Executive Summary  
Questionnaire for BANA/UEBC  
Texas Tech University  
May 2003

There were 248 questionnaires returned that were used for this analysis. When reading this report, attention should be given to the number of responses indicated rather than the number of respondents. A summary of the report follows:

**Question 1 – Before you read this sampler, what were your feelings toward unifying the braille codes?**

Ten distinguishable responses were recorded of which four were positive, three neutral, and four negative. Positive responses (N=88) were 38.1% of the total (N=231), neutral (N=47) 20.3%, and negative (N=96) 41.6%.

**Question 2 – Having read through this sampler, how have your ideas/feelings changed toward a unified braille code?**

Respondents provided eleven distinguishable responses. Three were positive, one was neutral, one indicated no change in attitude since reading the sampler, and six were negative. Positive responses (N=59) were 27.3% of the total (N=216), neutral (N=7) 3.2%, no change since reading sampler (N=83) was 38.5%, and negative (N=67) was 31.0%. Of those who reported no change, (N=83) since reading the sampler 37.3% (N=31) had no change from an original positive response and (N=52) 62.7% had no change from an original negative response.

Of the respondents who showed a clearly definable change in ideas/feelings after reading the sampler, 29 respondents changed from positive to negative feelings, 13 respondents changed from negative to positive feelings, and 83 experienced no change in ideas/feelings.

**Question 3 – What do you really like about the Unified English Braille Code (UEBC)?**

This question was phrased in a positive manner but only 62.9% (N=122) of the total (N=194) responded positively. Neutral responses (N=12) accounted for 6.2% of the responses and negative responses (N=60) were 30.9%. There were 13 different responses to this question.

**Question 4 – What do you really dislike about the UEBC?**

Due to the nature of this question, each of the responses appeared to be negative. Only 6.2% (N=13) did not dislike anything and 2.4% (N=5) were neutral and 91.4% (N=193) were negative.

**Question 5 – What issues do you feel the BANA Board should consider in making a decision on adoption of the UEBC?**

Twenty-seven different responses were recorded. The top three responses were: Ask those using old codes and those using new codes how they feel (N=21); Consider conservation of space (N=20); and Consider the burden it will place on blind readers for reeducation upon implementation should be considered (N=14).
Question 6 – What kinds of materials do you typically read in braille?

Magazines, fiction, and nonfiction accounted for 71.24% of the responses. Textbooks were listed at 14.38% and a vast list of other materials was defined.

Executive Summary (Continued)

Question 7 – What math or technical materials do you read?

Computer braille equaled 45.81% of the responses while textbooks were selected second at 27.76%. Other categories were listed.

Question 8 – What math code did you learn in school?

Of the usable questionnaires returned, 110 listed the Taylor Code (46.03%) and 113 listed Nemeth (47.28%).

Question 9 – When did you learn braille?

160 of the 184 responses (86.96%) were given to before the age of 18 and 18-55 years of age listed at 22 responses (11.96%).

Demographics

The average age of the respondents was 57.9 years. The youngest was 17 while the oldest was 86 years of age. Respondents between 40 and 49 years of age were the largest group with 35.7% of the total. Respondents who were 70-79 years of age had the second largest response with 21.4%. Males consisted of 27.3% of the respondents while females made up 72.7%.

As to the respondent’s preference to a literacy medium, 73.6% preferred braille, 14.4% preferred tapes, 6.0% listed print, and 6.0% listed electronics.
1. Before you read this sampler, what were your feelings toward unifying the braille codes?

(Percentages and numbers given are per response and not per respondent. Respondents may have responded more than once to a question.)

Ten distinguishable responses were recorded of which four were positive, three neutral, and four negative. Positive responses (N=88) were 38.1% of the total (N=231), neutral (N=47) 20.3%, and negative (N=96) 41.6%.

Characteristics of the positive responses were: a good idea to change/unify the codes; change is needed; it would be excellent if there was a universal code for math, science, and computer notations; respondents was amenable with or had an open mind to changing the code.

Characteristics of the neutral responses were: change would be a major undertaking; respondents wondered why codes needed to be changed; respondents had no opinion, no feelings, or were neutral about changes.

