-making in organizations "concerns the exercise of reason in social contexts," which Miller considers to be a "realm of rhetoric" (166). However, Miller adds,

decision science is a rhetorical theory, that is, a theory about the exercise of reason in social action...yet it is antithetical to the assumptions of rhetorical deliberation. As a rhetorical theory, decision science is at best too narrow to be of use in real conflicts and at worst coercive and authoritarian.... it encourages our submission to technical, knowledge-based solutions for what are social, value-based problems. (179)

She suggests that decision-making theories could be supplemented by rhetoric, and one of the main situations in which she explains rhetoric could supplement decision-making

is in rhetoric's concern with invention—the “intuitive” or “nonrational” side of decision-making (174). She also thinks rhetoric can, through stasis, help decision makers understand more about problem formulation (174), and, through kairos and ethos, explain “timing” and “organizational position” (174). In addition, rhetoric can provide a rich vocabulary and tradition for talking about symbolic exchange as occurs in deliberation (174). She elaborates, explaining that Aristotle, for example, helps us see uncertainty as more than a problem of knowledge; he thinks it is a problem of human action (175). Problems of action are contestable, unlike problems of knowledge, and so, as Perelman has indicated, “problems of action [are] sometimes reduced to problems of knowledge, that is, of truth or probability, and sometimes considered as completely irrelevant to reason” (176).

Miller, then, argues that connecting rhetoric and decision-making can help us understand that sometimes we do not need more information, but we need to deliberate about action. While decision theory usually merely attaches utility value to alternatives, Miller explains that we need to “create,” “improve,” and “define” more fully the moral and practical values of those alternatives, where the real problems are often located (176). Similarly, she elucidates that rhetoric, unlike decision theory, recognizes audience, sees that “decision problems arise because people have different beliefs about the future—what it will be, what it should be; these beliefs are ‘essentially contestable’” (177). When authors consider their audience, they give the audience some power because the shape of the argument is, at least partially, dictated by the audience's likelihood to accept it. When authors do not consider their audience, they seem to hold the power (177).

Some of the points Miller makes in her 1990 discussion of the deficits in decision theory have been addressed by more recent decision theory publications. Miller sees decision theory as too concerned with knowledge problems. Decision theorists also concluded this and have responded to the problem, rethinking the traditional decision theory approach to problems as knowledge problems. M. Feldman and James March's study of information use determined that people seem to gather information of little relevance, to gather information mostly used to justify a decision after the decision has

been made, to not consider most of the information they gather, to almost always request more information regardless of how much was available originally, and to often complain that they do not have enough information even while ignoring information they do have (174). Therefore, Feldman and March hypothesize that people may often gather information more to justify their competence than to help with making the decision (174). P.O. Soelburg, too, thinks that people often use knowledge to defend a “gut reaction” (Klein 11). James Byrnes concludes that knowledge is a necessary but insufficient condition for decision-making (130), and Chun Wei Choo recommends ways of sharing knowledge that include building relationships and that tie closely into action, like apprenticeships (121). Gary Klein developed a new model for understanding decision-making that relies less on knowledge and more on experience. All of these theorists expand decision theory’s concerns about the role of knowledge in decision theory.

Another of Miller’s concerns about decision science is that it does not address non-analytical methods for decision-making well. While Lee Roy Beach and Terence Mitchell’s explanation of non-analytical methods for decision-making, using terms like “gut feeling,” “tossing a coin,” and going “eeny meeny miney moe,” (Klein 34) seems to epitomize Miller’s concerns, Klein’s theory addresses this issue in a more helpful manner. Klein explains that some of the more intuitive, gut-response decisions that people make are really not that mysterious: many are based on “the ability to recognize situations and know how to handle them,” an intuition built with experience (34). Similarly, Klein suggests that some of these intuitive decision-making supports come from people’s ability to imagine the future in different ways (45), to mentally simulate situations (92), even situations that seem counter to available facts (154).

Although decision theory has addressed some of the problems Miller noted, decision theorists remain divided about the use of knowledge and importance of relationships to decision-making as is demonstrated by the variety of decision-making theories available, including prescriptive, descriptive, mathematically analytical, and behavioral theories (Browne 9). Prescriptive theories and mathematically analytical theories represent a more classical approach to decision theory. The classical approach

defines what would make a purely rational decision based upon the logically definable elements of a situation. Then, prescriptive and mathematically analytical theories often concern themselves with (1) condemning the behavior of those whose actions do not fit classical theory, (2) changing people's behaviors to match classical theory, (3) or modifying the theories to match real behavior (Beach and Lipshitz 22-23). In contrast, the descriptive and behavioral theories on which I will draw in my analysis represent theorists who desire

to describe more accurately the process involved in real-world decision-making by individuals acting alone or in groups. The underlying notion is that if decision makers know what they actually are attempting to do, perhaps they can be helped to do it better. Scholars committed to this response are almost wholly interested in understanding behavior.... [They] respect classical theory, but are unconvinced it should be the standard for all decision behavior.... (Beach and Lipshitz 22-23)

While decision theorists have addressed some of the flaws of early decision theory, theorists in technical communication have also addressed some of them. One flaw that technical communication researchers have addressed is the need to see many problems as caused by or being best addressed by relationship analysis and improvement, rather than being primarily problems of lack of knowledge best solved by collecting data. Bonnie Nardi and Vicki O'Day's *Information Ecologies* addresses the need for relationship-driven approaches to decisions about technology use and Souther argues that in order to make good decisions experts must not only inform people, but they must also mediate worldviews (10). Souther also explains that some activities traditionally seen as simply sharing information really do more: effective collaboration "is not just shared information; it is shared relationships" (1). He draws upon Stephen Doheny-Farina's research to explain that Doheny-Farina thought that we could reduce the uncertainty inherent in technology transfers with communication across groups, liaisons among groups, and formal and informal channels of communication (11), which Souther sees as examples of relationship-driven rather than data-driven approaches to problems (167). These approaches all emphasize that our invention processes often cannot and/or should not ignore relationships with clients, other designers, audiences, and the community.

To summarize, I first explained that our understanding of the roles of relationships and knowledge in problem solving has changed since Miller's article, both because of contributions from decision science and because of contributions from rhetoric and technical communication. I also explained that while Miller places rhetorical invention within decision-making, I consider them synonymous terms. Finally, I agree with Miller that what we have traditionally considered to be rhetorical invention can provide us with insight into some of the more intuitive aspects of decision-making that traditional decision theory seems ill-equipped to handle well. For example, I agree with Miller that we need to supplement decision theory's traditional perspective with rhetorical theory's rich history of audience consideration, ethos, and kairos. These three traditional rhetorical issues seem to be of grave importance to decision-making, especially about communication, and these concepts are much better developed within rhetorical theory than decision theory. However, I also think that what we have traditionally considered to be decision theory can help rhetoricians explore the processes of rhetorical invention in more detail than traditional rhetoric usually does, beyond the text of the written page or oral speech, and for authors and audiences beyond those primarily involved with government, law, religion, and the courtroom. For example, Klein's explanations of how experts recognize patterns and make decisions very differently from novices can help rhetoricians understand more about how expert rhetoricians use cues to sum up a situation and respond to patterns they recognize with plans they already know, while novices struggle with each step in this process. Klein's process model helps explain why we teach rhetorical invention to students as a series of well-defined, separate steps, even while we know that experts rarely follow the steps in a series. Klein describes the situation as follows,

Since experts have a mental model of the task, they know how the subtasks fit together and can adapt the way they perform individual subtasks to blend in with the others. This makes their performance so smooth. They do not even feel that they are performing subtasks because the integration is so strong. If they have to explain what they are doing to novices, they may have to stop and artificially break it down into subtasks. Often they feel uncomfortable teaching the separate steps because they know they are teaching some bad habits. They are teaching the

novices to do the task in a choppy way. In the short run, though, this task decomposition make it easier for the novices since they do not have to worry about the big picture. (152)

This observation is an example of the information we can gather more easily from decision theory than from rhetoric. Although rhetoric traditionally sometimes goes into great detail about how to make a decision about what tactic to use to persuade a given audience, it usually explains these decisions in terms of psychology, as Aristotle does, or of an audience's adherence, as Perelman does. It does not usually explain them as decision theory does, in terms of a set of separate decisions involved in the process of determining one's goals for an audience, determining one's options for meeting those goals, weighing those options, determining the values of the consequences of those options, and selecting an option. While rhetoric certainly asks us to consider our goals and our options and choose the most appropriate tactics, it less often breaks the process of doing so into small steps that we can analyze in the way that decision theory does. Moreover, while rhetoric sometimes does consider the process as a series of steps, decision theory brings a different, but related perspective to these processes and different, but related processes. Like Miller, I think that decision theory often addresses concerns of rhetoric, but its theorists have been using a separate body of grounding literature, have been working more on decisions made within organizations, rather than by individual authors, and have drawn from different academic disciplines. Therefore, even where rhetoric and decision theory's concerns overlap, their approaches to the situation often complement and supplement one another, rather than simply replicate one another. Decision theory and rhetoric are closely related, yet distinctly different terministic screens from which to understand an organization's decision-making processes.

Because of the explanatory power of a mixture of the traditions of rhetorical theory and decision theory, I use aspects of both in this and other chapters. For example, the next section of this chapter discusses barriers to decision-making as described in decision theory, but within this discussion I address issues like knowledge of audience, combining a rhetorical issue—audience—with a concern traditional to decision theory—lack of knowledge.

Barriers to Good Decision-Making

Not having clear goals can affect one's ability to make good decisions, something document management experts like Hackos observe often as they emphasize the importance of careful planning, including setting clear goals based upon audience-responsive standards like usability (Hackos 22, 33). In addition to this common barrier to good decision-making, Simon gives us three more common barriers to rational decision-making: we generally do not have complete knowledge of the consequences of a given choice, we can only partially anticipate the values we would attach to future consequences, and we usually can think of only a few of the possible alternatives (81). While Simon explains why even those groups that do engage in a planning process may make poor decisions, he suggests that memory, previous experience, and communication are key to people's decision-making (87). Simon also explicitly posits what Hackos often implies: people often satisfice, settling for what is good enough, easy, or requires less intensive research or less development effort, rather than carefully selecting and working towards the best option. Hackos defines her lowest level of publications-process maturity as organizations with no set process, oblivious organizations (47). The next level of organization on her management process maturity continuum consists of ad hoc organizations, which she defines as having no process as an organization (47). While I agree with Hackos that organizations at these stages, including the SEED Coalition, lack defined processes as organizations, I would also emphasize that at these stages individual staff members might have set processes for themselves. March joins Simon in noting that routines dictate most organizational decisions, and Choo explains that this dependence on routine can be both liberating (routines give the appearance of rationality, so make decisions more defensible) and constraining, as they "stifle creativity and forfeit organizational flexibility" (13). While Hackos' oblivious (level zero), ad hoc (level one), and even rudimentary (level two) organizations tend to use concerns about stifling creativity and forfeiting flexibility to defend their choosing not to develop more rigorous processes, I want to emphasize that Choo does not suggest we should not have routines because they sometimes carry these characteristics. Instead, Choo and Hackos would, I

think, agree that organizations that wish to have optimal decision-making need to have routines but also recognize how and when to depart from those routines.

Irving Janis can help us understand how routines can sometimes be problematic, at the same time that they are often helpful. He warns us that if cognitive constraints³, like “limited time,” “perceived limitation of available resources for information search and appraisal,” “multiple tasks,” “perceived lack of dependable knowledge,” and “ideological commitments” look too overwhelming, people are likely to fall back on decision rules that help them cope, and these rules are likely to lead to less vigilant problem solving (19). For example, as Janis describes,

If the managers... believe that the complexities... of the issue confronting them exceed their capabilities, or that the organization lacks adequate resources for working out a high-quality solution to an important problem they will make a crucial policy decision by ‘the seat of their pants,’ without bothering to examine carefully the pertinent information that is readily available and without even making any phone calls to consult with appropriate outside experts. (21)

Janis then links different constraints to the rules that tend to help people cope with them: for example, people often use satisficing, availability, and analogizing to deal with overwhelming cognitive constraints. They might satisfice by choosing the first satisfactory alternative rather than searching for the best, they might use what is readily available, or they might use something based on a perhaps deceptively analogous application. Clearly, what Janis describes as using decision rules does not mean not having and following a process that enables one to identify goals and develop ways to meet those goals. Instead, he delineates how the lack of a defined process might lead people, in a state of panic, to fall back on habitual coping mechanisms that may be less likely to lead to the best decisions. In other words, decision theorists and document management experts typically ultimately agree that people need well-defined processes

³ Janis also discusses affiliative and egocentric constraints, but as these do not seem to affect the SEED Coalition’s decision-making regarding its website, I do not address them. The SEED Coalition employees seemed comfortable with their positions, not battling for power or status (affiliative constraints), and seemed not to be too affected by strong personal motives, like greed or a desire for fame (egocentric constraints).

for identifying and meeting goals in order to make the best decisions. Furthermore, they agree that those processes need to address common concerns of decision makers, such as lack of time and lack of knowledge.

The SEED Coalition employees struggle with the common barriers to rational decision-making that Simon and Hackos define, including not having clear goals, lacking complete knowledge of the consequences of a given choice, being only partially able to anticipate the values we would attach to future consequences, and usually being able to think of only a few of the possible ways to reach a goal. The SEED Coalition staff, when trying to make decisions about its websites and their roles in campaigns, deals with these and other barriers. For instance, none of the SEED Coalition's full-time employees are web design experts; they have little knowledge about the audiences for their websites; and they have only informal knowledge about the success of past and present campaigns. Routine does not govern the SEED Coalition's day-to-day decisions enough to constrain creativity, and, in fact, the SEED Coalition in many ways resists routine.

However, at a different level individual habits about how to respond to situations may prevent better decision-making, especially about things that the SEED Coalition employees know less about, like websites. At this other level, lack of resources like time and money encourage the SEED Coalition staff to satisfice by maintaining habitual ways of using websites. At the same time, at the organizational level, other SEED Coalition routines may prevent its employees from gaining much new knowledge about web design, their web audiences, or the success of their campaigns. Indeed, the SEED Coalition represents either a level zero or a level one organization, at best a level two or rudimentary level, according to Hackos' maturity continuum. Like a level zero organization, the SEED Coalition has no full-time technical communicators. However, unlike a level zero organization, the SEED Coalition recognizes a need for professional publications; it even hires part-time staff to help it develop its website and professional newsletters and some of its full-time staff are experienced in writing press releases and reports. Therefore, I would place the SEED Coalition at Hackos' level one, ad hoc, maturity level, where Pete, the director of the organization, also functions as the

publication manager. Unlike Hackos' description of the publication manager in a level one organization, who gives assignments but does not review writers' work or engage in planning or control activities, Pete does all of these things. He engages in planning, reminding people of their communication and advocacy goals and helping them determine what to write and when; he engages in control activities; and he reviews writers' work, both at the writers' request and his own. These characteristics and way the SEED Coalition employees cooperate with one another make the SEED Coalition in some ways look like a level two organization, where writers coordinate to assure consistency, but this coordination is not enforcement and little project planning occurs. However, because the SEED Coalition's coordination occurs accidentally, rather than being planned or required, I consider the SEED Coalition to be a level one organization with some of the philosophies of a level two group. If we consider the SEED Coalition to be a level one organization, we can see how Hackos' concerns about planning and evaluation, especially, coincide with decision theorists' concerns about clear goals, identifying all alternatives, and knowing the consequences of those alternatives.

The next portions of this chapter will explore some of these common barriers and how they affect the SEED Coalition's decision-making. More specifically, I will address the following barriers: not having clear goals, inability to know alternatives or consequences, inability to recognize alternatives, inability to know the future values of consequences of alternatives, and perceived and real cognitive constraints. I will explore these constraints as they affect the SEED Coalition as an organization, but my specific foci are the SEED Coalition's decision-making processes for its main site and its Toxic Two Step Site. The SEED Coalition's main site serves as the home base for information about the SEED Coalition. It also provides opportunities to donate to the SEED Coalition or join its email list and ways to get information and take action on issues targeted by the SEED Coalition, which include primarily pollution from coal power plants, sustainable energy, environmental justice, and global warming. The SEED Coalition created the Toxic Two Step site in the summer of 2001 to focus on refinery pollution and a particular campaign effort to address refinery pollution through a tour of

polluted refineries in Louisiana and Texas. The SEED Coalition invited Christine Whitman, EPA director, to join it and citizen-activists in Louisiana and Texas for a tour of polluted refineries, reading reports on the refineries and meeting with citizen activists and others to discuss the problem. However, Whitman did not agree to join the tour, and so the SEED Coalition created post cards and made a **fax action** so that citizens could easily ask Whitman to join the tour.

Barrier One: Inadequate Goals

While not having clear goals can be a barrier to good decision-making, this is not a particular problem for the SEED Coalition regarding its decisions about its websites. Instead, the SEED Coalition employees largely share a common sense of what they want their websites to do, identifying several goals for their websites:

1. *Providing a means for action (contact with legislators and other decision makers) that is accessible for people not in Austin, where the SEED Coalition and the Texas state government are located, but geographically spread across Texas and the nation.* “We’ve got a big state, and we have a lot of things that we have to respond to quickly...getting people information...is easy to do on the web. And it has really helped us link and extend to whole new groups of people that we wouldn’t be able to work with” (Karen, personal interview May 11, 2001).
2. *Providing a means for action that is cheap.* “It costs only about 20 cents per letter” (Pete, personal interview, July 9, 2001).
3. *Providing a means for action that is convenient for visitors.* “The specific goal for the website is [for an interested person to get an email about a new action opportunity and then] say am I interested? Say yes, and go do it” (Pete, personal interview, May 11, 2001).
4. *Providing a repository of environmental information for citizens.* “We want people to be able to go to the website and pretty much find out everything that they want to about what’s going on with the project” (Laurette, personal interview, May 11, 2001).

5. *Providing a repository of environmental information for the media* “[Reports were put on the Toxic Two Step site in part for] reporters to whom we are pitching the story” (Pete, personal e-interview, September 6, 2001).
6. *Providing a repository of environmental information and tools for other activists.* “[I put the Where’s Whitman flyer online because] I wanted other people to use it—in an ideal world I would have had a staffer call lots of friendly orgs around the country and encourage them to use it but we only got as far as web posting”⁴ (Pete, personal e-interview, September 4, 2001).
7. *Providing a way for people to get more information about the organization.* “There’s plenty of information on there [our website], our whole history is on there if you want that, so its really good where I can point to one spot and say, here you can check this out” (Alex, personal interview, May 11, 2001).
8. *Providing a way for people to donate to the SEED Coalition.* In my initial telephone contact with the SEED Coalition, Pete explained that they might want to know how to encourage online donations; their website currently supports and requests online donations
9. *Building the SEED Coalition’s ethos as an organization.* Pete explained he put copies of letters to Christine Whitman, EPA director, online “because i wanted it to be clear that we asked nicely before ridiculing her. i hoped anyone coming to the site, curious about the effort, and wondering if we had asked nicely first would see them. also to make sure to clarify that we don’t just go off half-cocked” (Pete, personal e-interview, September 4, 2001).
10. *Reporting on its activities to donors.* “Plus [press coverage information on the website is] important to show we matter—in particular good for any visiting funders or donors to see” (Pete, personal e-interview, September 4, 2001).

⁴ Some quotations, such as this, come from email interviews. The punctuation and capitalization is preserved from the original message. Other quotations come from transcribed face-to-face interviews and have more regular punctuation and capitalization. When a quotation comes from an email interview, I cite it as a personal e-interview.

Additionally, the SEED Coalition has clear goals regarding its advocacy campaigns. Its advocacy goals, as stated in its mission statements in the “about” section of its main website, include:

advocating sustainable energy strategies for Texas, including the use of renewables and conservation.... [educating] the public about the economic, environmental, and health benefits of a sustainable energy strategy.... [tracking] relevant policy-making and legislative processes and [informing] the public of opportunities to voice their opinions. ... [providing] research, information, and education to public interest communities, the general public, the media, private industry, and public policy makers to encourage an equally accessible, fair, and informed decision-making process for the benefit of all Texans, particularly those who are under-represented.... and [working to improve] the environment; health, safety, and public welfare; energy efficiency and sustainable energy; transportation; and telecommunication and information services.

The SEED Coalition does not intend, as a primary goal, to persuade visitors who have no interest in the issues they target. Instead, it wants its websites to make it easy for people who are already knowledgeable and interested in the issues they tackle to take action, like sending faxes to political and corporate decision makers. The SEED Coalition employees want to educate people, but their primary goal is to have them take action: “Take action first, I guess, if you have to prioritize. But if they’re also educated, then they can do further things. They feel more confident about contacting their legislators and taking action...” (Karen, personal interview, May 11, 2001). While the SEED Coalition believes that educating people will enable them, it does not have evidence demonstrating that this strategy is effective.

The SEED Coalition uses its sites for fax actions, but its employees also refer people to their websites for more information about their group and the environmental issues they consider. For example, while most of the SEED Coalition’s initial contacts with people are through letters or phone calls, both letters and phone calls may finally refer individuals to the websites for more information. Alex describes a common contact: “and you know, I’ll give them a couple of examples of why Exxon Mobil is so bad about it, and then I’ll say, do you want more information, go to our website” (personal

interview, May 11, 2001). Laurette echoes this, explaining that when she first has contact with people from community groups she refers them to the SEED Coalition's website for more information (Laurette, personal interview, May 11, 2001). The SEED Coalition usually does not know, however, whether these people actually follow their advice and use their website as an additional resource.

The SEED Coalition's websites also can help other activists follow their campaigns, which is especially important because the SEED Coalition collaborates often with other advocacy groups. Pete explained, for example, that much of the material on the Toxic Two Step site was to help people involved with the campaign know what was happening, and when, in the refinery tour; have access to materials to help them participate, like logos and flyers; and know what press coverage and other effects their participation had yielded (personal e-interview, September 4, 2001). Again, however, the SEED Coalition does not know much about how many people used these web resources.

The SEED Coalition often overcomes the constraints to decision-making that not setting and striving for clear goals can create. As its impressive list of goals for its website demonstrates, it has, however informally, analyzed its and its audiences' needs and determined a need for websites and for specific kinds of information to be placed on its websites, doing some of the planning that Hackos would recommend. Not only does the SEED Coalition have set goals for its website, but also its decisions about its website at least sometimes reflect those goals. For example, Karen explained decisions to revise the website in August as follows: she planned to increase the size of the picture of Big Bend on the home page because she wanted it to attract more attention. The SEED Coalition was planning to soon send email to its email list asking people to take fax actions to pressure politicians regarding pollution in Big Bend (observation and personal interview, August 13). Similarly, in order to help focus website visitors on the Big Bend fax action for a while, she asked the Webmaster to take the Title V action link off the home page temporarily. She hoped this would help visitors concentrate on the Big Bend fax action while the Title V issue was not as urgent (observation and personal interview, August 13).

Pete explained that he put reports on the Toxic Two Step website partially so that reporters visiting the site could gather information (personal e-interview, September 4, 2001). He published press coverage of the refinery tour on the Toxic Two Step site in part so that visiting funders and donors, as well as participating advocates, could see that what they did made a difference (personal e-interview, September 4, 2001). These decisions clearly reflect the SEED Coalition's goals. Some of Pete's other decisions work towards the goals of building and protecting the SEED Coalition's ethos. For example, Pete said that he linked the Toxic Two Step site to two letters sent to Christine Whitman " ...because i wanted it to be clear that we asked nicely before ridiculing her. i hoped anyone coming to the site, curious about the effort, and wondering if we had asked nicely first would see them" (personal e-interview, September 4, 2001).

To summarize, the SEED Coalition sets goals for its websites; moreover, these goals are sophisticated and fairly comprehensive. However, while I was able to glean these goals from a series of interviews, it took that: a series of interviews. The SEED Coalition employees do not seem to recognize all of these goals all of the time. In addition, while many of the SEED Coalition employees' decisions reflect their goals, they often do not know what the consequences of their actions will be.

In other words, while the SEED Coalition employees logically explain the decisions they make in terms of goals for their websites, they often do not know whether the decisions they make actually support their goals, or only support them in theory. Not knowing the outcome of their decisions is symptomatic of one of the SEED Coalition's largest constraints to decision-making, an inability to learn from its actions, that I will discuss further in the next section of this chapter. In other words, because the SEED Coalition's planning processes are not clearly defined and because it seldom evaluates its document-producing processes, it does not have the well-developed processes that Hackos suggests make a solid planning process: looking at its audiences' needs, testing alternatives with methods like story boards or usability testing, and determining the best routes for sharing information, for example (Hackos 101-105). Nor, then, do the SEED Coalition employees clearly define their goals for each individual decision, identify their

alternatives, weigh them and their likely consequences, then proceed, as decision theorists would suggest would be a good process. Instead, while they do develop goals and consider them while making some decisions, they do this on a haphazard basis. They usually seem to share their goals, but they sometimes write their goals down and sometimes they do not. However, because they already sometimes practice a create goals/develop strategy process, they might be ready to make this a better-defined process.

Barrier Two: Inability to Know Alternatives or Consequences

For a variety of reasons, one of the major barriers to the SEED Coalition employees' making good decisions about how to use their websites is their inability to know the alternatives available to them and/or the consequences of those alternatives. Some of the reasons for this problem are as follows:

- The SEED Coalition's full-time employees have not been trained in web design.
- They mainly learn about web communication through their visits to websites, an imperfect method.
- Their Webmaster has little time.
- They have little personal contact with their Webmaster.
- They have limited knowledge of their web audience.
- They obtain little feedback about the success of their web communications.

The next sections of this chapter will explain in more detail how each of these factors contribute to the SEED Coalition employees' not being able to identify alternatives.

Lack of Training in Web Design. One problem the SEED Coalition faces is that its employees have not been trained in web design and do not have time to read about web design. Klotz explains, "because the Web is a new medium, candidates do not necessarily understand what are those constraints and opportunities" (3). The same is true about the SEED Coalition employees, who have learned most of what they know about web design through their personal experiences with other websites.

As Pete notes, “My experience using the other sites shapes how we use the sites.” He also explains, more specifically, that he has made decisions about the design and content of the SEED Coalition’s sites by “looking at other campaign websites, especially with a modem...the slow connecting speeds, but then the fax actions, etc.” (personal interview, July 9, 2001). This method of self-education does make the SEED Coalition employees aware of many of the newer uses of websites, especially those already used by other advocacy groups. The SEED Coalition employees did spend a great deal of time online while I observed them. They read news online, looked for information online, and visited other advocacy groups’ websites (observations, August 2001).

Not only do the SEED Coalition employees visit other advocacy groups’ websites, but also they pay enough attention to these sites that they can share critiques of them with representatives of the groups that made them. For example, Alex called a representative of another group to suggest changes in the wording on their website (observation, August 13). On the same day, but in an unrelated action, Laurette critiqued another group’s website over the phone, suggesting that alternative colors would be her preference, but would reflect what she likes; she would have no more solid reason than that to suggest this change (observation, August 13).

The SEED Coalition employees, then, do have ways to learn about web design. However, their methods of self-training are imperfect because their observations of website design are random, not systematic, and because they seldom can use anything but personal reaction to judge the effectiveness of the site characteristics they observe.

Imperfect Method of Self-Training. Although the SEED Coalition employees probably do, then, learn about web design by visiting advocacy websites, this imperfect way of knowing what websites can do may prevent them from knowing that many options for how to use their websites exist. For example, if they do not see another advocacy group using a web function, they may not be able to envision the function; i.e., if they do not observe another advocacy group using an **online auditorium**, they may not know it is something that groups like theirs can do.

An additional potential problem with the SEED Coalition's almost exclusive reliance upon learning about website options by looking at other groups' websites is that this does not necessarily allow the SEED Coalition staff to know what the consequences of another group's design decisions were. As March argues, while imitation "leads to shared practices and beliefs... the intelligence of the process depends not only on the speed and comprehensiveness of diffusion but also on the 'quality' of the information or practice being diffused. If bad ideas spread easily, knowledge will be shared, but the sharing will not lead to intelligence" (246). The SEED Coalition is vulnerable to noticing diffused knowledge that is of low quality. In addition, the SEED Coalition, because its employees lack a base level of expert knowledge about web rhetoric, is particularly at risk for picking up low-quality material. As March elaborates, "bad ideas spread more rapidly among the ignorant than among the informed" (246), and while the SEED Coalition staff is well informed about many things, web rhetoric is not one of them.

Furthermore, decision-making literature is clear that a critical component of making better decisions is the opportunity to learn from previous decisions, and sometimes the SEED Coalition lacks this opportunity. Sometimes it exists; Pete selected a simple design for the main SEED Coalition site partially because of his frustration with long download times for other groups' sites before he started using a DSL link instead of a dial-in modem. Also, Laurette notes, "I like the site map that Texas Campaign for the Environment has... especially like that each issue has a big icon, learn about and act on an issue... the victory information is more obvious... it has more color and is eye-catching" (personal interview, July 9, 2001). However, other observations employees make seem to steer them towards decisions that web design experts warn against, such as the use of too many colors or animated figures that may prove to distract audiences. For example, Laurette praises another group's site for being flashy, tells a group she would like to see a larger variety of color, and is in favor of the SEED Coalition's sites using more cartoon-like figures and animation to draw attention (personal interview, July 9, 2001; personal observation, August 13, 2001). Of course, one possibility is that these design options are appropriate for their group: Laurette is relatively similar to some of the potential

audiences for the SEED Coalition's websites, and she likes the flashier options, so maybe the SEED Coalition's web visitors also would. However, it is also possible, for example, that what she likes while using a DSL link in the office would alienate potential web visitors waiting for flashy icons and animation to download using a 28.8 modem connection. In addition, she is young, and her interest in these design options may have been influenced by the popular culture of her generation. If so, her tastes and distastes may have relatively better or worse consequences for the effectiveness of the SEED Coalition's websites depending upon the relative age of the SEED Coalition's web visitors, which, as Chapter V reveals, is generally older. If the SEED Coalition's visitors were mostly young, influenced by music videos and computer games and practiced in consuming complex multimedia, they might very well appreciate her design decisions. On the other hand, as many of them are older they might expect a more traditional design, akin to traditional media like newspapers or glossy corporate reports, and they might be unimpressed by, confused by, or frustrated with such design decisions. In addition, the same icons, animation, and cartoon figures that might draw the attention of a younger crowd might represent the SEED Coalition as less professionally oriented or less serious than potential funders and media representatives might be looking for in a group they wish to support or cite.

Finally, then, although the SEED Coalition employees have ways to learn about site design, their learning processes are not comprehensive enough to allow them to make the kinds of decisions that expert web designers would be able to make.

Lack of Feedback about Decision Outcomes. Whether particular decisions like choice of font for a web page are good for the SEED Coalition or not is less important than the larger problem: currently the SEED Coalition employees seldom can learn whether a decision they make works. Byrnes explains that in order for people to learn, they need to see a causal connection between action and outcome (110). To do this, they must know what the outcome is. Byrnes elaborates, explaining that although there are relatively few studies of the roles of feedback and expertise in decision-making (117), most of these studies indicated that outcome feedback was very beneficial to learning

(125). Indeed, Frank Heller posits that experts will seldom demonstrate better decision-making than novices in situations where the experts have (or have had) little feedback about the consequences of their decisions (218). For example, experienced parents may make the same mistakes repeatedly with each of their children if they do not receive feedback that lets them know the ramifications of their actions in the long term. Klein contends that the need to identify and weigh alternatives is more important for novices than for experts. Therefore, that the SEED Coalition employees do not receive feedback that helps them become expert not only affects their ability to learn and improve their processes, but also makes problems like not being able to identify all alternatives more critical than it might be if they were more expert in regard to web design.

Not only do the SEED Coalition employees need feedback about their choices, but also they need this to be good feedback. High-quality feedback is important because people are likely to interpret feedback in ways that supports their previous beliefs, so information that does not confirm a prior belief must be robust in order to be persuasive (March 84). Furthermore, people often create simple causal theories to explain the outcomes of their actions, so feedback must provide the best causal theories available to prevent people from becoming attached to overly simple causal explanations (March 84). If people are not given good feedback, they will usually remain tied to a previous way of doing something, because there is almost always an initial cost attached to switching from one method to another (March 96). March gives the example that people resist switching from one word processor to another, even if the new one is clearly superior, because there is an initial productivity cost required for the switch (97). Similarly, groups like the SEED Coalition could find themselves in competency traps. They may become quite adept at using a particular mechanism, such as linking press releases to websites or creating fax actions. Then, they might be reluctant to switch to new alternatives, even if those appear better, because as their competency has grown with one technique, the cost of switching to another technique has also grown. Without being given a strongly compelling reason to change what they are doing, they are apt to

satisfice in order to save time and effort in the short term, even if it appears that a change might save time or be more effective in the long term.

Clearly, the SEED Coalition's decision-making about its websites, then, could benefit from increased feedback about what works and what does not. Because—like more than half of environmental groups, according to Susan Jacobson (266)—the SEED Coalition has not researched its own campaigns, most of the feedback the SEED Coalition staff receives is limited to knowing how many fax actions web visitors send. Even here, their knowledge is often incomplete. For instance, Karen estimated that there were about 4,000 people in the SEED Coalition's email database, and that she thought that the fax actions worked well, but that she did not know what the rate of response was (personal interview, August 13). The SEED Coalition seems, therefore, to only know much about particularly successful or particularly unsuccessful attempts to generate fax actions.

For instance, both Pete and Karen told me of a particularly successful attempt to encourage people to go to the website and participate in fax actions. This success involved a combination of a radio ad in which religious leaders asked people to log in to the website and take action and the SEED Coalition's website (Karen, personal interview May 11, 2001; Pete, personal interview July 9, 2001). While the SEED Coalition knows that this combination created many fax actions from a greater geographic area than their typical efforts reach, they do not know enough to analyze how this worked: was the radio ad the most important element? If so, would any radio ad help a great deal, or was the religious support particularly critical? Was the issue at stake important in determining the response rate? Was something about the website important in convincing people who got there to take action, or were the additional people who came as a result of the advertisement convinced already to take action, regardless of what information was provided on the website? Was a combination of all these factors responsible for the success of this particular effort? Without knowing the answers to these questions, the SEED Coalition might have difficulty replicating the success of this particular effort, and the SEED Coalition staff might even draw incorrect conclusions

about why the effort succeeded that could lead it to make less than optimal decisions in the future.

Generally, then, the SEED Coalition has little understanding of the consequences of its web development choices. Furthermore, because it knows little about the success or failure of its own site design and content decisions and knows little about whether the ideas it borrows from other websites were successful, its decision makers can rarely learn how to improve their decisions based on what worked or failed in the past.

Limited Contact with an Expert, the Webmaster. In addition to having trouble knowing what alternatives are available to it for its websites and what the consequences of using those alternatives might be, the SEED Coalition also has difficulty knowing its options for web design because it has limited access to a web design expert. The SEED Coalition's Webmaster is both a web designer and an environmental advocate, so she understands both web design and many of the SEED Coalition's advocacy goals. However, the SEED Coalition hires her by the hour, so it does not have easy minute-to-minute access to an expert web designer with up-to-date knowledge of its activities who can help fill its knowledge gap. They wish that they could have more access to their Webmaster, as Laurette notes, "We need [our Webmaster] to have more time" (personal interview, July 9, 2001). Currently, their Webmaster works for them for approximately 6-7 hours a month (Gael, personal correspondence based on billing statements).

In addition to having limited contact with their Webmaster (or maybe because of this), the SEED Coalition employees have habits for communicating with their Webmaster that may sometimes limit the amount of expert knowledge she can apply to the websites. A typical way for the SEED Coalition employees to interact with their Webmaster seems to be to give her some decision-making power, especially about design. Alex explains, for example,

We just created a website, we just did a tour on the east coast, called the Earth to Exxon Mobil tour, where we went to those campuses where we were working with the students, and, um, for that, we came up with the materials that we wanted on the website, and I said, here, go for it, have fun, to our web designer, and so she put everything up, and then I looked at it, and I said, well, this is good, but, I want to change this a little

bit to make it look like this, or whatever, you know, we kind of, you know, tweak it, until it comes out to where we can get it to work... visions, I have visions of how I want things to happen, to get this report, you get to this website, you know, its kind, of, its got its design already, so I know I won't necessarily have the best ideas, someone else might... (personal interview, May 11, 2001)

Here Alex demonstrates that he often collaborates with the Webmaster, providing much of the content and some of the design, but giving her the opportunity to suggest design decisions as well. He also explains that all the SEED Coalition employees, including the Webmaster, are also constrained by the design of the SEED Coalition site as it currently is, which reflects a design created before they hired their current Webmaster. However, this example also demonstrates that the SEED Coalition staff does not follow a procedure that gives the Webmaster an opportunity to know the goals for a site, prepare a mock-up for that site, and receive feedback. Instead, the organization, typical of those Hackos describes as ad hoc organizations, tends to have individuals making decisions according to their own preferences and habits.

Pete offers us an extended example of how he communicates with the Webmaster. This example helps demonstrate both how collaboration with the Webmaster sometimes does include discussion of goals and design and how it does not follow a “here’s what we need and why” “here’s the proposal” “here’s the draft” “here’s the revision” procedure. For example, when starting a new website for a particular campaign in July 2001, Pete sent the Webmaster a list of instructions including the following:

- 1) Home page - plz set up like our other sites with link bars along top or side. The logo should be smaller and off-center so that we can have a couple of “hot items” next to it that draw immediate attention.
- 2) link bars in whatever order you like
“Home” “Take Action” “Resources” “Contact Us” “Learn More”
- 3) “Home” is for tts home. More described in separate e-mail.
- 4) “Take Action” described in separate e-mail
- 5) “Resources” should have [a list follows; I’ve kept only two examples]...

“Stop the Bush/Cheney Toxic Two Step Logo: you may download and use this logo for your local organizing. Put it on t-shirts, signs, postcards, etc.

Our only request is that you don’t make changes to it and keep the www.toxictwostep.org website on the logo.”

“Gasoline Alley Refinery Victims Tour flyer: this is the flyer describing the Gasoline Alley Refinery Victims Tour, which will visit refinery communities in Texas and Louisiana and then bring representatives of those communities up to Washington DC, from July 25-July 31. Flyer includes background information and a schedule.”

