BEST: Year Four Final Report October 2017 through September 2018

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Introduction

The BEST project, which is an effort of four collaborative partners: American Council of the Blind of Ohio (ACBO), Assistive Technology and Accessible Educational Materials Center (AT & AEM Center), Ohio Center for Deafblind Education (OCDBE), and the Ohio State School for the Blind (OSSB), received funding for a five-year scope of work starting on October 1, 2014.

This report summarizes the work of year four (October 2017 through September 2018) of the BEST project, making summative claims about the project to answer the following four evaluation questions:

- 1. Did the BEST project accomplish the work it set out to accomplish?
- 2. Did the BEST project achieve target levels of quality, relevance, and usefulness?
- 3. Did the BEST project have a significant impact on the learning of educators in braille and technologies used to make braille accessible to students with visual impairments?
- 4. Was the BEST project responsive to the needs of key clients and stakeholders?

Goals and Objectives

The project goals are included here so that readers of this final report can refer to them readily in reference to the specific evaluation findings assembled thus far and discussed below.

<u>Goal 1:</u> Increase the braille competency of Ohio's educators through the provision of high-quality professional development and technical assistance that focus on results-driven outcomes.

Objective 1.1: Provide professional development to educators.

Objective 1.2: Provide technical assistance and support to educators.

Objective 1.3: Provide avenues to communicate information and support to educators.

<u>Goal 2:</u> Increase the knowledge and use/implementation of braille and state-of-the-art technologies of Ohio educators through high-quality professional development/learning opportunities and technical assistance that focus on result-driven outcomes.

- **Objective 2.1:** Provide high-quality professional development training to educators in Ohio serving students who are blind and visually impaired or deafblind to increase their knowledge and use/implementation of braille and state-of-the-art technologies.
- **Objective 2.2:** Provide technical assistance and support relating to state-of-the-art technologies to educators in school districts by adults who are blind and technology experts.

<u>Goal 3:</u> Increase the competency of personnel providing quality braille materials for Ohio students who require braille through the provision of high quality professional development training and technical assistance support.

- **Objective 3.1:** Provide high quality professional development to educators related to the production of braille.
- **Objective 3.2:** Provide technical assistance to school districts that produce braille for Ohio schools.
- **Objective 3.3:** Expand braille production capacities at the local school district level.

Manage Project (noted on graphs as Goal 4)

Management Task 1: Lead and participate in the BEST Advisory Board.

Management Task 2: Lead and participate in BEST Leadership Meetings.

Management Task 3: Work with External Evaluator in managing project data and reports.

Management Task 4: Contract with Qualified Personnel.

Methods

The evaluation team used various methods for gathering information about the project: participant ratings of professional development (PD) sessions, pre- and post-assessments of PD sessions designed to teach braille and Duxbury, review of project documents (e.g., postings to the project Listserv), and discussions with BEST project staff.

Forms that allow participants to rate the professional development sessions in which they participate include four parts: (1) a set of questions that provide details about the quality of the session; (2) a set of questions that permit participants to judge the extent to which the session added value by increasing their knowledge and skills; (3) a set of questions that address the requirements of Government Performance and Results Act (GPRA) by allowing participants to

rate the overall quality, relevance, and usefulness of the session; and (4) a set of open-ended questions enabling participants to describe what they learned and how they plan to use it as well as to provide suggestions to presenters and BEST project staff.

Findings

This report of summative findings addresses the four evaluation questions highlighted on the first page of this report. Interpretations of the findings are provided in a section of the report, "Discussion and Recommendations," which follows this section ("Findings").

Did the BEST Project Accomplish the Work it Set Out to Accomplish?

During the fourth year of the five-year project, the BEST staff performed activities that addressed all project objectives for Year 4. Appendix A presents tables that show accomplishments by goal. Note that *Blended Basic Braille* PD from August 2018-October 2018) spans project years. Appendix B reports the accomplishment of objectives related to leadership and management of the project.

Did the BEST Project Achieve Target Levels of Quality, Relevance, and Usefulness?

On all counts, BEST project activities exceeded target levels of quality, relevance, and usefulness. Notably, a target of 3 on a 4-point scale would represent above-average quality, relevance, or usefulness. As the information in Figures 1-4 shows, participants' mean ratings of the quality, relevance, and usefulness of all categories of project activities were above 3.0 and typically above 3.5. Although ratings for all objectives were quite high, those for PD organized to address Objectives 3.2 and 3.3 were generally the highest, and those for PD organized to address Objective 2.1 were the lowest.