Characteristics of the negative responses were: respondents had reservations, misgivings, skepticism, reluctance, or were unfavorable about changes; not a good idea to change code; change is not needed, should be left alone, and impractical; respondents were opposed or very opposed to changes.

Question 2
Questionnaire for BANA/UEBC
Texas Tech University
May 2003

2. Having read through this sampler, how have your ideas/feelings changed toward a unified braille code?
Respondents provided eleven distinguishable responses. Three were positive, one was neutral, one indicated no change in attitude since reading the sampler, and six were negative. Positive responses (N=59) were 27.3% of the total (N=216), neutral (N=7) 3.2%, no change since reading sampler (N=83) was 38.5%, and negative (N=67) was 31.0%. Of those who reported no change, (N=83) since reading the sampler 37.3% (N=31) had no change from an original positive response and (N=52) 62.7% had no change from an original negative response.

Of the respondents who showed a clearly definable change in ideas/feelings after reading the sampler, 29 respondents changed from positive to negative feelings, 13 respondents changed from negative to positive feelings, and 83 experienced no change in ideas/feelings.

Comments that were positive included: still a good idea and strongly favorable; becoming more enthusiastic, excited, impressed, and strong about unifying the code; the unification doesn't look as bad as it first sounded, there is increasing comfort, and there is less resistance to unification.

Neutral comments were that there was something to be said for the changes but there was a bent toward neutral.

Unchanged attitudes were recorded and reported as those who were unchanged from a positive attitude and those who were unchanged from an original negative attitude.

Negative responses were characterized as: too expensive to change; do not see a need to change; strongly against the changes; bad idea; not a good idea to change anything about the code; and a particularly bad idea for changes in math.

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**Question 3**
**Questionnaire for BANA/UEBC**
**Texas Tech University**
**May 2003**

3. What do you really like about the Unified English Braille Code (UEBC)?

(Percentages and numbers given are per response and not per respondent. Respondents may have responded more than once to a question.)
This question was phrased in a positive manner but only 62.9% (N=122) of the total (N=194) responded positively. Neutral responses (N=12) accounted for 6.2% of the responses and negative responses (N=60) were 30.9%. There were 13 different responses to this question.

Negative respondents simply said they had nothing, no good thing to say, no positive remarks, and did not like anything about the unification.

Neutral comments ran to indifference and an expression of a neutral attitude.

Positive responses follows: it is universal; like new symbols used for Internet addresses; each symbol having a unique function (e.g. does 3,4,5,6 would be the # only, not "ble", "tion", or "ally"); liked bullets, words bolded, italics, degree sign, accent marks, @ sign, %, and parentheses; not much more difficult than current Braille; liked uniformity and consistency; liked treatment of to, by and, for, of, the and with; liked a braille symbol for each print symbol; code was easier to read; liked capitalizing a passage symbol; and was easier to learn.

Question 4
Questionnaire for BANA/UEBC
Texas Tech University
May 2003

4. What do you really dislike about the UEBC?

(Percentages and numbers given are per response and not per respondent. Respondents may have responded more than once to a question.)

Due to the nature of this question, each of the responses appeared to be negative. Only 6.2% (N=13) did not dislike anything and 2.4% (N=5) were neutral. The responses and the weight of the responses follow:
15.2% (N=32) Doing away with contractions.
11.4% (N=24) Longer punctuation marks (2 cell vs. 1 cell) and multiple cells.
10.9% (N=23) Waste of space for bullets, bold, and italicized text.
10.4% (N=22) Difficulties in math and/or science.
9.0% (N=19) Learning new symbols or difficulties with new symbols.
8.0% (N=17) Everything.
7.6% (N=16) Too much space wasted overall and volumes would be larger.
7.1% (N=15) Confusing, complicated, and difficult.
6.2% (N=13) Didn’t dislike anything.
5.2% (N=11) Symbols in old code are not similar to symbols in the new code.
3.8% (N=8) Doing away with “ally”, “able”, “to”, “com”, “by”, and “ation”.
2.4% (N=5) Neutral or don’t know.
1.4% (N=3) Some may not be able to make changes.
1.4% (N=3) Difficult signs for end cap, end bold, and numeric placeholder.
100% (N=211) Total

Question 5
Questionnaire for BANA/UEBC
Texas Tech University
May 2003

5. What issues do you feel the BANA Board should consider in making a decision on adoption of the UEBC?

(Percentages and numbers given are per response and not per respondent. Respondents may have responded more than once to a question.)