6) “Contact Us” should say:

“The Stop the Toxic Two Step web page is produced by the Texas the SEED Coalition, a non-profit organization dedicated to reducing pollution and promoting clean energy. To contact us,” and then whatever you normally put. (Pete, email to Webmaster, July 15, 2001)

Notice that while many of these instructions seem to dictate design and content options, some of them give the Webmaster power; for instance, a follow-up to the just quoted instructions instructs the Webmaster, “please use some artistic freedom and spruce up the appearance of the pages when the corrections are done” (Pete, email to Webmaster, July 15, 2001). The Webmaster supports that sometimes she helps make visual design decisions: “On sites that we have developed from the inception, they have let me decide on color schemes and layout design with some input from them. We did three sites together from the beginning. ToxicTwoStep.org, FixTNRCC.org and EarthtoExxonMobil.org” (Sonia, personal e-interview, October 8, 2001). As Pete’s email to Sonia about the Toxic Two Step page demonstrates, her freedom to choose a design even on sites they designed together is somewhat limited: Pete dictates some design decisions and offers rhetorical explanations for them, while leaving others for Sonia.

Sonia, too, provides examples of how she usually works with the SEED Coalition staff that support this interpretation of a typical interaction. She explains in an e-interview

Alex... had me make a change to the SEED Coalition website that links to another one of their partnership websites CoolTexas.net. I

changed the Take Action on Global Warming button on the SEED Coalition front page to go to the revamped website for CoolTexas.net. Alex then sent me a very extensive (23 page) document about what changes he wanted made to that site by e-mail. We changed everything from verifying links to putting up a new action form and putting up new news articles. Also put a section up promoting tour by Ross Gelbspan. All this was done via e-mail communication. If I had questions on his instructions, I would e-mail him back and he would clarify it (Sonia, October 8, 2001)

This example helps illustrate that most of the decisions about the websites are made by the full-time SEED Coalition employees. Alex sent twenty-three pages about changes; he did not send an explanation of the rhetorical situation and some support documents.

The next example similarly demonstrates that Sonia often puts information on the website without having the opportunity to make content decisions or many rhetorical design decisions herself: "Pete... sent me 9/11 statements for the various websites to put up on all their websites plus, he gave me a new section complete with fax action for the TNRCC rulemaking process that citizens can influence. Again all communication was done via e-mail. He sent me the text data and I put it up in HTML and he reviewed it and okayed it" (Sonia, personal e-interview, October 8, 2001).

The SEED Coalition employees, then, tend to tell Sonia what they want the website to look like and what content to place where and then have her implement those decisions. As Sonia elaborates, "At the point they contact me to do an update, they have a clear idea of what they want.... They basically can write down what they want done and think about it very carefully before they e-mail me" (Sonia, personal e-interview, October 8, 2001).

Usually, then, the SEED Coalition employees make rhetorical decisions about the websites before contacting the Webmaster. Pete sent Sonia text for her to put up in HTML, he did not ask her to make rhetorical decisions about how that would be done or where the new section would be located. Although the SEED Coalition employees give Sonia some free rein about design issues, like colors and fonts and placement, they dictate most of the rhetorical issues, like whether and when there will be a fax action and

what that fax action will do. In fact, their design process seems to largely neglect discussion of the rhetorical functions of various parts of the site, although it may seem to neglect this discussion because its Webmaster understands advocacy well enough to understand these functions without direction. As Sonia explains, "I'm pretty familiar with environmental groups here in the Austin area and I have worked and volunteered with some of these groups. So I have a basic understanding of how they try to influence legislation and get action from citizens response to campaigns to help influence opinions" (Sonia, personal e-interview, October 8, 2001).

Nonetheless, the SEED Coalition might benefit from reminding its Webmaster of its rhetorical goals, asking for a proposed design to meet those goals, then commenting on the proposed design. Its current processes seem to give the Webmaster primarily control over delivery, but not invention and arrangement. The SEED Coalition's current processes also seem to largely neglect concerns about audience. Although some of the content Pete sends to Sonia indicates concern for text that readers can use for navigation, there seems to be relatively little understanding of what users might want more or less information about, what they might want to see first, or what they might want to do. Instead, the design seems largely author-focused: what does the SEED Coalition want people to see and respond to. There are a few examples of exceptions to this. For instance, Sonia explains, "They did a lot of publications for the Gasoline Alley Refinery Victims Tour and we tried to make the website easy to use, so we provided those publications in both Adobe for download and plain HTML for people not comfortable using plug-ins on the net" (Sonia, personal e-interview, October 8, 2001). However, while the desire to make information available in various formats does seem user-oriented, this decision does not seem to reflect larger potential user concerns: do users want to download reports, or do they want to be able to read abstracts of those reports? Do they want to be able to download reports in a printer-friendly format? Do they desire to order copies of them? Would they prefer hypertext versions of the reports?

One explanation for the SEED Coalition's delivery-focused correspondence about its websites is that this habit may help compensate for the lack of time the SEED

Coalition employees have to consult with Sonia and the limited time she has to work with them. Alex seems to support this explanation when he elaborates,

Definitely there are some times where we have exactly how we want it up there, and we just post it on.... the time you'd be doing that is...when it's almost time pertinent, when you need something up right away, is when we say, here, put it up exactly like this, that, the Webmaster doesn't have to worry about coming back to us, saying is this what you want, is this ok, she just knows she can put it up right away, like if we have a few days to put this report or something we have done so something like that...(personal interview, May 11, 2001)

However, Alex's perspective here also supports the idea that the SEED Coalition employees are more concerned, finally, with having their Webmaster publish material on the website, handle the technical details, than with having dialogue with her about the strategies of the website. The staff seems to see its Webmaster largely as a publisher, not as a rhetorician. This theory is also supported by three other kinds of evidence: the kinds of questions the SEED Coalition staff ask the Webmaster, how the Webmaster seems to see herself, and how knowledgeable the employees perceive the Webmaster as being regarding the SEED Coalition's rhetorical purposes.

Sonia explains, in response to a question about the kinds of information the SEED Coalition staff might ask her to provide, that,

We talk mainly about the CGI aspect that is the forms processing and fax script. We make changes to the options and we discuss what is possible. A lot of times they see things on other websites that they want to duplicate on theirs. Mostly it's a decision about what they want forms to do, for example who gets the e-mail notice of that submitted data, does it get posted to the database form, what phone number for the fax action etc. What might be the best way to set up something that they want to do etc. (Sonia, personal e-interview, October 8, 2001)

As this quotation demonstrates, the SEED Coalition seems to ask Sonia for information largely about technical issues, not about rhetorical issues. In fact, she observes, as did the SEED Coalition staff (none of whom listed the Webmaster as a source of information about website design, although I asked most of them on multiple occasions in different

ways how they learn about web design) that the SEED Coalition staff often gathers information about site design from other websites.

Moreover, Sonia seems to support their seeing her in a technical/publisher role. Asked what kind of information she shares with the SEED Coalition and how often, she elaborates,

As often as I can. I feel that after working for them for about a year that I know what they want to accomplish and try to give them alternatives that will take into account their needs but minimize their costs. Having experience in programming I am able to get quotes for work on their scripts and tell them when I think something is reasonably priced or tell them that there are free scripts that will do what they want” (Sonia, personal e-interview, October 8, 2001)

The technical examples she gives imply that largely she provides information about how they can do something more cheaply. She also explains here that she understands their basic goals and that she does try to help them identify alternative ways to meet those goals.

Not only do Sonia’s interactions with the SEED Coalition support her role as a technical publisher, but so do her self-stated interests. She explains that she continues her education in web design in the following ways: “I work with other developers and belong to a couple of web-boards and newlists where development is discussed daily. The Internet itself is a wonderful resource tools for learning and downloading examples of code and software tools that you may need to learn” (Sonia, personal e-interview, October 8, 2001). Note that the examples of learning that she gives are technical examples: code and software. Similarly, the kinds of information that she most wants to have reflect technical interests, even when my question to her tried to prompt both rhetorical and technical concerns: *If you could attend a workshop on web design, communication, or development, what particular topic (Java, style sheets, or new ways to use websites in campaigns, for example) do you think would be most helpful to you?* “Flash development, Adobe acrobat, database development” (Sonia, personal e-interview, October 8, 2001). Sonia’s background, which I would guess is similar to that of many

web designers, may help explain her technical focus. She has worked in web design since 1995 and is self-taught. She describes her qualifications as follows:

I am self taught. I learned HTML from the net in the raw form. I know the tags and I know it well enough to look at the HTML and see errors, I don't use a WYSIWYG HTML editor and I could create a page in notepad if I had to. Again the Internet has had some wonderful places to learn just about anything you need from Photoshop to PERL. I did take a two week PERL programming class from one of the network groups here in Austin. Really just gave the basics, how to install PERL and how to do the easiest "Hello World" script. Then I buy books, lots of them and if I have a question I try to look it up either in the books or by doing a search engine query. The Google search engine is the very best at directing you to sites that show examples and tutorials.

<http://www.Webmasterclicks.com/>

<http://www.hwg.org/> HTML Writers Guild

<http://www.dezines.com/ultimate/> Ultimate Web Publisher's Guide

<http://www.cgi-resources.com/> The CGI Resource Index. (Sonia, personal e-interview, October 8, 2001)

I include her entire discussion of her education process here because I think it is important to note what is missing as well as what is present. Notably missing is any discussion of rhetorical considerations or training, including training in usability or audience analysis. I do not note this to criticize the Webmaster. In fact, I think that she is probably remarkably similar to many of the Webmasters hired by groups like the SEED Coalition: Sandra Harner and Tom Zimmerman explain, "it may also be true that professionals who now have publishing access are not necessarily professional communicators. They are simply HTML enabled...." (8). I do think that it is critical that technical communicators recognize the existence of many web designers like this and try to communicate rhetorical information to audiences composed of this kind of web designer. Otherwise, groups like the SEED Coalition find themselves in an awkward position for decision-making, where no one working on the website has genre and medium specific knowledge about how to make a website rhetorically effective. In addition, delivery, which is often the most visible aspect of rhetoric, tends to be the focus of most research into and advice about websites right now, so that even if Sonia and other

SEED Coalition staff wanted to learn about web design beyond delivery, doing so would take more time and yield less information.

Another possibility to explain why the SEED Coalition might use its Webmaster largely as a technical publisher is that the SEED Coalition employees dictate design and content because they have the expertise about the campaigns on which they are working. Laurette, for example, demonstrates how the Webmaster's lack of an insider's understanding of their activities may affect the number of decisions she makes herself: "We have to go to her [Webmaster's] house, she works from home, tell her, you know, show her what we want, what we don't want...because she just doesn't really know what's going on with the campaign... I would be able to look at it and say ok, this is covered and this isn't" (personal interview, July 9, 2001). In other words, the SEED Coalition employees may make strategic and rhetorical decisions on their own rather than spend time updating the Webmaster on the group's campaign activities and goals so that she can respond to the group's web strategy with suggestions.

Their Webmaster is also an advocate, so she understands the SEED Coalition's general goals. Still, however, collaborating with her probably takes more time than collaborating with an in-house expert would, because the full-time employees of the SEED Coalition also have to brief her on their recent activities and check to make sure her decisions reflect their concerns. Because the SEED Coalition employees all explain that they already do not have enough time, they may save time in their interactions with their Webmaster by making some decisions, especially content decisions, on their own. Nevertheless, if Sonia worked in-house, full-time, she might be able to suggest other options for web communication with which the SEED Coalition employees are relatively unfamiliar. Karen explains that she did talk to Sonia when she first started being active with the website, "I sat down with her for a little while, to sort of get an understanding of how it works from her perspective, which was very helpful to me" (personal interview, May 11, 2001). However, this kind of interaction with the Webmaster seems to occur relatively rarely. Therefore, Sonia has little opportunity to be an active influence on the other employees' understandings of the possibilities that might exist for the websites.

Finally, the SEED Coalition's Webmaster, like many, perhaps even most, of the people we have currently making decisions about web design anywhere in the world, seems to be experienced with making websites, but not an expert web rhetorician, just as the SEED Coalition employees increasingly have experience as web rhetoricians but are mostly not becoming experts. Although the Webmaster, like many web designers, has invested time into practicing web design, not receiving adequate, immediate feedback on the results of her decisions about web design may have prevented her from developing the casual knowledge that helps define a decision-making expert (Byrnes 135). The same is true about the rhetoric that the SEED Coalition employees develop for the web.

Finally, then, the SEED Coalition has limited access to a web rhetoric expert. Although it seems to have adequate access to a web designer who can help it meet its technical needs, its employees need a better understanding of the genre and medium specific rhetorical principles of the WWW if they wish to be in an optimal position for decision-making regarding their websites.

Limited Knowledge of Web Audiences. Another reason the SEED Coalition employees have difficulty knowing of their alternatives and of the consequences those alternatives may have is that they know little about who visits their sites, except that they know that media representatives and some of the people who they have personally referred to the site or have referred to the site through email go to the site (Pete, personal interview, July 9, 2001). To the SEED Coalition's credit, employees do meet with members of their web audiences at planning meetings with citizens, so they have one-on-one contact with audience members there, at other events, and on the telephone. However, rarely are they likely to discuss those audience's wishes and needs for the SEED Coalition's websites at those times. Nonetheless, these meetings can give the SEED Coalition a general understanding of some of the major concerns of its likely web audiences. The SEED Coalition has almost no knowledge of its web audience: "mostly, I don't know" (Pete, personal interview, July 9, 2001). This lack of knowledge hinders the SEED Coalition's decision-making, because its staff cannot, for example, know whether the sites need to have more or less detailed information, whether they can sport

flashier designs without alienating their visitors, or whether the people who go to the sites are primarily interested in being educated or taking action. In fact, although technical communication guidance like Hackos' dictates that knowing about audience is critical to effective communication, the SEED Coalition does not have any methodical ways to learn about its audiences and those audiences' needs, a major barrier to good decision-making about its web rhetoric. Unfortunately, the short length of this subsection of this chapter cannot adequately reflect the impact of this barrier. The SEED Coalition might benefit from more consideration of its audience and *then* a consideration of the available—and most effective—means of persuasion for that audience. It would almost certainly benefit from heuristic audience analysis, focus groups, surveys, usability testing, and other methods technical communicators apply to learn more about their audiences.

Summary of Discussion of Barrier Two, Inability to Know of Alternatives and Their Consequences. While my discussion of barrier two, inability to know of alternatives and their consequences, seems to focus on what the SEED Coalition does not know, going against Miller and Souther's focus on a need to analyze decision-making problems based on more than a lack of knowledge, my analysis here actually moves beyond a focus on lack of knowledge. For example, the SEED Coalition employees' lack of training in web design results in a lack of knowledge, but they only need more knowledge in order to better address the advocacy situations in which they find themselves. In fact, one of the biggest drawbacks to the way they currently learn about web design is that they learn primarily by visiting other advocacy group sites, so that their understanding of web design is based on web use by others who share their worldview, which may or may not reflect the needs of their audiences. The problems they may have because of limited access to their web designer are far more than knowledge problems—they are relationship problems: the SEED Coalition has decision-making problems not only because its staff needs more information about web design, but also, for example, because of the way in which it has defined its relationship with its web designer, seeing her as technical support rather than as a source of information about web design options. However, I do mean to indicate that many of the problems related to this

particular constraint to decision-making, knowing of alternatives and consequences, are knowledge related. They may not, though, all be best solved by providing the SEED Coalition employees with more knowledge, although certainly I think that feedback about the success or failure of their decisions could improve the SEED Coalition employees' ability to choose successful strategies.

If nothing else, I agree with Klein's very persuasive explanation of how novices often need to weigh options separately, something his research demonstrated that experts rarely do (12, 95). For example, in a study of decision-making processes used by firefighting experts, they compared and evaluated options eighteen out of 156 times, compared to recognizing the pattern and responding to it with a typical course of action 127 times out of the 156 times (Klein 24). K. L. Mosier found a similarly strong decision-making pattern in a replication study of airline crews (269), as did R. Flin, G. Slaven and K. Stewart in a study of offshore oil platform managers (275). Klein maintains that making decisions by recognizing patterns and applying plans seems to be the better method for making decisions, so that the traditional method of determining options and evaluating them is a "fallback for those without enough experience to know what to do" (103). Klein thinks that experts must "engage in deliberate practice... compile an extensive experience bank... obtain feedback that is accurate, diagnostic, and reasonably timely... [and] enrich their experiences by reviewing prior experiences to derive new insights and lessons from mistakes" (104). It follows, then, that the SEED Coalition employees, with little access to "accurate, diagnostic, and reasonably timely" feedback about their web decisions, will remain novices and so remain dependent upon the more analytical decision-making processes novices use until they develop their intuition: identifying and weighing alternatives (105).

Finally, then, the SEED Coalition has difficulty knowing of alternatives and knowing the consequences of selecting any of those alternatives for several main reasons:

- Its employees are not experts in web rhetoric, nor are they likely to become so given their current practices.
- Its employees have little contact with experts in web rhetoric.

- Its employees have almost no knowledge of their web audiences and those audiences' needs and desires.

Barrier Three: Inability to Recognize Alternatives

While not knowing about alternatives and their consequences is one barrier to good decision-making, another is less knowledge related: an inability to recognize alternatives. This is not a knowledge failure as was barrier two, the inability to know of alternatives and their consequences. In this barrier, unlike in barrier two, the decision maker knows about the alternatives but fails to think of particular options for some reason. In other words, this is an invention failure, not a knowledge failure—it is not a failure to know the available means of persuasion, but a failure to consider all of the available means about which one does know. This failure may be caused by something as simple as a short attention span (Simon 91). More often, it may reflect common decision-making processes, people's habits, or organizations' routines.

Decision-Making Processes Interfering with Recognizing All Alternatives.

Sometimes decision makers may not recognize all alternatives because of their decision-making processes. For example, Browne explains that Simon, Cyert, and March all think most decision makers consider alternatives one at a time, not simultaneously, and tend to select the first reasonable alternative they think of, which may or may not be the best (23). Not all agree, however. Soelberg thinks that managers may consider multiple alternatives at once and then enter a confirmation period, in which any new alternatives are compared only to the selected alternative (Browne 27). H. Mintzberg further complicates the situation by explaining that decisions usually involve only one, not multiple options, and the real decision is whether to go with that option (Beach and Lipshitz 25). In other words, people may frame problems differently: one person may frame a problem as a feasibility issue and so address the feasibility of different alternatives in turn, while others may frame problems as weighing and selecting among various alternatives. Some people may brainstorm, trying to determine all possible alternatives before starting to weigh them; others may select the first reasonable option,

without having tried to make a comprehensive list of the options they may have. As March posits, decision makers often frame problems narrowly rather than broadly, which helps demonstrate why they may not consider all of their options or the long-term results of their choices (14). Framing issues narrowly helps decision makers simplify their analysis of the problem (March 14). The SEED Coalition employees, who brainstorm and sometimes consider multiple options simultaneously, although at other times they seem to go with the first reasonable option, might find that while they frame problems they can use heuristics to help them be more comprehensive in their consideration of other alternatives. Another rhetorical method that might help groups like the SEED Coalition more comprehensively consider alternatives would be to consider alternatives from different terministic screens: to consider alternatives that would seem attractive to members of the media, to other advocates, to college students, and to legislators. Using Burke's pentad, tagmemics, and other invention strategies might also help. How anybody decides to frame a problem may depend upon the problem itself, as well.

Decision Makers' Habitual Responses. Additionally, most decision theorists agree that where an existing policy meets a goal, decision makers seldom search for a better alternative (23, Browne, based on Simon, Cyert, and March). When faced with a familiar stimulus, in other words, a response is usually habitual⁵; while, on the other hand, when faced with an unfamiliar stimulus, decision makers are more likely to try to further define the problem and invest in discovering alternatives (March and Simon 161). Heller elaborates, "In many cases, once the problem is identified the decision is made, because the decision maker can implement preformulated policies for dealing with the problems of the class to which the presenting decision belongs" (Heller 180).

This happened, for example, when Karen planned that later in the mercury campaign the SEED Coalition would update the fax action letter it makes available from the main website so that people could take more action on the mercury issue based upon TNRCC's response to the SEED Coalition's demands (personal interview, August 13,

⁵ I use **habit** to refer to an individual's learned responses and **routine** to refer to the organization's typical processes.

2001). Karen responded to a probable future stimulus when she suggested the fax action response that the SEED Coalition habitually uses. Lee Roy Beach, Helmut Jungermann, and Eric E. J. De Bruyn suggest that decision makers could forecast to make decisions, but often avoid forecasting by relying on “preformulating policies” (144). That is what Karen does in this case: rather than forecasting what might happen, developing alternatives, and selecting between them, she falls back on a preformulated policy: react to political stimuli by creating a fax action for public response.

I should emphasize that this kind of response is not necessarily bad. Simon contends that habitual reactions to stimuli allow us to conserve energy, which is, for example, why we often practice things with complex procedures, like sports, in order to make our reactions habitual (88). Therefore, such responses can allow organizations to operate more efficiently. Furthermore, Simon does not think habit is a purely passive element; he believes that habits tend to cause behavior without conscious thought, and conscious thought may have to occur to change the habitual response (89). In addition, habit may or may not be related to expertise: habits developed by experts are more likely to be worth following than those developed by people with experience who are not experts, who are more likely to have habits that are not based on knowledge of previous outcome. (I could, and have, developed habits regarding how to comment on student work. However, if I do not develop an expertise based in an understanding of the causal relationships that direct how those comments affect future work by those students and how they affect my relationships with students, my commenting habits may be flawed.)

Finally, then, the SEED Coalition staff tends to make some responses due to habit, a process that probably benefits the SEED Coalition in some ways and hurts it in others. If the employees had a better sense of whether their habitual decisions were sound, habit would be more likely to help them. In other words, making decisions habitually is safer when one has previously evaluated the outcomes of those habitual decisions. Again, then, the SEED Coalition’s decision-making could benefit from adding evaluation to its communication development processes. In addition, the SEED Coalition’s decision-making would benefit from a more holistic consideration of the

entire rhetorical situation—audience as well as purpose—that might help the SEED Coalition staff recognize subtle differences between situations that on the surface seem fairly similar, such as different political situations that call for timely contact with political decision makers. The SEED Coalition’s employees can use heuristics, brainstorming, tagmemics, or other invention techniques to determine what communication options exist in a given situation, such as what kind of text and picture might go on the website to draw attention and inform about a new political reality. The staff might reach a more holistic (authors, texts, audiences) consideration of the rhetorical situation by constructing a mental or real proposal that considers the goals and the audiences for a given piece of communication.

Organizations’ Routines. Sometimes the failure to recognize all available alternatives may result from organizational routines and procedures, rather than individuals’ habits. Organizations can influence behavior by expecting habitual behavior of group members under specified conditions and by providing stimuli to channel behavior (Simon 100). For example, March and Simon agree that organizations tend to use routine to simplify and shorten the decision-making process, especially to save time in considering alternatives (162). Similarly, Choo argues us that our routines can help us defend decisions but can also stifle our creativity, keeping us from considering available alternatives (13). The SEED Coalition seems to have some routines that could help it use its websites more effectively at the same time that it has other routines that probably constrain its ability to recognize alternatives.

First, the SEED Coalition seems to need different routines in order to be able to use its websites effectively on a consistent basis. Right now, it seems as if the SEED Coalition has few routines regarding site development and maintenance, although its lack of routines has become a routine in itself. Pete notes “thinking about the website is not burned into our protocol” (personal interview, July 9, 2001). He elaborates in a sentence that helps explain how their apparent lack of routine in other ways is a routine: “we rarely have a weekly staff meeting, usually decisions are made informally, we usually

think of how to use the web to help, pretty limited to things that can be faxed, we have little developed process...” (personal interview, July 9, 2001).

This last quotation is critical because it shows at least three important things:

- The SEED Coalition’s lack of systematic attention to its websites is a symptom of its typical operation as an organization.
- The SEED Coalition does have habits about how to use its websites (its employees often, for example, think of how its websites can be used for fax actions).
- The SEED Coalition has no systematic routine for who updates the websites or how, something Pete explains at other times, too: “the website is no one person’s responsibility ...no one is in charge of reminding/planning at staff meetings, we often don’t have staff meetings, we lack a process, so the websites are updated as people remember to and take initiative to take action” (personal interview, May 11, 2001). While Pete, the director of the organization, seems most aware of these systematic barriers to decision-making about the websites, others in the organization are also aware of these constraints. For example, Karen notes about the SEED Coalition’s process of developing the websites, “It’s not formalized” (personal interview, July 9, 2001). To summarize the SEED Coalition’s organizational constraints to considering alternatives for the application of its websites to its communication campaigns:
 - The SEED Coalition rarely has staff meetings.
 - When the SEED Coalition has meetings, no one is officially in charge of bringing up the websites
 - The SEED Coalition has no maintenance routines outside of meetings that ask its employees to regularly address website development and application.
 - While the SEED Coalition employees have few routines about when to consider the websites, they do have some habits about what they think the websites can be used to accomplish and how to accomplish those goals.

The SEED Coalition does not have regular staff meetings. I observed a staff meeting in August, 2001, and attendees assured me it was the first staff meeting since April or so (personal observation, August 16, 2001). However, the SEED Coalition employees have more planning meetings than they gave themselves credit for in my initial interviews. During the week when I was observing their actions, they spent time in at least four different conference calls (planning advocacy strategy with other local environmental groups); time in several informal meetings of some staff members; and time planning one-on-one with one another, in person with people who would, for example, write newsletters for them, and over the telephone. In addition, they regularly emailed one another about advocacy events and sometimes called one another with questions. In other words, they do more strategic planning as a group than the number and regularity of formal staff meetings that they have reflects.

My initial interview data seemed to accurately depict the SEED Coalition staff as having no formalized operations for talking about the website. Instead, employees barely discussed the website in their staff meeting. In some ways this makes sense: the SEED Coalition is organized so that different staff members are assigned to different advocacy goals, like global warming or power plant pollution, not to different media (Figure 3.1), so one would expect any discussion of their use of media to be secondary to their discussion of the campaign.

Figure 3.1. Organizational Chart for the SEED Coalition.

However, while the staff did not spend much time talking about the website at the staff meeting, they did discuss other media then. For example, Pete explained that he had seen people use bulleted lists effectively in press releases, and that they all might try this technique (staff meeting observation, August 16, 2001). Similarly, Pete critiqued a letter Alex was drafting, Pete and Karen discussed ways in which they could use different sources in press releases and at meetings, and Alex discussed plans for speeches and possibilities for a video (observation, August 26, 2001). Karen and Laurette also discussed email and postcard contact with people interested in the SEED Coalition (observation, August 26, 2001). Research methodology theory would suggest that my presence might have made them more likely to discuss the website because they knew that I was interested in it and people being observed often modify their behavior to try to please the observer. In addition, they discussed many other communication tactics, so it seems they would have been quite likely to discuss the website at this meeting. That they basically did not, then, seems to indicate that their earlier self-reports were accurate: they do not seem to systematically discuss ways in which to use their websites at formal meetings. However, while they discussed their websites in less detail than they discussed some other media, for the most part they did not seem to systematically discuss ways in which to use any particular communicative tools to reach advocacy goals, with the exception of the press release. Instead, they seemed to focus on their advocacy goals and brainstorm about tools to use to reach them, and then use whatever tools they thought of—except that they used press releases and reports more consistently and more often. As web use is still a relatively new communication tool, not only is the SEED Coalition staff less familiar with web communication and less likely to think about it, but also the literature available to guide not-for-profit organizations is less likely to cover it in detail, which may exacerbate this problem for now. For example, Susan Jacobson's *Communication Skills for Conservation Professionals*, published in 1999, contains a section on websites, but this section differs from her discussion of other media: it spends

more time arguing that the WWW is a valid way to communicate and focuses more on delivery than do the sections on Public Service Announcements and press releases⁶

Sometimes they mentioned other groups' websites or their own in conference calls: Pete and Karen praised the design on one group's new website (observation, August 13, 2001), and they discussed information available on their website and other websites that could help people write documents and newsletters (observation, August 13, 2001). However, they rarely discussed how they could use their websites to further their campaigns. One exception is that Pete suggested that they could supplement a report on global warming with information available through their website on larger trends for global warming by region (comment in conference call, August 13). However, although Pete made this suggestion, the group did not make specific plans for this as they did for a paper report on global warming that they were also planning at the time. They made specific plans to try to have the report out by September 20 and assigned Alex to gather information to put into the report, press releases, and other documents used in this stage of the campaign to reduce global warming. However, they made no plans at that time for any particular person to be in charge of putting the global warming trends on a website, a date for this to be accomplished by, or a choice of whose website they would put it on (conference call observation, August 13, 2001).

Lack of follow-up routines for decisions about the website were also apparent at other times. During a conference call, Alex and Pete decided that if the radio advertisement a representative of another group participating in the conference call had played to them were sent to them, they could have their Webmaster put the radio message on the Toxic Two Step website (observation August 13, 2001). In fact, they suggested that the other group Fed-Ex the ad to the SEED Coalition's Webmaster at the SEED Coalition's expense, and then Sonia could put the ad on the website by the next day (observation, August 13, 2001). However, one month later the ad was still not on the website, indicating that although they planned this, no one followed through with it.

⁶ An interesting note about Jacobson's quite helpful, well-written book is that Jacobson is a professor in wildlife ecology and conservation: she is neither a communication nor a technology expert.

Based on my observations and interviews, lack of follow-up routines often prevent the SEED Coalition from implementing ideas for its website. However, I should also explain that I observed this happening with things other than the SEED Coalition websites. For example, Karen suggested making a sticker in another conference call, and this idea was neither agreed to nor disagreed with, but dismissed through lack of conversation about it (observation, August 13, 2001). Similarly, when planning a rally for Labor Day weekend, the SEED Coalition employees brainstormed and came up with many more ideas than they planned to even attempt to put into action, much less than they implemented (observations, August 15 and 16, 2001). It seemed that, as in other organizations, the SEED Coalition employees were very good at coming up with ideas, but they have too few resources to follow up on all of them, forget to follow up on some of them, and reconsider others. Beach et al. explain that this is common: plans may change when goals change, but they also may “die an obscure death, wasting away, not being abandoned or changed” (151).

Nonetheless, it did appear that the SEED Coalition’s follow-up routines regarding its reports, press releases, and material for meetings seemed to be more robust than those regarding its website are. The lesser degree of follow-up for web materials may reflect the fact that the SEED Coalition has more perceived cognitive constraints about its websites than about press releases and reports, and so its employees are less likely to follow an optimal decision-making and support process for web materials.

The SEED Coalition, along with, I would guess, many small organizations, might find that maintenance routines could save time and help its employees consistently use sites across campaigns. In other words, its employees may wish to make one person in charge of considering how the websites are being used and ask that person to take time on a daily, weekly, or monthly basis to review the sites and their use in the SEED Coalition’s campaigns and to check for regular updating and other maintenance. Then, the employees might find that they have time to update the websites, because maintenance routines will have been made part of each employee’s daily or weekly work. Finally, then, I suggest what Hackos would suggest: the SEED Coalition would more

effectively and efficiently produce communicative documents if it followed a more prescribed publication management process.

However, while the SEED Coalition may find it helpful to develop new maintenance routines, it may also find that its habits about what to put on its websites and how to design them limit the possibilities it can imagine for the use of its websites. For example, because its employees are in the habit of thinking about fax actions and putting press releases and reports online, they may not always think about other alternatives for their websites. In general, however, while the SEED Coalition employees may find that these habits make it likely that they will overlook some alternatives, one of the organization's strengths seems to be its staff's ability to brainstorm and to be open to ideas from outside sources. For example, Pete came up with the Where's Whitman poster idea, a play off "Where's Waldo," brainstorming during a conference call (personal e-interview, September 4, 2001). Similarly, Alex and Pete discussed an idea Alex got from another group, to send pictures of people who signed a petition along with it (observation, August 15, 2001). The lack of effective maintenance and development routines for its websites may be a bigger problem than individual habits about web activity, so far as what is more likely to cause the SEED Coalition to fail to take advantage of opportunities for using its websites.

Summary of Discussion of Barrier Three: Inability to Recognize Alternatives.

Finally, then, the SEED Coalition's habits about its websites reflect its status as one of Hackos' ad hoc organizations in the documentation management process maturity model. The SEED Coalition's relatively undeveloped routines probably often adversely affect its ability to recognize all available alternatives, although they might sometimes allow the SEED Coalition to be more creative than it would be with more rigid routines. The SEED Coalition, like other ad hoc organizations, would probably benefit from developing organizational procedures for handling website development rather than relying upon individual employees' idiosyncratic, even if sometimes effective, methods for deciding upon, developing, and publishing web rhetoric

Barrier Four: Inability to Project the Values of the Future Consequences of Alternatives

In addition to its problems recognizing alternatives, while the SEED Coalition can try to design its websites to help support its goals, it may not be able to predict the degree to which different tactics may meet help it meet those goals. In other words, the SEED Coalition employees may not know the value of future consequences of different tactics. For example, does using a website to send a fax action, which is much easier for people to do than write a letter, engage people in the same way in deliberating about the environment and participating in decision-making? Will an email message engage or annoy recipients? While now recipients may ask for more email contact (they do, as Chapter V will explain), will that change by next year? A bigger issue for the SEED Coalition may be that it has so little knowledge about its websites that it probably often cannot begin to project the values of future consequences because it has trouble identifying future consequences. For instance, how can the SEED Coalition predict the values of future consequences when it knows little about who uses the website, why these people use it, what they want, or what are the likely consequences of web material?

In general, the SEED Coalition does not know the likely future consequences of its decisions about its websites, so it cannot begin to predict the values of those consequences, but there are exceptions. For example, the SEED Coalition knows that people will use the fax actions on the websites, and that these can affect policy makers. Those being faxed often ask the SEED Coalition to disengage a fax action after several days of being bombarded with faxes: “We have fax actions on the website... for Campaign Exxon Mobil, so we um, in short, we piss the people off who we send faxes to, so they ask for us to pull them down, so we uh, not every two or three days that happens, that happens every couple of weeks” (Alex, personal interview, May 11, 2001). What the SEED Coalition does not know as well is whether these faxes have the same impact on decision makers as a regular letter, although it suspects that they do not, and wonders how to encourage site visitors to write a letter, instead (Pete, personal interview, July 9, 2001). In this instance, then, the SEED Coalition can predict some of the future values of the consequences of its web content choices, and is dissatisfied with them, but it does not

know how to change the consequence to a more valuable one. For the most part, however, lack of feedback makes it almost impossible for the SEED Coalition staff members to predict the importance of future consequences in any meaningful manner.

Barrier Five: Perceived and Real Cognitive Constraints

In addition to difficulty identifying and selecting alternatives, decision makers can face other barriers to good decision-making. Some of these include Janis' cognitive constraints, such as perceived or real resource constraints and perceived lack of dependable knowledge. Janis contends that when these seem overwhelming, organizations are apt to make decisions more rapidly, depend more heavily upon routines and habits, and fail to examine information that is available to them (21). All of these actions can lead to poorer decisions. Another cognitive constraint is a kairos crisis, such as the cost of investing time into decisions that must be made in conjunction with a particular event, and cannot be made until then. Yet one more characteristic of the SEED Coalition's decision-making processes that has a strong effect upon it is how many of its processes are intertwined with those of other environmental groups. All of these barriers work to reduce what the SEED Coalition perceives as its available means of persuasion in any given situation.

Perceived or Real Resource Constraints: Time. As Laurette offers, "We haven't really had the time to update the website" (personal interview, July 9, 2001). The SEED Coalition employees are very busy people. They have more ideas that they wish to implement than they have time to implement. For example, right now they have regular meetings in Dallas and send postcards to people who might attend those meetings (observation, August 14, 2001). They would like to also do this in Houston, but do not have time to do so right now, especially because it takes one SEED Coalition employee nearly one full day to design and print the postcards, make copies, have the copies cut, put labels and stamps on them, and mail them (observation, August 14, 2001). However, part of the lack of time constraint might be more a perception difficulty than a real difficulty. In other words, the SEED Coalition employees perceive that they do not have time to update the website, when, in fact, they might have time. One reason for them to

perceive that they do not have time for this task is that they do not have well developed organizational routines for dealing with it, and, as March and Simon explain, when people have both programmed and unprogrammed tasks, they will work on the programmed tasks even when there is no strong time pressure (206). Working on the websites, or even thinking about the websites, is a less programmed task than other tasks on which the SEED Coalition employees work, such as writing press releases and reports, making contacts, and scheduling and attending regular conference calls and other meetings. Therefore, employees are apt not to spend time on the websites, even when the more routinized tasks do not demand their total attention, and they could spend fifteen minutes or half an hour on the websites. These brief periods of attention would not be adequate for major strategic planning and site revision, which also need to be addressed, but would provide time for linking to new information, highlighting currently more timely information, and other important tasks. The goals and outcomes for work on the website are less clear than the goals and outcomes for many of the SEED Coalition employees' other tasks, like press releases. This, too, may make them less willing to invest time into the websites. As March and Simon explain, the clearer the goals, the more willing someone will be to try to meet them, because clearer goals tend to be linked to clearer, more regular rewards and penalties for work done towards the goals (206).

Indeed, while I observed the SEED Coalition employees, they had little wasted time. However, several of them also indicated that they do have slower days (observation, August 15, 2001). On these days they might be able to invest more time into the websites (because of how they have designed their websites, many content updates can be done in little time, although it would take much more time for a major overhaul, considering the general rhetorical effectiveness of the overall website, something the SEED Coalition has not done much, it seems, since its current site was created). However, because the websites are not as routinized as other tasks, the SEED Coalition employees are, perhaps, more likely to work ahead on routinized tasks, such as sending out postcards for monthly meetings, writing press releases and reports, or planning for speeches or presentations, rather than spending a brief time considering

updates and changes to the websites. For example, Karen and Laurette discussed what Laurette should do one day, and determined that rather than working on a calendar of fishing events in Texas that they could use to contact fishing groups to try to set up presentations about mercury pollution, Laurette should work on the more routine tasks of updating the database and preparing new postcards, which seemed more urgent to them (observation, August 15, 2001).

