CHAPTER 7

EMPIRICAL INVESTIGATION:
ONLINE DISCUSSIONS OF READING DISABILITIES AND TECHNOLOGIES

The judges of normality are present everywhere. We are in the society of the teacher-judge, the doctor-judge, the educator-judge, the social worker-judge; it is on them that the universal reign of the normative is based; and each individual, wherever he may find himself, subjects to it his body, his gestures, his behavior, his aptitudes, his achievements.


Having identified relevant values and stakeholders, the next step in Value Sensitive Design is to conduct empirical investigations that explore, challenge, and refine them. To conduct such research on elements of human culture like values, at least two approaches can be considered. The first is to talk to the relevant parties directly (interview study), while the other is to independently observe public conversations involving the relevant parties (observation study) (Taylor & Bogdan, 1998). Each approach has its own strengths and weaknesses. Interviews guarantee that the topic of interest will be addressed, but the role of the interviewer may influence the participant’s responses. Observational studies can reduce or eliminate such influence and allow for the participant to discuss topic more naturally and unprompted. One major challenge with observation studies, though, is successfully finding conversations and situations to observe that are relevant to the purpose of the research. Moreover, as the researcher is ideally an outside observer, a participants cannot be asked to clarify his thoughts and opinions as could be done in an interview session.

Fortunately, the advantages of both methodologies can be gained by conducting multiple studies using the different approaches and triangulating the findings (Taylor & Bogdan, 1998). As such, both an observational study and an interview study were conducted. This chapter presents the first—a study of online discussions about RDs and technologies from message boards and newsgroups. In the first section, the study is described in terms of its motivation and methodology. Three online asynchronous discussions are then separately analyzed using the value and stakeholder frameworks. The findings are then summarized.
1 Study Description

In a public observation study, the researcher does not interact directly with the participants of interest. Instead, the researcher observes from afar, takes notes, observes, and potentially eavesdrops on conversations (Taylor & Bogdan, 1998). Several aspects of reading disabilities, however, pose challenges for conducting such a study if the participants of interest are people with RDs. Although RDs are not exceedingly rare, the prevalence rate of 7–15% does make finding such individuals potentially difficult (Sands & Buchholz, 1997). Furthermore, without any visual indicators of the disability, identifying whether a person has an RD without directly asking them can only occur if the person publicly discloses it. Given the issues of stigma discussed in the previous chapter, though, such disclosure and openness are also unlikely (Cory, 2005; Tanner, 2009).

1.1 Message Boards and Online Observations

With the advent of Internet-based communications, new opportunities for conversations have developed (Hine, 2000; Black, 2005). One such venue is the message board, alternatively known as a web forum, discussion board, newsgroup, bulletin board, etc. This online facility allows for a group of physically-separate people to communicate, albeit not in real-time. Any member can issue new messages or reply to existing messages. The forum itself is a repository for these messages. A conversation, or thread, on a forum consists of an initial posted message followed by replying posts. Depending on the board’s configuration, messages may be listed in chronological order or threaded (each post is positioned relative to the post that it is a reply to). The underlying digital communication technology can take many forms. Most message boards are web-based and accessed solely through an Internet browser. Newsgroups, however, are accessed primarily through a news reader or e-mail, although web archives are also often available as well.

Message boards and similar venues have also created new opportunities for observational research. Ethnographic techniques have been repurposed for conducting studies of online communities and conversations (Hine, 2000; Black, 2005). Importantly, this provides a means to address the challenges of conducting such a study of people with RDs. Message boards typically form around a shared topic of discussion such as hobbies, medical issues, and fandoms. Forums concerning RDs/LDs will not only more likely provide a higher percentage of users with RDs, but such a forums focus on support and community also leads to more people disclosing about their disabilities in their posts. Additionally, not all board members will necessarily have a reading disability. These forums are also used by parents, teachers, and researchers who work with people with RDs. The views and opinions of both direct and indirect stakeholders can be collected and studied.

1.2 Methodology

Thus, an observational study of conversations concerning reading disabilities and technology on online message boards was conducted. Particular focus was placed on understanding the roles of and issues associated
with technology in the daily lives of people with RDs. Discussion threads were analyzed in relation to the previously identified value-stakeholder framework to verify, challenge, and refine that model.

1.2.1 Identifying Discussion Threads for Analysis

To find discussion threads for analysis, multiple message boards were consulted. These boards were found through several means. Some forums selected were associated with the websites of major RD/LD organizations such as those listed in Table 3.1 in Chapter 3 (page 49). Other discussion groups were identified by conducting an online search. The words used for the search included terminology related to RDs, technology, and message boards, such as “reading disability message board” or “dyslexia computers discussion forum.” In general, most of the message boards consulted focused on reading or learning disabilities. However, the search efforts also found forums about related topics such as teaching and disability rights. The conversation discussed in Section 2.2 of this chapter, for example, came from a website concerning the teaching of writing composition at the university level.

Once a message board was found, a search was conducted for individual threads to be analyzed. Topics and subjects lines were skimmed for any threads potentially related to the study’s focus. Search features were also utilized to find threads mentioning computers or technology. If the forum was not specifically about RDs, searches were also conducted for terms such as “dyslexia” and “reading disability.”

Beyond being about a topic relevant to the study, several characteristics were also desired for threads. A thread would consist of multiple posts involving the exchange of multiple ideas and opinions. Such a thread should also involve actual conversation among the posters. An unacceptable thread would involve the asking of a question, an answer, and a reply to say thanks. Ideally, a thread would also involve several contributors as this would potentially bring in a broader range of perspectives and stakeholder groups.

1.2.2 Analysis

Once selected for study, each thread was analyzed to produce illustrative case studies. This form of case study involves studying a few instances of a phenomenon in depth with the intent of illustrating what is occurring (General Accounting Office (GAO), 1990). The goal is not to make generalizable claims but to provide rich, descriptive data in relation to a framework or topic under study.

To produce the case study, several types of data were collected about the thread. First, the text of the entire thread was gathered, including indications of who authored the individual posts. If a poster identified as having a disability, that was noted. Such claims were trusted, and, in the same vein of traditional observation studies, no additional efforts were made to verify those claims (Taylor & Bogdan, 1998; Hine, 2000). Logistical information such as the time and date of the posts will also be collected. A characterization of the originating message board or newsgroup was also developed. Finally, the discussion content was analyzed using a qualitative approach, with particular attention to word choices and any discussions of human values,
technology usage, and disability issues. Short quotes regarding such topics were also noted for later use when reporting about the case.

1.3 Human Subjects Concerns

Conducting online observation studies does raise several ethical issues regarding human subjects research, and these concerns have been noted by previous researchers (Hine, 2000; Black, 2005). Because of the nature of the Internet and how message board postings work, it is not possible to confirm the ages or legal competence of the posters on these forums. Issues of confidentiality and anonymity are also complicated. Unlike a spoken conversation, the text of a message board discussion continues to exist even after the conversation has finished. Even if the message board discards older messages after time has passed, web archives and caches make it possible to retrieve them. Search engines like Google make it possible for a person to find the source data using a small quote or screen name.

