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Changing the Public's Attitude Toward Braille: A Grassroots Approach

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Abstract: This study addressed the effect of casual exposure to braille on the attitudes toward blindness and the use of braille of three groups of sighted university students: students in two sections of a general linguistics course for language arts teachers, one taught by a blind instructor (Group 1) and the other taught by a sighted instructor (Group 2), and students in an English composition class (Group 3). Overall, the respondents in Group 1 expressed the most positive attitudes toward blindness and toward braille. These results suggest that individual readers of braille can positively affect attitudes toward braille.

There is no denying the utility of braille in the personal and professional lives of people who are blind. As Nemeth (1988, p. 316) aptly put it, "Braille has liberated a whole class of people from a condition of illiteracy and dependence and has given them the means for self-fulfillment and enrichment." Despite the utility of braille, however, rates of literacy in braille have been decreasing (American Foundation for the Blind, 1994). In the face of low braille literacy rates, braille readers and advocates have lobbied vigorously for the increased use of braille in all areas of life, and there has been much discussion about improving attitudes toward braille and the effect of negative attitudes on the use and availability of braille (see Augosto & McGraw, 1990; Ponchillia & Durant, 1995; Wall, 2002; Wittenstein, 1994).

Schroeder's (1996) article helped clarify attitudes toward braille among people who are blind, readers and nonreaders alike (see also Wells-Jensen, 2002, 2003).

Sighted people can be considered largely uninformed about braille or about the concerns about falling literacy rates. Nevertheless, they, as the majority, wield a great deal of social and political power. First, public pressure shapes legislation, and less popular programs or those that are perceived to be either extravagant or peculiar are often the first to face extinction when budgets need to be cut. Second, the majority of people are only temporarily able-bodied. That is, according to AFB (1994), most people who are blind were sighted at one time and lost sight later in life; many such people have half-formed and perhaps distorted perceptions of blindness and of the need for braille. Rehabilitation centers do what they can to change harmful preexisting ideas about braille and blindness, but it is a difficult and time-consuming task.

Their task would be so much easier if the general public would join in promoting braille. However, if advocates of braille have not yet been successful in promoting braille among the majority of people who are blind, what chance do they have of influencing the sighted population? What kind of program would be necessary, and how could any program with such a large scope be undertaken?

This article addresses whether attitudinal change may be achievable, not through the top-down implementation of costly educational and public-relations campaigns but, rather, through changes at the grassroots level where individual people who are blind—activists and nonactivists alike—make incremental contributions to alter the beliefs of the general public. Specifically, does casual exposure to the efficient use of braille alter sighted persons' perceptions of the learnability and

desirability of braille? Furthermore, do other forms of more formal education, such as college courses that are designed to address implicit assumptions about language and linguistic minorities, have a similar effect even when braille is not mentioned per se?

Both questions were investigated in a survey administered to undergraduate students at a state university in the midwestern United States in which all preservice language arts teachers are required to complete a general linguistics course. The course addresses the structure and function of language, as well as attitudes toward nonstandard speech and linguistic minorities. Students are introduced to the astonishing variety of languages in the world and to an objective, scientific approach to languages, speakers, and ways of writing and reading. By the end of the course, they are expected to be skeptical when they encounter common linguistic myths and misconceptions, such as that one language has 500 words for snow, that another language has no system for representing linear time, or that a single official language is inherently superior to multilingualism. They are also expected to know what a language is and is not and to be able to identify American Sign Language as a language, for example, whereas orthographic codes such as Chinese logograms or braille are writing systems, rather than languages in and of themselves. Atardo and Brown (in press) demonstrated that a general linguistics course of this sort can have a significant effect on students' attitudes toward linguistic diversity.

During a recent semester, two sections of the general linguistics course were taught simultaneously, one by an instructor who is blind (Group 1, n = 25 students) and the other by a sighted instructor (Group 2, n = 17 students). The two instructors had the same basic approach to the course and used a similar syllabus and the same textbook. At the point in the semester when this investigation was carried out, neither section had begun the unit

on writing systems, and thus neither instructor had discussed braille. However, the two sections had been introduced to objective ways of looking at various aspects of the structure and use of language, as well as to programs that are designed to promote languages that are spoken by linguistic minorities within and outside the United States.

The blind instructor, a fluent braille reader and writer (including Grade 3 braille), relied on braille throughout the semester. Students in the class frequently observed this instructor checking the braille room number before entering the classroom and using a braille notetaking device (with speech turned off) for lecture notes and for writing down information during the class. To facilitate the return of quiz papers during class, the instructor had brailled the students' names on their papers. Students who were inclined to do so could have examined these notations, but the instructor did not discuss or even comment on the notations. Other factors, such as the use of dry-erase boards and the degree of difficulty of the two classes, were roughly equal.