Nonetheless, the SEED Coalition does update and modify its websites, especially portions that are critical to current campaigns. The elements that seem to fall by the wayside are those such as updating the list of reports and media coverage on the main SEED Coalition site, which are also the tasks least likely to gain anyone reward or punishment for doing or not doing, as they are not clearly assigned to any one person and often fall into cracks between campaign assignments. Indeed, the SEED Coalition's routine use of a new website for any new campaign reduces the pressure to spend time updating the main SEED Coalition website. This means, for example, that while Pete will add information to the Toxic Two Step site, he may not add some of the same information to the main SEED Coalition website, even where it would seem appropriate to do so. Similarly, Karen and Laurette first built their own mercury page in spring of 2001. Then, in the summer of 2001, they worked to link their mercury material to the SEED Coalition home page and put other mercury material prominently on the SEED Coalition home page. In the fall of 2001, they updated parts of the original SEED Coalition website to reflect mercury pollution, and, as of Sept. 12, 2001, they still had not updated other portions of the SEED Coalition site to reflect the mercury pollution work.

While perceived and real time constraints can affect the amount of time the SEED Coalition employees spend working on the websites, they can also affect the amount of time the SEED Coalition employees spend learning about web design. For example, Pete and Laurette both expressed to me an interest in training Laurette in website design and having her take on an expanded role with the websites (Pete, personal interviews, May 11 and July 9, 2001; Laurette, personal interviews, May 11 and July 9, 2001). However, the SEED Coalition has not been able to take time to plan for and send Laurette to training

(Laurette, personal interview, July 9), and the original plans they had to train her fell through when an advocate working for a neighboring environmental organization ran out of time for training (Laurette, personal interview, May 11, 2001).

Additionally, the SEED Coalition employees are not apt to search out material on new ideas for web use because the time that they have for researching, for scanning information resources, has largely been devoted (through necessity and through routine) to searching for information on political events and on environmental issues.

Again, defined project management procedures could help the SEED Coalition employees remember what they might do or learn regarding their websites when they have more spare time and help them recognize when web materials are a major priority.

Perceived or Real Resource Constraints: Money. Just as both real and perceived lack of time can interfere with the SEED Coalition's decision-making, so can real and perceived lack of financial resources. For example, many web-training classes that the SEED Coalition could have Laurette and others take cost more than the SEED Coalition can afford to devote to web training. This is especially true because even if Laurette were able to maintain the website, she does not currently appear to have enough time to complete the duties she does now and completely take over website maintenance, so the SEED Coalition would continue to be dependent upon an outside contractor. Frankly, an outside contractor with experience can probably create and maintain websites more efficiently and with more expertise than a newly trained full-time employee, so would probably remain a better choice for the group for most of its web work for some time. Web design is becoming more of a specialization, which means that investing time and money training someone to work on it part-time makes less and less sense.

Perceived or Real Resource Constraints: Technological Knowledge. Sometimes, the SEED Coalition employees may find that their actions regarding their websites are affected by their technical knowledge and other technical difficulties. For example, while Laurette learned how to use Netscape Composer from a friend, and so can now make some minor changes to the website, she does not know how to post them herself, although the Webmaster gave her the password and other information to enable her to

post updates and changes (personal interview, July 9, 2001). This small gap in technical knowledge prevents her from completing the implementation of small changes in the website. Similarly, Laurette explained “I know what I want, but not how to go about it; I don’t know enough.... I have and want to add pictures of fish that may have mercury in them, but I don’t know how” (personal interview, July 9, 2001). Also, she and Karen discussed that “Karen wants a mercury cycle, an animated cycle, to put on the mercury pages, we discussed scanning one in, but we really want motion, the cool cartoons others are doing, we’d like to get there” (personal interview, July 9, 2001). Regarding an animated mercury cycle, which Karen recognized no one in the SEED Coalition had the technical knowledge to create, Karen asked me “Is there anyone we can get to do web stuff for free?” (personal interview, May 11, 2001). Clearly, the SEED Coalition wants to implement features of its website that it cannot due to lack of technical knowledge.

Similarly, the SEED Coalition employees sometimes must spend too much time dealing with technical incompatibilities, such as those caused when they try to exchange attachments with their Webmaster, who has a PC, from their in-office Macintoshes, sometimes unsuccessfully (personal interview, May 11, 2001). Karen and Laurette, who faced this problem, seem to have overcome it by learning how to create and send PDF files (personal interview, May 11, 2001), but initially this technical problem interfered with their implementation of ideas for the websites. Not having technical knowledge and dealing with technical problems reduce the SEED Coalition’s options, the number of Aristotle’s “available means of persuasion” to which it has access at any moment. This, in turn, limits its ability to make and implement the best rhetorical decisions.

Perceived or Real Resource Constraints: Perceived Lack of Dependable Knowledge. In addition to the resource constraints (real or perceived) that the previous sections discussed and to the problems that a real lack of knowledge can create, another constraint to good decision-making can be a perceived lack of knowledge. Janis posits that when people believe that they do not have the resources for information search or appraisal or the knowledge to deal with an issue, they will often “make a crucial policy decision by ‘the seat of their pants’ without even making any phone calls to consult with

appropriate outside experts” (21). In other words, even when information on an issue might really be available to people with relatively little effort, if they perceive that gathering it or sorting through it would be too overwhelming, they often will not try to gather any information at all. The SEED Coalition employees may sometimes suffer from this problem—they might sometimes think that they do not know enough to make a reasoned decision about what to do with the SEED Coalition’s websites, so they might make a rapid decision even when other options are actually available to them.

Perceived or Real Resource Constraints: Kairos Crises. While perceived lack of knowledge might encourage the SEED Coalition employees to follow less than optimal decision-making processes, sometimes its decisions are constrained by kairos. In other words, because the SEED Coalition reacts to and tries to create political opportunities and events, some of their campaign decisions are determined by timing. The first day I observed them, for example, they invested a great deal of time into planning for a response to a projected announcement by Christine Whitman, Director of the EPA. Then, Whitman delayed her announcement, so they did not yet need to respond to it (personal observation, August 13, 2001). Similarly, the SEED Coalition employees are careful about the timing of their actions. They want to time bursts of fax actions near the political vote or meeting, for instance (Karen, comments on timing of email regarding Big Bend fax action, personal interview August 15, 2001 and observation August 16, 2001). Therefore, they might be likely to put off working on parts of the website that will address a future need; at the same time, when the need arises, it may be immediate, and allow little time for working on appropriate support material for the website. For example, one day during my observations a sudden need for a press release arose about 3:00 in the afternoon. The SEED Coalition staff needed to rapidly make decisions about what to say and draft a press release, or determine it would not be possible to have an effective press release to make available that day (in fact, it determined the latter, and so the SEED Coalition failed to meet the kairotic need, due to its inability to respond that quickly to this particular need) (observation, August 14, 2001).

Another kairos-related issue is that the SEED Coalition employees would want to be careful not to put material on the website that would too rapidly be out of date, or that would announce plans for a rally, for example, that might be canceled suddenly if the political context in which they were working changed unexpectedly. One last example is Pete's advice to Karen about when to send email to help hit the mailboxes of area politicians. Pete said that they should wait until after a town meeting and then respond to what the politicians said in letters and op eds; he thought that responding after confirmation of their suspicions of the politicians' positions would be better than saying the wrong thing to them now (observation, August 13, 2001). These examples help demonstrate how the SEED Coalition's decision-making processes are time dependent; the SEED Coalition has little control over much of its schedule for making decisions.

Perceived or Real Resource Constraints: Effects of Heavy Inter-group Collaboration. The final significant characteristic of the SEED Coalition's decision-making processes is that the SEED Coalition spends lots of time collaborating with other groups. In many ways, this is beneficial. For example, Karen explains that the Texas environmental groups work together well, compared to many environmental groups. For example, they do not compete with one another with their actions in order to compete for funding, so they have relative strength as a group compared to environmental groups in some other states (observation, August 15, 2001).

The SEED Coalition employees, indeed, spent a great deal of time while I observed them invested in interaction with other groups. Much of this interaction involved brainstorming about what communication tools to use to meet a particular goal, how to develop them, and how to implement them. For example, Karen collaborated with a member of another environmental group about the Big Bend issue, and Karen said that she would make a fax list for another advocate to use to inform people about an upcoming trip and teleconference about Big Bend's air quality (observation, August 15, 2001). Moreover, they discussed using old movie footage of the park, but determined it might take too long to convert (observation, August 15, 2001). They did agree to use a

clip from an interview with a Sierra Club spokesperson about clean air in Big Bend and to use posters that they had previously made (observation, August 15, 2001).

Their collaboration with other groups often takes the form of conference calls, to the degree that Karen remarked that they had had too many conference calls and that she would like to spend more time doing the things they plan to do and less time deciding what to do (observation, August 15, 2001). During conference calls, the needs and ideas of other groups affect the SEED Coalition's decisions. On one hand, the brainstorming sessions that eight people representing eight groups have ought to be powerful. On the other hand, what any group thinks of doing or agrees to do will be mediated by the larger activity system of environmental advocacy in Texas, as well as by the group's own needs. For example, Pete discussed in detail with another group how they could work together to have a two-pronged attack; part of this conversation was a need to convince the other group to collaborate with the SEED Coalition even though the other group wanted to take a softer approach than the SEED Coalition did. Pete's solution was a compromise, that the SEED Coalition would take a tough line while the other group could suggest more moderate solutions (observation, August 13, 2001).

Pete is often the call leader for conference calls with other groups. This might help collaborative situations from constraining the SEED Coalition's decisions, as even when groups have different agendas, Pete has some control over negotiating them (Alex and Gael, comments to me during observation, August 14, 2001).

Making Decisions: Looking Forward for SEED

Beach and Mitchell define three main characteristics of a decision maker: "Knowledge of different choice strategies (the breadth of his or her repertory), ability to actually use the strategies, and motivation to expend the least possible time, effort, and money on the choices while still doing a satisfactory job" (8). Thus, it seems that if the SEED Coalition's decision makers could do these three things well, they could have effective decision-making practices. Indeed, when it comes to making decisions about how to address an environmental issue with the public, I think that the SEED Coalition employees do pretty well: they know of many possible strategies, can use them

effectively, and are motivated to implement them efficiently. However, this may be less true when considering primarily the SEED Coalition's decision-making about how to use its websites. While earlier sections of this chapter largely explored some of the barriers interfering with the SEED Coalition employees' abilities to make good decisions about how to use their websites, this section will outline more clearly the process the SEED Coalition may go through when making decisions, from responding to cues to creating plans and tactics. It will help place the SEED Coalition's decisions about its websites within a larger decision-making context, to demonstrate how they fit into the SEED Coalition's larger activity system. This section, then, may also help give the SEED Coalition more credit for good decision-making practices than the first parts of this chapter seemed to do, because earlier sections focused on things interfering with the SEED Coalition's making good decisions about how to use its websites.

Most decision theorists agree that the first step towards a decision is a cue from the environment that decision makers must identify and interpret. Not every cue creates what Niklas Luhmann would call resonance (15); many cues will not be strong enough to be recognized at all, and even fewer will be strong enough to invoke a response. The cues that seem to usually invoke a response from the SEED Coalition are political events. For example, when the EPA or another group plans a policy announcement, the SEED Coalition will often consider that a cue strong enough to invoke a response. Byrnes contends that if a cue is ambiguous, people often are uncertain about how and whether to respond to it, and so they may seek more information (36, 37). Determining which cues to respond to, or having the ability at any given time to respond to a cue, are more examples of the role of *kairos* in the decision-making process.

Once the SEED Coalition employees have determined that some response is called for, they may decide how to respond by retrieving experiences from memory, constructing a plan using analogous reasoning, constructing a plan using causal reasoning, or seeking advice (Byrnes 38). They might consider their typical responses to a cue like this and how their decisions fit with previously adopted goals (Beach and Mitchell 5). Thus, they will consider their usual plans for achieving those goals; plans

are “abstract sequence[s] of potential activities” (Beach and Mitchell 5). Byrnes suggests that because this step is very important, teaching people mechanisms for responding to cues can make them more self-reliant and prevent faulty causal interpretations (43).

Once a group has considered its typical plan for responding to a stimulus, it will develop tactics, or “concrete behavioral components of plans...specific palpable actions intended to facilitate implementation of an abstract plan to further process toward a goal...” (Beach and Mitchell 5). To help itself develop tactics, it will consider various forecasts, or “anticipations of [the] future based on various tactics” (Beach and Mitchell 5). These tactics are parallel to the tools that activity theory explains that actors use to reach goals. In both theories, people select specific concrete methods for reaching goals. For example, according to Beach and Mitchell’s process, the SEED Coalition might encounter a cue, diagnose the cue in relation to prior knowledge and history, consider the usual plan that it would use to reach the goal related to the cue, and then select particular tactics to reach those goals in this particular instance, using the plan as a general guide.

In a specific case, for example, the SEED Coalition received a cue that the EPA would release a policy decision. Its employees recognized this cue, diagnosed it as a common situation to which they might respond, and considered the plans they would usually implement to reach their goals of informing, persuading, and invoking action surrounding the issue. Then, they chose tools that could help them do these things, including a public protest, press releases, documents to hand out at a meeting, and presentations to give at the meeting (observation, August 13, 2001).

When considering how to deal with cues, the SEED Coalition employees might rely on a plan to deal with the recognized pattern; however, they might also analogize from other situations, one way of “rearranging” their environment. In one case, for example, Pete seemed to rearrange the SEED Coalition’s environment after a representative of another group balked at taking as liberal of an approach to an issue as the SEED Coalition wanted to take. He rewrote the situation, determining that the SEED Coalition should take a more radical approach on an issue while a collaborating group would take a more moderate approach. Then, however, Pete questioned this plan, asking

whether the two-pronged approach would be too complex for their audience to understand. The matter seemed to be settled after the representative of the collaborating group offered an analogous situation in which such an approach worked. Alex even questioned the appropriateness of the analogy, which the other representative assured them was sound, so that the SEED Coalition was more likely to be analogizing in a helpful way, rather than misanalogizing (observation, August 13, 2001).

The SEED Coalition also has at least some ability to self-correct when its employees become too involved in a particular tactic or tool and forget the ultimate goal. At the staff meeting, for example, Pete demonstrated his ability as an expert to see the big picture. He reminded Karen and Laurette that while making decisions about whether to pressure the TNRCC and legislature to make and support new laws about mercury levels, they needed to remember that the SEED Coalition's ultimate goal was not to decrease mercury pollution alone, but to use mercury pollution to pressure for power plant reform (observation, August 16, 2001). As March notes, sometimes talk about decisions, even when it does not lead directly to decisions, "reminds decision participants of their beliefs" (198). In the previous example, the SEED Coalition uses talk in this way.

Looking at how the SEED Coalition might deal with a given situation helps us see how the SEED Coalition can overcome some of the obstacles to good decision-making that March outlines: problems of attention, not being able to attend to all issues that need attention at once due to limited resources; problems of memory, a limited ability to remember and recall previously learned material; problems of comprehension, a limited ability to absorb, synthesize, analyze, and apply information; and problems of communication, sometimes created by division of labor (10). We can see how the SEED Coalition employees might apply heuristics to problems, brainstorming and drawing upon their different knowledge as different individuals to overcome these barriers.

This chapter has responded to Research Question 1, What decision-making processes shape the design and development of a website as part of a larger communicative campaign? For instance, how, by whom, and for what reasons are decisions made about how to use the group's websites? First, the chapter examines how

the SEED Coalition uses its websites to meet various goals: to spread information, to encourage citizen response to public and political leaders, and to support media reporting on SEED Coalition events, which can also inform and motivate the public to act. In the process, this chapter has identified major barriers to the SEED Coalition's optimal decision-making processes. Some of these barriers relate to how its employees make decisions: they have few prescribed procedures for considering their web rhetoric, developing it systematically, considering the audience, purpose, and alternatives, learning about web rhetoric, or evaluating web rhetoric choices. Some barriers relate to who makes which decisions, as we learned that employees with relatively little experience with web rhetoric make decisions about web rhetoric. Other barriers relate to a lack of diffusion of knowledge about web rhetoric to groups like the SEED Coalition and the often-freelance web designers who may typically work for them. The chapter has then concluded that the SEED Coalition could make better decisions about how to use its websites if it had better ways of identifying and interpreting how to use web rhetoric to meet its various goals (Byrnes 36). The next section of the chapter will explain some of the implications of this research for technical communication and for advocacy groups, exploring areas for future research and for experimentation with possible solutions to some of the problems that advocacy groups and small businesses likely share.

Implications for Advocacy Groups and Technical Communicators

What can Technical Communication Learn from Groups like the SEED Coalition?

1. Where to focus research efforts to help people make better decisions (for instance, technical communicators may learn that organizations and the technical communicators who may work for them, would benefit from a better sense of how people are affected by interacting with similar messages in different media).
2. How real people, including those technical communicators may work with or for, make decisions.

3. How to help technical communicators help the people they work with and for use better decision-making processes.
4. How to help technical communicators better understand, evaluate, and revise the decision-making processes they use.
5. How to help technical communicators reflect upon short and long term goals and reach those goals when working with communication campaigns
6. How to help technical communicators consider the values attached to the consequences of their decisions.
7. How to help information about web rhetoric diffuse from the technical communication community into other organizations and to experts in web design who may not affiliate themselves with technical communication as a field.

How can Technical Communication, as a Field, Help Support Organizations like the SEED Coalition?

1. Provide them with knowledge: (1) conduct studies of the use of websites in campaigns, and publish them both in technical communication journals and in other places, where advocates and others may come across them, (2) invite advocates to professional conferences where they may be able to learn more about their communication efforts, (3) attend advocacy conferences and share information with advocates, and (4) create myths, symbols, stories, and rituals that, as March suggests (207-208) can help knowledge diffuse through communities.
2. Support freelance designers who they are likely to hire: help them keep abreast of research results regarding web design and learn how to get immediate, relevant feedback about their decisions, so that they may develop into experts.
3. Help the freelance designers know how to empower advocates to make better communication decisions for themselves.
4. Encourage technical communicators to work as consultants with advocacy groups and provide them with the tools they need to provide good feedback.
5. Encourage advocacy groups to use technical communicators as consultants.

6. Volunteer time to work with advocacy groups.
7. Create student/advocacy group connections that may be mutually beneficial.

How can Organizations like the SEED Coalition improve Decision-Making about their Websites?

1. Learn how to and implement ways to get immediate, appropriate feedback.
2. Rely upon the most expert or the leaders within the organization to help them stay focused on their goals, especially when they are using tools in a round-about manner and when they are collaborating with other groups.
3. Create website maintenance and development routines that have clear goals and for which there are clear benefits and penalties for adhering or not adhering.
4. Develop ways to collect information about web research developments.
5. Develop and implement ways to learn more about web audiences.
6. Set clear goals for their websites.
7. Reflect upon the routines and habits they have for developing and maintaining their websites and revise them as needed.
8. Determine whether they have real or perceived time constraints (or both) regarding processes for developing their websites and, as is possible, create ways to deal with these constraints.

Conclusion

In this chapter, I have explored how the SEED Coalition makes decisions about how to use its websites. This chapter explains how decision theory, publication management, and rhetoric can work together to help us understand how people make and implement communication decisions. It also explains what barriers interfere with good decision-making and how common barriers affect or do not affect the decision-making processes the SEED Coalition uses. As a result of my analysis, we have been reminded of the importance of campaign evaluation and audience analysis as integral parts of good communication routines. These reminders reflect a rhetorical tradition back to Aristotle's

psychological analysis of various audiences, although I discuss them here largely as publication management and decision theory illuminate them.

In addition, I have explained how the SEED Coalition might benefit from routines regarding its website use; again I used decision theory, publication management, and rhetorical theory to support what technical communicators have long known: a clearly defined communication cycle can result in more consistently more effective documents. However, research comparing the quality of decisions coming from different decision-making processes for different sizes and types of organizations might guide and persuade organizations trying to decide whether to develop more systematic procedures.

I have also pointed to a few communication problems that may be particularly problematic for not-for-profit and other small organizations. For example, I have discussed the great disadvantage the SEED Coalition is at when creating websites because its employees are not expert web designers and it has limited access to its Webmaster, who is used mostly for technical, not rhetorical, information. This barrier, and those of limited time and money, are particular problems facing small organizations that technical communication as a field can try to minimize through outreach to small organizations and increased rhetorical training and support for free-lance web designers who may or may not identify themselves as technical communicators. Perhaps most importantly, this chapter provides a new perspective on communication processes.

The next chapter, Chapter IV, investigates the content of the SEED Coalition's websites. It considers whether they reflect the group's goals then explores how they function rhetorically. Next, it determines to what extent environmental discourse rhetoric influences the group's web rhetoric. Finally, I explain the implications of the analysis of the group's websites for the organization, environmental advocacy communication, and technical communication. In the process, I relate the sites themselves to the barriers and processes for decision-making discussed in this chapter.

CHAPTER IV

HOW THE SEED COALITION'S WEBSITES REFLECT ITS GOALS AND THOSE OF THE ENVIRONMENTAL ADVOCACY MOVEMENT

Introduction

Hypertext theorists and other scholars and critics have represented different attitudes about the WWW. Some have proposed that the WWW and/or hypertext are ushering a new, utopian era, supporting democracy, public participation, open access to information, and new ways of thinking. Jay David Bolter, for example, proposes that electronic discourses may lead us to a new, more interconnected, more metaphorical way of thinking that can help us access information as needed (22). Many feminist theorists, including Jodi O'Brien, who hopes that people who practice gender switching online may erode traditional gender lines, have suggested that online writing can enable women and minorities to communicate on a more even level with majority groups (91). Pedagogical theorists, including Anne Britt, Jean-Francois Rouet, and Charles A. Perfetti, believe that hypertext can help students draw connections between concepts (56). Similarly, proponents like J.W. Anderson, who contends that the web can be a significant tool for environmental advocacy groups as they try to communicate with citizens and build alliances with businesses, think that websites are increasingly helpful to advocacy groups (21). Websites can be tools for sending email to politicians and can support a combination of text and visual elements. In addition, the WWW is a potential venue for public participation in dialogue, a place in which to create opportunities for Jürgen Habermas' **communicative action** (multi-directional communication in which power is evenly shared among participants who all agree to temporarily abandon their preconceptions and listen, devoting themselves to working towards consensus). Scholars like Alison Anderson point out that advocacy groups may be particularly dependent upon the WWW, especially when traditional media are wary of using them as sources, as was

the case with Greenpeace after a media scandal involving the accuracy of some of its statements in the Brent Spar campaign (113).

In contrast, another school of scholars has tempered this utopian perspective. Ilana Snyder, for example, explains that there are few studies demonstrating that people learn better through hypertext (102). Some studies note that minorities (Burkhalter 63) and women (O'Brien 87) can be silenced online as well as face-to-face. Michael Joyce also points out that the WWW seems to be as hierarchical as it is hypertextual, indicating that what is true about hypertext may or may not apply to most websites (166). My own observations indicate that on many websites links are largely internal and seldom help build a balanced and diverse understanding of an issue, usually instead representing only the perspective of the supporting group: they do not seem to support Habermas' communicative action. Jimmie Killingsworth and Martin Jacobsen, too, demonstrate how many advocacy websites do not take advantage of the hyped opportunities of the web, such as an ability to create dialogue or provide personalized information (174). These contrasting perspectives leave us wondering whether websites indeed promote better access to information, as Omar Swartz would argue groups need to do if they are to help develop a meaningful participatory democracy (14). They also leave us wondering whether websites actually support communicative action and deliberative thinking. Instead, perhaps websites mostly recreate the ideological apparati that we have now, offering information mostly in a top-down manner. If they do largely operate in a top-down manner, they may actually further insulate political and personal decision-making systems from important stimuli. As Anderson posits, top-down communication patterns may make it easier to shelter communities of believers from dissenting opinions: "the result of interacting on the web may be the individualising of politics by bypassing intermediary groups" (101).

As research into the WWW becomes more empirical and less anecdotal, we may settle some of this debate with more data with which to support or refute various hypotheses. For example, the case study perspectives in Marc Smith and Peter Kollock's collection describe how the WWW does sometimes support new communities that are as

real as, while different from, traditional communities. Still, current research inadequately answers most questions about the use of the WWW, especially for advocacy sites, which have too often not received attention of their own, instead being treated just like other varieties of website. This practice is problematic. For example, because a genre is better defined by purpose than by medium, our current talk about websites, which often assumes that websites all share common characteristics, may be misleading. Swales, for instance, defines genre largely by purpose, “the principal criterial feature that turns a collection of communicative events into a genre is some shared set of communicative purposes,” rather than by similarities of form (47).

Using data about web use by financially disadvantaged groups, Robert Klotz also demonstrates how treating advocacy websites like other websites may be a particularly flawed approach. The common assumption has been that one of the benefits of the WWW is that it helps advocacy groups by allowing even access to the media from richer and poorer groups, a benefit Sagi Leizerov discusses (469). In fact, Graeme Browning’s analysis of web use in the 1996 election featured a discussion of the successful use of the Internet by a Libertarian candidate, who used many facets of web communication, including strong interactive elements, to successfully persuade many voters (48). However, Klotz’s more systematic analysis of the 1996 campaign demonstrates that, in general, web use correlated strongly to financial resources. Klotz himself began with the assumption that the WWW would help level the playing field for resource-rich and resource-poor groups. However, Klotz found, counter to his hypothesis, that fifty of sixty-eight major-party candidates had home pages, while among Libertarian candidates, who are poorly financed compared to the major party candidates, only nine of twenty had home pages. In addition, he noted, “On the whole, Libertarian candidates had the least sophisticated, least comprehensive, and most eclectic home pages of all candidates” (51). Klotz concluded, “financially-disadvantaged candidates were less likely (56%) to have home pages than candidates not in this position (79%)” (52). Not only did Klotz find a finance related disparity of website use among political candidates, but this was also reflected in political organizations, including advocacy groups. Klotz found that of

seventy-two organizations responding to his survey, forty operated websites, most prevalently among resource-rich groups (73%) rather than resource-poor groups (37%) (117). Their financial status also affected the kind of website that they had: while just over half of the organizations provided extensive discussion of at least one issue, with at least 750 words, more of the resource-rich groups did this (121). Therefore, Klotz determined that although the media-access playing field is more level on the WWW, it was still not level (59). Richard Davis concurs, "Poor groups are hard pressed to afford the staff to establish and then maintain Internet sites. Nor do they have the income to pay external contractors" (82). He explains some of the differences between richer groups' websites and poorer groups', beyond that only 50% of groups taking in less than one million dollars a year had websites while 85% of those with budgets over five million had websites,

Well-to-do groups were more likely to have sites that were more content-filled, with an attractive layout, and sprinkled with technological innovations. Even if they can do so, the site appeal for poorer groups is likely to be less due to limited resources. For example, the sites with searches of policy makers and specialized information databases are those from more well-off groups... Wealthy groups generally can update their sites more frequently, at least weekly and often daily. (83)

Because organizations have had time to build websites since 1996, when Klotz and Davis studied political websites, I would no longer expect to see a disparity between resource-rich and resource-poor groups concerning having a website. However, I would hypothesize that resource-poor organizations, including many advocacy groups, will still be less likely to have as well-developed or as often-updated sites, perhaps making them less likely to use strong interactive elements, which often require more sophisticated programming and more staff time to maintain. This may mean that advocacy group sites may not share as many of the characteristics of cutting edge websites as we might expect: on one hand, advocacy groups are likely to have a strong motivation to have highly interactive websites, while on the other hand, they may be less able to create and maintain these.

One way to learn about website use for non-commercial and non-pedagogical sites is to explore the values and goals of other website creating groups, like advocacy groups. By looking at the websites of these groups and comparing them to the goals and values of their creators, we can begin to answer questions like the following: Are these groups able to do what they want to do with their websites? What characteristics define the genre of website with which they work? If there is a discrepancy between what they want and what they create, why might that discrepancy exist? The answers to these questions can help those designing websites for advocacy groups. The processes I use to answer them can also provide a model for beginning to create an understanding of other web genres and can point to where we need more research into advocacy organization and other uses of the web.

Goals for the Analysis of the SEED Coalition Websites

In an attempt to understand how websites may affect communication, especially advocacy discourse, this chapter will investigate how the main SEED Coalition website and the Toxic Two Step site use textual and visual elements to support the SEED Coalition's goals and goals of the larger environmental advocacy movement. This chapter responds to the following research questions: (2) How do sites meet the goals and reflect the values of their developers? For example, how do website characteristics pertain to the advocacy campaign? How do website characteristics create and sustain dialogue, promote action, or encourage visitors to join or donate money?, and (3) How do these environmental advocacy sites reflect or fail to reflect common goals of environmental advocacy communication? For instance, how do they enable public participation in public policy formation? If we consider advocacy sites to be a genre separate, for example, from educational and commercial sites, what genre characteristics do they seem to have?

It may seem that because we know so little about what might work on websites and what might not, we have no good place to start a systematic investigation into website characteristics and how they support various organizational and/or audience goals. However, as Klotz describes the Internet, "the new medium may offer

opportunities and constraints that are new, but fundamental aspects of rhetoric are the same as they have always been” (3). Meghan McAndrews demonstrates how we can begin to systematically analyze websites. Her study analyzes communication elements on ten websites (including the sites of four advocacy groups: AFL-CIO, Health Insurance Association of America, American Association of Retired Persons, and Cato Institute) for rhetorical considerations including the following: “purpose and motivation,” “targeting and audience,” “using powerful language,” and “solidifying and supporting the argument” (4). Similarly, Klotz studied websites of political candidates, organizations, and interest groups in the 1996 elections in the U.S., Britain, and Australia, and identified elements of websites that are similar to those of traditional rhetoric or modern mass media, extend them, or differ from them. For example, Klotz looked at elements “for which the Web marks a true difference from both the traditional understanding of rhetoric and from the modern mass media campaign” (20). These elements included the following:

- 1) The audience, not the speaker, can choose the order in which materials will be taken up; 2) the audience, not the speaker, chooses when the communication is received; 3) the audience has an upward socio-economic bias, at least temporarily; [and] 4) the speaker has maximum capability of combining written, spoken, and visual material. (20)

Klotz also looked at elements in which the web seems to depart from the characteristics of modern mass media and “hearken back to traditional rhetoric,” including “1) the possibility of interactive, two-or-multiple way communication; 2) remote chance of accidental exposure; 3) prominence of unfiltered material; and 4) extensive amount of time/space allowed” (20). Finally, Klotz’s third group of elements includes those that seem unchanged with the web, “1) position of the advocate in an institutional context; 2) psychology of persuasion; 3) ease with which difficult subjects can be avoided; [and] 4) public nature of the communication” (21). Klotz’s discussion of these three groups of elements concludes, “although the Web does provide some new opportunities and constraints, the changes caused by the Web are at the margins” (22). Because of work like Klotz’s and McAndrews’, I could begin to systematically study the SEED Coalition

websites without having to create an entire approach. I will discuss my approach, based in part on their work, in the next section.

Research Approach for the SEED Coalition Website Analysis in Respect to Research Question Two

I used Klotz and McAndrews as a starting point to develop a research approach to learn more about the SEED Coalition's websites. For example, like McAndrews, I considered motivation/purpose for material on the sites. Building on some of the same considerations as Klotz, I looked at the combination of visual and textual elements on the SEED Coalition's websites, searched for interactive elements on the websites, studied the sites' use of extensive space, and, in Chapter V, considered how web audiences used one of the sites. Building the case for a need for research like his, Klotz asserts that research into the web is missing two main things: "an appreciation of how Web communication fits in the context of timeless aspects of rhetoric," and "basing assessments of the Web on systematic evidence" (iv-v). Klotz provided a systematic assessment of political web pages across kinds of advocates, a variety of political advocates (candidates, groups, and parties), and countries (4), and McAndrews systematically studied a variety of political sites. However, few, if any, scholars have combined a systematic analysis of a site with empirical evidence about decision-making about the site and the audiences' views of the sites. While the systematic analyses that Klotz and McAndrews provide are valuable, both tend to guess at the purpose and audience for the sites based upon the text. For example, McAndrews reviewed the sites she studied five times to discover emergent patterns and elements (6). Her final analysis led her to conclude that the AARP website primarily provides information about issues of concern and secondarily publicly portrays its position on a variety of political issues, while also heavily recruiting (19); the AFL-CIO page informs about labor in American politics and culture and recruits; and the Cato institute provides information (20). Combining elements of her analysis of textual traits with information from interviews, observations, and audience surveys can give us a richer picture of the sites' rhetorical use. In other words, I build on Klotz and McAndrew's work, in part, by combining textual analysis of website discourse with interview data, as

discussed in Chapter III. Furthermore, in Chapter V, I continue to expand the scope of my textual analysis beyond Klotz and McAndrews' research by gathering real audience feedback, rather than only inferring audience information based upon the texts.

Specifically, in this chapter I use a content analysis of the SEED Coalition's websites to determine to what extent the SEED Coalition's websites meet the following criteria, which my interview and observation data demonstrated were the SEED Coalition's goals for the sites

- Providing a means for action (contact with legislators and other decision makers, personal time commitments, donations, use of tools).
 - That is accessible for people not only in Austin, where the SEED Coalition and the Texas state government are located, but geographically spread across Texas and the nation.
 - That is cheap.
 - That is convenient for visitors.
- Providing environmental information.
 - For citizens.
 - For the media.
- Providing information about the organization.
 - For potential members.
 - For the media.
 - For donors and potential donors.
- Persuading visitors to support the SEED Coalition's goals and take action.

What we learn from these goals is two-fold: What the SEED Coalition sees as its sites' primary purposes and who it perceives to be its sites' primary audiences. Its sites' primary purposes are to help people take action at low cost to both the SEED Coalition and the visitor, to provide people with information about the group, to provide people with environmental information, and to persuade people to help the environment. Its targeted audiences include citizens (potential activists and donors), current activists and donors, and the media. As one of my goals in analyzing the websites was to see to what

extent the SEED Coalition's sites reflected the staff's stated goals for the sites, I analyzed the sites to see which of these goals and audiences seemed to be reflected by content on the site. I subdivided the kinds of action one could take into donating, writing to decision makers, attending SEED Coalition events, and writing to the SEED Coalition staff. Obviously, other potential actions, such as changing personal habits or persuading friends, might be prompted by the site, but I know of no way to meaningfully and systematically look for ways in which the site might directly stimulate these except for direct requests, so I noted direct requests for other kinds of action.

The SEED Coalition's last goal, to persuade people to take advantage of provided information and to take action, requires its sites to be persuasive. Ultimately, the SEED Coalition's other goals support this one: the sites provide means for action and information about the environment and about the organization in order to help persuade people to take action for the environment. They accomplish these goals either by removing physical or temporal barriers to action such as the time it would take to design flyers or write letters on one's own or by removing attitudinal barriers to action by providing people with arguments and pleas that might change their minds.

The SEED Coalition uses a variety of textual and design elements on its sites to help it persuade. I grouped these characteristics into Aristotle's appeals: logos, pathos, and ethos, using Winn and Beck's sorting of salient factors of sales into web design attributes as a guide. I noted both design and content considerations.

Winn and Beck, who address only design characteristics, consider the logos attributes of sales to include price, variety, product information, and effort (23). Of these, effort and variety seemed relevant to the SEED Coalition's work: the relative amount of difficulty visitors would have navigating the site or reading information or taking action would affect how likely a visitor would be to partake of any of these opportunities on the sites. I measured this by considering the number of steps needed to read information or take an action, the length and reading level of the information, and the level of the location on the website on which the information is located. In addition to these design

concerns, the kind of the information provided would be likely to affect the sites' persuasiveness: information that includes statistics or scientific data has a logos appeal.

Winn and Beck identify the design elements that develop pathos as playfulness, tangibility, and empathy (23). The SEED Coalition's sites could similarly use the entertainment potential of the site, sensory appeal through visual or other means, and personalization features to appeal to their visitors. In addition, the SEED Coalition could build text-based pathos appeals by providing information that is likely to have an emotional impact on people, such as examples of personal suffering.

Finally, Winn and Beck consider product quality and recognizability, compatibility, and assurance to be design factors that affect ethos (23): the SEED Coalition, similarly, can brand, build community, provide contact information, and use other features to assure visitors of the quality of the group and its effectiveness in helping the environment. The SEED Coalition can also cite and draw connections to outside sources or other groups to build its credibility.

In my content analysis, I identified units on the main website for the SEED Coalition and on its Toxic Two Step site. Then I coded those units, noting which units reflected the SEED Coalition's four main stated goals for its websites, which units reflected which targeted audiences for the SEED Coalition's websites, and when the SEED Coalition's sites' design and/or content seemed to include pathos, ethos, logos, or a combination thereof. By coding the websites for these characteristics, I hoped to learn whether the SEED Coalition's websites actually reflected its staff's stated goals and how the content of the SEED Coalition's websites might communicate the priority with which the SEED Coalition implements those goals through its web rhetoric. I also hoped to learn how the SEED Coalition begins to implement some of its goals through traditional rhetorical appeals. This information provides a foundation for building a sense of the genre of an environmental advocacy site.

First, then, I chose the discourse bloc for my unit of analysis. I defined a discourse bloc on the websites as the material accessed by a given hyperlink (or the hyperlink itself if it was broken, as it indicated planning for material or material no longer

there) or as a section of text with unity of content and organization. I also counted press releases, reports, and photos, logos, or groups of photos with related purpose as discourse blocs. While I considered each discourse bloc on the main website itself separately, I considered reports, press releases, and other linked documents each to consist of one discourse bloc; I did not code discourse blocs within linked reports, but treated the linked report as one discourse bloc. Similarly, I coded links to other sites holistically, not identifying and coding separate discourse blocs on external sites.

Finally, then, I coded the websites for the following characteristics:

1. The advocacy campaign to which the discourse bloc seemed most related (mercury, power plants, pollution and health effects, environmental justice, global warming, sustainable energy use¹)
2. The location of the discourse bloc on the site (if the material or the link to the material was on the home page, the media page, or on a deeper level of the site.
3. The purpose of the bloc defined relative to the SEED Coalition's professed goals:
 - Provide a means for taking political or personal action.
 - Provide tools.
 - Ask for donations.
 - Ask for time (invite to a meeting or rally).
 - Provide a fax-action opportunity.
 - Provide means for or request another political or personal action.
 - Inform/Build awareness of the environment.
 - Inform/Build awareness of the SEED Coalition.
 - Persuade/Build support.
4. The manner in which the site seems to try to meet the goals.
 - Logos.
 - Direct fact-based and other overtly logos appeals.

¹ I considered the mercury campaign to be a specialized subset of power plant pollution, because the SEED Coalition's mercury campaign is ultimately supposed to support their larger anti-coal power plant pollution campaign.