Posters to a message board do have a modicum of control over their privacy, however. By using screen names and not their real names, a layer of anonymity is put in place. However, any information that a person posts to the message board or keeps in a public profile is in the open for others to see and use. For this reason, most boards make profiles private and accessible only to members of the discussion board community.

Because of these concerns, I worked with the University of Washington’s Institutional Review Board (http://www.washington.edu/research/hsd/) to identify how to best conduct this study and still respect the rights of the posters on the message board. Recognizing that complete confidentiality and anonymity could not be guaranteed, we established several guidelines for how the data would be treated and presented in order to make it more difficult to trace the findings back to the original sources:

- Names of the message boards and their URLs are never reported. Instead, a message board is only referred to through a brief descriptions such as “the discussion forum for a leading organization for providing information on learning disabilities to professionals and parents.” Pseudonyms for a forum may also be used.

- All screen names are replaced with pseudonyms.

- The only information presented about posters is what they make publicly available. Private profile data available only to forum members is not collected.

- Posting dates are only reported in a general sense such as “winter of 2006.” The timing between posts in a thread may be reported in a relative sense: the original post will be at time zero; a following post could be at 1 day, 2 hours; another post at 1 day, 2 hours, 10 minutes; etc.

- Any direct quotes are limited to short statements in order to reduce their searchability.

With these policies agreed upon, the study was approved.
Table 7.1: Descriptions of the three threads included in the illustrative case study.

<table>
<thead>
<tr>
<th>ONLINE DISCUSSION THREADS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. A Call For Help</strong></td>
</tr>
<tr>
<td>Source: Public message board for discussing dyslexia-related issues. Unaffiliated with any organization.</td>
</tr>
<tr>
<td>Description: Multiple posters with reading disabilities respond when a man with dyslexia and dyscalculia desperately pleads for help in achieving his desire to finish college.</td>
</tr>
<tr>
<td>Posts: 17 messages by 8 posters</td>
</tr>
<tr>
<td>Time: Across 3 months in Autumn 2006</td>
</tr>
<tr>
<td>70% of posts in first three weeks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2. Composition, Computers, and Disability</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Discussion forum for an online conference for college instructors interested in using computers for teaching English composition.</td>
</tr>
<tr>
<td>Description: Several conversations by college English composition teachers about supporting disabled students in relation to the growing interest in digital media literacy practices.</td>
</tr>
<tr>
<td>Posts: 23 messages by 7 posters</td>
</tr>
<tr>
<td>Time: 1 week in Winter 2009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3. Macs, Dyslexia, and a Documentary</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Cross-posting on three newsgroups: a UK-based discussion of Apple computer products, an international support forum for people with dyslexia, and a group for amateur radio operators.</td>
</tr>
<tr>
<td>Description: An initial thread about usefulness of Macs for dyslexics evolves into discussion of the recent documentary <em>The Dyslexia Myth</em> (D. Mills, 2005) and if RDs actually exist.</td>
</tr>
<tr>
<td>Posts: 215+ messages* by 37 posters</td>
</tr>
<tr>
<td>Time: 1.5 years starting in Autumn 2005</td>
</tr>
<tr>
<td>95% of replies within first month</td>
</tr>
<tr>
<td>* Some posters’ messages were not archived but are evidenced by partial quotes by other posters.</td>
</tr>
</tbody>
</table>

### 2 Three Conversations

A total of three discussion threads were selected and developed into illustrative case studies and are listed in Table 7.1. The first is a classic example of a person with an RD/LD reaching a breaking point and realizing that he needs help in managing school and his disability. The responses by others with RDs in the forum community touch on accommodation policies, self-advocacy, and helpful technologies. Next is a discussion by college English composition instructors about using computers to support students with disabilities. These indirect stakeholders talk about multiple disability types and a small debate erupts over what is and is not a disability. The third discussion begins with a discussion about Macintosh computers and users with dyslexia,
Table 7.2: Descriptions of the key participants in the “A Call for Help” thread.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Todd</td>
<td>The creator of the thread. He is attempting to earn his bachelors degree in international relations but his learning disability is causing immense difficulties.</td>
</tr>
<tr>
<td>Maya</td>
<td>An architect who has faced difficulties in her profession due to her dyslexia and can relate to Todd.</td>
</tr>
<tr>
<td>Kilgore</td>
<td>A teacher who works with math students with learning disabilities.</td>
</tr>
<tr>
<td>Will</td>
<td>A British man with dyslexia who comments about spellcheckers.</td>
</tr>
<tr>
<td>Marybeth</td>
<td>A woman with dyslexia and dyscalculia who also has a daughter with the same conditions.</td>
</tr>
<tr>
<td>Advertiser</td>
<td>A marketer from a company selling a “treatment” for dyslexia.</td>
</tr>
</tbody>
</table>

but the recent airing of a British documentary on dyslexia triggers multiple conversations about what it means to have an RD and whether RDs actually exist. Together, these threads address many of the themes and values identified in the previous chapter.

2.1 Discussion 1: A Call for Help

The first thread came from a public message board for dyslexia support. This board had an open posting policy, meaning that anyone could post to it without having to officially register. The policy created a community of posters that included regular contributors as well as visitors asking questions or seeking support. This thread was of the latter type—a poster new to the boards beseeching for help.

2.1.1 Opening Post

In Autumn 2006, Todd, who had never posted to the board before, posted what is best described as a desperate plea for help. He described how he had gone to college but kept failing a course on statistics. A professor recommended that he be tested for learning disabilities, and it was determined that Todd had dyslexia and dyscalculia (an LD involving working with numbers and mathematics). Despite the diagnoses, he still struggled with math classes as well as a foreign language requirement. After six years of trying, he gave up and left with an associates degree which he described as “Pathetic. I still feal [sic] like a failure.” After ten years, he still wants to earn his bachelors and maybe a masters in international relations but is convinced that he will “…NEVER pass because of the math. It is not possible. PERIOD.” Todd describes how he has been scouring the Internet for information on how a person with an RD/LD can survive college but is still lost. He ends his post with the simple request, “Please help.”

2.1.2 Descriptions of Responses

Todd’s post is reminiscent of the phenomenon described by Cory (2005) in which a university student with an invisible disability decides to not register with disability services but a crisis eventually leads her to seek out help. Todd’s case is different as he left college and now seeks to return ten years later, but there are parallels. In
particular, like many students entering college, he does not know how to navigate the policies and bureaucracy associated with requesting and receiving accommodations (Cory, 2005; Burgstahler & Cory, 2008). In Todd’s case, he was not diagnosed until he was already in college, leaving him with even less experience managing his disability in an academic setting.