Method

To find out whether such casual exposure to braille could affect sighted students' attitudes toward braille, we administered a survey on attitudes toward and beliefs about braille to both classes during the 12th week of the semester. Because it was likely that the linguistics course per se would have some effect on the students' attitudes, we also administered the survey to a general-studies English composition class (Group 3, $n = 21$), also taught by a sighted instructor, as a control group. This class was not in any sense a linguistics class. It was concerned with the logical construction of short essays and focused on the students' personal writing. Participation in the survey was voluntary, and no compensation was provided.

Respondents

The respondents in the two linguistics courses were primarily English education majors, whereas those in the English composition course had a wider variety of majors, including education. The majority of respondents were monolingual English speakers aged 19 to 24. None of the students in any of the sections had any detailed knowledge of braille, and few had much interaction with people who are blind outside the classroom.

Survey instrument

The respondents were asked a series of 11 questions. The first four questions were multiple-choice questions about the respondents' knowledge of braille, their attitudes toward braille menus in restaurants and braille room numbers in public buildings, and the likelihood that they would use either braille menus or braille room numbers. For each question, there were four possible answers, with the most pro-braille choice scored 4 and the least pro-braille choice scored 1. Questions 5–11 dealt with the respondents' attitudes toward braille: whether it is difficult to learn or slow to read, whether they would make learning braille a priority if they were to lose significant vision, whether they believed that they would have trouble learning it, and their attitude toward how braille interacts with independence for people who are blind. These were statements with which the respondents were asked to agree or disagree, scored on a 7-point scale, with 7 indicating strong agreement.

Results and discussion

The mean scores for each group are presented in Table 1. Both participation in a linguistics class and casual exposure to the use of braille made detectable differences in the respondents' perceptions of braille. For most questions, the responses exhibited

a consistent trend, with the respondents in Group 1 presenting the most accepting and open attitudes toward braille, those in Group 2 presenting slightly more hesitant attitudes, and those in Group 3 presenting the most cautious attitudes. The apparent exceptions to this pattern are discussed in detail later.

An analysis of variance was performed across the three groups. Although only one question was significant at $p < .05$, a highly significant difference in the average overall responses to all the questions was found between Groups 1 and 3 ($p = .008$).

The first question was designed to detect individuals who already had extensive knowledge of braille. A few respondents indicated that they knew about the braille alphabet, but no student in any of the three groups claimed any knowledge of contracted braille or a close association with a person who is blind.

The next three questions dealt with the respondents' perceptions of the public use of braille. These questions were included partly to create an environment in which the students would think about where and how braille is or could be used. Question 2 asked about the use of braille menus in restaurants. Possible responses ranged from "It's wrong for a restaurant not to have a braille menu" to "Since most blind customers would be accompanied by a sighted person, [they] would still be able to get the information off the menu, so it's not necessary for the restaurant to go to the expense of providing a braille menu." For this question, the difference between Group 1 and Group 3 was significant ($p = .047$, mean for Group 1 = 3.17, mean for Group 2 = 3.00, and mean for Group 3 = 2.62).

Note that this type of question inevitably conflates attitudes toward blindness with those toward braille—an association that is usually impossible to avoid (see, for example, Spungin & D'Andrea, 2001). It may be expected, though, that improving

attitudes toward blindness would also benefit the use of and attitudes toward braille, and vice versa.

Questions 3 and 4 concerned attitudes toward brailled public signs. Although the differences among the groups were not significant, they varied in the same direction as for Question 2. Most respondents in all three groups agreed that such signs are necessary and useful (Question 3), and those who had casually observed the use of braille room numbers (Group 1) were most likely to say that they would use such information if they were blind (Question 4). For Questions 5–11, the respondents were asked to rate (on a 7-point scale) their agreement or disagreement with a series of statements about braille and people who read braille. Compared to the respondents in Groups 2 and 3, the respondents in Group 1 indicated that they would make learning braille a higher priority (Question 5), that they thought braille was less complicated (Question 6), and that they would have less trouble learning to feel the dots (Question 7). It is worth noting that this finding held true despite the fact that when the students in Group 1 received their class papers from the blind instructor, the braille (which was routinely written on the notebook pages with a slate and stylus) was often flattened and difficult for the untrained finger to feel. The respondents in Group 1 were also more likely to believe that reading braille is not slower than reading print (Question 8). Again, although the between-group differences for these four questions did not reach statistical significance, the tendencies were consistent with the previous responses.