- Design characteristics of the site that contribute to the ease of use of the sites (and so affect how well they appeal to people's reason):
 - Whether the bloc is actually linked to the site, functions as a navigational tool, and is in a usable format (html or PDF).
 - The number of steps required to take action, amount of time required to take action, whether there is an external personal cost attached to taking action—money, travel.
 - “Invitingness” of text, or relative ease of reading information (length and complexity of discourse (short-less than 250 words, medium-250-500 words, or long, over 500 words/Flesch reading and Flesch/Kincaid grade level).
- Ethos.
 - Branding (use of the SEED Coalition logo).
 - Community building (invitation to join the SEED Coalition staff or other SEED Coalition members; information about a SEED Coalition event in which citizens participated).
 - Contact information.
 - Other features that assure visitors of the quality of the group and its effectiveness in helping the environment (discussion of the success of a fax action, reports on the SEED Coalition's activities).
 - Perceived quality of information (sound research, outside sources).
- Pathos.
 - Playfulness: entertainment value of the site.
 - Sensory appeal: The bloc's containing or consisting of strong visual elements (a photograph, attention-drawing borders).
 - Personalization (an ability to personalize the information or experience one finds or has with the site).
 - Direct appeal to emotion or values (story about a person's suffering from the person's own experience, for example).

5. The audience the SEED Coalition appears to target with a bloc.

- The media.
- Citizens.
- Current/potential donors.

A sample coding then, is that the online mercury petition, connected to the mercury, power plant, and environmental justice advocacy campaigns, has no strong visual elements, can be found online in PDF format or provided as hard copy, includes logos appeals, and serves to ask for political action and provide activists with a tool. Units were sometimes coded for multiple characteristics: a report was considered to be informative and persuasive, for example, and most reports included both ethos and logos appeals (some also had pathos appeals).

I assumed the SEED Coalition would expect its websites to reflect its goals. Therefore, the analysis in this chapter does not only serve as a way to understand the sites themselves. It also triangulates the interview and observation decision-making data, investigating potential problems in the decision-making processes the SEED Coalition used to develop its web materials by considering the reasons for any discrepancies between the SEED Coalition's stated goals for its efforts and its websites and the goals the websites themselves seemed likely to facilitate.

Research Approach for the SEED Coalition Website
Analysis in Respect to Research Question Three

In addition to considering how well the websites reflect the SEED Coalition's goals, research question two, this chapter also considers research question three, exploring how the SEED Coalition's sites further or neglect commonly held goals of environmental advocacy communication, such as promoting public participation in decision-making. By also looking at how the SEED Coalition's websites reflect common goals of environmental advocacy communication, I hoped to be able to help those reading my research determine how similar or different the SEED Coalition may be from other groups or how different advocacy web rhetoric may be from much of the environmental communication previously studied. As Gurak explains, "social and political action on the

Internet is still somewhat novel, yet the trend appears to be toward an ever-increasing use of cyberspace as a political arena” (245). Because of this trend, Gurak also argues that we must study how traditional rhetorical activities—speeches, public debates, protests—conducted on the Internet differ, are enhanced by, or are problematized by using computer mediated communication (245). I agree with Gurak, and this chapter begins to answer some of her questions.

The SEED Coalition wants to educate people, inspire them to take action, use its websites to develop its ethos, and use its websites to provide information for the mass media. Researchers in environmental discourse indicate that other groups share some of these goals. Michael Kraft and Diana Wuertz suggest that most advocacy groups want to either educate or inspire people to action (107). In addition, Leizerov supports the SEED Coalition’s ethos-building goal, explaining that building credibility is a major factor in website success (480). Leizerov, among others, believes that providing information for the mass media on one’s websites is a typical goal of advocacy groups. He contends that one of the main functions of websites for advocacy groups seems to be to provide media with information that can generate more media coverage (476).

In addition to exploring how the SEED Coalition’s websites reflected the SEED Coalition’s goals in ways that might relate to goals of other advocacy groups, I also sought evidence for some goals of environmental advocacy discourse that the SEED Coalition did not state as among its goals. By doing this, I hoped to see whether these things seemed to be goals for the SEED Coalition’s websites that the SEED Coalition staff did not report to me in interviews or observations.

For example, environmental discourse literature indicates that advocacy groups currently tend to be committed to participatory decision-making and consensus-seeking processes such as those Habermas promotes. Similarly, Waddell, an environmental discourse scholar and environmental advocate, promotes social constructivist communication models for policy making about environmental issues in which lines between expert and public are blurred, rather than the more traditional communication models in which experts communicate decisions to the public or the public and experts

communicate in other fairly limited ways (142). Because environmental discourse scholars commonly state that communicative action is a goal of environmental advocacy, I also investigated to what extent the SEED Coalition seems committed to consensus seeking or participatory decision-making, even though the SEED Coalition did not express this as one of its goals.

In addition, I looked for narrative characteristics that environmental discourse scholars maintain are common to much advocacy rhetoric in order to learn more about the SEED Coalition's chosen rhetorical techniques as compared to those commonly discussed in literature about environmental discourse. For example, I determined which documents, if any, use apocalyptic narrative (Killingsworth and Palmer), the loci of the irreparable (Cox), or jeremiads (Opie and Elliot). All three of these narrative characteristics frighten people into action by telling them about the dire consequences of current activities. Apocalyptic narratives foretell a horrible future if the course of current events is not changed, the loci of the irreparable stresses that potential damage will be irreversible, and jeremiads use religious symbolism and narratives to prophesy a terrible future that only repentance and change can avert. I also noted the presence of significant amounts of information provided on the site, because one of the reasons that advocates and audiences are supposed to like websites is that the web allows them to provide and obtain information without interference from the mass media's agenda; websites provide their authors with space of their own (Leizerov 465, 467). In addition, I looked at the number of times that the SEED Coalition's websites cited or connected the SEED Coalition with other advocacy groups, because Leizerov also argues that websites can help connect activist groups (468). Finally, I looked for elements that built the SEED Coalition's rhetorical power, as Stephen Yarborough defined it: power to compel people to believe partially by making people believe that one can compel others to believe—for example, where the SEED Coalition explains that one of its email fax actions succeeded in promoting political change (22).

In addition to studying the SEED Coalition's websites for characteristics like those we would suspect would be used by environmental advocacy groups, I also studied

the websites for characteristics related to theories on website development and use. I did this in order to be able to help people understand the SEED Coalition's web rhetoric relative to theories about how web rhetoric is developing and how others are using it. For example, I determined which of John Pavlik's three stages the websites seem to be using. Pavlik argues that as websites move from stage one to stage three, they have increasing amounts of content produced specifically for the web, some of which, in stage three, may not be able to exist outside the web (35).

I also studied the SEED Coalition's websites to see how often and to what extent the SEED Coalition used them in ways that would promote or allow audiences to interact with the SEED Coalition, with the sites, with one another, and with others. Amount and quality of interactivity are particularly important aspects to study due to the common complaint that websites do not live up to their potential, which scholars have noted about many kinds of websites. Tracy Cooley noted that less than 9% of Fortune 500 websites had a discussion group, for example (42). The most interactive sources that Cooley found were computer, retail, and telecommunications sites (42), and none of these met Cooley's highest standard for interactivity, providing a forum for online interaction or public discourse. Browning noted that in the 1996 elections, most political websites included primarily material also available offline, such as speeches, photos, position papers, sound bites, news releases, and clips from broadcasts. She concluded that most political sites treated their websites like television, as a one-way communication of information, and that "most political strategists didn't know how to use the Net to persuade" (48). Interactivity is also important to study because many scholars think that it is what can help draw visitors back to a website. Michael Kent sees dialogic loops as critical to the success of websites with the public and thinks that they need more than just an email address for the Webmaster and/or a place to post comments about the website to be successful (32). Therefore, one characteristic that I coded for was the likely purpose of a bloc to build a personal relationship with a site visitor.

Finally, then, I coded the SEED Coalition's websites to see how well they matched the SEED Coalition's professed goals and how they used other common

characteristics of web rhetoric or environmental discourse. Figure 4.1 (the same as Figure 2.3) provides a summary of the web rhetoric and environmental discourse characteristics for which I coded. Although I coded units partially in order to count the numbers of units supporting various goals or demonstrating various rhetorical techniques, I also noted other characteristics of the units that might complicate such a quantitative analysis. For example, in addition to knowing how many units on the site support a particular goal, it is also important to know whether the units are on the home page or in the third or fourth layer of a site, whether those units have strong visual elements that might draw people's attention to them and so make them stand out more, and whether those units otherwise might be emphasized or de-emphasized through placement and with other rhetorical techniques. Coding the websites for this variety of characteristics and interpreting the results of that coding in several ways provides us with a rich understanding of how the SEED Coalition's websites function as seen through a variety of theoretical perspectives.

Table 4.1 Theoretical Perspectives Used in Content Analysis of the SEED Coalition Websites.

<i>Author</i>	<i>Description of Characteristic</i>	<i>Related Website Characteristics</i>
Waddell	1) Technocratic: no communication between experts and the public, experts make decisions alone	1) Technocratic: SEED does not present itself as an expert in a bureaucratic sense
	2) One-way Jeffersonian: one way communication from experts to the public	2) One-way Jeffersonian: I noted where the SEED Coalition provides "expert" information to the public
	3) Two-way Jeffersonian: two-way communication in which experts maintain power, but the public and experts talk to one another	3) Two-way Jeffersonian: I noted where the SEED Coalition solicits public opinion, while keeping experts in control
	4) Social constructionist: two-way communication in which experts and the public communicate, each from their own sphere of knowledge, sharing power	4) Social constructionist: I noted where the SEED Coalition uses public opinions in citizens' own voices
Killingsworth and Palmer	Apocalyptic narrative	Narrative about impending doom if we do not change our actions
Opie and Elliot	Jeremiads	Narrative about poor quality of life due to human error, with possible redemption if we change
Cox	Loci of the irreparable	Narrative arguing that taking no action will lead to irreparable damage
Kim	Ways to promote community	Chat rooms, novice vs. expert markers, celebrations, auditoriums, email lists, community history, recognition of contributions
Leizerov	Connections to other advocacy groups	Link to or citation of other group

Table 4.1. Cont.

<i>Author</i>	<i>Description of Characteristic</i>	<i>Related Website Characteristics</i>
Yarborough	Build rhetorical power	Examples of compelling others to believe—newspaper articles, picture of participants in a SEED Coalition event, discussion of a successful campaign
Leizerov	Amount of information provided that may not be provided by mass media	Press releases Reports Other data
Pavlik	Stage 1: put print information online with little change Stage 2: develop original content, with hyperlinks or interactive features like a search engine Stage 3: original content designed specifically for the web, such as immersive story telling	Stage 1: print information put online with little change, such as PDF reports available in print Stage 2: original content for web, with hyperlinks or other interactive features Stage 3: content on the web that could only exist there

Results of the SEED Coalition Website Analysis
in Respect to Research Question Two

Results of the SEED Coalition Website Analysis
in Respect to the SEED Coalition's Goals

After coding discourse blocs on the SEED Coalition main site and the Toxic Two Step site, I had coded 287 units of material. Two hundred and four units related to the power plant campaign, twenty-five of which related first to the mercury campaign; twelve relating to environmental justice; 103 relating to pollution and health effects; forty-three to global warming; and thirty-eight to sustainable energy. The fact that the majority of the units are related to power plants is not surprising; the Toxic Two Step site, with fifty-nine units, targeted power plants, and power plants are one of the main foci of the SEED Coalition's efforts. When I coded the blocs to see how they reflected the group's goals, I found the following percentages of units (Figure 4.1):

- Provide a means for taking political or personal action (51%).
 - Provide tools (30%).
 - Ask for donations (3%).
 - Ask for time (invite to a meeting or rally) (22%).
 - Provide a fax-action opportunity (8%).
- Inform/Build awareness of the environment (87%).
- Inform/Build awareness of the SEED Coalition (9%).
- Persuade/Build support (61%).

Figure 4 1. Percent of Units Dedicated to SEED Coalition Goals for the Main Website, the Toxic Two Step Site, and the Mercury Portion of the Main Website

Just focusing on the Toxic Two Step site, 42% of units primarily promoted action, 86% informed visitors about environmental issues, 68% persuaded, and 12% provided information about the organization. For just the SEED Coalition site, 51% of units primarily promoted action, 87 % informed visitors about environmental issues, 56% persuaded, and 8% provided information about the organization. For just the mercury portion of the SEED Coalition site, the newest part of it, 68% of units primarily promoted action, 92% informed visitors about environmental issues, 84% persuaded, and 12% provided information about the organization. The SEED Coalition's websites have characteristics pertaining to all of their goals. The next sections of this chapter will

discuss how the characteristics coded reflect the SEED Coalition's goals. Furthermore, the next sections of this chapter will also describe the limitations of analyzing the SEED Coalition's websites through a quantitative analysis of the number of units representing various goals. They will complicate that analysis by considering the relative quality or importance of various units as developed by visual elements, strategic placement on the home page, and other rhetorical elements that complicate a strict quantitative analysis.

Analysis of Results Pertaining to Informing versus Promoting Action. The SEED Coalition perceives education as secondary to taking action: "Our websites are really geared towards action orientated, not a comprehensive information source" (Pete, personal interview, May 11, 2001). However, the SEED Coalition's websites devote more space to informing than enabling action (87% versus 51% of the units altogether, 87% versus 51% on the main SEED Coalition site, 86% versus 42% on the Toxic Two Step site, and 92% versus 68% for the mercury campaign, see Figure 4.2).²

Figure 4.2. Percentage of Units Dedicated to Informing Compared to Percentage of Units Dedicated to Inducing or Enabling Action for the Toxic Two Step Site, Main SEED Site, and Mercury Campaign.

² My analysis in this section counts asking for people's time, asking for money, providing tools, and asking for political action as inducing action. An invitation to contact the SEED Coalition itself, for instance, while not asking for political action, is asking for action.

The SEED Coalition informs people largely by linking to its own and others' reports, providing brief summaries of issues on its sites, and providing information in the form of press releases and other linked documents. In contrast, it promotes action by inviting people to attend SEED Coalition planning meetings and events, such as monthly planning meetings in Dallas and the Toxic Two Step Tour events, by providing fax actions. The sites primarily promote personal and political action in the following ways:

- Provide tools for activists: fax actions, brochures, petitions, and flyers (30%).
- Ask for donations (3%).
- Ask for time: invite to a meeting or rally (22%).
- Provide a fax-action opportunity (8%).

Why the Number of Units Informing may be Greater than the Number Promoting Action. The SEED Coalition's websites may, by sheer quantity of units, emphasize educating people about environmental issues over promoting action because so much material meant to inform is available in print, which the SEED Coalition can easily link to or digest on its websites. The SEED Coalition might, instead, consciously choose to educate people to make them more confident about taking action, as Karen Hadden, a SEED Coalition staff member, explained (personal interview, May 11, 2001). Instead, its employees may place so much information on their site because the space available on the web enables them to use the websites as repositories for information, although they do not expect most site visitors to access much of it. Alternatively, it may be that the SEED Coalition includes information on its websites in order to supplement the more directly ethos-building portions of the site with the ethos related to sheer volume of information. In fact, a combination of these factors probably most closely reflects reality.

For example, the SEED Coalition likely includes much information on its websites because it is convenient to do so and because doing so builds their credibility. McAndrews reports that all of the advocacy sites she studied included lots of information, including original research and data from outside sources (49-50). Bruce Klopfenstein notes, "An Internet presence is becoming the norm as campaigns can easily place as much information as they choose on a Web site." Furthermore, people visiting the site

may desire information. Political campaign site planners think that people are going to candidate websites because, “They’re doing research. They want and demand detailed content” (Owens in Browning 50). Laurette explains that although the SEED Coalition placed a 20/20 transcript about mercury online, she doubts anyone will read it, but hopes that just having it there, just letting people know that this is an issue big enough for 20/20 to address it, will help (personal interview, July 9, 2001). It seems, then, based on what scholars studying other websites say and what the SEED Coalition staff self-reports, that the SEED Coalition employees include information on their websites to build ethos. They may do this because it is the norm (SEED Coalition employees often make design decisions based on experiences with other sites) and/or because it is easy.

In addition, because advocacy groups cannot count on other media to inform people of their activities and issues, they often use their websites as a substitute source of information. Klotz posits, “the Internet is like no other mass medium in providing a large amount of time/space to an advocate at little cost and potentially accessible to an almost limitless audience” (32). Therefore, it is not surprising that the SEED Coalition uses its websites to provide people with as much information as it can. Davis argues, “The Web is a significant new tool in group communication with the public. It offers the opportunity to communicate with an interested general public, and to do so with greater depth than the groups could through news-releases-turned-stories” (69).

As well as using its websites to work around the fact that it often may not find space in other media (83% of units), the SEED Coalition also uses its websites to give media representatives information for them to use in their newscasts and articles. Again, this is something other groups do. Davis explains that 22% of interest group sites included a press section (69). The SEED Coalition has a section directly targeting the media, with a “Media” link from its main home page. In addition, about 84% of the units I coded on the SEED Coalition’s sites either directly provide information for the media (such as press releases) or less directly provide information that might be valuable to the media (such as links that provide more information on an issue that a media representative may be researching or copies of governmental agency documents that the

SEED Coalition discusses). The SEED Coalition knows that sometimes media representatives visit its websites for information (Pete, personal interview July 9, 2001). Mass media literature also indicates that media representatives often use websites for more information about issues and organizations (Klotz 25). Therefore, it is not surprising that the SEED Coalition uses its websites to provide information for the media.

Furthermore, the SEED Coalition wants to inform visitors because its staff believes that informing makes people more confident about taking action. While this seems perfectly logical, James Cantrill cites five studies as examples of many studies that have demonstrated that being informed about the environment does not necessarily lead people to take action for the environment (“Understanding Environmental Advocacy” 37). Cantrill also draws upon Wiebe’s concept of well-informed futility, in which the more a person is educated about the environment, the less action for the environment he or she will take (Cantrill 37). Cantrill explains that when one becomes well-informed about the environment, one may “redefine one’s civic obligation to assist in solving environmental problems as being, rather, the duty to simply become informed about some issues” (Cantrill 37). He cites Novic and Sanders who argue that well-informed futility may explain “the frequent and troubling finding of no relationship—or even an inverse relationship—between knowledge about an environmental problem and commitment to participate in the problem’s solution” (Cantrill 37). It is likely that one reason more education sometimes leads people to substitute learning about the environment for action for the environment is that as they discover the complexities of environmental issues they become paralyzed and unable to act. Then, searching for more information rather than taking action becomes a way to protect one’s self from making the wrong choice or from contradicting one’s earlier position on an issue. Hence, knowing too much often encourages people to fall back upon environmental defense mechanisms, or methods Cantrill contends people use to understand and relate with the environment that prevent them from taking environmental action (“Perceiving Environmental Discourse” 78).

If, indeed, people often choose not to take action as they become knowledgeable because action does not fit with their original attitude towards the environment—the filter

through which they will understand most subsequent information—or because they are paralyzed by the complexities of the issues or do not want to contradict their earlier positions, then the SEED Coalition may be able to encourage some action through education. It may be, for example, that most of the SEED Coalition’s web audience consists either of people already interested in taking action or with such a low previous threshold of environmental knowledge that more will not contribute to their possibly being paralyzed by the complexity of the situation and thus interfere with their inclination to take action. In addition, because the SEED Coalition’s websites provide just one perspective on environmental issues, the sites may not contribute to people’s cognitive paralysis. Indeed, this may be one reason for the SEED Coalition to have chosen not to link its sites to other sites that advocate different positions, so as not to confuse people with the complexities of the situations that they address—although this decision also prevents the websites from promoting communicative action, an issue I will address later.

Although the SEED Coalition’s websites have many more units that primarily serve to inform than that primarily serve to promote action, to what extent the SEED Coalition’s sites emphasize informing more than taking action is more complicated than simply looking at the number of units pertaining to each purpose. For example, coding for the presence/absence of appeals to action and intent to inform is not the same as determining the relative strength of the appeals. Indeed, while there are many more informative units on the SEED Coalition websites, its action units often have privileged placement. Many action units (29% versus 19% of units that inform) appear on the home page, for example, or a link from a page informing people about a problem prominently asks for action. Therefore, the SEED Coalition’s websites may functionally stress action although the majority of the sites’ text primarily informs or builds the group’s ethos.

Furthermore, not only do the action units often have prominent placement on the home page (or are prominently referred to on the home page), but a call to action often also consists of visual and textual units. Gunther Kress explains that we should rely upon the visual along with the verbal in online communications (56), and Snyder, talking about the changes that hypertext will have on student education, thinks students will need to

learn visual rhetoric as well as verbal rhetoric (107). Both theorists draw attention to one of my more significant points about SEED Coalition web rhetoric: the sites use visual units to draw more attention to action-related text than to informational text. In fact, 36% of the units that enable action contain strong visual elements (see Figures 4.3, 4.4, 4.5, and 4.6 for examples), compared to 24% of the units providing information. At least sometimes, the SEED Coalition staff plans the sites this way. For example, Karen enlarged the picture of Big Bend on the main SEED Coalition site homepage to highlight the call for action related to it (Karen, observation and personal interview, August 13), a kairotic decision based on its being of greater political urgency (see Figure 4.5). Similarly, (in addition to a menu hyperlink in the same style as the others) the SEED Coalition home page has a bright red button that says, "Donate" that draws attention.

In addition, the ways in which the SEED Coalition makes it easy for people to take action also help it encourage action. For example, the SEED Coalition provides fax actions so that people can send a message to a policy maker in a few seconds. It uses them much like it uses printed postcards that people can pick up at SEED Coalition events and sign and the group will mail for them, except that fax actions can be accessed by people the group's staff would not see in person and modified to suit individual's personal desires (Figure 4.6). Modifying a fax action takes significantly less time and effort than writing a letter from scratch, printing, stamping, and mailing it. Davis agrees more groups now use these tactics: 14% of groups use online forms to send comments to policy makers, although in his study few groups provided modifiable messages (79).

In addition to fax actions, the websites contain flyers, logos, and petitions that people can download and use locally. Pete indicated that they would like to make more use of such tools in the future: he said ideally they would contact their members and ask them to use the flyers and logos available online, although they did not do this with the Toxic Two Step campaign (September 6, 2001). This function of the SEED Coalition's websites appears to be fairly new (there are more examples on the Toxic Two Step site and the newer mercury section of the main site than on the older portions of the site) and likely to expand in ways that can help the organization work strategically across the state.

Figure 4.3. Example One of Visual Linked to Request for Action from the SEED Coalition Home Page.

Figure 4.4. Example Two of Visual Linked to Request for Action and to More Information from the SEED Coalition Home Page.

Figure 4.5. Example Three of Visual Linked to Request for Action from the SEED Coalition Home Page.

Protect Big Bend

Big Bend on a hazy day

Big Bend on a clear day

Send a FAX to Dear Administrator Christine Whitman To Protect Air Quality in Big Bend National Park. Your name and address information are added automatically to your fax by filling out this section of the form.

Christine T. Whitman
1101-A US EPA Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460
fax: 202-501-1450

Dear Administrator Whitman,

Big Bend National Park is a scenic wonder, with awe-inspiring vistas that draw over 300,000 visitors year. In this beautiful land of rugged mountains, desert badlands and river canyons, visitors have been able to see up to 243 miles on clear days. Unfortunately, Big Bend is now shrouded in air pollution, and was added to National Parks Conservation Association's list of 10 most endangered national parks this year. A thick white haze hangs over the park much of the year, and visibility is now sometimes as little as 10 miles. Whole mountain ranges can be obscured. Disappointed visitors often shorten the length of their stay, and West Texas is losing \$44 million in tourism dollars due to dirty air.

Thank you for putting the "Best Available Retrofit Technology" or "BART" rules on the federal register. These rules will help clean up the pollution from old, dirty 'grandfathered' power plants, the largest contributors to haze in our national parks. Please keep the BART rules strong to ensure that our states have the clearest possible road map for cleaning up the coal-burning power plants that are fouling air in our treasured national parks. We must protect lands of scenic beauty, such as Big Bend National Park, for future generations to enjoy and leave a legacy of cleaner air for our children to breathe.

[Send Now](#)

Figure 4.6. Example Four of Visual Linked to Request for Action from the SEED Coalition Act Page.

While the SEED Coalition's websites' design stresses acting over informing, sometimes the informing they do is important. While informing may not always be effective, it is important for the SEED Coalition to have the ability to inform people. Swartz contends that giving people freedom to speak is not enough. As he describes, efforts to communicate with others through letters to the editor, for example, tend to represent a limited worldview, and that unacceptable worldview is often not printed (13).

Freedom to speak is only half of what a society must grant to allow real communicative freedom, he asserts: it also must grant “access to an audience” (14). He argues that too often traditional media will only grant groups access to an audience if it perceives them as expert: he posits that in our society we often think that we can only talk if we know, and to know is to be an expert, and so our communication is often almost necessarily one-way. Pavlik maintains that this problem is not easily overcome using traditional media, which is one of the reasons he thinks many groups may find the WWW an attractive option for disseminating information. He delineates how media ownership has concentrated, so that eight corporations control the three major networks, forty subsidiary stations, two hundred cable TV systems, sixty radio stations, and fifty-nine magazines (88). In addition, he argues that because the media is devoted to “fairness” it tends not to use non-official sources; 50% of articles in the mainstream U.S. press quoted from the government, corporations were the second largest group cited, and less than 4% of sources cited represented environmental groups (91).

Similarly, Klotz explains, “A Web site allows an advocate to bypass the media. Whatever is on the Web is what the audience will see. Increasing frustration with the media has made this lack of a filter a widely discussed trait of the Web” (31). He elaborates, explaining that the most often given reason for people to visit campaign websites in 1996 was their desire to hear from candidates directly, not through the media filter (31). Furthermore, as Klotz contends, “this desire of the audience for unfiltered communication fits nicely with the agenda of the advocates, who also wish to bypass the media... surveys of candidates with Web sites reveal that their primary motivation for having one was to deliver unfiltered information” (31). In fact, Klotz asserts that not only does the public want unfiltered information, but so do opponents and so does the media: “scholars have speculated that the three primary viewers of the campaign Web site will be supporters of the candidate, the media, and the opposing candidate” (36).

For these reasons, Richard Davis thinks many large lobbying groups are transitioning from traditional to Web media because the WWW furthers their message and reaches a new audience (64). In other words, while placing large amounts of

information on its websites might not be the best strategy the SEED Coalition might use in an ideal world, its informing the media and informing the public when the media chooses not to make sense.

Finally, then, although more units on the SEED Coalition's site inform, which might be of some concern because the SEED Coalition's main goal is to induce action, when we consider (1) the need for information on the SEED Coalition's sites to communicate with the media and work around the SEED Coalition's lack of assured access to other media venues, and (2) the strategic placement of calls for action on the websites and their use in coordination with visual elements, the SEED Coalition's websites may indeed reflect the SEED Coalition's goals, asking first for action, then providing information for people who would like to be better informed before taking action. The SEED Coalition seems to be intentionally and successfully providing visitors, to the best of its ability, with the means to have at least two of the rights that Belsten contends people in a just society must have: the right to participate and the right of access to information (38). (The other rights are often not within the SEED Coalition's power to provide: the right to be heard, right to be compensated for damages, and right to say no (38).)

In addition to providing information and promoting action, the SEED Coalition's websites try to persuade site visitors and provide information about the organization and its goals. The next several sections of this chapter explore these site functions.

Persuading Site Visitors. In addition to providing tools for site visitors, the SEED Coalition's websites also sometimes try to persuade site visitors. In fact, more units persuade than facilitate action, although, of course, many try to persuade people to take action. However, fewer of the units on the SEED Coalition's websites primarily persuade than inform. The SEED Coalition does seem, then, to try to reach an audience that is already interested and wants only information specific to an issue to determine whether to take action. In fact, the SEED Coalition employees indicated they do not mean for their websites to persuade people who lack environmental leanings (Pete, personal interview, May 11, 2001). This intent is demonstrated by the websites, on

which about 61% of material seems overtly persuasive, a seemingly low percentage, perhaps, for an advocacy group, as these groups often have a reputation for mercilessly bombarding audiences with pleas for sympathy or guilt. Indeed, as I will demonstrate later in the chapter, the SEED Coalition's websites do not contain many of the traditional narrative appeals attributed to environmental discourse, although they do use traditional appeals to pathos, ethos, and logos.

Klotz reminds us that "persuasion, then, is the key to rhetoric. This is not to say that no education can occur, but it would be subsidiary to persuasion" (10). In contrast, the SEED Coalition sites educate more than they persuade. More accurately, perhaps, the sites often persuade indirectly—persuade primarily by building a persona of rational expert, then letting that rational expert ask people to take action. This rhetorical strategy is part of the reason that the SEED Coalition finds it of critical importance to build its ethos with its websites. The desire to portray the SEED Coalition as a source of rational expertise also may be much of the reason that the SEED Coalition's websites present as much information as they do: reports, links to newspaper articles, pictures, graphs, and maps are all intended to convince visitors that the group has done its research, that its research is credible and accepted by others, and that, therefore, we should believe what the SEED Coalition says and do as it asks. The SEED Coalition's websites try harder to maintain the goodwill of its affiliates and others interested in environmental issues than to persuade non-environmentalists. This decision may be very wise, because it is quite likely that most of the people who would go to and spend time at the SEED Coalition's websites are already going to have environmental interest and because the WWW is generally not a very effective technology for pushing views on people who do not already have some inclination towards them.

Informing Site Visitors about the SEED Coalition. In addition to other SEED Coalition goals, the SEED Coalition websites devote space to giving people more information about the SEED Coalition. Mostly, information about the SEED Coalition is on (or linked directly to) the home page of the main site and the home page of the Toxic Two Step site. Therefore, although information about the SEED Coalition appears in

only 9% of the units, the prominent placement of this information and links to more on the home pages of the sites (41% of the references to information about the organization are on a home page) allows visitors to find and be aware of it.

Summary of the SEED Coalition Website Goal-Meeting. The preceding sections have explored how the SEED Coalition websites reflect the goals of the group's leaders. They explore the four main goals: inform people about environmental issues, promote personal and political action, inform people about the SEED Coalition, and persuade people to see environmental problems as such. Interviews with the staff indicated that promoting action and informing people about environmental problems were the group's main goals, and an analysis of the text and pictures on the websites indicates that the websites primarily support these two goals. Furthermore, while the number of units on the websites that serve primarily to inform outweighs the number that serve to promote action, those that serve to promote action are often given privileged placement and combined with strong visual elements. Still, though, the SEED Coalition staff and other advocacy groups should carefully consider how much of the information they provide meets their goals and how to consistently draw more attention to parts of websites that work toward their primary goals. A brief look at the SEED Coalition's home page at a later date than that used for the last collection of units to code for this analysis, for example, shows a larger number of visuals on the home page that draw attention to units that primarily inform than existed during the time for data collection. This may indicate that the SEED Coalition staff does not consistently consider whether it is privileging promoting action over informing with its web updates, when doing so could be critical to its success in meeting its primary goal.

The next sections explore how the organization's websites meet its goals. They discuss how the sites use the three rhetorical appeals: ethos, pathos, and logos.

Ethos on the SEED Coalition Websites

A great number of units on the websites (187 or 93%) are allocated to building the group's ethos. These include links to other group's websites, to facts and materials

provided by other groups, and to letters that demonstrate the SEED Coalition's good will. This finding is interesting because the SEED Coalition staff did not initially indicate to me that this was one of its goals for its sites. In fact, I learned that building ethos was one of the goals of the site only in one of my later interviews, when I asked specifically about the decisions to place individual items on the Toxic Two Step site. Nonetheless, this is such a major factor in the SEED Coalition staff's thinking about its websites and other communication tools that perhaps the SEED Coalition staff is habitually, not consciously, aware of this concern. If so, this habitual awareness would explain both why it was one of the last goals to surface from the interviews and why it was one of the most popularly targeted goals in the creation of web material.

Researchers would agree that building ethos is critical for small advocacy groups. As Anderson and Pavlik indicate, environmental groups are often in danger of mass media neglect. In order to make itself as attractive as a source for media representatives as possible, then, it is essential that the SEED Coalition does all it can to build a persona of an honest, even-handed group. In addition, the SEED Coalition could alienate potential members or potential donors by appearing rash or uninformed. Instead, the SEED Coalition wants to build its rhetorical effectiveness by presenting itself as careful to approach politicians and agencies and ask them nicely to address issues before asking the public to bombard them with faxes asking for change. It also builds ethos by offering credible reports, citing other experts, authorities, and groups, and providing links to other authority and organization websites. The group uses the following to build ethos:

- Branding (use of the SEED Coalition logo) (51%).
- Providing information about the organization (9%).
- Community building: invitation to join the SEED Coalition staff or other site visitors, information about a group event in which citizens participated (38%).
- Perceived quality of information: sound research, outside sources (57%).
- Other features that assure visitors of the group's effectiveness in helping the environment: discussion of the success of a fax action, reports on group activities.

Branding. The group brands its websites by using the SEED Coalition logo to connect pages within the site to the group. Harner and Zimmerman explain that people associate brands with their impressions of a group or product. Brands become shorthand for communicating the group's interest (71). Logos are one way to brand, and they are one of the primary ways in which the main SEED Coalition website brands. **Taglines** are another way to brand, and the Toxic Two Step site depends heavily upon these to brand the entire campaign: "Refineries are making US sick," "Stop the Bush/Cheney Toxic Two Step. Don't Trade Our Health for Corporate Wealth." Using a brand successfully involves applying it often, using it consistently, and remaining true to the brand's message (Harner and Zimmerman 82). The SEED Coalition could use its brands more often and more consistently, but its websites generally use logos and taglines, combined with fairly consistent design elements and menu placement, to create a unified online text that clearly is associated first with the SEED Coalition and secondarily with a given campaign. The SEED Coalition logo or another brand is used in association with 51% of units. Brands are often used, given that multiple units often appear on a web page.

Community Building. In addition to branding, the SEED Coalition builds online ethos by promoting a sense of community among website visitors. By helping visitors feel a personal connection with the group and a personal investment in its activities, the group reinforces its grassroots mission and asserts itself not as a group of radicals but as a citizen-driven organization. Thirty-five percent of the units on the SEED Coalition's main website build community, and 64% of the units on the Toxic Two Step site do so (which may indicate that the group invests more in building community through its website now than it once did, as the Toxic Two Step site is much newer). The sites build community by showing pictures of citizens participating in group activities, encouraging people to attend local events where they would interact with others with shared interests, requesting information from site visitors, and celebrating previous citizen involvement. The websites also build community by recruiting people for its email list, a common activity for an advocacy website, as Davis says 71% of groups recruit members online

(69). In addition to these methods for building community, the SEED Coalition's websites could help visitors feel more involved or more potentially involved with the community by providing a bulletin board, chat room, or member-to-member listserv that visitors could use to communicate online with one another and with SEED Coalition staff. The SEED Coalition site, like the sites Davis studied, provides email addresses to which visitors could send opinions or input, but, as Davis explains,

Sites did not include requests for opinions from members...on group policy, such as which issues the organization ought to address, what positions the group should take, or how battles over policy should be waged.... Given the fact that such solicitation, and subsequent aggregation, becomes remarkably simple with the Internet, one might expect the presence of such opportunities for input. (74)

Areas for public input could be password protected if groups were concerned about maintaining control over who gives policy input, and, of course, listening to such input gives the audience more control and the leaders of the group less. Maintaining a calendar of local events could also help people feel and be involved in online and offline events.

Organization Information In addition to branding and building community, the group's sites build ethos by providing contact information for the staff and others helping with major events and providing information about the organization. This is a common goal of organizational websites, 94% of which provide a description of the group's mission (Davis 67). Nine percent of the units on the SEED Coalition's main site provide information about the SEED Coalition, as do 12% of the units on the Toxic Two Step site. Providing this information invites site visitors to send their feedback, voice their concerns, and request more information: it helps visitors feel that the SEED Coalition staff consists of real people who will listen to them. An environmental advocacy website I studied several years ago used more extensive information on its staff to build ethos more overtly: its group information web page linked to brief biographies of its staff members, complete with pictures. The pictures and text helped build the group's ethos by presenting its staff as concerned, diverse, and qualified. Mary Coney and Michaël Steedhouder describe this as putting a few individuals on the stage to make the author

persona of the website more obvious (332). The SEED Coalition and other groups could also expand the ethos quotient of their contact information in this way.

Assuring Validity of Information. The sites use sources (63% of the units on the main site and 61% of those on the Toxic Two Step site) to demonstrate that others agree with them. They also mention connections with other advocacy groups, making the SEED Coalition's positions seem more reasonable as they do so (65% of the units on the main site and 58% of those on the Toxic Two Step site use this tactic). The group often uses independent sources of information to support its views, providing a list of citations or links to other websites to encourage visitors to understand that other reasonable people agree with or first determined the facts that the group endorses or promotes.

Assuring Quality. Probably the most effective way in which the SEED Coalition websites build ethos is by assuring visitors of the quality, reasonableness, and successfulness of the group's activities. For example, the websites build ethos by providing background information where needed to keep the group's current moves from looking extreme. For example, the websites contain copies of the letters that a coalition of groups sent to the EPA about the Gasoline Alley Tour so that visitors can see that the group tried friendly contacts before starting the Where's Whitman postcard and fax action campaigns. Similarly, when the websites provide information about current TNRCC decisions, they also, as needed, provide the history behind those decisions. This allows site visitors to know, for example, why the organization wants people to pressure the TNRCC to follow through with its earlier commitment: it lets people know what that earlier commitment was, first, then how the TNRCC has not yet fulfilled it. These kinds of efforts to appear reasonable and conciliatory, not reactionary, help the group build a persona as a reasonable organization that takes logical, well-supported action rather than extreme, emotion-driven measures. Given that many more of the site visitors who complete the audience survey, discussed in Chapter V, belong to the fairly moderate Sierra Club than to the more extreme Earth First!, building this persona is an appropriate rhetorical strategy.

In addition to presenting itself as reasonable, the group uses its websites to celebrate success. It puts clippings from newspaper coverage of its events online, to demonstrate to visitors its ability to be newsworthy. It informs site visitors of the success of previous campaigns and uses pictures and narratives about past events to demonstrate that people were involved in them and appeared to have fun and success in their involvement.