Overall, Todd’s post resulted in 16 replies, three of which were from Todd replying to the comments and questions from the others. Table 7.2 lists the key participants. Many of the other members clearly recognized and related to his situation. One poster, Maya, articulated her own experiences:

Boy do I feel for you... I am a server dyslexic myself. I have my college degree... a Master Degree in Architecture from Virginia Tech... I have struggled for twenty years to get these degrees

She then talked about some more recent struggles regarding a licensing exam for her job in which she was denied accommodations. Maya expressed that access is a fundamental right under the ADA and that she was fighting that decision. She then told Todd that he needs to do the for himself as well—be his own advocate. Other posters also informed Todd of how to advocate for his rights to educational access: who he should contact, what documentation he will need, what his accommodation needs may be, etc. Even when Todd expressed concern that he might not get accommodations or might not even be able to get back into college due to needing to pass entrance exams, the other posters reassured Todd and reminded him that accommodations are a legal right. Like all people with disabilities, he deserves a fair shot at a college education.

Although this relating of shared experiences and giving of advice might suggest the board’s sense of community was in complete agreement, some members constructively criticized some of Todd’s statements. For example, many of Todd’s concerns were over the need to successfully fulfill a math requirement. His frustration is based not only in his litany of previous bad performances, but he argues that he would never use any knowledge of mathematics in his field of international relations. Kilgore, who teaches math to dyslexic students, challenged Todd on this last point and argues that people in business and politics should understand some math such as statistics but not necessarily geometry. This criticism was part of Kilgore’s larger effort to make clear to Todd that he needed to clarify and specify what he will need to get through college while still being realistic. Todd will need to take a math course, but it should be one relevant to his needs and accommodations should be in place for him.

2.1.3 Discussions of Technology

Within this thread, some discussion of the helpfulness of technology also occurred. Todd mentioned in his opening post that when it comes to writing, most of his problems were with spelling, but spellchecking software readily addresses this issue. However, several of Todd’s posts contained misspellings. As quoted earlier, Todd misspelled the word “feel.” It is unclear if he used a spellchecker before submitting his messages, but given the emotions seen in his posts, spelling was probably a low concern for Todd. Furthermore, the
interface he used to post may not have included a built-in spellchecking feature.

Will, a dyslexic from Britain, laments that he has not shared the same level of success with spellcheckers, however. As he puts it, “I haven’t found spell checkers to be that good. I find they only correct the easy and balk on the hard.” Notably, many of the posters who disclosed having an RD made spelling errors that would not be caught by spellchecking software. Such examples included writing “server” for “severe” or “secede” for “succeed.” Each word was correctly spelled but wrong for the context. This is the lexicality effect previously identified by Bourassa and Treiman (2003) in their studies of spelling errors made by writers with RDs.

In addition to the discussion of spellcheckers, two other tools were recommended. However, the responses from the posters were quite different. Marybeth, who has dyslexia and dyscalculia like Todd, recommended a math tutorial software that was found to help her daughter who has the same RDs/LDs as her mom. Maya herself expressed interest in the software for herself and thanked Marybeth for the suggestion.

The other, less appreciated recommendation came from a poster outside of the board community. In an advertisement personalized to Todd, a marketing representative promoted her company’s supposed special educational approach that can “fix” dyslexia. She pointed Todd to the company website, noting that they “guarantee results!!” Both Kilgore and Maya attacked and denied her company’s claims. Kilgore called on his expertise as a teacher of students with RDs/LDs and criticized the company’s description of dyslexia symptoms. He also politely inquired about some design elements on the website that make the text unfriendly to people with dyslexia. Maya, on the other hand, attacked the very idea that dyslexia is something that can simply be cured:

You can not fix dyslexia... it is a life long disability... you can learn clues to help assist you but you can not be “fixed.”

Essentially, these forum members reacted strongly to questionable claims made by an outsider. By responding as they did, Kilgore and Maya worked to ensure that the support offered by their community can be trusted.

2.1.4 Thread Summary

This thread shows how a message board’s community can form together to offer advice and support to both new and long-term members. Stakeholders present in this conversation included people with RDs, teachers, and parents. Although raised as a concern in Chapter 6, Section 3.4.3, this forum is one example where people with RDs are active members of a reading disability community. Additionally, the conversation touched primarily on the values of access and fairness and the themes of accommodations and self-advocacy. Issues of trust in advice and treatments also arose.

2.2 Discussion 2: College Writing Instructors Discuss Disability

The second thread included in this illustrative case study did not come from a site focused on reading disabilities. In fact, this thread was the only discussion involving disabilities on the entire board. The board in
Table 7.3: Descriptions of the key participants in the “College Writing Instructors Discuss Disability” thread.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amber</td>
<td>The creator of the thread. A graduate student interested in supporting students in college writing courses that make extensive use of digital technologies.</td>
</tr>
<tr>
<td>Lily</td>
<td>An author and poet with a mobility disability who tries to stay aware of accessibility issues.</td>
</tr>
<tr>
<td>Clark</td>
<td>A writing instructor who is a fan of classroom of technologies who usually tries to check for any accessibility issues before using them.</td>
</tr>
<tr>
<td>Virginia</td>
<td>A writing instructor who has worked with multiple students with RDs/LDs.</td>
</tr>
<tr>
<td>Amos</td>
<td>Identifies as Deaf, he is a graduate student with strong opinions about what is and is not a disability.</td>
</tr>
</tbody>
</table>

question was a discussion forum set up for an asynchronous, online conference about the use of computers in teaching English composition at the college level. Thus, participants in the thread (key ones listed in Table 7.3) were primarily instructors, educators, or researchers interested in topics related to the conference.

2.2.1 Opening Post

This thread involved the intersection of teaching digital composition skills and inclusive education. Amber, a graduate student (field not specified), states that she has two research interests regarding university students with disabilities. First, she wants to know about the digital literacies in which these students regularly participate. Second, she wants to identify what access barriers, if any, they experience. Towards answering these interests, Amber asks forum participants who are composition instructors to discuss their experiences with students with disabilities as well as any opinions involving disability issues and computer-based reading and writing.

2.2.2 Discussions of Digital Literacies and Disabilities

Amber’s post triggered several discussions. Some posters gave examples of how digital literacies provide new opportunities for some disability groups. One composition instructor discussed the impact of online video services on people who communicate with sign language. For many individuals who are deaf and particularly for those born deaf, sign language is their primary language and English is secondary. Video allows some individuals to create blogs and even “write” novels using sign language.

Discussion of access issues with digital practices was also a concern for some of the instructors. Lily, an author and writing instructor, creates interactive poetry on-line through the use of hypermedia and dynamic HTML. Because she has a mobility disability, Lily tries to remain cognizant of all forms of access barriers and has adjusted her web poems to use accessible web formats.

2.2.3 Teaching Students with Disabilities

Access issues were a particular concern when students with disabilities came into play. For example, Clark has been a long time fan of using web technologies in his teaching and does his best to ensure that tools like
screen readers work successfully with his web pages. Amber’s thread made him unfortunately realize that he had failed to continue that practice when he adopted a new tool into his teaching practice:

I’m a big fan of our CMS [content management system]… However, I just realized that I’m not entirely sure if text readers and magnification work… a disheartening thing to realize.