Quality ratings for categories of BEST project activities appear in Figure 1, relevance ratings in Figure 2, and usefulness ratings in Figure 3. The graphs show the ratings across the two calendar years that were spanned by Project Year 4. The specific time span covered by this graph as well as by the three graphs following it was October 1, 2017 through September 30, 2018. Note that ratings for PD/TA positioned to address Objective 1.2 appear only in 2018. The three such PD/TA events took place on February 14, 2018; February 23, 2018; and March 23, 2018.

Figure 1: Quality by Objective

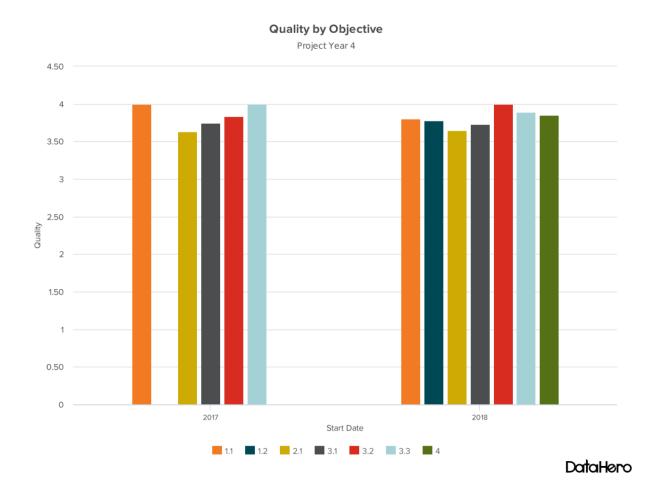


Figure 2: Relevance by Objective

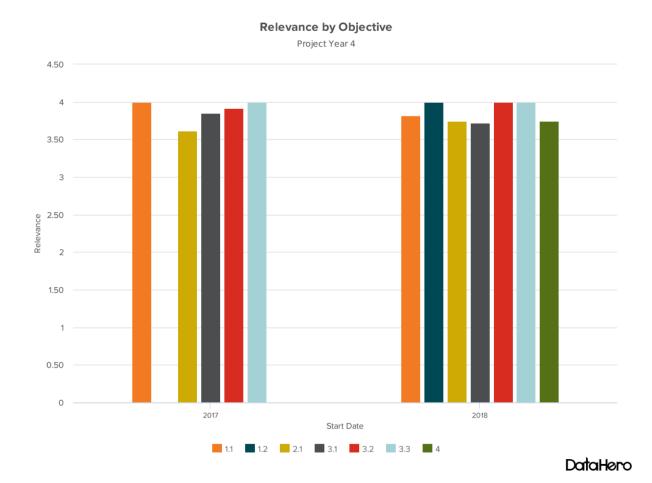
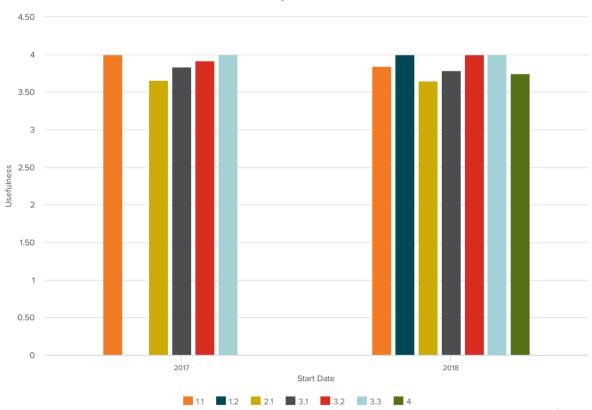


Figure 3: Usefulness by Objective







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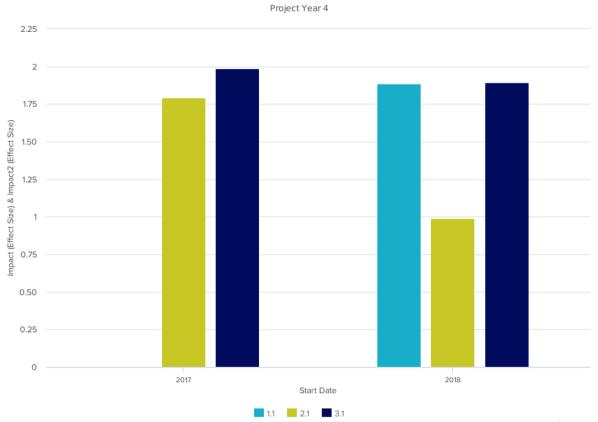
Did the BEST Project Have a Significant Impact on Learning?