Twenty-seven different responses were recorded. The number of responses and their percent of total follow:

12.6% (N=21) Ask those using old codes and those using new codes how they feel.
12.0% (N=20) Consider conservation of space.
8.4% (N=14) Consider the burden it will place on blind readers for reeducation upon implementation should be considered.
7.2% (N=12) Send questionnaires to users for input and seriously consider input.
7.2% (N=12) Is the price or the cost worth the changes?
6.0% (N=10) Don’t do it!
4.8% (N=8) Will books and newspapers have to be rewritten?
4.2% (N=7) Do Braille users really want or need this change?
4.2% (N=7) Will the new system improve learning of Braille?
4.2% (N=7) Leave literary Braille out of the change and change only science or math.
3.6% (N=6) Consider upgrading software and computers.
3.6% (N=6) Will the UEBC be easier for public school teachers/students to learn than what we have now?
3.0% (N=5) Inform users after effects of the change/implementation/phase-in.
3.0% (N=5) Adopt it.
2.4% (N=4) Consider the already low Braille literacy rate among US blind persons.
1.8% (N=3) Will the world want to change the math code for the new system or will the world use each other’s system?
1.8% (N=3) Is there a current problem with the current math system or should it be resolved?
1.8% (N=3) Don’t know.
1.3% (N=2) How much will this unification impact the reading speed of users?
1.3% (N=2) Consider opposition to change.
1.3% (N=2) Should we focus on other ways to teach Braille rather than change the code?
1.3% (N=2) Consider leaving the math and science along and change everything else.
.6% (N=1) How do you persuade Braille readers to adjust to the new symbols?
.6% (N=1) Consider a time frame for adoption of new code.
.6% (N=1) How much will Grade 2 Braille be under this new system?
.6% (N=1) How important is the new code?
.6% (N=1) Consider writing of code verses reading.
100% (N=166) Total

Question 6
Questionnaire for BANA/UEBC
Texas Tech University
May 2003

6. What kinds of materials do you typically read in braille? (Check all that apply.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>% of Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magazines</td>
<td>168</td>
<td>26.83%</td>
</tr>
<tr>
<td>Fiction</td>
<td>128</td>
<td>20.45%</td>
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<tr>
<td>Nonfiction</td>
<td>150</td>
<td>23.96%</td>
</tr>
<tr>
<td>Textbooks</td>
<td>90</td>
<td>14.38%</td>
</tr>
<tr>
<td>*Other</td>
<td>90</td>
<td>14.38%</td>
</tr>
<tr>
<td>Total</td>
<td>626</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Other
- Music/Braille music: 14
- Legal materials: 2
- Bible: 12
- Agendas: 1
- Cookbooks: 10
- Calendars: 1
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters/Mail/Correspondence</td>
<td>9</td>
</tr>
<tr>
<td>Recipes</td>
<td>9</td>
</tr>
<tr>
<td>Technical Manuals</td>
<td>8</td>
</tr>
<tr>
<td>Computer Materials/Data</td>
<td>7</td>
</tr>
<tr>
<td>Personal Notes</td>
<td>6</td>
</tr>
<tr>
<td>Bills</td>
<td>5</td>
</tr>
<tr>
<td>Computer Manuals</td>
<td>5</td>
</tr>
<tr>
<td>Handcraft/Knitting patterns</td>
<td>5</td>
</tr>
<tr>
<td>Newsletters</td>
<td>5</td>
</tr>
<tr>
<td>Religious books/Materials</td>
<td>5</td>
</tr>
<tr>
<td>Poetry</td>
<td>4</td>
</tr>
<tr>
<td>Bank statements</td>
<td>3</td>
</tr>
<tr>
<td>Computer braille</td>
<td>3</td>
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<tr>
<td>Foreign Languages</td>
<td>3</td>
</tr>
<tr>
<td>Maps</td>
<td>3</td>
</tr>
<tr>
<td>Student's writings/work</td>
<td>3</td>
</tr>
<tr>
<td>Addresses</td>
<td>2</td>
</tr>
<tr>
<td>Children's literature</td>
<td>2</td>
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<tr>
<td>Labels</td>
<td>2</td>
</tr>
<tr>
<td>Catalogs</td>
<td>1</td>
</tr>
<tr>
<td>Charts</td>
<td>1</td>
</tr>
<tr>
<td>Chess</td>
<td>1</td>
</tr>
<tr>
<td>Clocks</td>
<td>1</td>
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<tr>
<td>Dictionary</td>
<td>1</td>
</tr>
<tr>
<td>Government Information</td>
<td>1</td>
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<tr>
<td>Hymnals</td>
<td>1</td>
</tr>
<tr>
<td>Instructions</td>
<td>1</td>
</tr>
<tr>
<td>Medical Dictionary</td>
<td>1</td>
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<tr>
<td>Piano (for tuning pianos)</td>
<td>1</td>
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<tr>
<td>Plays</td>
<td>1</td>
</tr>
<tr>
<td>Reports</td>
<td>1</td>
</tr>
<tr>
<td>Sports schedules</td>
<td>1</td>
</tr>
<tr>
<td>Telephone Numbers</td>
<td>1</td>
</tr>
<tr>
<td>Test Manuals</td>
<td>1</td>
</tr>
<tr>
<td>Tutorials</td>
<td>1</td>
</tr>
<tr>
<td>Weighing</td>
<td>1</td>
</tr>
<tr>
<td>Workshop materials</td>
<td>1</td>
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</tbody>
</table>
Questions 7, 8, 9
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7. What math or technical materials do you read? (Check all that apply.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>63</td>
<td>27.76%</td>
</tr>
<tr>
<td>Technical materials for my job</td>
<td>38</td>
<td>16.74%</td>
</tr>
<tr>
<td>Computer braille</td>
<td>104</td>
<td>45.81%</td>
</tr>
<tr>
<td>Chemistry or other scientific notation</td>
<td>19</td>
<td>8.37%</td>
</tr>
<tr>
<td>*Other</td>
<td>3</td>
<td>1.32%</td>
</tr>
<tr>
<td>Total</td>
<td>227</td>
<td>100.01%</td>
</tr>
</tbody>
</table>