Another instructor participating in the discussion used the thread as an opportunity to find help for one of her students. Virginia stated that one of her students in her freshman English course has dyslexia. The university provided him with a reading pen, but the student rejected the device because it “… was too slow, clunky, and he hated the sound of the computer voice.” She asked if anyone participating in the thread knew of other TTS approaches that the student might like. Amber replied that she had seen some students use the Kurzweil 3000® software (Kurzweil Educational Systems, 2006) as well as free alternatives like ReadPlease (2005), although she had not necessarily heard great things about them.

However, when it came to truly supporting students with disabilities, the instructors identified respecting student wishes as more important than technology. Virginia related an experience she had years ago with a student who had several LDs. With previous students with RDs/LDs, she had taken care to spend extra time and offer more support to them, but she had not been able to do so with this student. Worried that she was neglecting him, she asked the student if there was more she could do to help him. His reply surprised her:

He said that he appreciated the fact that I didn’t hover over him in class and that I only came to help when called me because in high school his teachers hovered, which made him feel different and too dependent.

This made Virginia more aware that students, disabled or not, have unique preferences for how they should interact with the instructor. Some are more independent; others want more explicit support.

More generally, this triggered a greater discussion of the importance being aware that some students have disabilities. Several posters discussed how the thread helped to remind them about disability and access issues. This inspired Amber to thank the other posters for providing her with an insight:

…we have yet to hit a critical threshold [of number of students with disabilities] that makes awareness of disabilities an important issue for faculty. I commend all of you for having the awareness now.

Others echoed this value of maintaining awareness and connected it to inclusive education notions of proactively addressing access issues before they arise (Burgstahler & Cory, 2008; Deibel, 2008).

2.2.4 Defining Who is Disabled

Some dissension did occur in the thread, however. After the post about video blogging and deaf individuals, one poster objected to associating being deaf with having a disability. Stating that he lost his hearing at some point in his life and attended Gallaudet University, Amos argued that the culturally Deaf are not disabled but are
instead a distinct linguistic group. The basis of his argument was that in a community where everyone knows American Sign Language, a Deaf person would not experience any difficulties as they place no importance on hearing in their daily lives. This argument has been made previously by other Deaf scholars (L. J. Davis, 1995; Lane, 1997).

For the purposes of this study, the legitimacy of Amos’s argument is not important. What is relevant is the impact that his multiple postings on the topic had on the thread. After Amos’s first post on this topic, Amber acknowledged his perspective and tried to redirect the discussion back to the thread’s original topic. Amos continued discussing this issue, though, and made multiple posts pointing to scholarly articles and quoting large sections of text from those articles (one of which was the article by Lane (1997) from the theme-value literature review). In terms of content alone, Amos’s post accounted for more than half of the text in the overall thread, dominating and essentially drowning out the other discussions.

Moreover, certain elements of how Amos characterized disability are worth noting given their connections to normalcy, stigma, and perceptions of disability. When discussing disability, Amos used terminology associated with the medical model of disability such as “defect” or “loss.” He objected to using these terms to describe a Deaf person, but applied them to other disability types. At one point, Amos compared denying the teaching of sign language to a child born deaf as “...equivalent of taking a beautiful bird that can fly and chaining it into a tiny wheelchair.” This statement led Amber to post due to his continuous assertions of disability being a flaw or a state that no one would want to experience had become insulting to those reading the thread. Amos replied that such statements were valid and not insulting because:

...everyone who uses a wheelchair would gladly give it up if there was a way to have an operation to have the use of their legs restored.

The only support for this claim provided by Amos was an unsourced opinion essay by a Deaf scholar named Finklestein. Notably, his claim is demonstrably false. In a (1978) survey of wheelchair users, Weinberg and Williams found that half of the people they surveyed saw advantages in their physical disabilities and would not wish to be no longer disabled. Still, Amos argued that no one wants to be in the state of having to use a wheelchair, and therefore it was perfectly acceptable to equate being in a wheelchair to a state of confinement. However, since Deaf people do not find fault with their inability to hear, one should respect their identity and choice to not be treated or accommodated as having a disability.

In its entirety, Amos’s arguments about what is and is not a disability invoked many value issues. He admitted to having a condition that is legally and commonly recognized by American society as a disability. As one of the cultural norms of this society is to communicate verbally, he likely often faced barriers in accessing aspects of daily life. However, he embraced a viewpoint in which people like him are not disabled because it is part of their identity and thereby not a fault. To him, disability is to him about faults, defects, and
deviations from what is normal, yet the vast majority of American society would also not include his hearing disability under the notion of normal. He insisted that his view of what is normal was correct and demanded that it be respected even though it disrespected those with other types of disabilities. Amos’s negotiations and navigation around what defines a disability highlights the complex interactions of the sense of self and various definitions of normalcy.

2.2.5 Thread Summary

This thread does not involve the primary stakeholders of adults with RDs. Instead, the views and perspectives of college-level instructors who teach English reading and composition courses are presented. One poster’s views of what is and is not a disability touches on many of the dynamics discussed in the previous chapter about normalcy, disability, and identity. More illuminating, however, were the conversations of the other posters and their repeated mentioning of the importance of keeping aware of the needs and access issues of students with disabilities. This notion of being aware of events, needs, and aspects of the community one finds oneself in can be thought of as a value, and this value is conspicuously missing in the current value-stakeholder framework. Further investigation of the value of awareness of or connectedness to one’s community is warranted, and attention should be given toward its relation to this important group of indirect stakeholders is warranted.

2.3 Discussion 3: Dyslexia, Macs, and a Controversial Documentary

The final thread selected for analysis comes from newsgroup postings. Newsgroups are similar to discussion forums but also share some features with e-mail distribution lists. Each newsgroup is associated with a particular topic of interest, and members can choose to create, receive, and reply to discussion threads posted to a newsgroup. Moreover, it is possible to crosspost a discussion across multiple newsgroups if the focus of the discussion spans several topics.