The impact of project activities was measured in two ways. First, in the training sessions participants provided self-ratings of their levels of knowledge and skill before and after the session. Second, pre- and post-test scores were obtained for participants in four training sessions: Basic Braille, Advanced Braille, Basic Nemeth, and Advanced Nemeth.

Both approaches to measuring impact revealed very high levels of impact. Figure 4 presents effect sizes as determined through participants' retrospective self-assessments, and Figure 5 presents effect sizes based on pre-to-post test scores. It's important to note that an effect size of .8 represents a *high* level of impact. As the graphs indicate, all effect size measurements for Project Year 4 exceed this threshold. It's important to note that retrospective self-assessments and pre- and post-assessments are applicable only to some types of training. For TA sessions that inevitably have low numbers of participants (as in sessions provided under Objective 1.2), there is too little data to support statistical calculations of the significance of pre- to post-assessment comparisons.

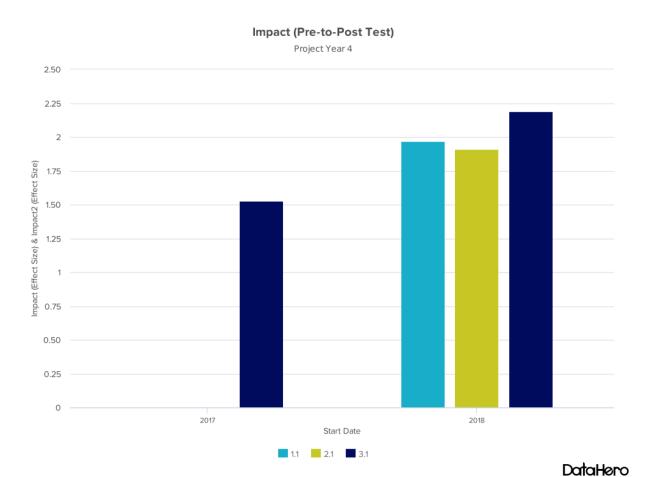
Figure 4: Effect Sizes based on Retrospective Self-assessments





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Figure 5: Effect Sizes Based on Pre-to-Post Test Scores



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Was the BEST Project Responsive to the Needs of Key Clients and Stakeholders?

Participant ratings of Advisory Board meetings provide one way to gauge project responsiveness. For both meetings, ratings for the quality, relevance, and usefulness of the meeting were very high (4.0, 4.0, and 4.0 respectively for the February 28, 2018 meeting and 3.5, 3.7, and 3.5 respectively for the August 2, 2018 meeting).

Another indicator of responsiveness are the numbers of times that BEST provided technical assistance (TA) to client groups. Records from Project Year-4 show that there were 328.50 contact hours for TA that was provided to clients.

Discussion and Recommendations

Overall, the evidence collected through the external evaluation indicates that the BEST project accomplished what it set out to accomplish in Project Year Four. Furthermore, wherever client and participant measures are available (i.e., for all professional development activities and advisory activities), they indicate high levels of participant satisfaction as well as high levels of impact on the learning of educators, transcribers, and other adult participants.

Appendix A
All Measures for Activities in Project Year 4

Name	Quality	Relevance	Usefulness	Impact (Effect Size)	Impact2 (Effect Size)	Objective
AT Vendor Fair - Mansfield	3.36	3.42	3.39			2.1
AT Vendor Fair - Rootstown	3.56	3.50	3.58			2.1
AT Vendor Fair - Cambridge	3.65	3.56	3.56			2.1
AT Vendor Fair - Hillsboro	3.81	3.79	3.83			2.1
BrailleNote Touch (Columbus)	3.73	3.83	3.83	1.79		2.1
Duxbury 1	3.75	3.81	3.81	1.8		3.1
Duxbury 2	3.89	4.00	4.00	2.88	1.89	3.1
MathType	3.61	3.75	3.7	1.28	1.16	3.1
Braille Production Center Set-up Butler County ESC	4.00	4.00	4.00			3.3
Braille AT Forum at OCALICON	3.70	3.60	3.74			2.1
Onsite TA to SDs that Produce Braille Pleasant Run Elementary School, Northwest Local	3.50	3.75	3.75			3.2
Onsite TA to SDs that Produce Braille - Fayetteville-Perry Schools	4.00	4.00	4.00			3.2
Braille Production Center Set-up Lorain County ESC	4.00	4.00	4.00			3.3
Transition Intro to UEB Training	4.00	4.00	4.00			1.1
Onsite TA to SDs that Produce Braille Dayton City Schools	4.00	4.00	4.00			3.2
Onsite TA to SDs that Produce	4.00	4.00	4.00			3.2