*Other Number
- Refreshable Braille: 1
- Commend summary chart: 1
- Scientific notes and statistics: 1

8. What math code did you learn in school?

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper numbers (Taylor Code)</td>
<td>110</td>
<td>46.03%</td>
</tr>
<tr>
<td>Lower numbers (Nemeth)</td>
<td>113</td>
<td>47.28%</td>
</tr>
<tr>
<td>Upper numbers (BAUK–Braille Authority of the UK)</td>
<td>6</td>
<td>2.51%</td>
</tr>
<tr>
<td>No math code used</td>
<td>10</td>
<td>4.18%</td>
</tr>
<tr>
<td>Total</td>
<td>239</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

9. When did you learn braille?

<table>
<thead>
<tr>
<th>Description:</th>
<th>Frequency</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before age 18</td>
<td>160</td>
<td>86.96%</td>
</tr>
<tr>
<td>18-55 years of age</td>
<td>22</td>
<td>11.96%</td>
</tr>
<tr>
<td>56 and above</td>
<td>2</td>
<td>1.09%</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Demographics
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May 2003

N=248

Age:
Average Age 57.9 Years
Youngest 17 Years
Next Youngest 31 Years
Oldest 86 Years

% Respondents under 40 years 4.8%
% Respondents between 40-49 years 35.7%
% Respondents between 50-59 years 19.1%
% Respondents between 60-69 years 9.5%
% Respondents between 70-79 years 21.4%
% Respondents between 80-86 years 9.5%
Total 100.0%

Gender:
% Male 27.3%
% Female 72.7%
Total 100.0%

Preferred Literacy Medium:
% Braille 73.6%
% Print 6.0%
% Electronic 6.0%
% Tapes 14.4%
Total 100.0%

Occupations Included:
Certified Braille Proofreader, Class A Braille Proofreader, Proofreader
Child Care
Editor
Homemaker
Homeschooler
Housewife
Medical Transcriptionist
Mother
Pianist
Piano Tuner
Professional
Musician
Program Specialist for Tech. Services
Retired
Secretary
Student
Social Worker
Teacher
Transcriber
Unemployed
Word Processor