This conversation comes from a crossposting that eventually involved three distinct newsgroups. The first, uk-apple-group, was a discussion and technology advice forum for British users of Apple computer products. Also involved was the rd-help-group, an international support forum for people with dyslexia. Finally, an interest group for amateur radio operators, amateur-radio-group was involved in a few posts in the thread.5

2.3.1 Opening Post

This thread began with Nick (who later disclosed being dyslexic himself) conjecturing about the superior utility of Macintosh computers (Macs) for people with dyslexia. At the basis of his argument is his characterization about people with dyslexia:

Dyslexics are picture thinkers. . . . They excel at processing non-verbal information. Loads of dyslexics are apparently the creative types -into art. Apparently many are computer experts, architects, graphic designers. . .
Table 7.4: Descriptions of the key participants in the “Dyslexia, Macs, and a Controversial Documentary” thread. Participants who specifically mention having seen the documentary are noted.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nick</td>
<td>The creator of the thread. He is dyslexic and postulates that Macintosh computers are especially dyslexia-friendly.</td>
</tr>
<tr>
<td>Neville</td>
<td>A British man with dyslexia who is an active participant on both the uk-apple-group and the rd-help-group. He is very open about educating others about dyslexia and watched the documentary.</td>
</tr>
<tr>
<td>Ruth</td>
<td>A member of the uk-apple-group. She is not dyslexic but considers herself more as a visual than a verbal thinker. She watched the documentary.</td>
</tr>
<tr>
<td>Dylan</td>
<td>A British man with dyslexia. He does not consider himself to be a picture thinker.</td>
</tr>
<tr>
<td>Ross</td>
<td>A member of the uk-apple-group. He takes a neutral stance on several issues. His posts aim to contribute information and not opinions.</td>
</tr>
<tr>
<td>Lester</td>
<td>A member of the uk-apple-group. He questions the notion of dyslexia and tries to view disability as a weakness compensated by strengths in other areas.</td>
</tr>
<tr>
<td>James</td>
<td>With his mild case of dyslexia, he favors Macintosh’s built-in dictionary application.</td>
</tr>
<tr>
<td>Mike</td>
<td>A member of the uk-apple-group. He states he has dyslexia. He also admits that lack of effort on his part contributes to his difficulties.</td>
</tr>
<tr>
<td>Leroy</td>
<td>A member of the uk-apple-group who challenges Mike about his laziness.</td>
</tr>
<tr>
<td>Henry</td>
<td>A member of the uk-apple-group. He denies the existence of dyslexia and argues that it is actually a lie constructed to hinder the lower class. He watched the documentary and agrees completely with its conclusions. His posts were not archived in the newsgroups.</td>
</tr>
<tr>
<td>Fred</td>
<td>A British man who has been diagnosed as dyslexic but does not experience enough difficulties to qualify for accommodations.</td>
</tr>
<tr>
<td>Timothy</td>
<td>An American man who was diagnosed with dyslexia early in his childhood, he describes the negative implications his disability had on his interactions with others.</td>
</tr>
</tbody>
</table>

Opining that the Mac interface is “so intuitive,” Nick reasoned that “…loads of Mac users are dyslexics.” As proof, he noted that Neville, a poster to the uk-apple-group, had disclosed about his dyslexia. Nick then asked the members of the uk-apple-group and the rd-help-group if they knew of any other dyslexic Mac users?

### 2.3.2 Ensuing Conversations

In cross-posting, Nick brought together two newsgroup communities with different backgrounds and interests. With the exception of Neville (one of the most active participants in the thread) and Nick, most of the posters previously followed only one of the newsgroups. The thread grew quite rapidly and averaging 35 new posts per day in the first three days. Overall, the combined efforts of thirty-seven posters (Table 7.4 lists key discussants) led to a thread that spanned over 1.5 years and 215+ messages.

The exact number of posts in the thread is uncertain. Because of how newsgroups are implemented, the exact number of posts is uncertain. A newsgroup server does not necessarily archive every message, creating gaps in the overall thread. In particular, the messages of one poster, Henry, were not archived. Their presence,
However, is partially provided as other posters would quote sections of Henry’s postings in their replies, but an exact recreation of everything he wrote is not possible.

This massive, cross-posted thread resulted in multiple conversations and subtopics of varying relevance to Nick’s original post. One off-topic example involved a lengthy discussion (45+ posts) on the merits and reality of anarchy as a political system. Another conversation concerned different styles of posting to newsgroups, including some historical discussion of how the Usenet community had changed over the years. For the purposes of this study, though, several strands of discussion are particularly relevant to the current study. First, some of the discussion did focus on Nick’s original thesis: Macs are dyslexia-friendly. Arguments supporting and challenging this view were given. Second, some of the thread moved on to discussing the accessibility of other technologies for users with dyslexia. Finally, a majority of the thread evolved into a series of debates about the nature and existence of reading disabilities, fueled in part by the then recent airing of a controversial British documentary, *The Dyslexia Myth.*

### 2.3.3 Macintosh Computers and Dyslexia

Despite being the topic of the opening post, only a few responses addressed Nick’s assertion that Macs are a great computer for users with dyslexia. The posts that did concern the post centered on either of the two premises assumed by Nick. First, he argued, dyslexics are visual thinkers. Second, Macs use a visual-friendly interface.

One of the first replies supported the second element of Nick’s argument. Ruth stated that although she is not dyslexic, she considered herself to be primarily a “picture thinker” who finds it much easier to work with drawings or pictures than just text and numbers. As an example of this, she compared her first experiences using PowerPoint and Excel. She had quickly picked up the “image driven” PowerPoint interface but stumbled and struggled with the text and grid nature of Excel. Although she did not directly make the connection, her post suggested that a different interface approach could be better for visual thinkers. A few other posters echoed this sentiment as well. James, who claims to have a mild case of dyslexia, espoused this view, but noted that his preference for using a Mac was not the visual features but the integrated dictionary application that he uses all the time.

However, more individuals argued with Nick’s opening post by contesting the first premise of his argument. Two posters who disclosed having dyslexia, Neville and Dylan, both challenged the idea that dyslexia is associated with strong visual thinking skills. Dylan used himself as a counterexample:

> I’m not. Indeed, I find pictures a pain in the backside in many situations. I would far rather read instructions in Czech than follow a set of pictures to complete a task.

Neville provided a broader perspective as to why people with dyslexia might show greater relative strengths in graphic design and other areas of visual arts. He argued that our society likes to find the positive when faced
with an apparently negative situation. In the case of disabilities, this means that people expect to see a strength substituting for the weakness:

you do find some really very bright dyslexics with very good visual skills. personaly i think that the evidenc is some what circansantal, and that really it amounts to emotional barganing, ie you lose something but you gain some thing else.

its the same reason for some of the intrest in steven hawkins, humans have a desire to even it out, to see the silver lining, be it real or not.

Thus, Neville argued that people with dyslexia might gravitate to fields like art not due to superior visual skills but due to a nurturing desire to avoid fields involving more reading and writing. Society’s perspective on and definition of disability, however, may lead to the misinterpretation of such decisions as indicative of strengths that do not necessarily exist.

Interestingly, Nick’s original post and these responses reflect what is known in the research literature. As part of their SeeWord project, Dickinson et al. (2002) did identify that direct manipulation interfaces with immediate visual feedback were preferred by their dyslexic participants. However, this preference was attributed to memory and sequential processing difficulties and not necessarily exceptional visual skills. The argument that people with RDs may or may not have strong visual skills was also discussed in Chapter 2, Section 4.3. Although some scholars like West (1995, 1997) have argued that dyslexia leads to great feats of visual thinking, studies of visual ability in people with RDs has failed to find evidence of such superior abilities (Winner et al., 2001).