Braille Maysville Local Schools						
JAWS FOCUS ElBraille Training	3.36	3.49	3.35	0.99		2.1
Onsite TA to SD that Produce Braille	4.00	4.00	4.00			3.2
Dover City Schools						
Onsite TA to SD that Produce Braille	4.00	4.00	4.00			1.2
Fayetteville Perry Local Schools						
Onsite follow-up TA to SD that	3.33	4.00	4.00			1.2
Produce Braille Maysville Local						
Schools						
Instructional Strategies for Math:	3.65	3.73	3.71	1.11		1.1
Dealing with Nemeth in the UEB						
Context						
Advisory Board Meeting	4.00	4.00	4.00			4
Duxbury 1 Follow-up	3.74	3.80	3.83	1.55	2.19	3.1
Duxbury 2 Follow-up	3.71	3.63	3.75			3.1
Onsite TA to SD that Produce Braille	4.00	4.00	4.00			3.2
Nelsonville-York Schools						
Onsite TA to SD that Produce Braille	4.00	4.00	4.00			1.2
Dayton Public Schools						
4-Day Summer Basic Braille	3.93	4.00	4.00	1.70	1.62	1.1
Summer Advanced Braille	3.88	3.88	3.88	2.36	1.81	1.1
Summer Advanced Nemeth	3.84	3.67	3.76	1.94	2.26	1.1
4-Day Summer Basic Nemeth	3.72	3.72	3.78	2.41		1.1
Advisory Board Meeting	3.70	3.50	3.50			4
Blended Basic Braille 12-Week	3.79	3.89	3.93	1.79	2.19	1.1
Braille Production Center Set-up	3.78	4.00	4.00			3.3
Olentangy LSD (Oak Creek ES)						
Scanning for Braille, Large Print,	3.75	3.74	3.79	2.24		3.1
and Audio						
Onsite TA to SD that Produce Braille	4.00	4.00	4.00			
Montgomery County ESC						

Onsite TA to SD that Produce Braille OSSB	4.00	4.00	4.00		3.2
Writing Math Expressions and Graphing Equation with BrailleNote Touch	3.93	4.00	3.94	1.91	2.1
Braille Production Center Set-up Clermont County ESC	4.00	4.00	4.00		3.3

Accomplishments Relating to Leadership and Management

Manage Project

Management Task 1: Lead and participate in the BEST Advisory Board.

The Advisory Board was convened on February 28, 2018 and August 2, 2018 during Project Year 4. The purpose of this group is to share expertise with the BEST Grant Leadership team and the grant project staff.

Management Task 2: Lead and participate in BEST Leadership Meetings.

The BEST Leadership Team provided support to the BEST grant activities by advising and consulting with grant staff as needed. The Leadership team met on the following dates during Project Year 4: October 17, 2017; February 28, 2018; June 7, 2018; and August 2, 2018.

Management Task 3: Work with External Evaluator (Dr. Aimee Howley) in managing project data and reports.

The AT & AEM project staff met periodically with Dr. Aimee Howley to review project data and reports. For each of the grant activities a report was generated from data collected from participants. The project evaluator also assists in interpreting data for all reports including the quarterly, final, and Annual Performance Report. The AT & AEM Center formally met with Dr. Howley, either face-to-face or by phone, on the following dates: February 8, 2018; March 19, 2018; April 25, 2018; May 15, 2018; July 16, 2018; August 13, 2018; and September 17, 2018. Additionally, many email exchanges occurred between project leaders and the external evaluator throughout the year for the purpose of managing data collection, data analysis, and report writing.

Management Task 4: Contract with Qualified Personnel.

The BEST Grant continues to contract with quality personnel to conduct BEST grant trainings and other PD and TA activities. The staff and contractors are highly knowledgeable and dedicated, and many have been with the project for several years. Contract staff is recruited from within the state when possible; but when expertise is not found within the state, project leaders seek national expertise to conduct specific PD activities. There are currently nine contracted staff providing support to the BEST project.