The SEED Coalition uses its websites to try to build a persona of an organization that is active, reasonable, successful, and believable. By doing so, it brands itself as a group to which people would like to belong or donate and persuades people to take personal and political actions, through the group or on their own, on the environmental issues that it champions. The next section will discuss how the group's websites also use logos to persuade site visitors.

Logos on the SEED Coalition Websites

The SEED Coalition uses appeals to logos on its websites. These appeals take the following forms:

- Direct fact-based and other overtly logos appeals.
- Design characteristics of the site that contribute to the ease of use of the sites (and so affect how well they appeal to people's reason):
 - Whether the bloc is actually linked to the site, functions as a navigational tool, and is in a usable format (html or PDF).
 - The number of steps required to take action, amount of time required to take action, whether there is an external personal cost attached to taking action—money, travel.
 - “Invitingness” of text, or relative ease of reading information (length and complexity of discourse (short-less than 250 words, medium-250-500 words, or long, over 500 words/Flesch reading and Flesch/Kincaid grade level).

The most effective and significant ways in which the websites build logos are direct appeals to logos, i.e., statistics. Thirty-nine percent of the blocs on the main SEED Coalition site and 47% of those on the Toxic Two Step site directly used statistics. In addition, blocs used other, harder to count, appeals to logos: enthymemes and syllogisms, for instance. These appeals to reason through argument and presentation of research work in tandem with ethos and pathos appeals to persuade audiences. Logos may be somewhat less important than pathos and ethos given that the people who visit the website are likely to already have some environmental leanings and so be relatively easy to persuade without exhaustive consideration of counterarguments and lists of evidence. However, people may be skeptical of the group's research and opinions, perceiving it as radical, and so may be put at ease by what appears to be careful, persuasive research and logical argument with few fallacies.

In addition to text-based appeals to logos, design characteristics of the website also affect people's impressions of the group's use of good reasoning and people's ability to find, process, and respond to the group's arguments. The first several design issues this section will address affect how difficult it is to find information on the site. For example, 12% of links do not lead to the information promised, which does not allow people to access that information and damages the strength of the logos appeal of the site. In contrast, other units (86%) function in part to help people navigate the site, adding to the logos appeal of the site. Linked information may be more or less accessible depending upon its format: PDF files may not be as accessible to some visitors as html, although PDF files may enable formatting critical for information that people desire to print, such as the mercury petition. Only 6% of the material on the websites is only available as a PDF or MS WORD file and is not available also (or only) as html. The items that are only available as PDF are also available in print, as are many of the texts provided in html. Material available in print that is on the website as PDF files may be more accessible to people than it is in print: Jacobson explains that the Illinois Department of Natural Resources distributed more catalogs online as PDF files than in print (177).

In addition to these kinds of serious accessibility issues that may affect whether people can find or read information at all, other logos-related design issues that affect the ease of use of the site include the number of steps needed to take an action, the amount of time it will require to take action, and external personal costs associated with taking action. The average unit on the website, for example, requires approximately five steps to use: using includes such varied activities as moving to another place on the website; reading, filling out and sending a fax action; or learning about and attending a meeting. Seventy-five percent of the units require a short amount of time, 23% require a medium amount of time, and only 2% require a large amount of time. A small amount of time translates into about five minutes or less, a medium amount to five to fifteen minutes, and a large amount of time to more than fifteen minutes. Clearly, the vast majority of the units on the website have high appeal in that they ask for only a short time commitment.

In addition to the number of steps or time required to take an action, some activities require external costs. Sixty-six percent of the units on the websites carry no external cost. The remainder do have some cost. The most common cost is the time required to find a copy of material (elsewhere on the website if there is no hyperlink or from the group if the hyperlink is not working). Nineteen percent of the units have this cost. Other common costs are an investment of time (3%), a public commitment to a particular political perspective (11%), or an investment of money (2%). These costs may discourage some visitors from taking political or personal action and will very likely discourage most visitors from seeking unlinked published information or requesting information to which the link no longer works. Some of these external costs, such as time, political commitment, and money, are mostly inevitable. Others, like the cost of time to track down information, are avoidable, and the SEED Coalition and other organizations could more consistently check for broken links and link to information to make it easier for visitors to use their sites.

Another measure of the ease of use of the sites is the length and complexity of the text found on them. Units of text were coded for length as possible (units with broken links or units that linked to an external website were not coded for length: a total of 181

units were coded for length). I defined lengths as follows: short, less than 250 words, medium 250-500 words, and long over 500 words. Forty-nine percent of the total code-able units on the websites were short, 15% were medium, and 36% were long. The majority of the units, then, were short or medium, allowing site visitors to more quickly read the majority of the units on the site. The fairly substantial number (36%) of longer units included mostly reports, which people could choose to read or choose not to read. The SEED Coalition could improve the length appeal of the reports on its websites by consistently doing what it does in a few cases: providing an abstract or summary of the report which people could choose to read instead of the report if they so desired.

In addition to looking at the length of the text, I also used MS WORD to calculate the Flesch reading ease score (based on average sentence length and average number of syllables) and the Flesch/Kincaid grade level (based on average sentence length and average number of syllables per word). While these are not perfect measurements of text complexity, they provide general measurements, and for the purposes of this research general measurements are adequate. The average grade level for the 145 code-able units³ of material on the websites was 9.7. Fifty percent of the units were grade level twelve. The average reading level was 40.9, and the median reading level was also 40.9. Standard documents generally aim for a Flesch rating of sixty to seventy and a grade level of seven to eight. The SEED Coalition websites' average grade level of 9.7, with 50% of those units at grade twelve, is higher than that recommended for a standard document. This might be more problematic online, where simpler text (especially shorter sentences) might be needed for online reading. The SEED Coalition websites' average Flesch reading score, at 40.9, falls below the sixty to seventy guideline, probably reflecting the short length of most of the discourse blocs. The biggest readability problems with the SEED Coalition websites' discourse blocs is probably in those units that were not originally intended for online consumption, such as reports posted online. People could print these and read them on paper, especially as several are provided as

³ Non code-able units included links to external websites, units to which grade level was not applicable, such as pictures or contact information, and units that were promised but not linked to the websites.

PDF files. However, consistently providing abstracts or summaries for these could also improve their perceived and real accessibility for site visitors.

Altogether, while direct logos appeals are less prevalent on the organization's websites than ethos appeals, they remain an important component of the websites, especially as indirect logos appeals through site design impact site visitors. The next section of this chapter will explore pathos appeals on the websites.

Pathos on the SEED Coalition Websites

In addition to ethos and logos appeals, the SEED Coalition uses pathos appeals on its websites, although less prevalently than one might expect. The coder for the intercoder reliability rate commented several times during training for the coding that a given discourse bloc might have been more persuasive had it had a pathos appeal. Still, however, the sites use the following kinds of pathos appeals:

- Playfulness: entertainment value of the site (22%).
- Sensory appeal: The bloc's containing or consisting of strong visual elements: a photograph, attention-drawing borders (24%).
- Personalization: an ability to personalize the information or experience one finds or has with the site (10%).
- Direct appeal to emotion or values: story about a person's suffering from the person's own experience, for example (23%).

As with the first items in the ethos and logos appeal lists, the first items in this list are sometimes design, rather than content, appeals. Visual elements, for example, were considered pathos elements that drew people's attention and often appealed to their values or emotions. Figure 4.7 provides an example of a strong visual pathos element from the online picture of the cover of the *Code of Silence* report. Eighteen percent of the units on the main SEED Coalition website and 53% of the units on the Toxic Two Step site contained strong visual elements. Playfulness, too, sometimes was connected with visual elements, as is the case with the Toxic Two Step logo (see Figure 4.8). Playfulness could also be textual, as is the case with the following example of a

paragraph that was considered comparatively “fun” to read, located on a Toxic Two Step flyer provided as a tool for activists: “There’s an old saying in Texas politics—you dance with them who brung ya. Wealthy polluters helped put George W. Bush in office and now are pushing for regulatory changes to weaken public health protections. The resulting Bush/Cheney Toxic Two-step will allow refineries and power plants to get off the hook for violating federal laws and will set back clean air progress by decades.”

Figure 4.7. *Code of Silence* Report Cover, Example of Visual Pathos Element.

Figure 4.8. Toxic Two Step Logo.

In addition to these appeals, the websites could build pathos by allowing site visitors to personalize their experiences on the website, something they rarely do. Only 10% of the units altogether allow personalization, and most of these are fax action forms that people could choose to modify before sending, an important example of an ability to personalize. The SEED Coalition could potentially offer other ways for visitors to personalize their experiences: visitors could sign up for different email update lists, perhaps based upon geographic area or upon environmental issue interest. It would be more difficult for a group the size of the SEED Coalition to develop and maintain personalization capabilities like those experienced on www.amazon.com, where one's experiences on a site are shaped by previous visits and purchases. The SEED Coalition's websites could, using cookies, gather information about what people are most interested in and what actions they have previously taken and provide them upon new visits to the site with a personalized home page, but this level of personalization requires more technical expertise and more time to maintain than the SEED Coalition probably needs to invest in, and, finally, will provide only some information about audience, not answering the most interesting questions, like what persuades people to take action.

In addition to these kinds of pathos appeals, the SEED Coalition's websites use more traditional versions of pathos appeals. These direct appeals to emotion or values often involve sharing a citizen's personal story and picture, as is done in several of the reports located on the Toxic Two Step site or in an online version of a full page newspaper ad on the main SEED Coalition site. The following headline and quotation provide an example of a pathos appeal from one of the Toxic Two Step campaign reports, *Lake Charles and Norco, Louisiana Refineries*,

"Norco Refinery Chronicles: Real people, real problems."

Latricia Peoples was born in Norco, only blocks away from the Motiva refinery. She fears for her children and believes their breathing problems are caused by the refinery's petrochemical operations. "This child—my son—was supposed to be on oxygen for the rest of his life. It takes a piece of me. It takes a piece of my heart. When my sister said she was going to have a baby, and I think she's going to have a healthy baby, I walk in there and I see my little nephew, and the doctor says he has a breathing problem and he can't be saved. Why does he have a breathing problem? She lived right there in that house [near the refinery]. That's why I talk boldly, 'cause I know there is some kind of justice that we deserve."

In addition to these more overt appeals, many discourse blocs contained slightly more subtle appeals, such as statistics or non-statistical information about harm to pregnant women or children. An example of this common appeal is the following quotation about mercury from the SEED Coalition home page, "Mercury pollution is contaminating fish in Texas lakes, reservoirs and rivers, as well as in the Gulf of Mexico. Eating mercury contaminated fish can result in damage to the human nervous system, causing development delays and learning disabilities, and posing special risks for children and women of child bearing age." These appeals promote a sense of urgency and appeal to people's pity, sense of civic duty, and concern for others, helping to persuade them of the severity of environmental problems and to convince them to take action.

Rhetorical Appeal Summary

Like most texts, the SEED Coalition's websites rely upon a combination of logos, ethos, and pathos to persuade. They use ethos appeals most often and most consistently;

the SEED Coalition staff seems to use these most habitually. The websites also, however, sometimes use logos and pathos appeals quite effectively, although some discourse blocks that lack both might be more effective if they contained one or the other.

The next sections of this chapter explore the SEED Coalition's websites not in relation to the organization's stated goals and how the websites reflect those goals but in relation to common goals of environmental discourse and web communication. They provide a rich sense of the websites from two external perspectives.

Results of the SEED Coalition Website Analysis in Respect to Research Question Three

When I analyzed the SEED Coalition's websites in respect to environmental discourse conventions and Internet communication conventions, I learned more about how the SEED Coalition is using its websites. One issue I explored was interactivity.

Interactivity and Web Rhetoric: An Introduction

Klotz cites Juliet Roper, who suggests "that it may be the nature and context of advocacy itself that will cause the Internet to fail to live up to its potential as a public mecca..." (34). She observes that the sites of the advocates she studied "rarely allow for a free exchange of ideas and generally lack the candor of non-advocate sites" (34). Similarly, Klotz criticizes many of the sites he studied for being much like brochures and failing to take advantage of many of the interactive possibilities of websites. For example, he tells us that most candidates had brochure home pages, twenty-three never changed their home page in the last forty days of the campaign, and only about ten made meaningful changes in the content of their website while he studied them (54). As he explains, "the consensus has generally been that the content of Web advocacy is recycled from other formats"—scholars and critics note that interactive elements are rare (159). Davis explains that "given the interactive nature of the Web, it would be expected that campaign Web sites would be interactive, allowing candidates and voters to engage in a two-way dialogue" (89), but that most groups did not meet this goal. He explains that while 75% of the one hundred candidate websites he studied included email contact

invitations, only three of the sites allowed voter-to-voter communication through bulletin boards, and “only two candidates took further steps toward interactivity” (91). As Davis argues, this level of interactivity in fact only provides an “illusion of interactivity,” as the candidate retained complete control over whether he or she responded in any way to received email (92). Their comments echo the opinions of almost every researcher whose ideas I have encountered: websites are too rarely interactive. Instead, they are often, as Shaiko argues, “passive means of communication” (171), although they need not be.

Implications for Non-interactive Web Rhetoric. Swartz might argue that brochureware applications of the Internet add to a problem he perceives, that most citizens in the US today are spectators—they are “idiotes,” or non-political, private people (33). Habermas contends that modern legislatures are arenas for staged displays aimed at persuading the masses rather than forums for critical debate among their members...substituting “a pursuit of acclamation for the development of rational-critical consensus” (Calhoun 25). Furthermore, he thinks that the result is that the public turns into both minorities of specialists who put their reason to use non-publicly and a great mass of consumers whose receptiveness is public but uncritical (Calhoun 26). He might very well say about the Internet what he says about the rest of the public sphere, that it abandons debate for advertising (Calhoun 26).

Implications for More Interactive Web Rhetoric. While it is clear that most researchers agree that the WWW does not currently make adequate use of interactive and other possibilities to create a forum for deliberation, for open conversation, for debate, or for real public participation, Pavlik thinks that electronic mail and online communications have a democratic element that has the potential to encourage public participation (141). He describes four characteristics of “sound new media content design,” including,

Rich multimedia presentation of information, but done in a manner appropriate to the content at hand and flexible in its distribution or accessibility to adjust to variations in network or distribution medium bandwidth, individualization of content, in particular creating a new media product that enables the receiver to personalize that content, either in form or substance, fully interactive content and user interface design that engages the user, and immersive forms of content that permit the user to enter into and participate in increasingly rich, three-dimensional virtual

worlds, where all three of the above-mentioned characteristics come together. (186)

Pavlik, then, shows us possibilities for websites. Amy Jo Kim, too, provides strategies for creating more interactive sites exists. She suggests nine design strategies:

Define and articulate your purpose, build flexible, extensible gathering places, create meaningful and evolving member profiles, design for a range of roles, develop a strong leadership program, encourage appropriate etiquette, promote cyclic events, integrate the rituals of community life, and facilitate member-run subgroups. (xiii, xiv)

Kim continues by offering a variety of ways in which websites can promote community: chat rooms, auditoriums, bulletin boards, and more. Her vision, that Pavlik and Lea Parker share for advocacy sites, would have advocacy sites serve as a forum for public participation in environmental decision-making. Parker connects these possibilities to environmental communication, suggesting that the Internet can provide a place for genuine public communication. She thinks the Internet, by enabling more possible combinations of people to participate in dialogue with one another, provides more opportunities for deliberative democracy such as Gunderson discusses (53). Parker also links Internet communications such as Pavlik describes to chaos theory. She describes an online process of diffusion of ideas with messages being communicated in a variety of ways, creating instability of language that, in turn, works as a catalyst for stability because while people try to make sense of alternate interpretations they often move towards consensus or establish some other form of order. In turn, this process often creates a tighter and more meaningful message than the original (57). One problem that groups like the SEED Coalition have is that it is difficult to know how to achieve this process, as some of the ways to do it, such as bulletin boards, can also result in less than helpful non-conversations or in a place for poorly-thought-out messages to be posted.

Analyzing the SEED Coalition's Websites in Reference to Pavlik's Model for Interactivity. Because researchers like Pavlik and Parker seem hopeful about the use of interactive elements and web communication, one of the characteristics I searched for in the SEED Coalition's sites was the presence of interactive web elements. I coded for

Pavlik's stages of websites. I noted which units seemed to fit Pavlik's description of a stage one website, merely posting materials already available in print online, with few if any revisions. The press releases the SEED Coalition makes available online are a good example of units that meet the description of Pavlik's level one, as are many of the SEED Coalition's reports made available online. I also coded for units that match the description of Pavlik's level two material: material produced specifically for the websites. Then, I coded for materials matching Pavlik's level three description: materials produced specifically for the WWW that take advantage of unique characteristics of the medium.

Out of 267 coded units for which Pavlik's levels could be determined,⁴ 41% were level one units, representing material available in print or other media merely posted online with few if any changes. Another 36% of the units represented level two web development, such as creation of text with hyperlinks, for example, as on the SEED Coalition's "learn" page that consists of short paragraphs of information created for the web page, with hyperlinks to more information. That leaves 11% of the units that represent level three development, information online that takes advantage of elements of the medium and could not exist in the same way elsewhere. These include the fax actions, as the fax actions go beyond a form letter or postcard that the SEED Coalition might (and does) make available to people in hard copy, because visitors to the website can modify the text of the faxes before sending them (see Figure 4.6, earlier in this chapter). Although the fax actions represent the potential of the WWW put into practice in the way that Pavlik and Parker think might help advocacy groups accomplish their goals of political action and involve citizens in this political action, the majority of the SEED Coalition site is not yet at level three—and a significant portion of it is not yet at level two. In order for the SEED Coalition websites, or any other organizations' websites, to reach their touted full potential, more than 11% of the information on them probably needs to be created for interactive web delivery.

⁴ Not all discourse blocs allowed coding for Pavlik's stages or, in the next paragraphs, Waddell's communicative models. Often this was because of a broken link.

Using Interactive Web Elements to Promote Communication between Visitors and Staff. One way in which advocacy groups may use interactive web elements is to promote communication between grassroots members and organizational staff. Currently, many advocacy groups, ironically, often do not encourage much of this contact. For example, Ronald Shaiko observes that interest groups can use their communications to set an environmental agenda and increase the amount of dialogue about issues in their agendas, but they often now have fewer publications than ever and less communication between members and leaders (163). Similarly, Shaiko argues that although groups currently do stimulate some political activity, more advocacy group members write to their political representatives without direct mobilization from their affiliate groups than with it (although this may have changed with the advent of electronic faxes and emails such as the SEED Coalition uses). More significant, perhaps, because it is less likely to have changed with applications of web rhetoric since Shaiko's book was published, is Shaiko's note that rarely do leaders ask members to provide an agenda—leaders provide the issues, members the action (163). Moreover, although websites are being used to inform and mobilize members and nonmembers (Shaiko 171), are not being used to gather information from their members. Instead, most groups seem to use a "rhetoric of domination," in which they position the audience as primarily receivers of a predetermined message (Simmons 13). As Simmons explains, grassroots alliances, while representing some citizens whose opinions might otherwise not be heard, can still exclude citizen voices, even some of those they might like to represent (16).

The SEED Coalition's websites, for example, invite visitors to take action on the issues the SEED Coalition staff has selected, in the ways it has selected. However, they rarely invite feedback from visitors (except that visitors are invited to email the SEED Coalition staff, and presumably could email them with agenda suggestions, although this is not mentioned specifically as an option on the website). In other words, websites have the potential to provide space for Parker's open communication, which invites deliberation by exposing visitors to a variety of opinions. They can also create space for citizens to communicate with one another in ways approaching Habermas'

communicative action. However, the SEED Coalition, like many groups, is currently not using its websites to do these things where it might be advantageous to do so. Although the SEED Coalition encourages its visitors to do more than receive information—it asks them to act upon the information—it does not make it easy for people to share their views or for those views to be clearly incorporated into the group's policies.

Waddell designed his model of communication to describe communication between policy makers and citizens in legal and civic decision-making processes. I believe that we can also use Waddell's models of communication as one measure of the different ways in which the SEED Coalition's websites communicate information to their audiences and represent the opinions of its grassroots members, in their own voices, rather than their opinions through the SEED Coalition staff (or, perhaps, the opinions of the SEED Coalition staff itself). Therefore, I coded the units on the SEED Coalition websites to see which of them seemed to fit (1) Waddell's one-way Jeffersonian communicative model, in which one way communication from experts to the public occurs, (2) his two-way Jeffersonian model, in which two-way communication occurs with experts maintaining the power, but the public and experts talking to one another, and (3) his social constructionist model, in which two-way communication between experts and the public occurs, with each group speaking from its own sphere of knowledge and both groups sharing power.

However, because this is not the original purpose of Waddell's models, I want to add that while Waddell's models indicate, for example, that one-way Jeffersonian communication hinders the public, the ramifications of one-way Jeffersonian communication as I identify it in the SEED Coalition's communications that are often intended to educate the public are significantly different. Waddell implies that in bureaucratic policy making processes, one-way Jeffersonian communication is not ideal. In the SEED Coalition's communication with its audiences, whether one-way Jeffersonian is good or bad is more complicated. It is more complicated; I would argue that the SEED Coalition quite ethically chooses to share expert information with the public, information that the public might otherwise not have, although when the SEED

Coalition's websites shared expert information I typically coded that as one-way Jeffersonian communication. Waddell is considering bureaucrat/public policy maker communication with the public, while the SEED Coalition is not a bureaucrat or a public policy maker, but, instead, is (in theory, at least) the collective voice of part of the public. In other words, Waddell's model does not allow for the need for a group like the SEED Coalition to provide information to the public in a way that empowers, rather than disempowers, the public. Similarly, I would like to add another caveat: when I explore in the following section to what degree the SEED Coalition's websites seem to ask for and follow-up on the feedback of its grassroots members, I am doing just that, seeing how much its *websites* seem to do this. In fact, many of the ways in which the SEED Coalition contacts and learns of the opinions of its grassroots members are, perhaps quite rightly, not online. Indeed, the SEED Coalition staff spends time sending letters to local civic groups, calling local groups and individuals, attending meetings of local groups and telling them about the group's efforts, having planning meetings where members can influence the group's strategy and goals, and collaborating with other like groups about strategy and goals. Therefore, I would like to note that the SEED Coalition staff spends more time with grassroots members than the following section may indicate.

Although an imperfect application of a model, I coded the units on the SEED Coalition websites to see which of them seemed to fit (1) Waddell's one-way Jeffersonian communicative model, in which one-way communication from experts to the public occurs, (2) his two-way Jeffersonian model, in which two-way communication occurs with experts maintaining the power, but the public and experts talking to one another, and (3) his social constructionist model, in which two-way communication between experts and the public occurs, with each group speaking from its own sphere of knowledge and both groups sharing power. Out of the 236 units for which this issue was relevant, 64% of them fit the one-way Jeffersonian model, with information communicated one way from experts to the public. Twenty percent of the units fit the two-way Jeffersonian model, and 18% fit the social constructionist model. In other words, with few exceptions, the SEED Coalition's websites do not enable open

communication between the public and either the SEED Coalition staff or other decision makers. Instead, largely the SEED Coalition's websites serve to give the public expert's opinions, and sometimes the websites allow the public to share its opinions with politicians, as through a fax action, or with the SEED Coalition, as through email to one of the staff members. Even more rarely, the SEED Coalition's websites give the public a chance to share its opinions in its own words—mostly on the Toxic Two Step Site, where reports include citizens' perspectives on the pollution caused by power plants. In other words, the SEED Coalition's websites are not using the interactive potential of the WWW to enable more social constructionist communication. In fact, ironically, almost all social constructionist communication on the site occurs through reports that decision makers can read and respond to offline as well as online. The only direct communication on the sites must occur either between a visitor and a SEED Coalition staff member, through the desire of a visitor who chooses to use an available phone number or email address, or through fax actions to politicians and other officials, who may or may not respond to citizens or to the SEED Coalition. However, just as the SEED Coalition's sites use visual elements and placement of elements to encourage action, despite their heavy information content percentage, they similarly use visual elements and placement of elements to encourage dialogue.

Arguably, too, they use their websites to help members deliberate about environmental issues so that they can better express their views in their own words. Unlike Waddell's discussion of one-way communication as condescending and disempowering, the SEED Coalition's sharing of information empowers citizens. In fact, the SEED Coalition employees may make the most ethical decision regarding how to encourage people to have personal contact with them to influence the organization's goals and strategies: by having most contact over the phone and in face-to-face meetings, they potentially prevent some of the educated middle class bias of the current population of heavy Internet users. Although I do finally recommend that groups like the SEED Coalition might experiment with more interactive web rhetoric, I also would maintain that they should continue to use the more traditional methods of contacting grassroots

members that they currently use, especially when, like the SEED Coalition, one of their stated goals is to work on issues of environmental justice.

Further Discussion of the SEED Coalition's Applications of Interactive Web Rhetoric. One of the issues my application of Waddell's models to the SEED Coalition's websites draws attention to is to what degree the SEED Coalition helps facilitate more citizen involvement in bureaucratic decision-making. Of course, the SEED Coalition has little power over whether public officials listen to citizens. Still, the SEED Coalition could potentially use its website for more two-sided communication. For example, the SEED Coalition currently has regular planning meetings in Dallas, where attendees can contribute to SEED Coalition strategy. Chat rooms on the SEED Coalition websites might facilitate conversation between meetings or between people in areas other than Dallas. Even the SEED Coalition's email is all one-directional, not a listserv that would allow multi-directional email (although the SEED Coalition probably would want to moderate such a listserv). Similarly, the SEED Coalition could potentially use its websites to host auditorium presentations from decision makers and citizens, or invite decision makers to chat rooms for discussions with SEED Coalition site visitors about issues. A coalition of groups including the SEED Coalition and an Austin-based faith-based environmental group brought a noted global warming author to several Texas cities to discuss global warming in the fall of 2001. This contact with citizens across the state was wonderful to see and participate in, but web possibilities could have expanded it to more places. For example, an online auditorium might have helped this coalition effort reach not only the handful of cities chosen for onsite visits, but could also have involved people from other locations in the state. In a state like Texas, where travel distances to the capitol often prohibit most citizens from traveling there for face-to-face contact with legislators, groups like the SEED Coalition might be able to arrange online discussions with political decision makers.

Instead of taking advantage of potential features like these, the SEED Coalition's websites function primarily like its print documents and do not facilitate the multi-directional communication that the SEED Coalition believes in for face-to-face

encounters. About 48% of its website units can be construed as promoting community in any way, but most of these do so relatively weakly—by, for example, providing an email address or phone number for a SEED Coalition staff member. In fact, the SEED Coalition's websites make Shaiko's words about the WWW true: "Web sites are passive means of communication. The web provides ways for people to gather information to participate in the political system" (171-172). Shaiko sees the WWW as a place for people to be informed, but not to inform one another, for them to receive information, but not to share information.

Shaiko's perspective accurately reflects the current primary state of the SEED Coalition's websites, but does not accurately represent the potential for websites to do more or the potential problems with doing more—and there are potential problems with doing more. For example, groups may hesitate to have chat rooms because visitors can potentially say anything, no matter how non-credible, and those thoughts may be associated with the group, harming its credibility. This problem might occur with the SEED Coalition's fax actions, as well, one disadvantage to their being modifiable. Other possibilities, like a moderated listserv, could prevent this problem. In addition, if caveats could be added to prevent some damage to credibility, multiple viewpoints on an issue might help promote political action and environmental advocacy. For example, Swartz asserts that Protagoras' notion that there are multiple sides to a question forces us to learn to evaluate arguments, that we depend upon *dissoi logoi*, or choice-making based upon thorough understanding... a way of understanding the world and an ethic (73). In his opinion, as in Gunderson's, multiple views can actually induce deliberation, and Gunderson found that deliberation on environmental issues almost always raises people's devotion to environmental ideas and increases the likelihood that they will take action for the environment. Michael Spangle and David Knapp suggest, for example, that we should refashion environmental discussion toward more constructive ends, empowering it by moving it toward common ground, promoting a problem-solving approach, providing greater participation by community members and stakeholders, and reducing anti-collaborative persuasive tactics (20). They assert, "empowerment occurs by design, not

accident, and involves a proactive effort to establish collaborative discussion” (2)

People who are offering ideas and having their ideas challenged are more engaged in thinking than people who merely receive information, so they would be more likely to feel committed to the organization and its goals and motivated to become more involved with shaping and meeting those goals.

Certainly, more opportunities for open communication on the SEED Coalition’s websites would seem to better reflect the goals of its staff members, although these also tend to require more additional web programming knowledge to arrange and more time from the staff to maintain, and therefore they may be slow in coming. Many, including Muir and Veenendall, agree that “perhaps the most important question facing teachers, scholars, critics, and students of environmental communication today is the appropriate and effective involvement of average citizens in issues that span local, regional, and global arenas” (xiii). Therefore, the SEED Coalition and other advocacy groups should reflect upon the kinds of communication that their sites support, and communicators should help enable these small organizations to take greater advantage of technological capabilities when they desire to do so.

Other Questions about Web Rhetoric: Giving People Access to a Diversity of Opinions

In addition to these observations about the degrees to which the SEED Coalition’s websites promote community and take advantage of interactive potentials of the media, I also noted to what degree the SEED Coalition’s websites use the potential of the medium to give people access to a variety of opinions on an issue. Indeed, the SEED Coalition almost never links to or provides information that does not share its perspective, making its websites not a place for multiplicity of opinions like Parker and Swartz envision, but a place like Klopfenstein discusses, where “it is reasonable to assume that the Internet has often been used to reinforce previously existing political beliefs” (3). It is not surprising that the SEED Coalition uses its site to promote its ideas, that is what we would expect an environmental advocacy group to do, advocate action for the environment. Providing alternative opinions (linking to the sites of groups with opposing views) may seem

dangerous—one might lose a visitor to a different viewpoint. However, openly acknowledging other opinions and inviting visitors to read arguments from other perspectives could promote deliberation, promote real community, enable Habermas' communicative action, and build the SEED Coalition's reputation as an open, reasonable group. Without more research into how this might work for groups, we cannot know whether this would help or hinder their efforts.

Other Questions about Web Rhetoric: Building Connections to Other Groups

Although the SEED Coalition's websites rarely offer alternative opinions, they do build connections to other advocacy groups, one of the things that Leizerov thought that many advocacy sites would do. In fact, the SEED Coalition's websites often cited or thanked other advocacy groups or linked to other advocacy group websites. Fifty-seven percent of the units on the SEED Coalition site built connections to other groups, in fact, making this a clear goal of the SEED Coalition websites. Davis explains that linking to like-minded organizations provides visitors with more information about a group's policy stance, and he reports that 69% of the organizations he studied used this tactic (68).

Other Questions about Web Rhetoric: Building Rhetorical Power

Just as connections to other groups can build the SEED Coalition's credibility, and so its persuasiveness, the SEED Coalition may also build its persuasiveness by showing itself as persuasive. Yarborough thinks that rhetorical power, demonstrations of when one compelled others to believe, can make one more persuasive...in other words, people are apt to believe organizations they perceive as having persuaded others, too. Therefore, that 33% of the units I coded on the SEED Coalition's websites demonstrate rhetorical power may be significant. They show how they compelled others to believe by giving newspaper clippings, by mentioning and showing pictures of citizen participants, and by explaining that fax actions were successful.

Other Questions about Web Rhetoric: Using Environmental Discourse Conventions

Other options for persuasion include more direct persuasive techniques. In fact, environmental discourse literature is full of discussions of environmental rhetoric tactics, such as the apocalyptic narrative about impending doom that Killingsworth and Palmer discuss, the jeremiad that Opie and Elliot discuss, and the loci of the irreparable that Cox discusses. I looked for these tactics in the SEED Coalition's websites but found them in less than 2% of units. Not finding these tactics is interesting in itself, and so I searched for possible explanations for why the SEED Coalition's websites do not take advantage of these common tactics. Spangle and Knapp provide one possible explanation, as they contend that advocacy groups build on different philosophies. For example, they explain that extreme groups tend to use tactics including "demonstrating urgency through fear appeals...including the environment as an actor in the world drama.... employing language tactics that contrast and polarize...approaching risk with a no-threshold perspective, ...and blending scientific interpretation with ideology" (15). In contrast, Spangle and Knapp argue, more moderate groups tend to compromise on issues more often. They often "project a persona as defender of public interests...invest in efforts to make corporations more environmentally responsible...promote pragmatic prescriptions and agendas for solutions to environmental problems, and involve well-known television and movie celebrities in ethos appeals (12). Because tenets of worldview between more moderate groups overlap, the tactical choices they use seem less defiant (14). Therefore, they are less likely to use strategies like the jeremiad and apocalyptic narrative, and, perhaps, are more likely to do what the SEED Coalition does, and largely seem to borrow journalistic and scientific language to inform and persuade site visitors.

Other Questions about Web Rhetoric: Hypertext versus Hierarchy

Another characteristic of the SEED Coalition's websites that is worth some discussion is that most of their links are hierarchical, not hypertextual. This is important, in part, because as Nicholas Burbules contends, links control access to information as

much as they establish possible movement paths (105). As Burbules also explains, links are rhetorical tools that can work as metaphors, when they may “invite the listener or reader to see points of similarity between [two concepts] them while also inviting a change in the originally related concepts by ‘carrying over’ previously unrelated characteristics from one to the other” (111). An example of where this occurs in the SEED Coalition sites is on the home page of the SEED Coalition site, where a fish represents mercury issues, a thermometer represents global warming, and a windmill represents sustainable energy. The SEED Coalition site uses text and visuals to create these metaphor-links. (See Figure 4.4, earlier in the chapter, for an example.) Burbules posits that while we tend to rely upon outline and syllogism to look at arguments, the web may need us to rely on bricolage and juxtaposition (117). He would, then, be in favor of more use of metaphor-links such as the SEED Coalition uses almost exclusively in those three instances, rather than the hierarchical organizational strategy the SEED Coalition mostly uses. At the same time, though, Burbules suggests the dangers inherent in more hypertextual websites—web visitors are familiar with using outline and syllogism to look at arguments and may struggle with sites that are more hypertextual, that, as Snyder suggests hypertext might do, use collage in place of narrative (114). However, Snyder also echoes Burbules, suggesting that a more hypertextual approach might help us cease valuing “accumulation over contemplation” or seeing multiplicity as “overwhelming instead of enlightening” (119). Hypertext, she contends, might help readers synthesize (112). Helping people synthesize could better promote environmental advocacy concerns. Hypertextual white papers or summaries that provide a short discussion of the issues, what is being done about them (by the SEED Coalition, policy makers, corporations, and other groups), what the counterarguments are, and why they are problematic might help visitors to the SEED Coalition better learn about and come to their own conclusions. Having some of these be written by outside experts might lend credibility, as some of the reviews on www.Amazon.com can do.

The SEED Coalition and other advocacy sites might experiment with more hypertextual elements in their websites. However, unlike chats, auditoriums, and other

interactivity that seem like they would be almost entirely beneficial to advocacy groups, helping them reach their goals, these same groups might desire to use hypertext cautiously. Until we have more research to help us know whether, in fact, hypertext is advantageous for author/audience communication, rather than confusing and frustrating for audiences used to a more hierarchical organization, it might be better for groups to use hypertext with moderation.

Summary of Chapter IV

In an attempt to understand how websites may affect communication, especially advocacy discourse, this chapter investigated how the main the SEED Coalition website and the Toxic Two Step site used textual and visual elements to support SEED Coalition goals and goals of the larger environmental advocacy movement. This chapter responded to the following research questions: (2) How do sites meet the goals and reflect the values of their developers? For example, how do website characteristics pertain to the advocacy campaign? How do website characteristics create and sustain dialogue, promote action, or encourage visitors to join or donate money?, and (3) How do these environmental advocacy sites reflect or fail to reflect common goals of environmental advocacy communication? For instance, how do they enable public participation in public policy formation? If we consider advocacy sites to be a genre separate, for example, from educational and commercial sites, what genre characteristics do they seem to have?

In reference to the first set of these questions, how the sites met the goals and reflected the values of the developers, we have learned that the SEED Coalition's sites contain a higher quantity of information that is meant to inform than that primarily induces action. We also learned that the SEED Coalition's sites use less of the WWW's potential for interactivity than might seem to help the SEED Coalition meet its goals. However, if we look not at the quantity but at the quality of its sites' web rhetoric, we see a slightly different picture: the SEED Coalition does, in fact, subordinate informing to promoting action and non-interactive web elements to interactive web elements by

strategically placing information on its home page and strategically using pictures. To draw an analogy, assuming that because there is more informative rhetoric on the SEED Coalition's sites than opportunities to take action the SEED Coalition's sites will encourage visitors to passively learn more than take action might be like assuming that because there are more food vendors in an amusement park than there are roller coasters, people will eat (and identify their experience in the park with food) more than they will ride roller coasters. Finally, then, I would conclude that the SEED Coalition's websites do a fairly good job of reflecting the organization's values and helping it reach its goals, although I simultaneously would recommend that technical communicators and groups like the SEED Coalition conduct more research into the effects of more interactive web rhetoric possibilities and other design options.

In response to the second set of research questions this chapter tried to answer, questions about how the SEED Coalition's websites reflected goals common to environmental advocacy groups, we have learned that the SEED Coalition's websites support some of them: informing the public, enabling the public to contact decision makers, and inducing deliberation in site visitors. We have also learned, however, that the SEED Coalition's websites do not use some of the rhetorical techniques common to much environmental rhetoric, such as jeremiads. We have learned that the SEED Coalition's websites do not support some goals, such as member participation in organizational goal setting and strategizing, as much as they potentially could. However, I think that they do so as much as most other advocacy organization's websites do and that the SEED Coalition uses non-web methods to conduct much of this business. Finally, I have not directly addressed the question of how, then, the web rhetoric of advocacy group websites may differ from that of e-commerce and educational sites through a comparison of such sites, which would be a project for another research study. However, I think that by describing what the SEED Coalition's websites do I have drawn attention to some of the potential differences, such as concern with member/staff interaction, a need to communicate with media representatives, a need to communicate information not available through the mass media, and concern with developing group

ethos and the rhetorical power of the group. I have produced a foundation from which we can further study differences between a web-advocacy genre and other web genres.