The last three questions require a more nuanced analysis. They not only further conflate attitudes toward braille with attitudes toward blindness, but, in some cases, may reveal conflicts between those attitudes. For example, when asked whether the use of braille makes a person who is blind seem more like a sighted person (Question 9), Group 1's tendency to respond more

favorably was followed closely by the response of Group 3, with Group 2 appearing to react with more hesitancy. Although the interpretation of this question was intentionally left up to the respondents, it was assumed that most would think that being "more like a sighted person" was a positive response. The differences in the responses to Question 9 approached statistical significance ($p = .083$). An explanation for this distribution of responses may lie partly in the kind of training and consciousness-raising that students receive in their linguistics classes. Along with increasing students' awareness of linguistic diversity, the general linguistics class strives to teach students to adopt an objective and descriptive attitude toward differences, rather than to react emotionally or judgmentally. The low rating of Question 9 by Group 2 (the linguistics students with a sighted instructor) may partly reflect their increasing understanding of the wide range of human variation and their attempt to think objectively and analytically about the differences between reading braille and reading print. This effect may have been mitigated for Group 1 (the linguistics students with a blind instructor) in a number of ways by their regular exposure to an instructor who is blind: For Groups 2 and 3, all the questions on the survey were merely hypothetical, while for Group 1, any judgment about people who are blind, in general, would likely be a judgment about not only a specific person, but a highly educated person who was in a position of authority over them.

For Question 10, the respondents were asked to react to the idea that a person who is blind who does not read braille is illiterate. It is interesting that the respondents in Group 1, hitherto the most vigorous supporters of and advocates for braille, seemed to disagree the most strongly with this statement, followed by the respondents in Group 3, whereas the respondents in Group 2 were the most likely to agree that the lack of knowledge or use of brailled could be called "illiteracy." This result may be due, in part, to the difficulty that the respondents had separating attitudes

toward braille from attitudes toward people who are blind. Because of their positive working relationship with the blind instructor, the respondents in Group 1 might have been less comfortable using the stigmatizing label "illiterate" for other people who are blind. On the other hand, because of their growing sense of their own objectivity, the respondents in Group 2 might have been more willing to use what they thought was an objectively accurate label, since they were free from close interactions with anyone who might be hurt by being called illiterate. However, few respondents in any group seemed eager to label a nonbraille reader illiterate (mean for Group 1 = 2.68, mean for Group 2 = 3.47, and mean for Group 3 = 3.29), and the differences among the groups were not significant.

The last question probed the respondents' views on whether braille is "essential for independence." Again, although the result was not statistically significant for this sample, the low rating by the respondents in Group 2 may be related, in part, to their linguistic training. There is a common misconception that groups of people without a written language must be linguistically and culturally "primitive." However, many languages have never been written down, and thus many societies have no traditional concept of "literacy" (O'Grady, Archibald, Aronoff, & Rees-Miller, 2001). The existence of a writing system for a given language may be related to historical trends, such as commerce and colonialism, but it is not directly correlated with any objective measure of the complexity of a language or a culture (see Niedzielski & Preston, 2000). Once students begin to discover that entire societies (with complex languages and cultural traditions) can exist without literacy, it may become easier for them to entertain the notion that an individual in this society can be independent without literacy. This idea is supported by interviews with blind adults who did not read braille and who did not perceive themselves to be dependent (Wells-Jensen, 2003).

A few cautionary notes are in order. First, the number of respondents was small because linguistics classes at this university are kept small. More robust findings would be available in the unlikely case that larger sections of similar courses were offered during the same semester with similar pairings of sighted and blind instructors. Second, because both linguistics classes were primarily (although not exclusively) filled with future language arts instructors, while the students in the general-studies English composition class included a variety of majors from across campus, it may be argued that part of the effect that was observed for linguistics classes is an artifact of the students' majors, rather than the effect of being enrolled in the course. The findings of Atardo and Brown (in press), however, indicated similar effects on the understanding and acceptance of linguistic diversity as a result of taking an undergraduate linguistics class. It may be expected that braille would also benefit from this widening of perspectives.

Although it might have been desirable to obtain additional data on the equivalence of the three groups via a pretest early in the semester, such a pretest was not conducted for two reasons. First, there was no reason to assume that the students would not be randomly assigned to the two sections of the linguistics class. Second, the purpose of the study was to evaluate incremental and perhaps unconscious changes in attitude over the course of several weeks; thus, any pretest that focused on braille would have drawn unwanted attention to its use in the classroom and would have alerted the students to the conditions of the study.

Finally, the ordering of the choices in Question 2–4 may not reflect a real continuum of attitudes, from accepting to not accepting attitudes. Differences were found in these questions, but their order on the continuum may be contestable.