2.3.4 Large Texts and Reading

Despite the lack of direct discussion of Nick’s primary questions about Macs and dyslexia, other conversations did venture into the usability of other computer technologies for people with dyslexia. Somewhat ironically, one of these discussions involved Nick’s difficulty with following the progress of the newsgroup thread he started. Roughly thirty days after his initial posting, Nick posted a reply to Neville asking how the thread was going and if there were any of “…the posts are worth wading through.” Several posters responded negatively to the idea that others should help Nick manage reading his e-mail and newsfeeds. One poster jokingly described a “usenet reading service” in which someone will not only relieve a person from “reading tedious articles written by other people” but would also do all of the “sifting, thinking and understanding” as well. Such negative reactions are not surprising, but Ross noted that Nick might be somewhat justified in his request to Neville:

…for somebody who really has trouble reading- as the OP [original poster] seems to have- it must be absolute hell, and take ages, even to skim through a load of replies. In fact I suspect that somebody with severe dyslexia skimming might simply be impossible.
Ross added that asking a friend to summarize the thread could be quite helpful, but it would have been far more prudent and diplomatic to request that help in a private communication. It is quite possible that Nick meant for this to be a private message to Neville, but everyone in the newsgroups did end up receiving it.

Acknowledging the possibility that reading the thread involved access issues, several individuals replied with strategies for better managing the potential flood of messages from a newsgroup. Some suggested that Nick could configure his newsreader to limit the number of messages received on a daily basis to a manageable amount. Neville confirmed Ross’s suspicions that a busy newsgroup thread like the current one could be difficult for a person with dyslexia. Depending on the degree of reading difficulty experienced, Neville noted that text-to-speech is sometimes helpful:

- text to speech can be slow and fairly dry, i use it sometimes, mostly if its a massive block of text,
- but to be fair my reading is genurally good.

This is the only mention of TTS in the entire thread, and Neville notes that he does not use it that much. Moreover, he laments that “most tecnogical methods of helping one read fall down in some way or other, realiticy.”

### 2.3.5 Spellcheckers and Spelling

Despite the lack of discussion about technologies that support reading, several issues related to spelling and computers were mentioned. Neville noted that spelling was a major obstacle for when using the search features in any operating system. If he misspelled any of his search terms, nothing would be found. He did offer a solution in that it would be nice if the search functions worked “…like google does where it finds what you typed but also asked did you mean this?”

Spellcheckers were suggested as potentially useful, but several issues were noted. Although a spellchecker can identify when a word is spelled wrong, the user must sort through the suggested correct spellings. Neville articulated this point several times:

- i can look at word and it looks as wright as the correct spelling. one problem with spellcheckers
  is chosing the wright word as they can bring up a number of almost identical looking words
  …all the options it gives look just the same. which means i have to be very careful not to chose
  the wrong one and put a correctly spelt but totaly random word in...

This led Lester, a member of the uk-apple-group, to suggest integrating “a spell checker with a theasaurus, that not only gave a list of alternate words, but a few words on the meaning of the word.” This suggestion led to mentions of earlier word processing software that had similar functionality, but these posts noted that Lester’s idea had not truly been implemented despite being seemingly easy to do so.

More generally, the challenges of spelling garnered discussion from many posters. Neville, as an active poster in both the rd-help-group and the uk-apple-group, commented about his own struggles with spelling.
Despite an early diagnosis of dyslexia and extensive remediation, he stated that “...though my writing and spelling did improve dramatically they are still very poor.” James noted that he experiences similar difficulties, but not nearly as bad as Neville’s. Despite the poor spelling, several posters complimented and respected Neville on his ability to make “...points in a very articulate, intelligent way.” Another poster noted that since joining the uk-apple-group, Neville’s spelling and grammar had either improved significantly or that he had become inured to his writing errors.

An important observation involving the value of literacy came from Ruth when she commented about the difficulty inherent in the English language:

Let’s all be a bit kinder to ourselves and the world - the English language is bloody difficult to spell. Ghoti7 and all that. :-)

Follow-up posts recognized the idiosyncrasies of spelling in English. Moreover, some of the responders suggested and debated whether other languages might be easier in terms of spelling rules. Some of their suggestions, such as Spanish, Italian, and Russian, have been verified in studies comparing the difficulty of learning to read and write across languages (Seymour et al., 2003). However, a few balked at the suggestion that English is difficult and interpreted such claims as a call to abandon the language for another. Ross noted the similarities of this reaction to past efforts at introducing simplified spelling:

Many simplified spelling systems for English have been suggested, some partially adopted; I believe Webster was a partial adopter ... None of it ever caught on in a big way. Probably a combination of inertia (mostly) and snobbery as in ‘any fule kno how to spel that’.

This expectation that everyone possesses literacy competence was shown in other elements of this thread. Mike, who disclosed having an RD, discussed his own struggles with spelling:

I’ll freely admit some of it laziness. I don’t take time to read my work. But even when I do, carefully, I’ll still miss having substituted completely the wrong word.

Leroy quickly identified the crux of Mike’s problem: “You just rush things.” Even after Mike and Neville articulated that their phonological processing deficits occur even when they focus on the text, Leroy continued to discount their reading and writing problems by asserting that, “Mistakes are only obvious when you see them.” Leroy failed to show empathy and understanding about how literacy is experienced differently by people with RDs.

2.3.6 The Dyslexia Myth

The public perception about what is normal in regards to literacy and what is a reading disability constitutes the majority of the thread due in part to the fortuitous timing of Nick’s original post. Roughly one month prior to his post, the documentary *The Dyslexia Myth* had aired on Channel 4 in Britain. This controversially-titled one-hour special challenged that popular conceptions of what dyslexia is are wrong (D. Mills, 2005). The
documentary refuted notions that dyslexia is caused by visual problems or reversal of letters and recognized that visual stress is a separate issue. The role of intelligence in reading was similarly debated. The act of letter and word decoding was stated to be a basic neurological skill independent of intelligence. It was therefore argued that the notion of defining dyslexia as struggling with reading despite having normal to high intelligence was unfounded as intelligence was unrelated to reading. Dyslexia, in essence, only exists as an artificial construct. This led to the controversial argument that the public funds used to screen for, identify, and provide accommodations to British students with dyslexia could be better spent improving and implementing the teaching of literacy skills.

As earlier when Amos argued whether deafness is a disability, debating the validity and legitimacy of the documentary is not important. Instead, many of the uk-apple-group members had watched the documentary, as had some of the British members of the rd-help-group. The recency of their viewing increased their awareness of dyslexia and primed them to ask questions and express doubt. Thus, the stage was set for a debate much larger than the usability of Macs for people with dyslexia. The majority of the thread evolved into heated debates about what dyslexia is, does it exist, and how to best address the needs of people with dyslexia. Elements from and references to the documentary itself were referred to and shared.