Finally, my analysis of the SEED Coalition's websites in this chapter demonstrates that the SEED Coalition's websites do a fair job of reflecting the SEED Coalition's goals, although they might devote more time to promoting action and less to informing and they might use more interactive web feature to their advantage. My analysis also suggests that we cannot assume that advocacy websites share characteristics of other advocacy publications or of environmental discourse as traditionally understood. My analysis has these and other implications for advocacy groups and communicators.

What can Technical Communication Learn from Groups like the SEED Coalition?

1. How groups might design their websites to meet their goals.
2. Where to focus research to help people better apply interactive web features.
3. Where to focus research to help people better choose whether to use hypertext.
4. Which goals groups can more easily reflect in their websites, and which ones create more difficulty (those that create more difficulty may indicate places for technical communicators to focus research and educational efforts).

How can Technical Communication Support Organizations like the SEED Coalition?

1. As I indicated in Chapter III, technical communication can provide organizations with knowledge by encouraging its members to do the following: (1) conduct studies of the use of websites in campaigns and publish them both in technical communication journals and in other places where advocates and others may come across them, (2) invite advocates to professional conferences where they may be able to learn more about their communication efforts, and (3) attend advocacy conferences and share information with advocates.
2. Also as indicated in Chapter III, technical communicators can help support the freelance designers small organizations are likely to hire by helping them keep

abreast of research results regarding web design and helping them learn use web design characteristics to reach various rhetorical goals.

- 3 Volunteer time to work with advocacy groups, helping them create and support more interactive web elements.
- 4 Create student/advocacy group connections that may be mutually beneficial.

How can Organizations like the SEED Coalition Improve How their Websites Reflect their Goals?

1. Learn and implement more interactive features on their websites.
2. Research and publish the effectiveness of those features in helping their sites reach their goals.
3. Practice and develop new ways to support interactive web features.
- 4 Consider how much information their sites provide and conduct research to determine when this information helps or hinders the group in attaining its goals.
5. Decide, through trial and feedback, how much hypertext is beneficial in an advocacy website
6. Reflect upon the routines and habits they have for developing and maintaining their websites and revise them as needed.
7. Determine whether they have real or perceived time constraints (or both) regarding processes for developing their websites and, as is possible, create ways to deal with these constraints.
8. Determine what, exactly, their web audiences want and to what degree the material on their sites matches those desires.

Conclusion

The next chapter, Chapter V, will complete the comprehensive analysis of the communication situation by exploring the audiences for the websites. It provides the results of two surveys of real and potential audiences for the SEED Coalition websites and relates the survey findings to information in Chapter III and Chapter IV about the organization's goals for its websites and the content of the websites.

CHAPTER V

THE SEED COALITION'S WEB AUDIENCES: SURVEY RESULTS

Introduction

Chapter III focused on the “authors” of the websites, on how the webmaster and other employees of the SEED Coalition decided what to put on the websites and why, and Chapter IV focused on the “texts” of the websites, on how the websites function rhetorically and how they reflect the SEED Coalition’s goals and goals of the larger environmental movement. This chapter will address the “readers” of the websites, answering research question 4, “Who visits the websites, and what do those visitors want to find, learn, and/or do?” Addressing this question both completes my investigation into the comprehensive communication context (authors, texts, and readers) and helps provide the SEED Coalition and other advocacy groups with information about potential visitors to their sites and the relative effectiveness of their websites. This information can guide future website design and content decisions.

Audience is perhaps the most important of these three concepts: author, text, and audience. As Aristotle stated, “of the three elements in speech-making—speaker, subject, and person addressed—it is the last one, the hearer, that determines the speech’s end and object” (32). Because audience is so important, we need to pay attention to the audience for any piece of communication, especially those using new media. Klotz reminds us that, “A new medium means a new audience, and there can be no notion of effective communication independent of a particular audience” (2). In order to promote more effective web communication, then, we need to continually learn more about web audiences, in particular studying audiences for specific websites to guide their design. Some studies report on web audiences in general, indicating that they tend, still, to be fairly white, male, and middle-upper class. Others, like McAndrews, guess at the audiences for the websites they study based upon the content and design choices of those websites (20-28). Few studies, though, both investigate and publish information about specific websites and then discuss how the design for those websites might work or fail to

work for those audiences, although such research might help guide other groups. As one of the people responding to the surveys discussed in this chapter explains,

I would be interested in the results from these questions, as would all of our coalition partners. The environmental community always faces large, well-financed opposition and we depend on grassroots activity to support our policy goals. Yet a full 70% of our members are 45 or older and over 20% are 65 or older. How to engage a larger portion of the public, how to overcome disaffection and encourage “political” activity, is critical to achieving the overall goals of the community. Sharing information makes us all stronger and more effective.

Kim suggests that organizations can start to build successful communities by understanding their members or potential members and their needs and creating a master list of goals for the members and owners (10-11). While, as James Porter explains, we have often seen the construction of audience as an “imaginative activity...[and] propose audience analysis questions to guide this activity...such approaches assume.... in effect, the writer already possesses the image of the audience that the questions are designed to help the writer reconstruct” (5). Porter elaborates by mentioning that these kinds of questions best serve as a mnemonic function for writers who already possess some audience awareness (5). Therefore, more empirical ways of gathering audience information are more appropriate starting places in a case like that of the SEED Coalition’s web audiences, where no one knows enough about them to reasonably imagine the answers to audience analysis questions. One way to understand members is to survey them, and so in order to learn about some of the audiences for the SEED Coalition’s main website, I used two surveys. One online survey was linked to the home page of the main site to gather data about visitors to the website. The SEED Coalition emailed the other survey to people on an email contact list it maintains and uses regularly to send notices about meetings, action alerts, and other environmental events.

The surveys tried to gather a variety of kinds of information:

- Personal data: age range, sex, political affiliation, geographic location.
- SEED web page visiting habits: number of visits, how learned about site, main reasons to visit site, actions completed on site.

- Main environmental interests: what environmental issues are of most interest, other environmental groups affiliations.
- Kinds of contact with SEED, beyond web pages.
- Donation behavior.
- Letter writing behavior.
- Suggestions and other comments for SEED.

From the surveys, I learned some of the characteristics of visitors to the websites that the SEED Coalition can use to guide its decision-making about its websites. Nancy Walters Coppola argues that audience analysis in environmental communication needs to be interactive and include a transdisciplinary perspective (29): she specifically explains that we need to consider audience knowledge, attitude, and what behaviors we desire audiences to demonstrate as a result of our communication (32-33). Some of my questions reflect these concerns. To learn about respondent attitudes, I asked them to self-report their level of affiliation with the environmental movement and their level of interest in various environmental concerns targeted by the SEED Coalition. I also asked about the areas of environmental concern that respondents want to learn more about to begin to assess their current knowledge (although for the most part my survey does not assess people's current knowledge). Furthermore, I asked questions to help the SEED Coalition and other advocacy groups know how to better prompt desired behavior, like taking action for the environment, donating to the group, and writing letters to policy makers. Although Coppola advocates interviews with audience members, these survey questions, including open-ended questions, can provide similar data.

The response rates to both surveys were disappointingly low. Only sixteen people responded to the survey on the website and only just under 10% (or about 130) of the people on the email list responded to the survey. This might be expected; Diane Witmer, Robert Colman, and Sandra Lee Katzman suggest that responses to online surveys may be 10% or lower (147). Still, however, the survey responses provide useful information about some of the audiences for the SEED Coalition websites.

General Data

The surveys helped provide a general profile of part of the SEED Coalition's web audience. The survey respondents provided information about their sex, age, political affiliation, and identification with the environmental movement.

First, although (still) the majority of Internet users are male, the majority of survey respondents were female (see Figure 5.1). This might mean that women were slightly more likely to complete the survey, but it might also mean that women comprise more of the SEED Coalition's email list (respondents to the web survey were evenly divided between men and women).

Figure 5.1. Sex of Survey Respondents.

Survey respondents were mostly between eighteen and fifty-nine, with the largest percentage, 37%, between fifty and fifty-nine (see Figure 5.2). This might indicate that the SEED Coalition might put more effort into involving younger citizens. Shaiko indicates this is true about many environmental groups, which tend not to target college-aged populations, who usually require a larger investment of resources and rarely donate in return (101). However, it may also indicate that people who were young during the seventies, at the height of the environmental movement, still choose to be more involved in environmental activism than those in other age groups.

Figure 5.2 Age of Survey Respondents.

Not surprisingly, 81% of survey respondents were from Texas. The remaining respondents were from a variety of states:

- Arizona
- California
- Colorado
- Florida
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Missouri
- New Jersey
- New Mexico
- New York
- North Carolina
- Ohio
- Pennsylvania

This indicates, then, that the SEED Coalition's websites serve several of the functions that the group desires, helping to involve people from a greater geographical area, especially in Texas, but also nationally. A list of the towns in Texas where respondents live is in Appendix C.

Also not surprisingly, the majority of the respondents consider themselves Democrats, Greens, or Independents (with a few explaining, understandably given the typical ballots in many areas, that they voted Green where possible, and as Democrats otherwise) (see Figure 5.3).

Figure 5.3. Political Affiliation of Survey Respondents.

Finally, the vast majority of respondents fit with the SEED Coalition's target audience: people with a preexisting environmental interest. On a scale from one to five, 87% identified themselves as quite or very strongly affiliated with environmentalist values and beliefs (see Figure 5.4).

Figure 5.4. Self-Reported Environmental Affiliation of Survey Respondents.

Altogether, this basic demographic information helps provide a general profile for part of the SEED Coalition's web audience. The responses to the surveys were low enough that traits like sex, which resulted in a fairly gender-balanced picture, perhaps cannot tell us a great deal. However, in areas where responses were more strongly unbalanced, such as in environmental identification, the surveys provide more helpful information about the composition of the web audience, which, then, would include a high percentage of people who already espouse strong environmental affiliation. The SEED Coalition can use this data to help it make decisions about its websites and other communications and to help it direct further recruitment activities.

Website Visiting Behavior

This section discusses survey data relating to survey respondents' basic behavior regarding the SEED Coalition's website: Have they visited? How often? How did they learn about the site? Perhaps most importantly, the surveys established that people on the email list do, indeed, visit the SEED Coalition website. Forty-five percent of people responding to the survey have visited the website between two and four times and another

29% have visited more than four times. Only 4% of respondents have never visited the SEED Coalition site (see Figure 5.5). Of course, it is likely that fewer people who have not previously visited the SEED Coalition website responded to the survey, but, still, the results indicate that some people are relatively regular users of the site. This lets the SEED Coalition know that the audiences for its email and its website do, indeed, overlap.

Figure 5.5. The SEED Coalition Website Visiting Behavior of Survey Respondents.

In addition, the surveys helped establish how people learn about the SEED Coalition main site. Only 3% of respondents found the site through an Internet search engine. Instead, the majority of respondents learned about the site through another person. 22% of respondents learned about the site through a SEED Coalition employee and 20% of respondents learned about the site through another person who was not a SEED Coalition employee. Other respondents learned about the site in a variety of ways (see Figure 5.6):

- Through email from the SEED Coalition (including two respondents who explained they were “mysteriously” added to the email list) (9%).
- Through the URL they found on printed materials (7%).
- By first learning about the SEED Coalition at a rally, presentation, or meeting with another environmental group and subsequently visiting its website (7%).
- Through another website (5%).

Another 23% no longer recalled how they learned about the SEED Coalition website, and the remainder of the website visitors learned about the SEED Coalition website through a variety of sources: *Grist* magazine or a professor, for example.

Figure 5.6. Ways in which Survey Respondents Learned about the Websites.

This information allows us to know that word of mouth seems to be the primary method of publicity for the website, but it also informs us that sometimes secondary means of publicity, such as mentioning the site in a presentation or email or providing the URL on printed material, brings some people to the site. The SEED Coalition can use this information to decide how (if at all) it wants to change how it markets its websites. Perhaps, because of the group's interest in grassroots efforts that finally often require face-to-face contact, and in an effort not to alienate people without Internet access, the group will be content with this marketing layout. Perhaps, however, it will want to make

more of an effort to market its websites in presentations and on printed material, two methods that are currently somewhat successful and could be even more so.

Another important piece of information that the surveys provided was information about why visitors to the website come to the website. This is particularly important given the SEED Coalition's general lack of knowledge about its audience, which I explained in Chapter III is a potentially serious barrier to good decision-making about its websites. Without knowing what visitors to the website are looking for, what they want to see or do on the website, it is hard to know whether one is making good decisions about the website. A series of questions in the surveys attempted to provide information that would help us know how visitors to the main SEED site (and how non-visitors on the email list who are also potential visitors) would interact with or desire to interact with the website. These questions include questions about what visitors did on their most recent visit to the site, what actions they have completed on any visit to the site, what environmental issues they are interested in learning more about on the site in general, and which environmental issue they are most interested in learning about.

The majority of the respondents to the web survey (53%) visited the site on the occasion of their filling out the survey to gather information about the environment. Another 24% visited either to take action or to learn how to take action for the environment. One percent visited to learn about the SEED Coalition, and 3% came to fill out the survey. (One of the side-effects of the survey was that it temporarily affected the behaviors I was trying to study.) The respondents to the email survey demonstrated a different main reason for visiting the site: 45% visited to take action and another 11% to learn how to take action for the environment, while only 18% came to gather information about the environment (another 9% came to learn about the SEED Coalition and the remainder came for a variety of other reasons or had not previously visited the website). This means that while the respondents to the web survey had the predominant goal of being informed, the respondents to the email survey reflected the SEED Coalition's goals for the website: their number one goal, like the SEED Coalition's, was to take action for

the environment, and their number two goal, like the SEED Coalition's, was to be informed about environmental issues.

Also of interest is that no one who completed the survey came to gather information for the media (although 3% of the respondents had, at some point, represented the SEED Coalition in the media). This could be because media representatives rarely visit the site, but it is also likely that media representatives would elect not to complete the survey. I should have but did not foresee this likelihood, which would mean that a better way to gather information about media representative use would be to ask local media representatives directly (perhaps surveying those with bylines for recent media coverage of SEED Coalition events). Davis indicates that currently 65% of journalists are fairly likely to sometimes use press releases from the websites of organizations, 69% of them sometimes and 23% of them frequently use documents from the websites of organizations, and similarly a majority use data and email addresses from these websites. If these data hold true in the Austin area, media representatives there probably do visit the SEED Coalition website and use its press releases, reports, and other data and information to cover events in which the organization is involved.

In addition to knowing what people most recently used the SEED Coalition's main website for, I also learned about the tasks they had used the website for in the past. As Figure 5.7 demonstrates, almost all of the survey respondents have used the SEED Coalition's websites to read information. (Although fewer of the email list respondents have than the web survey respondents, perhaps because email list respondents are more likely to have already "bought into" the SEED Coalition's goals and so are less apt to think they need to inform themselves anew. They may, in fact, have already been informed through other sources, such as email, presentations, flyers, or phone calls.) Again, a larger percentage of email survey respondents have completed fax actions, which may well be because the SEED Coalition commonly sends email notifications about new fax action opportunities and/or because people on the SEED Coalition's email list are more likely to have already committed themselves to the SEED Coalition's environmental goals.

Very few respondents to either survey have used the website to contact a media representative and almost none have used it to donate to the SEED Coalition. More have used the site to join the SEED Coalition email list, although it is interesting to note that less than half of the respondents from the email survey joined that list on the website

Figure 5.7. Online Tasks Survey Respondents Completed on the SEED Coalition's Websites.

In addition to asking respondents whether they read about environmental issues on the website, I also asked them specifically whether they have read reports or parts of reports on the website, because the website links to so many reports. About half of the respondents indicated that they had read reports on the website, which seems to support the SEED Coalition's habit of putting reports on its websites (see Figure 5.8). This is good news for most political organizations, as Davis reports that 76% of the sites he studied included reports the group had published (68). Another question asked

respondents what format they would like the reports to be in, as the SEED Coalition's websites currently supply reports in html and PDF and sometimes both. Most respondents (57%) preferred html, although another 19% preferred PDF. Some explained they preferred html for short documents and PDF for longer documents. The importance of these questions, and others like them that other groups might ask their visitors, is that they provide website-specific feedback about current habits about the websites that affect their current and future content. In this case, the survey results indicate that the SEED Coalition is probably making a good decision to place reports online and to make those mostly available in html and PDF, while also suggesting that leaning towards html or a combination of forms might best suit the audience.

Figure 5.8. Percentage of Survey Respondents who have ever Read a Report on the SEED Coalition Website.

Environmental Interests

In addition to gathering information about how people use the SEED Coalition's websites, I also learned what environmental issues are of most interest to the respondents. James Grunig defines publics as being all-issue (people interested in a wide range of environmental problems), single-issue (people interested primarily in only one environmental issue), or involving-issue-only (people interested only in issues that directly involve them) (57). Knowing which of these constitutes most of the SEED Coalition's audience would help this group and others know how to focus their messages.

When asked which issue they would most want to learn about, the majority of respondents selected sustainable energy, with environmental justice the clear second choice and most of the rest of the respondents divided between global warming and air pollution (see Figure 5.9). This is interesting largely because this is the first place where what the survey respondents say they want and what the SEED Coalition offers on its website diverge significantly. The SEED Coalition's website contains information on all of these issues: global warming, air pollution, mercury pollution, sustainable energy, coal power plant pollution, and environmental justice. However, the primary foci of the SEED Coalition's home page are coal power plant pollution and mercury pollution, with air pollution another significant focus. The sustainable energy section of the SEED Coalition's website is smaller than those on these other issues and the fax actions on the site during the time in which I studied it did not directly relate to sustainable energy. Similarly, the main site's direct coverage of environmental justice is the smallest and least significant. The SEED Coalition deals with environmental justice issues indirectly through the reports on the Toxic Two Step site and in other places; more directly addressing this work as focusing on environmental justice might better meet the desires of site visitors and so help draw them further into the organization.

Not only was sustainable energy the issue people most wanted to learn about, but it was also the issue people expressed the most interest in, in general, with 91% of respondents interested or very interested (on a scale of five) in it (see Figure 5.10). The SEED Coalition can probably not go wrong, then, if it expands its coverage of and opportunities for discussion of and action on issues relating to sustainable energy.

Figure 5.9. Environmental Issues about which Survey Respondents Most Desire to Learn.

On the other hand, although respondents indicated they would rather learn about environmental justice on the website than about air pollution or global warming, they were more interested in air pollution (91% interested or very interested) and power plant pollution (81%) and almost equally interested in global warming (77%) as in environmental justice (79%). One possible explanation for why people would rather learn about environmental justice on the website while they are more interested in global warming, power plant pollution, and air pollution, in general, is that these are issues people already feel fairly well informed about. If a people feel well informed about air pollution and less well informed about environmental justice, they might prefer to learn about environmental justice, although they might prefer action opportunities for air pollution. This might indicate that while the SEED Coalition might want to enhance and expand its information about environmental justice, it might continue to have many action opportunities and updates on local events relating to air pollution, power plant pollution, and global warming.

Figure 5.10. Percentage of Survey Respondents Indicating Interest in Environmental Issues Targeted by the SEED Coalition.

The web audiences for the group generally fit the profile of Grunig’s all-issue interested public, and so appealing to them on many fronts will probably pique and maintain their interest. There are exceptions: a few survey respondents clearly fit the “involving-issue only” profile and state that they are interested only in issues that directly affect them, and other respondents seemed interested in primarily one issue. Nonetheless, if the SEED Coalition appealed successfully to the range of interests the majority of its web visitors seem to be interested in, these members would probably remain well served, too.

Donation Information

A concern of interest to the SEED Coalition is online donation behavior. In fact, my including information on the surveys about this directly reflects a request/suggestion that Pete made during our first telephone conversation, so that the investigation of this issue is one of the primary places where the SEED Coalition acted as a research partner in helping to direct the research questions.

Several questions on the survey reflected donation behavior; at the suggestion and because of the feedback from several of the survey testers, all but one of these questions

were located near the end of the survey so as not to turn people off by too overtly presenting the survey as a marketing device. I asked respondents if they had donated to the SEED Coalition online or in other ways in the past, whether they planned to donate during their current visit (for the web survey), and what might increase the likelihood that they would donate online.

Sixteen percent of the respondents had donated to the SEED Coalition. Of these, 25% donated online, and the other 75% donated offline. One person had donated both online and offline. Most respondents (60%) did not think that assurances of the security of donating online would encourage them to donate (see Figure 5.11). Similarly, most respondents (61%) did not think that making it easier to donate online would encourage them to donate (see Figure 5.12). However, many respondents (44%) did think that providing more information about how their donations would be used would encourage them to donate (see Figure 5.13).

Figure 5.11. Likelihood of Security Assurances to Encourage Online Donations

Figure 5.12 Likelihood of Increased Ease of Donation to Encourage Online Donations.

Figure 5.13. Likelihood of More Information about how Donations would be used to Encourage Donations.

Contact with the SEED Coalition

One important issue affecting the use of the SEED Coalition's websites is how they are used in conjunction with other resources, how the SEED Coalition uses a variety of media and communication options to communicate with its audiences. In order to learn more about which of these communication options its audiences experience, I asked

people if they had had contact with the SEED Coalition through a variety of means (see Figure 5.14).

Figure 5.14. Methods of Contact Survey Respondents have had with the SEED Coalition.

The most common method of contact for those surveyed was email from the SEED Coalition. Of course, in part this is because so many of the survey respondents received the survey through email, but also 59% of those completing the web survey had also received email from the SEED Coalition, making email, even for those not on the email list, as common a method of communication with the SEED Coalition as any other method I asked about. Flyers, too, were a common method of information about the SEED Coalition and its environmental efforts, with 59% of all respondents having received these. Fifty-six percent of all respondents had also received, signed, or seen a petition from the SEED Coalition and had read a newsletter from the group, making these the next most common methods of communication between citizens and the SEED Coalition. Another 44% of respondents had received a letter from the SEED Coalition.

The most common communication methods, then, after email, include traditional mail like newsletters, letters, and flyers.

However, while contact through mail or email is most common, a fairly high percentage of survey respondents had also had closer contact with the SEED Coalition. (Although, again, it is quite likely that more of the respondents had this contact than non-respondents to whom the survey was emailed.) For example, 34% of respondents had had a face-to-face conversation with someone from the SEED Coalition, 25% had attended a SEED Coalition sponsored event or meeting, and 24% had received a phone call from someone from the SEED Coalition. This indicates that while the SEED Coalition depends heavily upon written communications for its contact with its supporters, it also invests heavily and successfully in more intimate contact through presentations, phone calls, and individual conversations.

The responses to these questions indicate that the group fairly successfully communicates ties with many people who have shown interest in it. Perhaps the only “bad” news for the SEED Coalition in responses to these questions is that only 24% of respondents had visited a website affiliated with the SEED Coalition beyond the main site. Another 23% were unsure of whether they had been to one, but, still, that leaves over 50% of respondents who had not or did not recognize that they had been to a SEED Coalition website beyond the main site. It is possible that some of these respondents had been to a site like the Toxic Two Step site but did not recognize it as being a subsidiary SEED Coalition site, despite the significant design differences between the main site and these other sites. If so, the SEED Coalition is doing a good enough job branding its subsidiary sites to keep many members from noticing that they are at all separate from the main site. However, it is also possible that these people have really not been to any of the subsidiary SEED Coalition websites, which may mean that they miss out on information about some of the SEED Coalition’s more exciting current activities.

Certainly, whatever kind of contact respondents had with the SEED Coalition through its mailings, email, or website, it is important contact, especially because most members rarely hear about the SEED Coalition through the media. Only 18% of

respondents have heard about the SEED Coalition through a newspaper, and less than 5% had heard radio or television coverage of the group's activities (see Figure 5.15).

Because of the unlikelihood, then, of respondents knowing about and being able to participate in events or activities sponsored by the SEED Coalition through coverage in the media, they are almost entirely dependent upon the SEED Coalition's efforts to contact them and their own efforts to keep up with the group's activities.

Figure 5.15. Survey Respondents' Exposure to Media Coverage of the SEED Coalition.

Affiliation with Other Groups

Shaiko explains that most people who belong to one environmental group belong to others, in part because the groups typically offer overlapping, rather than discrete, benefits, so that the same person may be motivated to join several groups (128). The survey respondents generally belonged to multiple groups, as Shaiko suggested they might. Only 16% reported they were unaffiliated with any environmental group, and 66% listed affiliations. Of those listing affiliations (not counting at least six who said that they had too many to list) the average respondent was affiliated with 4.4 environmental groups. The most common affiliation was with the Sierra Club (73% of those who listed affiliations, or 48% of total respondents). Respondents who listed affiliations were also often affiliated with the following:

- Greenpeace (32%).
- Nature Conservancy (28%).
- Environmental Defense Fund (22%).
- The Audubon Society (21%).
- National Resources Defense Council (21%).
- World Wildlife Fund (18%).

A complete list of affiliations can be located in Appendix D.

The commonness and complexity of people's affiliations with other environmental groups helps explain some of their behavior and some of their survey responses. For example, some respondents explained that they were not sure if they had used fax actions through the SEED Coalition because they participate in so many through so many action alert emails from different groups that they forget which they have done. Many respondents explained that they receive so many action alert emails altogether that they tend to respond only to those that they particularly are interested in, seem particularly urgent, or are received when they have a few minutes of time to invest. Others requested that the SEED Coalition make it possible to tell if they, personally, had already responded to particular fax actions, as they respond to so many that they cannot remember which ones they have already sent. Several respondents expressed frustration that environmental groups do not more often form coalitions and consolidate their efforts. These statements make sense given that most of the respondents belong to so many groups that are likely to make demands upon their time, intellect, and pocketbooks.

What the Respondents Want

Probably the most interesting information the surveys contained consists of people's responses to five open-ended questions at the end of the survey:

1. What suggestions do you have for the SEED website to serve your needs better?
2. What could SEED do to keep you better informed about its activities and/or issues?
3. What could SEED do to better help you take action on issues?

- 4 What would encourage you to write a letter instead of sending a fax action to a politician or other decision maker on an issue?
5. Any other comments:

By studying people's responses to these questions, I learned (1) what factors most limit people's involvement in action opportunities, (2) what people like that the SEED Coalition is doing, (3) what people like that they want the group to do more often, and (4) what people would like the group to do that it is currently not doing. However, 35% of the survey respondents did not reply to any open-ended questions, so percentages in the following section of the chapter refer to the number of total respondents (96) answering at least one open-ended question.

First, many respondents are generally happy with the SEED Coalition. The majority of respondents who commented in the "any other comments" text box thanked or encouraged the group. This resulted in 31% of the respondents answering open-ended questions making comments like the following:

- "Thanks again for all your great work. SEED's a fine group and I've gotten helpful information on Texas environmental issues from SEED in the past and I hope to continue that!"
- "Keep up the good work, stay in touch :o)."
- "Keep fighting the good fight."
- "I appreciate your work greatly and give you my support."

In addition to this general praise, many respondents commented favorably on the website, action opportunities, or encouragement the SEED Coalition already provides them to write letters. Thirty-five percent of the open-ended question respondents expressed content with the SEED Coalition's efforts to involve them in action opportunities, saying things like

- "E-mail, flyers and notification of meetings in the Austin area serve me well."
- "SEED is doing well at this. The newsletters and emails are there when it is important and yet SEED does not cry 'wolf' all the time."
- "You are doing a fine job in my opinion."

Eleven percent of the respondents commented on the website with praise like the following:

- “The page does a good job on the ‘act now’ front. Keep up the good work.”
- “The one time that I used the site to learn more about Mercury pollution, I found the site very helpful. Thank you.”
- “i think it is fine how it is.”

Another 9% explained that they already write letters in addition to or instead of the faxes, explaining in ways including, “you already have encouraged me with your emailings.”

This unsolicited praise lets the SEED Coalition know at least three things: that people feel connected to it, that many of their associates are fairly happy with its services, and that people are particularly happy with the action opportunities that it provides. Because one of the SEED Coalition’s major goals is to involve people at the grassroots level in action for the environment, the large number of people expressing satisfaction with the action opportunities the SEED Coalition provides should be particularly encouraging. In fact, most of the suggestions people made for what the SEED Coalition could do to further encourage action involvement included things that it already does, such as sending email action alerts to people notifying them of action opportunities and making fax actions available on the website. Twenty-four percent of the total open-ended respondents mentioned that they appreciate the email updates and would like to continue to receive (and receive more of) what many of them called “action alerts” letting them know about immediate actions they should take. Another 11% indicated how helpful the fax actions are and that they would like more of these.

In addition to providing positive feedback, respondents also made many suggestions in response to the open-ended questions and provided some criticism. The next sections of this chapter will address some of this feedback. First, I will discuss ways in which people suggested that the website could be improved. Then I will explain how people suggested that the SEED Coalition could keep them better informed about its activities and events. Next, I will address what motivates people to write letters rather

than sending email or the modifiable faxes, and finally I will address other issues that arose in the responses to the open-ended questions.

How the Website Could Better Serve People's Needs

Very few respondents to the question about how the website could better serve people's needs asked for design changes to the website. These included the following:

- One request for more color.
- One request for a color combination that would be easier to read on a laptop than the current orange on green.
- Two requests for better indexing so that it would be easier to find specific information.
- One person noting that the calendar link on the activities page does not work.
- One suggestion that making the pictures on the home page bigger with headings above instead of under them in order to better draw attention.

No one problem with design was mentioned by more than two people, so all of these could be idiosyncratic (although the calendar link really does not work and has not the entire time I have been studying the site). In general, website design did not seem to be a concern of the survey respondents. This may mean that the current website is fine. It may reflect that nothing in the survey encouraged respondents to consider the site design. Alternatively, it may mean that any problems in the site design are secondary to other concerns that the respondents had.

It is also possible that survey respondents simply did not recognize design problems as such. For example, although the SEED Coalition's home site has an index page with a link to information about the organization, several respondents explained that they desired more information about the SEED Coalition, mostly asking for information that they could find by taking that link. This may indicate a design problem with the website that prevents people from learning about the organization as easily as they might like.

For example, several respondents wanted to know what the acronym SEED stands for, especially because it does not, as one respondent explained, “conjure up any relevant images.” Simply writing the entire name of the group in some place on the home page might prevent this confusion. Some respondents wanted to know what the SEED Coalition’s focus is, what its goals are for a particular time. As one respondent explained, “I know that AIR is their main concern, but what is their strategy—Federal, State, Local? and what particular issues within AIR are they focusing on—power plants, global warming, automobile emissions, etc? Do they have stats to back up that strategy?” Perhaps adding a more detailed strategy statement to the SEED Coalition’s discussion of itself and its goals would better inform visitors like this (doing so might also help inform potential donors).

Not knowing what the SEED Coalition is appeared to be most disconcerting to people who were added to its email list but did not know for sure how they were. Those who responded to the survey who enter into that category were content with being affiliated with the organization in this way, but had many questions about the organization. The SEED Coalition might deal with this confusion by sending a welcome email to people just added to its email list, perhaps letting them know a little about the organization and referring them to the group’s website and staff with any questions.

One common suggestion from survey respondents was that the SEED Coalition keep its home page up-to-date, having a regular schedule to check links and update the home page. None of these respondents actually explained that the SEED Coalition’s home page was ever not up-to-date; instead, several explained this was a common problem with environmental websites in their experience. In my experience with the website over a year and a half, the SEED Coalition often updated its home page. Therefore, I do not know that the SEED Coalition needs to take this advice as a criticism, but it (and other groups) should take it as a good principle to follow.

The other three main responses about how content for the SEED Coalition’s website could best help visitors regarded elections, education, and other areas of focus. The first was a suggestion that the SEED Coalition provide information about political

candidates or a link to another group's page of information about political candidates, which could have local politicians' voting records on environmental issues and endorsements of particular candidates before an election. The second was a list of suggestions for ways the SEED Coalition could better educate site visitors: with a table, with more information about what ordinary citizens can do, with technical reports, or with a portion of the site geared towards homeschoolers. Finally, several respondents suggested that the SEED Coalition add other areas of focus, especially more environmental justice information. Combining responses asking for more information on environmental justice to respondents' indications of interest in environmental justice in response to earlier survey questions seems to make this a likely addition or new area of concentration for the SEED Coalition's websites.

In addition to focus on environmental justice, many respondents indicated a desire for the SEED Coalition to be more active in local issues. Seven percent of respondents added comments about their greater interest in local issues and about half of these expressed dismay at what they interpreted as the SEED Coalition's greater interest in state or national issues. Because some of the respondents were not local, the SEED Coalition would probably not want to overly de-emphasize its involvement with state and national issues, but might emphasize local issues more strongly on its websites or send some email only to local people with information about local events. An even better plan would be to send postcards and other mail to local people about local events, as the SEED Coalition currently does, for example, about bi-monthly meetings in the Dallas/Fort Worth area. Using a non-email form of contact (or both email and regular mail) for local events would prevent the group from excluding people who do not have email accounts from being active in local events. It takes the group a long time (one staff member most of one day) to create, print, place postage on, and mail postcards. This might be something that local volunteers would be willing to help with, and if the postcards for events used a template, it would take less time for the staff of the SEED Coalition to create them and would enable strong branding of the SEED Coalition's correspondence with local members about local events and activity opportunities.

Finally, several survey respondents indicated concern about bias on the website and in the email, saying things including the following:

- “Site currently has feel of looking through only one pair of colored glasses. The evidence cited for a position should look unquestionable and pure.”
- “The information sent by emails should be summarized better, and maybe more straightforward and less biased.”
- “It would help if I trusted SEED to analyze the policy situation accurately and to summarize the key points that would help me write an informed-sounding letter that focuses on facts rather than emotion.”

In many ways the SEED Coalition already makes a strong effort to appear to be unbiased: it often adopts scientific-style language, rather than using more pathos-oriented pleas, and it uses lots of sources and statistics. However, it is also possible that including links to more information about issues from other sources, as one survey respondent suggested, would help prevent its site from appearing to some visitors to represent only one perspective. Montague Kern, Marion Just, Ann Crigler, and Hong (Iris) Xie explain that their study of how people chose to use the Internet to learn about candidates and issues before a political election demonstrates that people, when given the opportunity, enjoyed visiting related sites and almost always chose to do so when given the opportunity (196). In fact, even when people identified with the views on one political website, they usually visited competing sites (196). Helping web visitors who desire to visit competing websites do so easily might build good will and encourage visitors to think that the SEED Coalition is confident about its position.

In addition to feedback about the SEED Coalition’s website, respondents also provided information about how the SEED Coalition could better keep those interested in its activities informed about them, the subject of the next section of this chapter.

How to Keep People Informed of SEED Coalition Activities

Survey respondents had two main suggestions for how the SEED Coalition could keep them informed of its activities. One of these was that they continue to send email;

this was the most common response. Another was that they include an up-to-date calendar on the website and consider mailing one, too.

About 20% of the people who responded to the open-ended questions suggested that email would be the best way to keep them informed about the SEED Coalition's activities. A few did disagree, however, explaining either that they did not prefer email access or that everyone does not have it, and so postcards, phone calls, and newsletters should remain ways to inform people.

In addition, several survey respondents discussed the advantages of an up-to-date calendar, something the SEED Coalition's home page promises but does not deliver. Respondents requested a calendar of events on the website and/or mailed to them. This calendar might include information for other local groups, especially any without their own websites. Such a calendar would help people (especially people living in Austin or the surrounding areas) plan to attend events. Completing a calendar as a collaborative effort with other local groups would reduce the time and expense per group and help emphasize coalition efforts, something survey respondents are interested in seeing.

How to Help People Take Action on More Issues More Easily

In response to an open-ended question about how the SEED Coalition could help people take action on issues, survey respondents made a variety of comments, few of which overlapped with other people's, except that 16% of the people who responded to open-ended questions at all explained that the SEED Coalition was doing well with this already. Other suggestions included handing out flyers, hosting guest expert speakers, having more local activities in non-smoking areas, hosting an annual solar-oven bakeoff, and building an electronic community with an email listserv (to which people could respond, so that they could maintain their own conversation). Several respondents indicated their willingness to participate in volunteer and other activities if provided adequate foreknowledge of the events.

How to Encourage People to Write Letters

I asked a question on the survey about how to encourage people to write letters at Pete's suggestion: this, like the questions about donation, is an example of where the SEED Coalition played a more active role in the research process. Shaiko explains that senators and representatives pay attention to personally written letters from people in their home district or state (140). Similarly, Davis explains that members of Congress "place a lower priority on e-mail than on regular mail" (178). Altman did not state that he had evidence that letters were more effective, but did explain that he thinks that they are and that he would like to know how to motivate people who are currently responding to the fax action requests to take an additional step and write a personal letter.

Survey respondents provided a wealth of information in response to this question. They provided information about what prevents them from writing currently, what might motivate them, and what might better enable them to overcome the current barriers they face when considering whether to write a letter.

Overwhelmingly, the two reasons people tend not to write letters now (when excluding responses from less than 10% of respondents who indicated that they already do write letters and those from less than 5% of respondents who indicated that they never would write letters) are lack of time and lack of conviction that writing a letter helps any more than sending an email or fax.

About 18% of people responding to the open-ended questions on the surveys indicated that lack of time is a significant barrier for their writing letters. They often made comments like the following:

- "I would write a printed letter only under extreme conditions or if time were specifically provided for it somehow, simply bec. otherwise I could spend my whole day and \$ on stamps at letter writing."
- "Hmmm? More time in the day?"
- "IF you could give me more time in a day. Life is too busy these days that email action letters/faxes best serve my lifestyle."

- “The only reason I don’t write more letters instead of faxing is that faxing is so much quicker. I understand an original letter is much more effective, and am sorry that I haven’t done more of that.”

Many of these respondents indicated that the fax actions are simply easier for them; some of them explained that for an issue that seemed particularly urgent or one particularly of interest to them, they do make time to write a letter, although they do not normally choose to do so. Others suggested that sometimes they write a letter, mostly dependent upon whether the request for action arrives at a time when they can spare the time to write a letter.

Another 22% of those who responded to the open-ended questions indicated that they are currently unlikely to write a letter because they are not convinced that a letter would be any more effective than their email or fax (especially in our new world of anthrax scares). These respondents made comments like the following:

- “You could also point out the greater impact of a written letter, although I don’t know how to quantify the greater impact. do you?”
- “Writing letters in the conventional way takes longer than hitting a button to generate a fax that they may ignore anyway, but see how many people do not like what is going on in the numbers of generated faxes.”
- “Hmmm. I’ve only sent e-mails. If hand-written letters are that much more effective, I’ll write them. I just never knew they were. Is this true?”
- “Anthrax scare finished—ensure my letter would be opened.”
- “Convince me that it is significantly better to write a letter, Does that make a real difference, the media with which a message arrives? I don’t think I’ve ever been told that it does. Do congressional staffs pay more attention to letters than faxes?”
- “Why would a letter written be more helpful? Would it? If so, please help us understand why. Thanks.”
- “Do they take letters more seriously than faxes? The already written fax message is easy to send.”