Conclusion

Although this was not a controlled experiment and differences among the groups were small in some cases, the linguistics students who had a blind instructor (Group 1) consistently demonstrated stronger pro-braille attitudes than did the students in the other two groups, and the linguistics students with a sighted instructor (Group 2) showed more acceptance of braille than did the students in the general-studies English composition (Group 3) in most of their responses. Two types of apparent exceptions to this simple pattern were found. First, the students in Group 1 were the least likely to equate the inability to read braille with illiteracy (Question 10); second, the students in Group 2 were the least likely to agree that reading braille "makes a blind person seem more like a sighted person" (Question 9) and that it is "essential for independence" (Question 11). We speculate that the unique relationship of the students in Group 1 with a highly educated person who is blind made them less willing to use a stigmatizing label like "illiterate" for other people who are blind and that the responses of the students in Group 2 to the questions that involved judgments about the social status of people who are blind may be related to the students' increasing awareness and acceptance of diversity as a result of linguistic training (Atardo & Brown, in press). In other words, the exceptional responses probably reflect positive attitudes toward people who are blind, rather than negative attitudes toward braille.

It is important to remember that none of the groups in this study had much concrete evidence to support their ideas about braille. Group 1 had seen braille being used, but the instructor had not read aloud to them or explained anything about braille. Their attitudes toward whether braille is slow or complicated were based on little more than inference. This fact may be extremely useful for advocates of braille literacy if, as has been shown here, groups of attitudes vary together with exposure to braille, positively affecting attitudes toward a number of different facets

of the issue.

This is the beginning of what may prove to be a fruitful line of action and inquiry into what shapes public attitudes toward braille. A more detailed survey that attempts to pinpoint exactly which behaviors contribute to the improvement of attitudes toward braille would be valuable. Also, this study was something of a snapshot, shedding light only on one point during these students' development. Pre-and posttests in other courses that are taught by blind faculty who are literate in braille (regardless of the subject matter) may help to separate further the influence of exposure to braille from other factors, and follow-up surveys would help determine whether these effects are general and lasting. The lack of a pretest in the present study was discussed earlier; it is also worth noting that the usefulness of a posttest would have been diminished somewhat, for the purposes of this investigation, by the fact that braille literacy was introduced overtly as a lecture topic in the linguistics courses after the survey had been administered, at which time both instructors were outspoken advocates for the system and its use.

Clearly, any extension or replication of this study with larger groups of respondents would be beneficial, although such replications would be extremely difficult to implement, primarily because relatively few college faculty are blind. However, attitudes toward braille need not be adjusted using large, expensive, and cumbersome studies or programs. Little by little, each person who is blind or each advocate of braille who overtly uses and relies on braille in public clearly sends the message that braille is easy to use and practical—providing, as Nemeth (1988, p. 316) stated, "one of the keys to self-fulfillment and enrichment."

References

American Foundation for the Blind. (1994). *Statistics and sources for professionals* [Online]. Available: http://www.afb.org/section.asp?Documentid=1367

Atardo, S., & Brown, S. (in press). What's the use of linguistics? Pre-service English teachers' beliefs toward language use and variation. In N. Bartels (Ed.), *Applied linguistics and language teacher education*. Dordrecht, The Netherlands: Kluwer.

Augusto, C. R., & McGraw, J. M. (1990). Humanizing blindness through public education. *Journal of Visual Impairment & Blindness, 84,* 397–400.

Nemeth, A. (1988). Braille: The agony and the ecstasy. *Braille Monitor, 31,* 316–324.

Niedzielski, N. A., & Preston, D. R. (2000). *Folk linguistics*. Berlin, Germany: Mouton.

O'Grady, W., Archibald, J., Aronoff, M., & Rees-Miller, J. (2001). *Contemporary linguistics: An introduction.* Boston: Bedford/St. Martin's Press.

Ponchillia, P. E., & Durant, P. A. (1995). Teaching behaviors and attitudes of braille instructors in adult rehabilitation centers. *Journal of Visual Impairment & Blindness, 89,* 432–439.

Schroeder, F. K. (1996). Perceptions of braille usage by legally blind adults. *Journal of Visual Impairment & Blindness, 90,* 210–218.

Spungin, S. J., & D'Andrea, F. M. (2001). Braille literacy. In National Library Service for the Blind and Physically Handicapped, Friends of Libraries for Blind and Physically Handicapped Individuals in North America (Eds.), *Braille in the*

next millennium (pp. 537–573). Washington, DC: National Library Service for the Blind and Physically Handicapped.

Wall, R. (2002). Teachers' exposure to people with visual impairments and the effect on attitudes toward inclusion. *RE: view, 34,* 111–119.

Wells-Jensen, S. (2002). Just say no to reading braille: Part I. *Braille Monitor, 45.*

Wells-Jensen, S. (2003). Just say no to reading braille: Part II. *Braille Monitor, 46.*

Wittenstein, S. H. (1994). Braille literacy: Preservice training and teachers' attitudes. *Journal of Visual Impairment & Blindness, 88,* 516–524.

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