The documentary’s discussion of the relationship between intelligence and reading ability continued into the thread. Multiple posters referred to a provocative demonstration from the documentary in which a young woman with Down Syndrome read aloud from an advanced text with polysyllabic words. Although her reading was flawless, the tone and intonation she gave to the text as she read made it “...clear as a bell that she didn’t understand it.” Such an example demonstrates that some aspects of reading do not require even a normal level of intelligence and begets the question as to why a person with normal or better intellect could possibly struggle with reading? This creates a conundrum regarding how to properly evaluate struggling readers within a society that expects and values literacy competence.

While several posters only implied or talked around that question, Lester directly asked the question, “Can you be a poor reader and still [be] intelligent?” In pondering the answer to his own question, Lester postulated about what makes a person with dyslexia different and settled on “...a mild kind of ‘brain damage’ in specific regions of the brain responsible for processing sensory information.” Furthermore, in discussing the possibility of advantages gained from having a disability, he suggested that such “subtle abnormalities” could lead to stronger abilities in other areas. He stated, without references for support, that people with manic depression are strong at word play and rationality and that “...a gifted blind person would have marvelous abilities in 'other' areas.” Whether deliberately intentional or not, Lester’s thoughts and choice of words clearly defined a notion of normal brain function and ability, separating people with RDs from the general community. He tempered this distinction and abnormality, though, by suggesting that members of this group
may also be better than others by exhibiting superior abilities in other areas. As an unintended consequence of such statements, a person with an RD who lacks such bonus abilities is thereby less valued and in a poorer state of existence. This is the heart of disability-related stigma. In all fairness, though, Lester did attempt to couch his discussion and express its limitations by noting that different cultures value and interpret differences differently, even stating positively about the values of respect, diversity, and awareness:

\[
\ldots \text{as a society we need to understand what makes up a human being, and how we can all support each other with a diversity of neurotypical individuals.}
\]

Other posters did not hold such a position of respect. In particular, Henry directly challenged and dismissed the notion of reading disabilities:

Dyslexics are just *poor readers*. If you are from the lowest classes, or none too bright, you’d just be described by more traditional terms like “illiterate” or *crap at reading*. Dyslexia is just a term used to describe people who appear *too intelligent* to be such poor readers.

Henry’s arguments are directly in line with the thesis of *The Dyslexia Myth* documentary, but he expanded the debate to include issues of income levels, class privilege, and fairness. In the discussion that followed his initial claims, he further articulated that being labeled “dyslexic” was a privilege afforded to “…middle class people who have parents that can afford the ridiculously expensive diagnosis required to be officially awarded with ‘dyslexia.’” Henry’s view of RDs is that as today’s society values intelligence and literacy, it is unfavorable to perform poorly, therefore those with the means have found a way to avoid the negative association by formulating an excuse that can be purchased. Moreover, since remedial instruction and “good teaching works for most poor readers,” Henry argued that spending more time, funding, and attention on dyslexic students denies help to lower-income struggling readers, thereby reinforcing society’s class structure. These statements fit with Henry’s other posts that he is a proponent of anarchism and believes that “…school is more about control than education.”

Responses to Henry took several forms. Many posters challenged individual claims that he had made. For example, several posters asked for Henry to name the test that well-off parents pay for their children to take in order to gain a diagnosis. Henry evaded such inquiries by referring to the documentary’s claim that no definitive test exists for distinguishing dyslexic readers from otherwise struggling readers. Despite several posters pointing out the contradiction of him claiming that there is a test but no real test exists, Henry failed to back his accusation of there being a diagnostic available for purchase by those with the financial means.

Others pointed out that Henry’s claims of dyslexia diagnoses and class were false given the nature of the British public education system. Dylan stated that the

\[
\text{free state education system...diagnose dyslexia for bright children who struggle to read, for average ability children who struggle to read and, indeed, for those who could be outshone by}
\]
Neville also noted that, “you generally will have to pay for the tests but not the whole amount,” and that the tests are priced at “…a level to discourage every one from trying just in case, but still affordable.”

Others did comment that some financial issues were involved in diagnosing and receiving accommodations. Neville, in discussing testing costs, posted that teachers are responsible for identifying students who may be at risk for dyslexia. However, not all teachers are well-trained in this manner, a point also made by Kriscenski-Perry in regards to why RDs/LDs are often diagnosed more often in areas with higher economic levels (Kriscenski-Perry & McColm, 2001). Mike did note that he was advantaged in that his school recognized his reading difficulties as more than just being a slow reader. He admitted that “…in other educational circumstances I would simply have been ignored as a thickie or labelled a lazy waster.” Fred, who disclosed as being dyslexic, stated that diagnoses and accommodations are not necessarily linked. Although he has passed some tests for RDs/LDs, his reading is only mildly affected and does not qualify for aid.

Further arguments and dissension were raised against another aspect of the claims by Henry and the documentary—that the diagnosis of dyslexia is an award and positive thing. The idea that receiving a diagnosis provides an explanation for poor reading performance and a ticket to free accommodations was directly challenged by several posters recounting their experiences living with dyslexia. Nick related how when he received private tutoring in some classes, he could perform very well. Those who knew he was dyslexic resented his good performance, and several teachers concluded

…concluded that I was very intelligent was very lazy (which was not true - it was hurtful. I wasn’t lazy - I just didn’t understand material in the way it was presented)

The poster Timothy also related his experiences with an early diagnosis of RD/LD. Placed into special education classes in first and second grade, he was regularly called a “retard” by regular school kids and repeatedly got into fights with those kids as he was “…was an ultrasensitive and highly intelligent child, and so I was keenly aware of the insults and cruelty.” Like the students interviewed by Edwards (1994), he kept the shame with him throughout his life. When he changed schools and was no longer in the special education classes, he kept his past a secret:

I never forgot where I came from. I always kept the shame and believing that I am stupid because of my special education experiences.

This only changed when he began to read about his disabilities and could form a positive identity around having a disability. As Timothy stated:

I feel the problem is that too many people think special education is for the mentally retarded and not for remediation at all. This is why a lot of people don’t understand that people with learning disabilities can get their problems corrected.
In replies to Timothy’s posts, Neville agreed and recalled his own past with teasing and the emotional scars he carries to this day. Both he and Timothy explicitly reject Henry’s and *The Dyslexia Myth’s* claim that their diagnoses were completely advantageous. Although tutoring, accommodations, and understanding their struggles were all positive outcomes, the negative social implications of having RDs/LDs were far from insignificant.

### 2.3.7 Thread Summary

This thread is a rich congruence of discussions of reading disabilities, technologies, and the social aspects of RDs/LDs in today’s society. Both people with and without RDs conversed in this thread. Although informative about computer choices and issues relating to reading and spelling, the airing of *The Dyslexia Myth* fostered a powerful debate about the existence of dyslexia and the implications it has in relation to access, fairness, and modern society’s valuing of literacy. Awareness of how people differ was brought up and both appreciated and rejected.