Most of these comments indicate that if people were given evidence that letters were more effective, they would write them... but that without evidence of the greater effectiveness of a letter, they are unwilling to write them. Also, after September 11 and the anthrax scares, people want assurances that their letters would be opened and opened in a timely fashion before investing more time into a letter than into a fax or email.

Respondents also, then, indicated what the SEED Coalition and other environmental groups could do to overcome their unwillingness and/or inability to write letters. First, they could assure participants that letter writing is more effective, providing convincing evidence (if such evidence exists). This evidence can also take the form of good news about past actions, something that the respondents desire to know about their participation via fax and email, as well, making comments like:

- “Sometimes some good news would be nice. You always ask for help. I do respond, I would like to hear follow ups on whether it helped or not.”
- “Provide ample evidence of changes made in the political process. Even small wins are encouraging.”
- “Provide tangible evidence of impact in policy.”

The SEED Coalition already provides some information about the effectiveness of its campaigns on its websites, but maybe it needs to email people about this, too, and make success more visible for a longer time on its websites. Perhaps it also needs to report small or half-victories. Other small things the SEED Coalition could do would be to keep a tally on its website of how many people have sent fax actions on various issues in a particular period of time: this information might encourage others to join in the action and help respondents feel like part of a community of action-takers.

Because time is one of the greatest barriers to writing letters, the SEED Coalition and other groups could obviously encourage more letter writing by helping it take less time and effort to write a letter. Almost 10% of those responding to the open-ended questions made the simple, easy-to-implement suggest that the SEED Coalition consistently provide the name and mailing address to which to send a letter, saying things like, “I often do write a letter; please be sure always to include the name and address for

mailing through the USPS,” and “It would be easy to do especially if had the address.” Others, 32% of those responding to the open-ended surveys, explained that sample text and other information for them to include in a letter would also help enable them to write letters more often:

- “Provide short, concise statements for use in writing.”
- “A good sample letter or list of point of concern or factual information on the subject so I seem to be informed on the subject also a good list of who to send it to in my area.”
- “If there was a letter prepared so I could access either through Adobe or word processor that was ready to stick in an envelope and mail ”
- “A word attachment with the addresses, names, subject summaries already in place.”
- “Put clear icons indicating Cut and Paste this text, alter it (as desired) and mail it to this address (which is also included in the formal header of the already laid out letter).”
- “Details in information, analyses and histories of issues.”

Several respondents indicated that even the current fax actions could be made to sound less time-consuming: “However you need to make it clear to the general population that it is a simple 3-step process. (Should be no longer than that) Advertise by sending e.mails to listerves with headings like: *[SEED] 3-clicks: Fax your rep, Save the environment* ” Obviously, anything that environmental advocacy groups can do to reduce the time it takes for people to take action, or reduce their perception of the time it takes to take action, will help encourage more people to take advantage of action opportunities.

In addition to making writing letters easier and emphasizing their effectiveness, people also suggested they are more likely to make time to write letters on matters that seem urgent or important to them. Many (16% of those responding to the open-ended questions) explained that whether they write a letter is closely tied to how important or urgent they perceive the problem as being:

- “The immediacy and importance of the issue involved.”
- “It would need to be one of my personal issues.”
- “My deep and abiding interest in the issue.”
- “We often do write letters to send via USPS; it’s all about how we feel on an issue.”
- “A passion for the issue, and an urgency to the issue in question.”
- “Direct experience with the issue at hand.”
- “If there is a vote coming up soon i would like to know because i would probably write a letter in that case.”

Obviously, the SEED Coalition has little control over people’s direct experience with or passion for an issue. However, the group can determine the relative urgency of issues and emphasize those that are particularly urgent for people to write about at a given time because of an upcoming political action or for another reason. Some respondents suggested that setting a quick deadline on emails about a fax action might motivate them to complete the action right then, rather than putting it off and forgetting about it.

The SEED Coalition can also potentially make people more passionate about issues and help people see issues as more important by tying them to other issues survey respondents expressed an existing interest in, such as local people or issues of environmental justice. The SEED Coalition sometimes already does this: an advertisement it placed in the Austin newspaper featuring a local couple who felt betrayed by the TNRCC did a nice job of tying the TNRCC guidelines to both local issues and issues of environmental justice. However, sometimes the SEED Coalition’s website could make these connections more explicit, while remembering to draw upon empirical evidence where possible, too, so as not to appear biased.

Discussion of Survey Results

Many proponents of the Internet have hoped that it will revolutionize participation by ordinary citizens, that “by pushing a button, typing online, or talking to a computer, they will be able to tell their president, senators, members of Congress, and local leaders

what they want them to do and in what priority order” (Grossman in Davis 22). A study in 1996 indicated that 17% of Internet users had used email to send messages to groups, organizations, or public officials (Davis 203). Since then, that number has most likely grown. Davis suspects that the Internet will not, in fact, transform political activity: he thinks that the people most likely to use the Internet to gather information and take political action are the people who were already apt to use other media toward these ends (23). He specifically warns that the Internet could create an expectation of constant political activity that some people may find too time-intensive and so overwhelming (180). The survey respondents’ numerous reminders of their busy schedules support Davis’s hypothesis to some degree. However, that these reminders are often used as an explanation for their commitment to using only or preferring to use electronic means for communicating with policy makers may partially counter Davis’ hypothesis. The Internet makes it take less time and effort to send communications, especially messages that are pre-written by an organization. Therefore, both people who otherwise would not might send messages and those who normally would send messages might more often.

Of course, when people take advantage of an organization’s pre-written message they support one of Davis’ other claims about the future of political action on the Internet: that the Internet is destined “to become dominated by the same actors in American politics who currently utilize other means” and so the organizations that are currently major political players will continue to be the main sources of political info and power (5). This may be the case, but organizations like the SEED Coalition can afford to support more prewritten communications online than offline and can make it easier for people to access and complete them, even modify them and personalize them, online than offline. While the SEED Coalition also uses paper postcards to allow people to communicate with policy-makers, it is more difficult and expensive and takes longer to distribute these to interested parties and have them send them to policy makers, and people then do not have the opportunity that they do online to personalize their message. For these reasons, I think that Davis’ bleak prediction of the future of political action on the Internet is only partially true. Davis even admits this himself, quoting Norman Vig

who argues that communication technology has, “enhanced some forms of public participation—notably by organized activist groups promoting particular interests or causes” (178). However, Davis uses this to support his claim that the Internet benefits the politically active while putting the politically inactive at a greater disadvantage: an alternative interpretation is that the Internet may make it easier for more people to be at least marginally politically active.

In addition to helping people more easily involve themselves in political action, the Internet potentially could promote more communication from citizens to organizations like the SEED Coalition. However, while the SEED Coalition’s current website invites comments and questions and provides contact information, few visitors have taken advantage of this. Instead, most of the contact people have had with employees of the SEED Coalition is through telephone, mail, and face-to-face contact. These are valuable, as they help reach people without Internet availability and promote a sense of community. However, the SEED Coalition’s website could also do more to promote an online community (as discussed in Chapter IV), something it seems at least some survey respondents would appreciate.

Implications for Advocacy Groups and Technical Communicators

What can Technical Communication, as a Field, Learn from Surveys of Audiences of Groups like the SEED Coalition?

1. Information about audiences that we can, as Rob Houser suggests, put into user databases to enable user-information sharing that can lead to our becoming more user-oriented designers, improve future design, help us make the most of our resources, help us plan new user and audience studies, and help us build new audience theories (178).
2. How people learn about particular websites.

How can Technical Communication, as a Field, Support Organizations like the SEED Coalition?

1. Teach organizations like this how to conduct their own user surveys, focus groups, usability tests, and interviews to learn about their audiences and how to use what they learn to change their communications .
2. Volunteer time to work with advocacy groups, helping them complete audience analysis research.
3. Create student/advocacy group connections that may be mutually beneficial.
4. Share a database of user information with organizations.

How can Organizations like the SEED Coalition Improve How their Websites Serve Their Audiences

1. Learn and implement more easy-to-use interactive features such as fax actions.
2. Revise companion communications to the websites, such as email referring people to the websites, to be concise, clear, unbiased, and timely.
3. Reconsider the kinds of information they provide and how much information they provide on various subjects on their websites.
4. Reconsider how easy it is for people to learn about the organization on the website and how thorough the information they provide about themselves is.
5. Provide supporting information to help people participate in activities offline, such as addresses for writing letters and calendars to help people plan participation in face-to-face events.
6. Consider including more functions that allow people to build a sense of community online and offline.
7. Remember not to become overly dependent upon electronic communication.
8. Provide news of people's impact of actions: let people know whether their messages impacted votes/policy.

Conclusion

In this chapter, then, I reported empirical data about a portion of the audiences for the SEED Coalition websites. This information lets the SEED Coalition know where to add more information to its websites, how to effectively communicate with its audiences and encourage them to participate in activities, write letters, and donate to the group. It also provides both the SEED Coalition and other organizations and web designers with information about how people use websites (that they will, indeed, read reports posted online, for example, or that they use activist sites both to take action and to gather information). Perhaps most importantly, this chapter provides information that allows the SEED Coalition to listen to its audience and provides an example for other organizations of how they can solicit and use information from their audiences.

The next chapter, Chapter VI, will briefly consider how the SEED Coalition uses its websites as communication tools in a larger communication campaign within an activity system. Then, Chapter VI will summarize the entire dissertation, drawing implications from the interactions between the data discussed in each chapter and looking at areas for future research.

CHAPTER VI

THE SEED COALITION'S COMMUNICATION ACTIVITY SYSTEM AND CONCLUSION

Introduction

In the introduction to this dissertation, I explained that in my case study of the SEED Coalition's websites, I would look at the web designers (authors), websites (texts), and web audiences (readers). However, I also argued that this was an overly simplistic view, because there is overlap among these three categories. Furthermore, I noted that I would expand this more traditional approach by considering the roles of the group's websites in its overall campaigns. This chapter will first explore the overlap among the categories of author, text, and reader that complicate the results of this case study as presented in Chapter III, Chapter IV, and Chapter V. Then, it will explore how the websites played a role as one tool within a larger communication campaign. Next, it will review the implications that the findings of this research have for theory and practice in technical communication and for advocacy groups. Finally, it will consider implications of this case study and areas for future study.

Overlap Among the Designers, Texts, and Audiences

In Chapter III, I discussed the goals that the SEED Coalition has for its websites and the processes that its employees use to plan and implement changes to its websites. These goals and processes directly affect what the websites themselves look like and how they function rhetorically, as presented in Chapter IV. Finally, the websites themselves affect how the audiences interact with them, addressing and invoking audiences (and sometimes failing to do one or both). In addition, the SEED Coalition employees' guesses and knowledge about audience affect their goals and therefore what the websites themselves look like. In other words, what this dissertation, through its organizing authors, texts, and readers into three separate chapters, presents as three distinct areas of study is, in fact, a recursive, interactive rhetorical situation.

The next sections of this chapter will explore two examples of this overlap. First, I will discuss several relationships between the SEED Coalition's goals and its web visitors' goals. Then, I will elaborate on how what the website makes available may invoke a particular audience.

Author and Audience Web Goals

One example of overlap between authors and audiences occurs when we compare the SEED Coalition's goals to the web visitors' goals. The SEED Coalition wants its websites to primarily promote action and secondarily inform. Its audiences want to take action and be informed. Its websites provide plenty of information but also its homepages heavily promote action and provide the quick and easy fax actions that its busy audiences desire. Some of the desires that the audiences express (for an up-to-date calendar, for example) could be better provided by the SEED Coalition staff if it created and followed routines for updating its websites, making updating the calendar a regular activity. Similarly, regular routines for updating the website and making a calendar of events might help the SEED Coalition provide people with more notice about local events and activities and better enable them to use volunteers to help with some of their regular mail and other communications.

Some of the areas of overlap between author and audience goals are a little less obvious. For example, one of the things that the SEED Coalition can learn from studying its audiences is where to focus its energy. Like other advocacy groups, the SEED Coalition wants to represent citizens. Ideally, then, the SEED Coalition is the voice of the public, what it targets is what citizens are most concerned about, and the action opportunities it provides are what citizens want to do, anyway, but the SEED Coalition facilitates. Largely, the people who have chosen to visit the SEED Coalition's websites or who are on its email list seem to identify with the group's goals. Mostly, where they have other interests, like animal welfare, they seem to be affiliating with other groups that will be their voice on issues related to those interests. However, there are a few exceptions. For example, the people affiliated with the SEED Coalition often see it as a

local voice, as one of the groups that can fight local environmental problems, perhaps the very problems that they see other groups they belong to, like the Sierra Club, addressing at a national level. In addition, people see the issues that the SEED Coalition primarily addresses, like clean air and sustainable energy, as perhaps more closely related to environmental justice than the SEED Coalition's communications make obvious. Here, the SEED Coalition can listen to its "constituents" and both focus more on environmental justice issues and make it more clear where things they are already doing fight environmental injustice.

Web Texts: Invoking Audience

In addition to sometimes having different goals, the authors and audiences of the websites also interact in another way: through how the websites invoke particular audiences, changing who and what the visitors are and encouraging them to be someone else. Although the SEED Coalition primarily intends for its websites to communicate with people who are already interested in environmental issues and generally motivated to act on environmental issues, it also tries to persuade its visitors to do more, or to do differently, than they might if they did not visit and interact with the SEED Coalition's websites. For example, the group wants to know how to better encourage visitors to write letters instead of using the fax action. The survey respondents provided a variety of ways in which the group might do this: explain how the situation is important and urgent and how a letter would be more effective. Then, survey respondents explained, make it convenient to write a letter. It might also help if the SEED Coalition indicated it has the rhetorical power to convince others to write a letter: it could have a button on the site next to the fax action and a link to a pre-written, modifiable letter complete with addresses that allows visitors to click on "I wrote a letter." Then, the site could track how many people hit this button and report it: "Join 25 others, Write a letter!" This kind of encouragement might help persuade people to behave differently and help them feel connected to others in the SEED Coalition web visitor community.

Already, the SEED Coalition sometimes uses its websites to encourage people to behave differently. It uses reports that quote real people in real places suffering the consequences of real environmental problems, then asks those reading the stories to take action. It encourages people in Austin to sign up for a different energy source and facilitates their getting to a website that will enable them to do so.

Now that I have briefly explored how one can apply findings in one of my chapters to inform practice in another, I want to discuss the importance of not only looking at where research into author/text/reader overlaps but also into where author/text/reader for the SEED Coalition's websites overlaps with and interacts with other authors/texts/readers in offline contexts.

Looking Beyond the WWW

Swales defines communication as a contract between readers and writers who react and counter react to one another. For the SEED Coalition's websites to fulfill this contract, they must reflect not only the goals of the SEED Coalition staff, experts in environmental problems and how to start addressing them, but also the goals of the people who visit the sites. Swales further explains that genre can limit this contract: a website can only fulfill the needs of both authors and audiences as much as the genre allows them to do so (63). Luckily, there are not many limits to the ability of a website to allow authors to meet their goals and visitors to meet theirs.

Indeed, one of the primary limitations of the advocacy website as a loosely defined genre is that not everybody who wants or needs to be informed about environmental problems or activist group activities or to be able to take action on the environment has access to the WWW. My study of how the SEED Coalition uses its websites is meant to improve our understanding of the use of websites and guide better WWW use. However, environmental and other groups should remember not to rely exclusively on websites. As Mick Couper reports, Internet access is greater for those with higher income, for whites, and for people with college educations (472). Groups like SEED, which have interest in environmental justice issues and which target problems

that transcend race, income, and education, should continue to rely on other communication methods, as well. In fact, as several of the people responding to the survey explained, being over-reliant on the WWW as a communication medium would limit the SEED Coalition's ability to involve some of the people who most need to be involved or would like to be involved:

- "Please do not become over-reliant on electronic means of informing and accomplishing goals. There are still many people out there who are more responsive to old-fashioned means of learning about and acting upon issues."
- "Email alerts work, but only for those with computers (as do websites)."
- "Since a lot of environmental justice activists do not have easy web access in my experience, something needs to be done to keep us all equally in the loop despite our computer access..."
- "Send simple e-mails or postcards or short bulletins through the mail. I am not fond of computers."

Not only should groups use other media to communicate with the public, but we should also study those. Steve Jones argues, "The Internet does not exist in isolation. To study it as if it was somehow apart from the 'off-line' world that brought it into being would be a gross mistake" (xii). Therefore, he suggests that when we study the Internet we always tie what we learn to the offline world. Lori Kendall expounds,

Various aspects of [off-line] contexts enable and constrain the ability of participants, potential participants, and nonparticipants to learn about, access, and navigate on-line forums. Once on-line, participants draw on their off-line resources, as well as understandings gained in off-line experiences, to negotiate and interpret their on-line interaction. (58)

She explains that we need to consider the offline communities and interactions people who participate online may have, that they may even go to great lengths to create (62).

When we add the need to study online advocacy discourse and the need for it and our research into it to not ignore offline discourse, we can see that we need to study how websites are marketed offline, how people interact with one another offline, and what

people want of online discourse to help them make the most of their online and offline communities.

Kim explains that we can have at least four kinds of communities: geographic, demographic, topical, and activity based (5). To begin with, she suggests one defines an ongoing, unmet need for a community (3); because communities require a time investment, members will only return if they get something from the community (3). A group like the SEED Coalition very well might create and belong to several communities: a community including leaders in other local advocacy groups in which it is active through email, in person, and on the phone; communities of citizens in geographic areas, such as the people who attend planning dinner/meetings in the Dallas/Fort Worth area; communities of people who share topical interests in, say, pollution in Big Bend National Park or in mercury pollution; and communities of citizens who take similar actions for the environment.

Kim outlines a hierarchy of online community needs (9):

- Physiological: “System access, the ability to maintain one’s identity, and participate in a web community.”
- Security and safety: “protection from hacking and personal attacks; the sense of having a ‘level playing field.’”
- Social: “belonging to the community as a whole, and to subgroups within the community.”
- Self-esteem: “the ability to contribute to the community and be recognized for those contributions.”
- Self-actualization: “the ability to take on a community role that develops skills and opens up new opportunities.”

Comments from some of the survey respondents explain what statistics also support: everyone in the SEED Coalition’s communities does not have fulfilled physiological online community needs such as system access. Therefore, the SEED Coalition, like other advocacy groups, needs to continue to allow ways for people to participate offline in the ways they can online. Moreover, though, the group, like other advocacy groups,

could do more to help fulfill social, self-esteem, and self-actualization needs of people within each of its communities. Pictures of people participating in protests, for example, that the group often places online and mails to participants, help promote a sense of community, of belonging in a group or sub-group. Similarly, keeping track of and reporting on its website how many people have completed a fax action might help create a sense of belonging with others also completing the action. Newsletters (paper and email) that report group activities, emphasizing the actions of citizen participants, can also create a sense of belonging and contribute to self-esteem actualization, giving people a sense that they can contribute to and be recognized for contributing to the community. Finally, inviting citizen participants, as individuals and because of individual characteristics, to plan events, to create postcards for events, or to attend rallies, protests, and other meetings can help build self-actualization.

Kim explains that to begin to create or overhaul a community-building process, we must try to understand our members and their needs, understand the leaders and their needs, and create a master list of community goals (10-11). The survey results reported in Chapter V can provide a partial list of community goals, reflecting a complex situation in which some people express the desire to be more involved in hands-on activities and others express the desire to be able to take action simply, easily, and in as little time as possible, seeming to be content with being only marginally active within the community. This combination of a larger number of people who want to have their needs (being informed of environmental issues and enabled to take quick action on them) met quickly and those who long to be more active members reflects the composition of most communities. One of the difficulties in maintaining any community is being able to invite people to become more involved if they like while not making others feel guilt or inadequacy for remaining more marginally involved. Celebrating the actions of both marginally involved people (congratulating people in email and paper newsletters for sending letters, postcards, and fax actions) and people who are more actively involved (recognizing those who have attended events and helped plan them) might help create

this balance. The SEED Coalition already tries to do these things, although it could do them more systematically and regularly.

Certainly, although groups like the SEED Coalition should be wary of becoming overly dependent upon websites and email for communication, these remain viable communication methods. Jacobsen reports that 60% of web users access reference material daily or weekly (169). She argues that we should use the web because it can allow multimedia; it is cheap and independent of number of copies; the Internet is firmly established and available globally, twenty-four hours a day; users can access what they wish, efficiently; and information is easy to update (172). For all of these reasons, and more, advocacy groups can and should continue to use the WWW; they should, however, be wary of using it exclusively and of studying it without also considering offline communications relating to it.

A More Systematic Look at a Communication Campaign

When considering online and offline communication tools, I analyzed my data through the theoretical lens of activity theory, which examines systems of actors and tools and goals. Activity theory offers one way to study the complex interactions between people, communication tools, and communication outcomes in situations like the use of different media by an advocacy group in a communication campaign. Using activity theory, I could see the website and its characteristics and other items in the communication campaign as tools that the SEED Coalition and visitors are using to reach various goals. I could also determine what tools (people, items, resources) the SEED Coalition uses to create and update its websites. Both rhetoricians and decision theorists have drawn upon activity theory, perhaps because it can provide us with vocabulary to talk about systems more easily than can often be done with either of these bodies of theory by themselves. In addition, activity theory's attention to goals, tools, and actors seems to mesh well on one hand with rhetoric's attention to authors and/or audiences, texts, and purposes, and well on the other hand with decision theory's decision makers, goals, and premises.

Technical communication and rhetoric have too often, although certainly not always, addressed rhetorical invention too much at the level of the audiences, purposes, and characteristics of individual text, and not enough at the level of a system of texts, the building of a campaign. Historically, for example, rhetoric has given us only fairly vague guidelines about a campaign, and then those have been more likely to be focused on legal situations than upon those facing a contemporary advocacy group that has media options ranging from paper to radio to television to the Internet. Even in Harner and Zimmerman's technical communication marketing text, that does look at communication situations in a systematic way, it is difficult to tell exactly how one is supposed to invent ideas for the use of a variety of communication tools. Technical communication and other communication fields are better at providing a process to follow to implement the campaign than an understanding of how to build the campaign initially.

Even more problematic are the general lack of clear, unambiguous vocabulary choices for discussing multiple documents that begin to be used and to interact in complex ways. User theory currently helps technical communicators pay close attention to a user's needs and the user's interaction with a text in a way that sees these interactions as a system. We need a similarly sophisticated vocabulary to discuss users' interactions with interrelated texts and the relationships those texts have with one another. Decision theory can complement rhetoric's approach to rhetorical invention by providing vocabulary like a discussion of barriers and a detailed model of decision-making process. Similarly, activity theory can provide us with analytical tools, including vocabulary, for breaking down a complex system of texts, readers, and authors into smaller, more easily understood parts, including those involved in developing a particular text and those involved in determining how that text might interact with others. Both rhetoricians such as Russell and decision theorists such as Choo have drawn upon activity theory, perhaps because it can provide us with vocabulary to talk about systems more clearly than either of these bodies of theory can do by themselves. Russell and Engestrom, for example, encourage us to conduct research through the theoretical lens of activity system theory because it can help us focus not just upon the final product, but how it exists and is used.

Activity theory also helps us study decision-making as “an ongoing process of social construction and collective action that is embedded in organizational tasks, relationships, and tools” (Choo 224). Decision theory helps us, for example, see how tools, concepts, traditions, rituals, and rules all mediate among an individual, the context, and the community (Choo 224). Activity theory, then, focuses our attention on decision-making as mediated, “located in time and space and specific to particular concepts...situated,” “constructed and constantly developing...provisional,” and “purposive and object-oriented...pragmatic” (Blackler 1039). It is obvious that these foci sometimes echo those of rhetorical and decision theory: seeing decisions as mediated, as part of a social context, or as relationship-driven are similar lenses, as are *kairos* and activity theory’s “situated,” for example. In addition, activity theory’s attention to goals, tools, and actors seems to mesh well on one hand with rhetoric’s attention to authors and/or audiences, texts, and purposes, and well on the other hand with decision theory’s decision makers, goals, and premises.

In an activity theory approach, we would see the SEED Coalition employees as similar to Kenneth Burke’s actors, selecting tools to help themselves reach various goals, and drawing upon historical context to do so (Choo 6). Activity theorists, for example, might describe the same process as organizations first making sense of their environments by noticing a change (recognizing a cue), then responding to the environment by “enacting” it, or generating raw data about it, naming, rearranging, creating constraints and features (Choo 6). Then, actors would select possible relationship structures to understand the change and retain some of these structures for future use (Choo 6). We can then discuss the actors, goals, and tools that exist in the situation, seeing where they overlap and merge into one another.

To use activity theory to look at a variety of the media used by the SEED Coalition in a given campaign, I first made a partial list of the actors and subjects, communication tools, and communication goals related to the Toxic Two Step and in the mercury campaigns. See Tables 6.1 and 6.2 for this data.

Table 6.1. Partial List of the Actors and Subjects, Tools, and Communication Goals Related to the Toxic Two Step Campaign.

<i>Actors and Subjects</i>	<i>Communication Tools</i>	<i>Goals</i>
The SEED Coalition	Where's Whitman postcard	Get Whitman to join tour
The Bucket Brigade	<i>The Heat is Online</i> website	Reduce power plant pollution
Citizens who sent fax actions to Christine Whitman	Beaumont community briefing and candlelight vigil	Persuade people to take political action about power plant pollution
Citizens who mailed postcards to Christine Whitman	Protest Refinery Pollution and Violations at 1 Shell Plaza	Persuade journalists to write articles and give other media coverage to the tour
Citizens who shared their stories in the tour reports	Tour kickoff at Exxon Mobil Baytown refinery	Protect people from power plant health effects
Citizens who read about the tour on the SEED Coalition website	Visits to Shell Crown Central, Lyondell-Citgo and Valero Refineries	Persuade citizens to send postcards or faxes to Christine Whitman
Citizens who heard about the tour on the local news	Louisiana Refinery Report Release "Home Invasion"	Persuade citizens to attend tour events and/or join tour
Citizens who read about the tour in the newspaper	Beaumont evening refinery tour by flare light	Protect people from power plant financial hardship
Managers and owners of power plants on tour	Baton Rouge Protest at Sen. John Breaux's Office	Raise awareness of local pollution from power plants
Citizens who joined tour	Where's Whitman logo	
Christine Whitman, Director of the EPA	More money than God report, online and on paper	
Other participants in the tour	Code of silence report release	
Media reps who attended tour events	Gasoline alley refinery tour flyer	
Media reps who received press releases	Newspaper coverage of tour events	

Table 6.1. Cont.

<i>Actors and Subjects</i>	<i>Communication Tools</i>	<i>Goals</i>
Reps of other environmental groups who helped plan the tour	Letter from concerned citizen groups to Christine Whitman	
	Code of silence report, online and on paper	
	Environmental and Public health groups criticize the Bush/ Cheney Toxic Two Step press release	
	Tour welcomed by Rally and Talent Show at the ringmaiden center on Old Spanish Trail	
	Refinery viewing and photo opportunity	
	Mossville local refinery tour	
	Baton Rouge prayer breakfast	
	Tour welcome with Rally and Talent Show at playground by Shell Refinery Louisiana	
	Refinery Report release	
	Toxic Tour of Community	
	Whitman, EPA fax	
	Tour kickoff press release	
	Refinery neighbors fight back press release	

Table 6.1. Cont

<i>Actors and Subjects</i>	<i>Communication Tools</i>	<i>Goals</i>
	Laura Dunn film	
	Laura Dunn website	
	Fax action asking Whitman to join refinery tour	
	National Sierra Club link	
	Clear the Air report link	
	EPA NSR background link	
	Series of on and offline reports	
	Louisiana bucket brigade links	
	Environmental Watch Dog Refinery site link	
	TTS logo	
	Where's Whitman flyer	
	SEED contact info	
	TTS info on website	
	Gasoline alley tour report	
	Gasoline alley pictures	
	Gasoline alley tour schedule, online	
	Refinery tour online	
	White House balloon	
	Refinery tour pictures	
	Letter from concerned citizen groups to Jessica Furey	

Table 6.2. Partial List of the Actors and Subjects, Tools, and Communication Goals Related to the Mercury Campaign.

<i>Actors and Subjects</i>	<i>Communication Tools</i>	<i>Goals</i>
Fishing groups contacted by the SEED Coalition	Information on emissions and fish advisories and bans	Raise awareness of mercury pollution in Texas
Viewers of the 20/20 interview about the dangers of mercury in fish	Telephone conversations with representatives of local fishing groups	Persuade people of the dangers of mercury pollution
Other groups working with the SEED Coalition on the mercury issue, such as Public Citizen of Texas	Information mailed to local groups upon request, follow-up from telephone conversation	Pressure the TNRCC to better monitor and inform citizens about mercury pollution
Citizens who attend the SEED Coalition presentations on mercury	Telephone conversations with local community groups	Connect mercury pollution to coal power plant pollution
Citizens who send fax actions to various policy makers	Presentations to local fishing and other community groups	Persuade people to ask for coal power plant pollution law reform
Citizens who send postcards to various policy makers	Coal power consequences brochure about the Esperanze effort	Protect citizens from the health and financial hazards of mercury pollution
The SEED Coalition	Article in fishing magazine	
Citizen groups contacted by the SEED Coalition	Postcards to send to Huston, Chair of TNRCC	
Citizens of Texas	Mercury fact sheet	
The TNRCC	Page from brain food	
Visitors to the SEED Coalition website	Letters to representatives for clean smokestacks act	
People who read about the mercury problem	Postcards to Kirk Wiles, TX Dept. of health SEED Coalition brochures Postcards to Andy Samson	

Table 6.2. Cont.

<i>Actors and Subjects</i>	<i>Communication Tools</i>	<i>Goals</i>
	Mercury info online	
	20 20 transcript, online	
	Planned bulletin board with picture	
	Environmental Justice	
	Bill fact sheet	
	Clean smokestacks act info online	
	Grandfathered power plant list online	
	Mercury info in newspaper	
	Mercury action opps, online	
	Mercury advisories online	

A brief glance at the data in Tables 6.1 and 6.2 indicates that the communication situations for the campaigns are complicated. The actors and subjects include a wide variety of people, the communication tools are diverse, and the goals are complex. In order to better understand how some of these actors, subjects, tools, and outcomes work with one another, I have used activity theory to create diagrams of the situations. First, I present, in Figure 6.1, a simple example of how one of the actors uses one tool to mediate a situation, trying to invoke an action in one subject to create a particular outcome. In this simple situation, the tool (a letter) mediates between the actor (concerned advocacy group leaders) and the subject (Christine Whitman), to try to reach an outcome: persuade Whitman to join the Gasoline Alley Tour. In the following, slightly more complex situation (Figure 6.2), several actors use different tools to work on the same subject towards the same outcome.

Figure 6.1. Activity Theory System Diagram of One Actor, One Tool, and One Goal.

Figure 6.2. Activity Theory System Diagram of Two Sets of Related Actors, Tools, and Goals.

Figure 6.3 presents the situation as even more complex, beginning to reflect the complexity of the real communication situation, in which, for example, one set of actors uses a tool (advocacy groups use text on a website) to create a new set of actors who will use a fax action to try to influence another subject in order to reach an ultimate outcome.

Figure 6.3. Activity Theory Diagram of Several Sets of Related Actors, Subjects, Tools, and Goals.

In Figure 6.3 we have levels of outcome. The first outcome might be to convince someone to send a fax action...and even before that, to convince someone to visit the SEED Coalition website so they can send a fax action. The next outcome is to try to influence Christine Whitman to join the tour, and the next outcome would be to try to influence the EPA to take action to reduce power plant pollution—to ultimately prevent harm to people and the environment from pollution.

Harner and Zimmerman discuss a variety of media and genres which a group might use in a communication campaign: brochures, information sheets, newsletters, print advertisements, postcards, quick reference cards, email, websites, CD ROMs, CD's, tapes, file clips, films, phone calls, personal presentations, letters, conference calls, web seminars, banners, posters, press releases, editorials, telemarketing calls, exhibit booths, event sponsorship, and specialty items (193-195). They explain what each of these are best used for in the context of marketing products and documentation; advocacy groups have most of the same media and genre options. Jacobson lists some of the communication tools that advocacy groups in particular may wish to use: political activities, official proclamations, legislation, lobbying, indirect lobbying, public hearings, news conferences, personality appearances, spokesperson tours, information booths, contests, billboards, posters, special events, public service announcements, community calendars, spectacles, specialty items, meetings, conventions, seminars, classes, presentations, brochures, slideshows, videos, tours, exhibits, websites, news interviews, television ads, radio ads, magazines, newspapers, press kits, tip sheets, fact sheets, and email. Harner and Zimmerman explain that most marketing campaigns aim to have six to eight contacts with a customer: they suggest three to five, a guideline that might work well for advocacy groups when considering having contact with any subject of a communication effort (192). In other words, advocacy groups might do well to try to use communication tools to mediate communication situations in such a way that any given subject will have contact with three to five communication tools all trying to reach roughly the same outcome.

If the SEED Coalition desired to create more of an online community, for example, for its web visitors, it could implement some of the ideas Kim suggests that build community that it does not currently do: maintain a listserv, for example, that allows member-to-member as well as group-to-member member-to-group communication. Chat rooms or bulletin boards, too, would allow for more member-to-member communication. As Kim explains, people build online communities through interactions with one another (112). She argues that helping people go from visitor to novice to regular to leader to elder in an online community helps build the community: recognizing people's online contributions can help them feel valued and better enable them to guide newcomers to the site (118). Special events, such as auditorium visits from guest speakers, can also help build a community, if the group building it can afford the time and planning involved. These kinds of events would also help involve more people in geographically disperse areas like Texas. Other events—rituals, contests, and games—can also help create and maintain a community. Furthermore, design elements like these could help the SEED Coalition and other organizations build more feedback loops to track its web audiences and those audience's wants and needs. She also suggests that groups communicate their backstories and brand personalities for their communities (23), which, for small groups, might include people involved with other local groups, too.

Jacobsen, Harner and Zimmerman, and Hackos frame their discussions of what communication tools to use by placing them within a process they suggest groups follow to choose and implement communication tools within a campaign. All three suggest first that an organization know what it needs to do and to and with whom: that it identifies its subjects or audiences and its purposes or desired outcomes. Then, all three suggest that communicators gather information about the audiences, plan a strategy for reaching the outcome, implement that strategy in a well-planned manner, and evaluate the campaign.

Harner and Zimmerman suggest the following strategies for reaching outcomes: inform, educate, train, influence, motivate, introduce, and implement (54-56). They suggest matching these strategies to desired outcomes, which may include the following: act, change, adopt, endorse, learn, understand, participate, and contribute (56-57). For

example, they would explain that if you desire for someone to participate, you would not only use the strategy of informing, although you might need to begin with that strategy. Instead, you might use any combination, as appropriate for the audience/subject, of mediating tools that would inform, educate, train, influence, or motivate people to enable them and persuade them to participate. In order to help people first think about determining what tools might be available, Harner and Zimmerman suggest that people understand their markets, consider what has been done before, either successfully or unsuccessfully, and consider what their competitors are doing (65). These strategies can all help overcome barriers to good decision-making such as the inability to recognize strategies or an inability to foresee the outcomes or values of strategies.

These strategies, in addition to those provided by Hackos (her 10% information planning, 20% content specification, 50% implementation, 19% production, and 1% evaluation model) (29) and others can provide groups like the SEED Coalition with a basic plan for how to create and implement its communications. Because processes may need to differ to meet the different needs of small and large groups, however, we need more research into what publication management processes work well in organizations of different size and structure. Even better than Hackos' advice, then, for environmental advocacy groups, would be a research-based book like Susan Jacobsen's, written specifically for conservation professionals, that incorporates the kinds of plans for document management that Hackos and Harner and Zimmerman discuss with the realities of the time and money pressures that many advocacy groups face. Furthermore, as small and large organizations are likely to face different barriers to decision-making, such a book might need to address a particular size of organization or offer plans for groups of different sizes. Such a book could guide groups that need to determine what tools to use and how to plan, publish, and evaluate those tools within specific contexts.

Just as the preceding section ends with a discussion of how, exactly, advocacy groups might better benefit from research like that in this dissertation combined with other existing or needed research, each of the primary content chapters in this dissertation (Chapter III, Chapter IV, and Chapter V) ends with a list of implications of this research

for technical communication and for advocacy organizations. Let me now provide a new discussion of the implications of my research, combining and elaborating on those in individual chapters and offering areas for future study.

Significance and Applications of my Research

What can Technical Communication Learn from Research like Mine?

This section will explore the implications of my research for the field of technical communication, specifically explaining how my research can help the field by providing the following information:

1. How people use and can improve decision-making processes relating to communication.
2. How technical communicators can influence others' decision-making processes.
3. How technical communicators can consider the values attached to the consequences of their decisions.
4. How to diffuse web design information from technical communication to others.
5. How to use interactive and hypertextual web features.
6. How organizations use websites to meet various communication goals.
7. What might define an "advocacy" genre of website.
8. What audiences might a small environmental advocacy group have.
9. How people learn about particular websites.

I discuss each of these areas of knowledge and suggest where we need further research.

How People Use and Can Improve Decision-Making Processes Relating to Communication. Technical communication, as a field, can help technical communicators identify, analyze, and revise their own decision-making processes. It can develop and offer strategies for better decision-making processes and train its professionals in applying these in various contexts. Because groups of different size, purpose, and organizational structure may suffer from different barriers to good decision-making and because different solutions may be appropriate for each of them, we need to conduct more research into decision-making in various organizations. The barriers to good

decision-making discussed in Chapter III provide a model for decision-making research related to technical communication. In addition, Chapter III's discussion of the common decision-making barriers and which of those most affect the SEED Coalition provides other researchers with examples of decision-making barriers that they can hypothesize might exist in other contexts. To overcome the limitations of case study research that focuses on a small advocacy group, additional research might first identify which barriers to good decision-making that affect the SEED Coalition also affect other small advocacy and non-advocacy organizations or mid-size or larger organizations.

Once research has better determined which decision-making barriers seem most common and most severe for communicators in different situations, research might investigate how to overcome those. It might focus on the consequences of various communication options: for example, how are people affected by interacting with similar informational or persuasive, but not commercial/advertising, messages in different media? Researchers might also investigate how to help communicators and non-communication professionals who must make many communication decisions be able to think of all the alternatives available to them: what heuristics or other invention techniques are most effective in helping people identify a full range of communication tools they might use in a given situation? In addition, researchers can identify common patterns communicators face and help us know how to help communicators more rapidly learn and respond to those patterns. Perhaps most importantly, research might help us more rapidly move people from novice or experienced non-expert status to expert status.

How Technical Communicators Can Influence Others' Decision-Making Processes. Technical communicators might, in many situations, be the most qualified employees in an organization to identify and overcome decision-making barriers related to communication situations. However, especially in small organizations, they are likely to need the assistance of others to identify, plan, and implement communication. Therefore, they are likely to need to know how to share their information about decision-making processes with others without insulting or overlooking others' areas of expertise. Technical communication, as a field, might work on training its professionals to share

this knowledge, a professional goal akin to other current goals in the field, including streamlining publication management processes and sharing information about working effectively on multidisciplinary teams, other tasks that technical communication researchers and professionals have argued technical communicators may be particularly qualified to do. My research creates a picture of an organization in which environmental advocacy experts must collaborate with a web communication expert in a situation in which it might be difficult for either party to share knowledge with the other without dealing with organizational politics and perceptions of expertise. I provide an example of a situation in which this issue arises and in which we could provide better guidance for how parties collaborate.

How Technical Communicators Can Consider the Values Attached to the Consequences of their Decisions. One barrier to good decision-making for the SEED Coalition staff is being able to envision the consequences of a decision and the values attached to those consequences. Most communicators probably face this barrier. My identifying and discussing this barrier supports the importance of the work of those in the field who try to help communicators better identify the practical, financial, political, and ethical values of communication decisions.

How to Diffuse Web Design Information from Technical Communication to Others. One of the specific problems that the SEED Coalition and other small organizations that depend upon self-trained freelance communication professionals face is that the communication professionals with whom they work may or may not be aware of the resources and knowledge that technical communication, as a field, shares through formal education, journals and magazines, and professional societies such as the Society for Technical Communication. They may or may not identify themselves as technical communicators. The field should consider how make information accessible and palatable to people outside of the field. In addition, of course, we can better connect communication professionals with bodies of experts like the Society for Technical Communication in areas like web design, where professionals may perceive themselves as belonging to a variety of primary professional organizations, this may be difficult.

How to use Interactive and Hypertextual Web Features. My analysis of the SEED Coalition's websites and review of the literature about web use indicates that web designers currently seem to under-utilize online interactive elements. Researchers might investigate why web designers currently under-utilize these: do they not know about them, not think about them, abandon them as not helping the sites meet their communication goals, abandon them as requiring too much expertise or time to implement or maintain, or not use them for some other reason?

Similarly, hypertext researchers have complained that websites are becoming too hierarchical. The SEED Coalition's site is an example of a hierarchical site, and its audience's feedback via my surveys indicates this structure may be the best choice for them. How web designers should, then, use hypertext may be addressed by at least two research areas: (1) In which communication contexts is hypertext more effective? and (2) If hypertext is sometimes more effective, why are web designers currently under-using it and how can that trend be changed?

How Organizations Use Websites to Meet Various Communication Goals. In order to guide web designers working in various contexts, we need to know which goals websites can more easily meet and which ones create more difficulty. (Those that create more difficulty may indicate places for technical communicators to focus research and educational efforts.) By learning more about how websites function rhetorically, technical communication, as a field, can better guide web design practice. It is especially important for research to examine how websites function in a variety of communication contexts: to inform, to persuade, to build community, to encourage action. My research can help us start to divide websites into a variety of genres with different purposes and characteristics that will help us provide this guidance more effectively. Specifically, my investigation of how an advocacy group uses its websites provides the foundation for a definition of an advocacy site genre.

What Might Define an "Advocacy" Genre of Website. My research provides a beginning for defining an advocacy genre of website. This genre has the purposes of informing audiences and inducing action. It might also intend to create and mobilize a

community. Genre characteristics of this kind of website include ways to electronically communicate with policy makers, donate to the organization, sign up to receive mail, email, or other updates from the organization, learn about the issues of interest to the organization, and communicate with the group's staff. The SEED Coalition's websites have all of these characteristics and purposes, and my unsystematic analysis of other advocacy sites I have visited would indicate these might be shared. Future research could analyze a variety of advocacy sites to better define this genre. Research could also define other web genres, allowing us to see the differences between genres. For example, are advocacy sites likely to emphasize action on their home pages while commercial sites are apt to emphasize special buys?

What Audiences Might a Small Environmental Advocacy Group Have. Rob Houser argues that we should collect audience information and place it in shared databases that could help us improve future design, make the most of our resources, plan new user and audience studies, and build new audience theories (178). The audience information I provide in Chapter V could join such a database.

How People Learn about Particular Websites. As the number of websites increases, the likelihood of stumbling across one decreases; it is becoming more critical to know how people learn about the websites they visit. Knowing that the SEED Coalition web visitors primarily learned about the sites from other people offers important insight into how people may learn about small groups' sites. Research into how people learn about a variety of websites can guide practitioners marketing websites.

How can Technical Communication Support Small Organizations?

This section discusses the following ways in which my research suggests technical communication, as a field, can support small organizations:

1. Provide them with knowledge.
2. Support freelance designers.
3. Help freelance designers empower advocates to make better communication decisions.

- 4 Volunteer time to work with small organizations.
- 5 Work as consultants for small organizations
6. Encourage small organizations to use technical communicators as consultants.
7. Create mutually beneficial student/small organization connections.
8. Share a database of user information.

Provide Them with Knowledge. Technical communication could (1) conduct studies of the use of websites in campaigns and publish them both in technical communication journals and in other places where advocates and others from small organizations could access them, (2) invite professionals in small organizations to professional conferences where they may be able to learn more about their communication efforts, (3) attend advocacy conferences and other venues where they could share information with people from smaller organizations, and (4) create myths, symbols, stories, and rituals that, as March suggests (207-208) can help knowledge diffuse through communities. One of the biggest barriers to decision-making that the SEED Coalition faces is that its employees have little knowledge about web design. Other small advocacy groups and small companies likely share this problem. Technical communicators working full-time for organizations can apply their knowledge to help overcome these problems. However, the field of technical communication could do more to teach people who do not consider themselves to be technical communicators about web design. In particular, it could provide advocacy, other not-for-profit groups, and other small organizations unlikely to hire full-time technical communicators with information about web design by sharing such information in venues where representatives from such groups could learn about it. For example, technical communicators might teach small organizations how to conduct their own user surveys, focus groups, usability tests, and interviews to learn about their audiences and how to use what they learn to change their communications.

Support Freelance Designers. While the staffs of small organizations are likely to not possess expert knowledge in web design, small not-for-profit groups are also unlikely to be able to hire full-time experts. Instead, any experts who are helping them are likely

to be volunteering or to be freelancers. These experts may or may not align themselves with a professional community that helps them keep up with rhetorical aspects of web design as well as technical aspects. The field of technical communication can do more to keep these designers abreast of research results regarding web design, help them learn to use web design characteristics to reach various rhetorical goals, and help them learn how to get immediate, relevant feedback about their decisions, so that they may develop into experts, if they are not already. The field can provide these professionals with opportunities to learn, train, and share the knowledge they have gathered with other communication professionals.

Help Freelance Designers Empower Advocates to Make Better Communication Decisions. In addition to helping freelance and other designers learn more about rhetorical aspects of web design and about website evaluation, technical communication, as a field, could study and share information with these designers about how to share their knowledge with non-web experts. For example, web experts may often be hired by small groups to set up a website that the group plans to maintain itself: it may be important to the long-term success of an organization's website that the freelance expert who creates the website can also train the organization's other employees to maintain the website, both technically and rhetorically.

Volunteer Time to Work with Small Organizations. In addition to supporting their fellow experts who may be hired as consultants or part-time designers, technical communicators may volunteer time with small organizations, especially helping them create and support more interactive web elements and complete audience analysis research, important aspects of web rhetoric that non-web experts may be ill-equipped to think of and implement on their own.

Work as Consultants for Small Organizations. In addition to volunteering time, technical communicators who have important communication skills that advocacy groups might benefit from might market themselves as consultants to advocacy groups, who might be able to hire them on a short-term basis in order to benefit long-term from improved web communication skills.

Encourage Small Organizations to Use Technical Communicators as Consultants.

In addition to making themselves available to not-for-profit and other small organizations as consultants, technical communicators might create a market for such work by advertising the benefits of such relationships to small organizations.

Create Mutually Beneficial Student/Small Organization Connections. Those who work teaching technical communication can also support the rhetorical work that not-for-profit and other small organizations currently do. Continuing a trend toward more service learning, technical writing teachers can build short, medium, and long-term connections between their students and advocacy groups. For example, a group like the SEED Coalition might benefit from a group of students who conducted audience analysis research for them, or who created some web pages for their main site geared towards kids, or who worked on interactive educational or community building elements for the website. A variety of small projects like these could involve students with working for a real client and practicing their skills while providing the advocacy group with increased visibility with members of the community and with tangible communication benefits.

Share a Database of User Information. If communication professionals develop a database of user information, they might share it with not-for-profit and other small organizations. They can also encourage small organizations to share their user information with one another where appropriate. For example, the SEED Coalition might share its audience information with many of the small local groups with whom it often collaborates: although each group will have a unique web audience, their web audiences are also likely to overlap enough that some more general information might apply to other groups, too. Furthermore, if local groups all gathered and shared audience data, they would have a better idea of how their audiences overlap, which could allow them to make better decisions about how to proceed in collaborative situations.

How can Communicators Improve Decision-Making about Websites?

This section provides advice for communicators based upon my research. Specifically, it explores the following ways in which communicators can improve their decision-making about their websites:

1. Learn how to and implement ways to get immediate, appropriate feedback.
2. Rely upon leaders
3. Create website maintenance and development routines and habits.
4. Reflect upon and revise their website development and maintenance routines and habits.
5. Develop ways to collect information about web research developments.
6. Develop and implement ways to research web audiences.
7. Set clear goals for their websites.
8. Consider and deal with time, financial, and technical constraints.

Learn How to and Implement Ways to get Immediate, Appropriate Feedback.

Communicators are deal with barriers to good decision-making that can be overcome by gathering immediate, appropriate feedback. If they learn how to learn about the success and failure of their own decisions, they can build expertise from which they, their organizations, and the audiences for the websites they create can benefit.

Rely upon Leaders. Watching the SEED Coalition, I learned that its director took the leadership role one would expect, and helped keep the group focused on its goals. Communicators in other organizations might more consistently and intentionally cultivate or depend upon those in this leadership role.

Create Website Maintenance and Development Routines and Habits. In addition to developing more web expertise and relying upon leadership, communicators can create maintenance and development routines and follow them. Technical communicators know the benefits of having and following a product development cycle; non-communication professionals may not currently have such routines, but creating them and then creating incentives for following them might improve the overall efficiency and quality of their organizations' communication cycles. Similarly, individual

communicators can build more habits, becoming better at recognizing and responding to patterns without having to expend much decision-making energy.

Reflect upon and Revise their Website Development and Maintenance Habits.

Communicators need periodically revise the routines and habits they develop so that they reflect any changes in their organizations' communication contexts.

Develop Ways to Collect Information about Web Research Developments.

Earlier, I suggested that technical communication, as a field, do more to inform advocacy professionals about web design. Similarly, professionals who make communication decisions, especially those who are not full-time communication professionals, need to develop ways to continually monitor web research developments without having to devote much time or energy to the pursuit. They might, for example, subscribe to an annual or bi-annual publication or attend an annual conference or regularly visit a website that provides information on important new developments.

Develop and Implement Ways to Research Web Audiences. Again, while I suggest that technical communication help small organizations know how to learn about their audiences, these organizations also need to invest some time and energy into deciding how to learn about their web audiences and then doing so.

Set Clear Goals for their Websites. Although the SEED Coalition has clear goals for its websites, not having clear goals is a barrier to good decision-making that might hamper other small organizations. Organizations may need to periodically reflect upon and revise their web communication goals in order to ensure that their decision-making processes are guided by their current needs.

Consider and Deal with Time, Financial, and Technical Constraints.

Communicators need to determine whether they or their organizations have real or perceived (or both) time, technical, or financial constraints regarding processes for developing their websites and, as is possible, create ways to deal with these constraints. For example, the SEED Coalition might determine whether its staff does not have the time to develop and implement routines for maintaining its websites or whether such routines might save time in the long term or might warrant an investment of time. Its

employees might decide if it is worth their time and money to train one of their full-time staff members in web design. Where they face real constraints, such as potentially not having money to hire a consultant, they can make other choices: create ties with communication programs at local colleges and universities and ask for the students and professors there to work on small projects with them or share information with them to their mutual benefit.

How Can Communicators Improve Websites?

This section provides advice for web design based upon my research. Specifically, it explores the following ways in which communicators can improve:

1. Learn more about and implement more interactive features on their websites.
2. Consider how much information their sites provide.
3. Decide how much hypertext is beneficial.
4. Match web design and content to audience interest.
5. Revise companion communications to the websites.
6. Reconsider information about organizations on websites.
7. Provide web content to help people participate in offline activities.
8. Consider web characteristics that build a sense of community online and offline.
9. Avoid being overly dependent upon electronic communications.

Learn More about and Implement More Interactive Features on Their Websites.

My literature review and analysis of the SEED Coalition's websites indicate that most websites currently under-use interactive features. Where using interactive features might help them meet their goals (as with the SEED Coalition's fax actions, popular with its web audiences), communicators need to learn how to use and then implement more interactive web features. In order to guide what organizations do, we need to conduct more research into how various interactive features work for various kinds and sizes of organization and then help organizations practice and develop new ways to support any interactive web features they choose to use. One barrier to having interactive web features like bulletin boards, listservs, or auditorium presentations might be not having

people who know how to or have the time to support these features. Communicators might decide which interactive features might have benefits worth investing time and energy into supporting them and then practice supporting them. Some features might be supported by volunteers: a volunteer could plan and conduct a one-time online auditorium presentation.

Consider How Much Information Their Sites Provide. Most advocacy groups, like the SEED Coalition, use their websites in part to share information on the issues they address. In addition, sometimes specific kinds of information may be persuasive to people: letting new web visitors know how many people have previously taken action on an issue might encourage others to do so, as well, for example. Many not-for-profit and commercial organizations also share information on their websites. Research into who uses which kinds of information, to what extent, and with what results can guide future web content decisions. For example, the SEED Coalition survey results demonstrate that SEED Coalition web visitors desire information on issues of environmental justice; they also demonstrate that people sometimes read online reports. This feedback supports current communication practices and guides new practice for this group: more research could guide other organizations, too.

Decide How Much Hypertext is Beneficial. Most websites are only marginally hypertextual. As researchers strive to learn more about the effects of hypertext and hierarchy in web design, a variety of organizations could learn about the effects of these on their websites and for their audiences. For example, the comments that survey respondents made about the SEED Coalition website would support a fairly hierarchical web organization: visitors indicated that because they are busy, clear menus and informative links save them time by letting them know exactly where to go to get what they want; they seem unlikely to explore issues hypertextually. Other organizations need to know what decisions to make about the structure of their sites.

Match Web Design and Content to Audience Interest. Organizations can also better attain their goals by conducting audience research to see where their goals and their audiences' overlap and learning where their web design meets those goals.

Revise Companion Communications to the Websites. Respondents to the SEED Coalition surveys also explained that the group's email would more effectively direct them to its websites if it were consistently concise, clear, unbiased, and timely. Respondents did not want more or less email, but they wanted efficient and effective email that let them make quick decisions about whether to take action based on the email or not. Other organizations are likely to benefit if their communication decision makers consider how other communication tools affect people's use of their websites.

Reconsider Information about Organizations on Websites. One concern that a few survey respondents had was that they did not know who or what the SEED Coalition was. Groups might remember to be responsive to the questions of newcomers and provide more extensive, easy-to-find information about themselves on their websites and in other communication with newcomers.

Provide Web Content to Help People Participate in Offline Activities. In addition to revising their websites to inform people effectively and encourage online activity, communicators can help web content support offline communication and activities. For example, they might provide addresses to help people write traditional letters and calendars to help people plan participation in face-to-face events.

Consider Web Characteristics that Build a Sense of Community Online and Offline. People who feel personally connected to groups are more likely to more often participate in group activities. Building community both online and offline can, then, encourage future participation and ensure that advocacy groups are citizen representatives as well as citizen advocates. A stronger sense of community would also help people feel more connected to other kinds of organizations.

Avoid Being Overly Dependent upon Electronic Communications. Organizations, especially those concerned with issues important to people who may not have access to online media, need to use a variety of communication tools to reach people with a variety of communication needs.

Conclusion

Anderson states, “At present, relatively little is known about the use of new media technologies by grassroots campaigners” (101). However, she thinks that many of them are “at the forefront of developing new forms of political action through the new communications media” (101). Therefore, research like mine that investigates what advocacy groups are doing with their websites and how is critical to understanding what new political action forms we may be creating and helping to shape them as they form. Researchers need to investigate if what the SEED Coalition is doing is relatively standard. Then, and in the meantime, we need to apply the lessons we learn about web decision-making, web design, web audiences, and the roles of websites within communication campaigns to our practice making websites and training others

My research can help guide future research and current practice. In particular, it provides empirical research results into the use of websites for non-pedagogical and non-commercial purposes. Most current practice in web design is guided by lore, as little research has been conducted into website design in general, and most of that is unpublished research. Furthermore, most research and lore-based guidelines do not address the different needs that websites for non-commercial and non-pedagogical purposes may have. My research provides accessible, data-based insight into web design for an advocacy group: this can help environmental advocacy groups in particular and other web designers, as well, know more about what processes they may be using (or not using) to build and maintain their sites, what characteristics their sites may have, and how audiences might perceive their sites.

By providing a rich discussion of potential barriers to decision-making about websites and real examples of how those can come into play for communication decision makers, I provide a way for other web designers to reflect upon their practice and the routines (or lack thereof) in place in their organizations. My analysis of these barriers through decision-making, rhetoric, and publication management helps support why overcoming these barriers would benefit designers, the organizations for which they work, and the audiences for which they produce websites. It also raises questions about

current guidelines: for example, does the SEED Coalition (or another small organization like it) need many more formal planning meetings than it has, if its small number of employees communicate frequently in informal ways and they seem to, as a whole staff, make few errors in planning or implementation due to lack of communication? Of particular interest in my findings about decision-making are

1. The need for non-web professionals who, nonetheless, may be making a majority of web design decisions, to have a better source of information about web design than their experiences with other websites.
2. The need for web professionals working part-time for organizations, who may or may not define themselves as technical communicators, to have better access to rhetorical as well as technical information about web design.
3. The need for non-web professionals and part-time web professionals who collaborate to design websites to know how to make the most of their collaboration, which expertise to obtain from whom, what processes to use to collaborate, and what resources to expend on usability, audience, and campaign evaluation research.
4. The need for all web decision makers to have rich, immediate feedback about the results of their communication decisions: the need for evaluation research.
5. The need for research into how publication management routines and decision-making habits for those working in organizations of various size and structure help or hinder their effective, efficient production of good websites.

By analyzing the content of the SEED Coalition's websites in detail, I provide a model for evaluating web content beyond usability, which we often too narrowly define as functionality. Even a less systematic analysis than mine could consider more rhetorical issues of website design, such as whether a site uses its visual elements and placement on the site to emphasize the information and other content on the site of most importance and interest to its designers and its audiences, whether the site provides additional information purposefully or because it is available, whether information from traditional sources is modified for web reading, and whether the site builds community.

In addition, my analysis of the use of websites as just one communication tool in a larger communication campaign provides a model for web designers and other communication professionals to consider more systematically the interaction of a variety of communication tools they may use toward a related purpose. In particular, my research helps us understand the following about advocacy websites:

1. How traditional advocacy efforts like letter writing might be modified for the web, and what benefits and disadvantages result.
2. How traditional environmental discourse traits (like the loci of the irreparable) may be basically abandoned online and replaced with different kinds of appeals.
3. That advocacy websites may not currently be providing the variety of perspectives they would need to provide to support communicative action.
4. How advocacy websites might enable people who are geographically dispersed and time-strapped to be more active in advocacy campaigns through online actions like fax actions and downloadable petitions, brochures, and flyers.
5. How advocacy organizations may devote web space to building personas as reasonable organizations to which people wish to belong and donate resources.
6. How, perhaps unlike websites created for other purposes, advocacy websites may primarily support and encourage action on their causes.

In addition, my research reminds us of general website principles, like the need to pay attention to visual cues and placement on the site when considering a site's overall impact on a casual visitor. Overall, my analysis of the SEED Coalition's sites provides a rich foundation for building a genre definition for advocacy websites and models how other groups might analyze their websites in order to improve how effective they are for their organizations as well as their audiences.

By surveying the audiences for the SEED Coalition's websites, I provide information about what appeals to website visitors, i.e., being able to quickly find what they want on a website and being able to plan offline activities based on online information. While the audience information itself is probably the least generalizable of all of my research data, it does offer a portrait of the audience for an advocacy

organization which might give other advocacy group's a starting place in their own audience analyses. For example, the audience for advocacy groups may be older and more female than the audience for the Internet in general, which tends to consist mostly of young males. In addition, my research can help us create hypotheses about web audiences that we can test to build general theoretical propositions.

As web designers and researchers into web design proceed, then, they need to pay attention to the particular concerns of small organizations, in which non-web design professionals may make the majority of web design decisions and to the concerns of those creating websites for a variety of purposes. We need to remember that just as the SEED Coalition creates and maintains websites that largely suit their and their audiences needs, despite many barriers to good decision-making and a generally ad hoc development process, those who we advise as communication professionals may create fairly successful sites on their own. However, if we work together to conduct more research and disseminate the results, we can prevent organizations from overlooking decision-making process revisions and web design issues that could enhance their web communication. This could lead to more successful communication practices, making both organizations and those visiting their sites and using other communication materials they provide more likely to meet their goals: everyone can benefit.

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APPENDIX A
SAMPLE INTERVIEW PROTOCOL

Interview Protocol, 1

Participant name: Peter Altman

Date of interview: May 11, 2001

Location of interview:

Time interview began:

Time interview completed:

Participant job description: Director of SEED

Questions for the Initial Interview

Mr. Altman, first, I'd like to thank you for agreeing to participate in this research. I selected your group to contact because your web sites are interesting and I liked that SEED is a coalition, so I'm very excited to talk to you today and learn more about the organization. Today I'm going to ask some basic questions about SEED, how it uses its web sites and other communication media, and who helps with communication decisions. One of my goals today is to get a sense of who I should interview in the future and what kinds of questions to ask them. Let me know if at any time you need a break or have a question. As I explained earlier, I will be tape recording this, but also taking notes. First, is there anything that you hope to get out of this meeting?

- 1) I know that you have indicated to me that you tend to be quite busy, which has me intrigued about what your job is like. Could you describe for me what you might do in a typical day?
- 2) Now, could you please explain how SEED is organized and what its objectives are. (Ask follow-up questions as needed)
- 3) What objectives has SEED targeted through its communication efforts in the last two years? (What reasons has it had for communicating with the public?)

- 4) In the attempt to meet ____ objective, could you give me as comprehensive a list as possible about the communication media SEED has used, in the last two years? (Repeat for each objective from 2) (Prompt, web sites, tv, radio, newsletters, newspapers, brochures, etc.)
- 5) Which SEED employees have been active in making decisions about what media to use and how to use them for the last two years? (You may list these by position or name or both).
- 6) How have any other SEED employees helped with communication efforts in the last two years?

If less than 30 minutes of time remains, proceed directly to question 8.

- 7) Ok, now I'm going to ask more questions about a particular communication campaign. You mentioned earlier that one of SEED's objectives in the last two years was _____. and that to meet that objective, SEED used (list media). What role did ____ (list one of the media) play in that communication campaign? (Repeat for each media, and ask follow-up questions as necessary).
- 8) For what reasons was ____ (one of the media) used in this campaign? (Repeat for each media)

If time allows, repeat questions 6 and 7 for other SEED objectives. If not, proceed to question 8. Allow at least 15 minutes for the remainder of the interview.

- 9) Thank you for the information you have given me so far today. Let me ask a few more questions about where you see this research helping SEED. First, you know that part of my goal today has been to identify other interviewees and documents to study. So far, it sounds like I should interview (list people named earlier). Who else might be important for me to interview?
- 10) I know it may have been a while since you've looked at the goals I set out for this research. I have a sheet here that outlines them briefly. I'd like to devote some time to reviewing them in preparation for my next question, which will be what else can I do for you that I haven't identified? I can give you a few minutes to review the goals I've set out, which do reflect your interest in the donation link on

the web site that you expressed in my first discussion with you (Repeat, as necessary: what other questions do you have that I might be able to help you answer? How can I help this research be of the most benefit to you?).

- 11) In our next meeting with one another, I'd like to discuss (questions not gotten to today, web survey questions to ask, etc.) I'll be back in town May 17, and then July 6 and 9. Would any of those days work for you as a time to meet again? (Understand from email July might work, when in July...)
- 12) Also, since we are both busy and since Lubbock and Austin are a good traveling distance apart, would you be willing to answer some of my questions electronically? We could meet electronically in a chat or MOO, or I could email you, say, one or two questions every couple of weeks, so that rather than setting aside a block of time all at once, you could talk with me more at your convenience. (Just a suggestion, prompted by time issues and financial realities)
- 13) Just a few more quick questions... first, What are your preferences about how I approach other SEED employees or when I interview them? I'd like to start talking to some of them as soon as possible
- 14) I have indicated two other things I would like to do are attend planning meetings held for the web sites, and study planning documents, like email discussion, memos, etc. that reflect decisions made about the web sites. Is it still ok to do this? When might the next planning meeting be? Are they held regularly or as needed? Can you give me copies of any documents now, or direct me to someone who can help me start collecting them? Also, do you have an organizational chart?
- 15) What questions do you have for me? If you think of more later, feel free to email me with them.

Thanks! (Reminder, valuable information).

APPENDIX B
WEB SURVEY

SEED Visitor Survey

It should take 10-15 minutes to complete this survey. Scroll down as you answer the questions so that you can see the next questions, and when you have completed the survey, please press the submit form button at the end of the survey. Thank you for your responses.

1) Indicate how many times you have visited the www.seedcoalition.org web site, to the best of your recollection. You can select an option by using your mouse to make the cursor hover over the button you wish to select, then clicking your mouse. If you desire to change your initial response, simply select a new option from the list.

- ☐ this is my first visit to the SEED web site
- ☐ 2-3
- ☐ 4-5
- ☐ more than 5

2) Indicate how you initially found or knew about www.SEEDcoalition.org web site, to the best of your recollection.

- ☐ Internet search engine
- ☐ URL on printed material
- ☐ radio advertisement
- ☐ a SEED employee referred you to it
- ☐ a person other than a SEED employee referred you to it
- ☐ you came from a link on another web site, please specify the site
- ☐ other, please specify
- ☐ I don't remember

3) Please indicate the primary reason for your visit to the web site today.

- ☐ to gather information about SEED as a media representative
- ☐ to gather information about SEED, but not as a media representative
- ☐ to gather information about the environment
- ☐ to take action for the environment
- ☐ to learn how to take action for the environment
- ☐ to join the SEED email list
- ☐ to donate to SEED
- ☐ other, please specify _____

4) Indicate in each case if you have already completed or plan to complete the indicated action on the web site today.

a. send a fax to a politician or other leader regarding environmental issues

- ☐ yes
- ☐ no
- ☐ I'm not sure

b. read about environmental problems

- ☐ yes
- ☐ no
- ☐ I'm not sure

c. contact a SEED staff member through email, or collect contact information to call or write to one.

- ☐ yes
- ☐ no
- ☐ I'm not sure

d. join the SEED mailing list

- ☐ yes
- ☐ no
- ☐ I'm not sure

e. donate to SEED

- ☐ yes

- ☐ no
- ☐ I'm not sure

5) Indicate your interest in information on each of the following environmental issues on the scale from 1-5, with 5 being very interested and 1 being not at all interested.

less interested ←————→ more interested

a. global warming

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

b. air pollution

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

c. power plant pollution

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

d. mercury pollution

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

e. sustainable energy options

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

f. environmental justice

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

g. other, please specify |

less interested 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ more interested

6) Indicate the item below which you would MOST want to learn more about on the web site today.

- ☐ global warming
- ☐ air pollution
- ☐ mercury pollution
- ☐ sustainable energy options
- ☐ coal power plant pollution
- ☐ environmental justice
- ☐ other, please specify |

7) Have you ever read part of a report on the SEED site?

- ☐ yes
- ☐ no
- ☐ I don't remember

8) Indicate your preference for how reports and other documents linked to the web site be made available to you.

- ☐ pdf (open using Acrobat Reader)
- ☐ html (opens like a web page)
- ☐ WORD file (opens in MS WORD)
- ☐ other or combinations of the above, please specify

9) Have you previously joined the SEED email list?

- ☐ yes
- ☐ no
- ☐ I don't know

10) Indicate whether you have had contact with SEED in each of the following ways, to the best of your recollection.

a. you had a phone conversation with someone from SEED

- ☐ yes
- ☐ no
- ☐ I'm not sure

b. you read a flyer or fact sheet by SEED

- ☐ yes
- ☐ no
- ☐ I'm not sure

c. you read a SEED newsletter

- ☐ yes

- ☐ no
 - ☐ I'm not sure
- d. you saw a face-to-face presentation by SEED
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- e. you had a face-to-face conversation with a SEED employee
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- f. you heard radio announcements about SEED or a SEED campaign
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- g. you read newspaper articles mentioning SEED
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- h. you saw TV announcements mentioning SEED
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- i. you visited a seed web site besides www.seedcoalition.org
- ☐ yes
 - ☐ no
 - ☐ I'm not sure
- j. you have attended SEED events
- ☐ yes

- ☐ no
- ☐ I'm not sure

k. you received email from SEED

- ☐ yes
- ☐ no
- ☐ I'm not sure

l. you have reported on SEED events for the media

- ☐ yes
- ☐ no
- ☐ I'm not sure

m. you received a letter from SEED

- ☐ yes
- ☐ no
- ☐ I'm not sure

n. you saw or signed a petition sponsored by SEED

- ☐ yes
- ☐ no
- ☐ I'm not sure

11) Have you previously donated to SEED through the web site?:

- ☐ yes
- ☐ no
- ☐ I don't know

12) Have you ever donated to SEED, but not through the web site?

- ☐ yes
- ☐ no
- ☐ I don't know

13) Indicate to what degree each of the following would increase your likelihood to donate to SEED on the web site, on a scale of 1 to 5 with 5 being very much and 1 being not at all.

not at all increase my likelihood to donate ←————→ very much increase my likelihood to donate

a. increased assurance of security

not at all 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ very much

b. more information about how my money would be used

not at all 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ very much

c. easier process for donating money

not at all 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ very much

d. other, please specify

not at all 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ very much

The following set of questions will ask for information about you, only for purposes of knowing more about who visits the web site. This data will only be reported to SEED as it refers to the group of survey respondents, not for any individual respondent.

14) Please give us a little information about yourself, so that we can know more about who visits the web site.

Your age

Your gender

- ☐ Male
☐ Female

Your political affiliation

- ☐ Democrat
☐ Republican
☐ Libertarian
☐ Independent
☐ Green

☐ other, please specify _____

15) Please indicate to what extent you affiliate yourself with environmentalist ideas and beliefs, on a scale from 1 to 5 with 5 being very much and 1 being not at all.

not at all ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ very much

16) Please list the environmental groups to which you've belonged, or indicate that you have never belonged to an environmental group by selecting the button below. To unselect the button, simply click on it again.

☐ I've never belonged to an environmental group

17) Please provide the following information about where you live, for demographic purposes only.

City _____

State/Province _____

Country _____

Please respond to the following five open-ended questions. Your responses can help SEED better meet your needs and can improve a general understanding of how people use advocacy web sites.

18) What suggestions do you have for the SEED web site to serve your needs better?

19) What could SEED do to keep you better informed about its activities and/or issues?

20) What could SEED do to better help you take action on issues?

22) What would encourage you to write a letter instead of sending a fax action to a politician or other decision maker on an issue?

23) Any other comments:

Submit Form

Reset Form

Heather Sehmel
PhD student, Texas Tech University
hsehmel@ttacs.ttu.edu
Revised: March 12, 2002

APPENDIX C
TEXAS TOWNS WHERE SURVEY RESPONDENTS LIVE

Alpine	San Marcos
Arlington	Seabrook
Austin	Shady Shores
Boerne	Shoreacres
Bryan	Snook
Canyon	Temple
Cedar Creek	Texas
Converse	The Woodlands
Dallas	Tyler
Denton	Whitney
El Paso	Wimberley
Fort Davis	
Fort Worth	
Friendswood	
Galveston	
Grand Prairie	
Houston	
Kerrville	
Longview	
Lubbock	
McDade	
McKinney	
Midlothian	
Mustang Ridge	
Round Rock	
San Antonio	

APPENDIX D

ENVIRONMENTAL GROUP AFFILIATIONS

OF SURVEY RESPONDENTS

ABA	Coalition on the Environment and Jewish Life
Adirondack Mountain Club	Community Environmental Task Force
Alliance for the Wild Rockies	Conservation International
Amnesty International	Co-op America
Appalachian Mountain Club	Corpus Christi Outdoor club
Aquifer Protection	Defenders of Wildlife
Audubon Society	Downwinders at Risk
AWEA	Earth First!
Bat Conservation International	Earth Island
BoiGems (NDRC)	Earth Justice
California Public Interest Research Group	Ecology action
Campus Greens	Environmental action
Catskill 3500 Club	Environmental Advocates
CBE	Environmental Defense Center
Center for Marine Conservation	Environmental Defense Fund
Chefs Collaborative 2000	Environmental Health Network
Chemical Injury Information Network	Friends of Thacher & Thompsons Lake State Parks
Chemically Injured Association of Central Texas	Friends of the Earth
Citizen Action	Friends of the River
Citizens' Environmental Coalition	Galveston Bay Conservation and Preservation Association
Citizens for Healthy Growth (Denton, TX)	Galveston Bay Foundation
Clean Water Action	Global awareness (high school)

GOO

Greater Yellowstone

Greenpeace USA

Heifer Project

Hudson River Sloop Clearwater

Iowa Renewable Energy Association

Izaak Walton League

Katy Prairie Conservancy

LBJ Wildflower Center

LCV

LDF

League of Conservation Voters

League of Women Voters

Lotka Institute

Mohawk Valley Hiking Club

National Association of Environmental
Professionals Student Chapter at SW
TX State U

National Parks Conservation

National Parks Foundation

National Wildlife Federation

Native Forest Council

Natural Resource Defense Council

Nature Conservancy

Ocean Conservancy

Orion Society

Ozone Action

Peace & Justice org. of United
Methodist Church

Peregrine Fund

Planned Parenthood

POST

Pred Conservation Alliance

Protect National Forest campaign

Protection & Reintroduction of Wolves
in Arizona

Public Citizen

Rails-to-trails

Rainforest Action Network

Rainforest Alliance

Redwood Justice Fund

Reed College Canyon Committee

Regional Clean Air and Water

Renewable Energy Roundup
(Fredericksburg)

Riverside Nature Center

San Antonio Trees

San Marcos Greenbelt Alliance

San Marcos River Foundation

Save Barton Creek Association

Save Our Springs

Save the Redwoods

Scenic Hudson, Inc.

SEED Coalition

Sierra Blanca Legal Defense Fund

Sierra Club

Students for Environmental Action

Sustainable Building Coalition

TCONR
Texas Campaign for the Environment
Texas Community Project
Texas Impact
The Cousteau Society
The Energy Foundation
The Wildlands Project
Trail Building Non-Profit Organization
in AZ.
Tree Folks
TREIA
Union of Concerned Scientists

University Environmental Education for
Children
US PIRG
Voice for Animals
WDF
WE CAN
Western Massachusetts Global Action
Coalition
Wilderness Society
Wildlife Damage Review
World Wildlife Federation
World Wildlife Fund
ZPG

APPENDIX E

GLOSSARY

Communicative action: Habermas' concept of multi-directional communication in which power is evenly shared among participants who temporarily abandon their preconceptions and listen, devoting themselves to working towards consensus.

Decision-making: A process through which people make decisions. The process may be more or less well-defined and is akin to what I call *problem-solving* or *invention*.

Epoche: Considering and openly discussing bias that might affect one's research.

Fax action: An online form with a letter which website visitors can modify, fields to enter one's name and address, and a button that directs the SEED Coalition to fax the letter to a policy maker on the behalf of the web visitor.

Habit: An individual's learned responses to a stimulus.

Invention: Refers to the ways by which we set goals, select means to meet those goals, and gather information to support our goal setting and selection processes. Includes brainstorming, tagmemics, and heuristics. I also use it as a term that shares traits with *decision-making* and *problem-solving*.

Lore: An experience-based contribution to knowledge used by people in a field (North).

Micro-design: Issues like font choice or menu placement: important but small issues.

Online auditorium: An online forum akin to a chat room, but in which the online "speaker" has more power and there is more control over when and how questions may come from the "audience."

Problem-solving: Like *decision-making* and *invention*, but focuses on solving a problem.

Routine: An organization's typical responses to a stimulus or typical processes.

SEED: Sustainable Energy and Economic Development.

Stretch text: Hypertext that expands or shrinks in response to people's previous reading selections, profiles that they help build, or other electronic feedback. Stretch text tries to adapt to the needs of individual readers, giving some readers more detail and some less as appropriate based upon their prior knowledge of a subject.

Tagline: A phrase like a slogan used to unite a campaign or remind of ultimate goals.

Web design: See *web rhetoric*.

Web designer: Refers to people who work with both rhetorical and design aspects of websites. A web designer might or might not also program websites.

Web rhetoric: Like *web design*, I use this to refer to both the rhetorical and design aspects of websites. The term web rhetoric refers primarily to the function of the text and

design of the site, and not to the programming itself, although how the site is programmed clearly affects its functionality.