### 3 Discussion

In these three discussion board threads, how people converse relatively unprompted about reading disabilities and technologies was observed. Various technologies were discussed. Notably, most of the ATs concerned spelling and writing and very few that provided mathematics support. The few mentions of text-to-speech were the only tools mentioned that support the reading process. This supports the concerns expressed in Chapter 3 that there is a lack of either awareness of or overall availability of ATs for supporting reading.

Each discussion thread provided insight and support to the value-stakeholder framework proposed in the previous chapter. With multiple examples, the value of literacy in today’s society and how it shapes a community’s notions of normalcy was emphasized. Issues of access and fairness arose as well. Respect and the lack thereof came into play in many ways. Most importantly, the voices in these threads were not only people with RDs/LDs. Family members, teachers, members of other disability groups, and general members of society all contributed.

Moreover, gaps were found in the value framework. Two values, awareness/connectedness and diversity, were identified as pertinent and influential in these threads. Todd’s unawareness of the type of help and support he could receive, the instructors’ appreciation in being reminded of access issues, and a shared viewing of a documentary fostered discussion of dyslexia all show that awareness of various issues shapes discussions and opinions among various stakeholder groups. Recognizing that people differ in important and sometimes meaningful ways also came through several times in these discussions. Sometimes this diversity was embraced; other times it was rejected as not even existing.

Some elements of the value-stakeholder framework account for these notions of awareness and diversity.
Chapter 7

The notion of access is inherently about understanding and being aware of potential barriers. How the community defines normalcy is similarly influenced by notions of awareness and what forms of diversity are represented. One’s sense of identity is also framed by diversity and awareness of how one fits within a community. Normalcy and diversity clearly exist in a paradoxical tension with each other. While normal suggests sameness, the goal of diversity can be thought of as everyone being different as the typical state.

The literature review in Chapter 6 that formed the basis of the value-stakeholder framework was not meant to be comprehensive of final. While this empirical investigation supported some of its elements, it was found to be incomplete. As is the nature of the integrative and iterative process inherent to Value Sensitive Design, additional investigations to explore awareness and diversity are warranted.

4 Chapter Summary

This chapter presented an empirical investigation of conversations involving reading disabilities and technologies. In order to observe public conversations unprompted by a researcher’s inquiry, discussions from online message boards were analyzed. Three threads involving various stakeholder groups were described in relation to the value-stakeholder framework laid out in the previous chapter. The analyzed threads replicated and supported many of the themes and issues found in the initial literature review. Two values, diversity and awareness, were noted as potentially missing from the existing framework, suggesting further research directions.
NOTES TO CHAPTER 7

1 Unfortunately, the open posting policy eventually led to the demise of this discussion forum. With increasing frequency, more and more posts were generated by spam bots. Two years after this thread began, at least 90% of all threads were advertisements. Towards the end, there were some posts about how to salvage the community and its efforts at providing support to people with dyslexia, but by that time, most of the posters had already abandoned the board.

2 Todd, like all other names in this chapter, is not this poster’s actual screen name. Instead of using abstract identifiers such as numbers or letters, real names were chosen to help emphasize that these case studies are about real humans. Pseudonyms were also selected to reflect the apparent gender of the posters.

3 As is to be expected, misspellings occur frequently in the posts. Whether this is due to many of the posters having reading disabilities or because it is casual writing on-line is unclear. Regardless, all quotes will replicate the original spelling and grammar errors but will no longer be indicated with a sic.

4 The software recommended by Marybeth was Maths2XL and was available at http://www.maths2xl.co.uk/index.html. As of August 31, 2010, this website no longer appears to be available.

5 The involvement of the amateur-radio-group newsgroup was minimal and limited to two posts that involved two posters from that newsgroup. While the first post appeared to connect to a discussion of difficulty with spelling, the reply was basically an insult rejecting the claim. To understand the nature of this debate, I looked into the newsgroup and found that at the time, there was an ongoing debate about people with RDs/LDs participating in amateur radio. Apparently, radio operators were required by federal regulations to use acronyms and codes on the radio, and people with RDs/LDs had extreme difficulty using them to the point that an ADA access complaint was issued. The result was a move away from the requirements, which led to dissension and complaints among the members of the newsgroup that eventually festered into name-calling and slinging of insults.

Thus, in the process of working on my dissertation, I determined that for a time, there was a notable and documentable hatred of people with dyslexia among at least one set of amateur radio operators. Aside from this footnote, though, I have not pursued this finding any further. For completeness, though, it should be noted that amateur radio operators are members of the affected/affecter indirect stakeholder group. They are affected when people with dyslexia participate in ham radio and has difficulty using acronyms and codes. Furthermore, through actions such as those demonstrated on this newsgroup, they exert a stigmatizing influence on the use of ham radio technology by adults with RDs/LDs.

6 For the most part, this discussion of anarchy was irrelevant to the focus of the study. Some elements
deserve some appreciation and mention. On one level, the debate provided insights into the political viewpoints of several posters, including Henry Score’s. Several of the posters take and report their results from the political compass online assessment (http://www.politicalcompass.org/).

More generally, though, is what the conversation tells about the posters and their digital literacy practices. Most of the participants in the anarchy conversation seem to come from the uk-apple-group. They would call upon previous newsgroup conversations in indirect ways. Some would refer to a previous political debate in another thread. The link to the political compass was retrieved when one poster recalled an earlier newsgroup thread involving an online quiz about political beliefs, but it took another poster to find and post that link. Essentially, the conversational history shared by uk-apple-group community augmented and shaped their current dialogues.

Ghoti is a pathological example of how complex English phonology can be and is actually pronounced the same as the word ‘fish’ (Carney, 2001). The ‘gh’ is pronounced the same as in ‘tough,’ the ‘o’ as in ‘women,’ and the ‘ti’ as in ‘nation.’ Together, these produce the same phonology as the more common spelling of ‘fish.’

Given that this dissertation was written five years after the documentary aired, it should be fairly obvious to the reader that the notions of dyslexia and reading disabilities have not been abandoned by educators, psychologists, etc. Still, The Dyslexia Myth did create some uproar when it was first shown. The Dyslexia Institute, the British Dyslexia Association, and the British Psychological Society all issued responses and critical articles after its airing (Cramer, 2005; Nicolson, 2005). There criticisms involved the documentary’s narrow view of reading as only word decoding, the ignoring of research demonstrating genetic and neurological underpinnings of RDs, and the sole focus on how dyslexia manifests in young children learning to read.

Additionally, some parents of dyslexic children expressed concern that their child’s accommodations and support might be taken away. This concern even worked its way up to Parliament. Lord Andrew Adonis, the education minister at the time, stated before the House of Lords that the documentary caused undue anxiety and dyslexia would continue to be recognized as “…a complex neurological condition and that people with dyslexia do need proper support to develop the reading, writing and comprehension skills essential to succeeding in school, in life and in work” (BBC News, 2005).

For the remainder of this dissertation, this potential value of awareness/connectedness will be referred to simply as “awareness.” This may change in the future if a more appropriate term is identified.