

MEville to WEville: Early Literacy and Communication Curriculum **Research White Paper**

Prepared by The Center for Literacy & Disability Studies
University of North Carolina at Chapel Hill

In the spring of 2004, a team of researchers at the Center for Literacy and Disability Studies,¹ investigated the implementation of ***MEville to WEville: Early Literacy and Communication Curriculum*** in 3 substantially separate special education classrooms in an elementary school in the Piedmont region of North Carolina. The 23 children served in these 3 classrooms all had multiple disabilities and moderate to profound cognitive impairments. Sixteen of the children could not use speech as a means of communication, and 10 used wheelchairs.

The research design involved mixed methods including pretest and posttest literacy probes (letter identification, phonological awareness, concepts about print, writing), teacher interviews, and classroom observations, as well as, classroom observations at least once weekly throughout the 6 weeks of program implementation. A total of thirty-one observations were completed totaling more than thirty-five hours in length.

Teachers began implementing ***MEville to WEville*** after a 20-minute overview of the materials and a week to review and plan before beginning implementation. No specific training was provided and no guidelines for modifying or extending the program were provided. The classrooms each had at least 1 single message and 1 sequential message device, and shared a single switch adapted camera, BookWorm, and All-Turn-It Spinner.

Findings

MEville to WEville had an immediate impact on the amount of time the 3 teachers spent engaged in literacy-related instruction. Instead of seeing reading time as a discrete instructional period in the day, the teachers began integrating activities from the program across the day. One teacher reported, “I was amazed when I calculated the time onto the data sheet.... We spent 200 minutes on literacy!!! (Of course we only had music and PE as pull outs that day.)”

The program made it much easier for the teachers to work with support and related service personnel. From the teaching assistants to the occupational therapists, speech language pathologists, and teachers of the visually impaired, the program led to improved integration across services. For example, one occupational therapist starting planning and implementing a lesson each Friday afternoon that targeted the children’s therapy goals while supporting the content being taught in ***MEville to WEville***. All of the teachers and therapists were better able to meet the technology needs of the students in the classes because they had a better sense of what the students would be doing in advance of the activity. One teacher wrote, “To have it already out on paper also helps with the assistants and therapists. The speech therapists already know the vocabulary that we’re going to be concentrating on. I already know that by Friday we’re gonna make birthday cupcakes for the children. It helps the speech therapist to know what we’re gonna do. Otherwise if I can, I plan three days ahead and I’m doing darn good. This way it’s already planned and I just have to implement it so it’s really good.”

For the teachers, ***MEville to WEville*** gave them the time they needed to address assistive technology needs of their students. One of the teachers in particular had experience using the technologies, but prior to ***MEville to WEville*** found it very difficult to find the time to integrate the technology into the classroom routine. About half way through the study she wrote, “I have also been able to spend a little more time on the cool stuff - like the BookWorm™, switch digital camera, preparing communication boards, and preparing IntelliTools and am excited about using

¹ The Center for Literacy & Disability Studies is located in the Department of Allied Health Sciences at the University of North Carolina at Chapel Hill. You can learn more about the CLDS at www.med.unc.edu/ahs/clds.

this assistive technology more and more over the next few months.” Her assistants even got into the act and began taking charge of taking, downloading and printing digital photos for use in writing activities.

The notes and materials for teachers to share with families that are included in *MEville to WEville* appeared to support interactions and collaboration between home and school for many of the students. The notes (worksheets as the teachers called them) encouraged families to share important information about the child with school. One teacher noted, “Children are actually bringing back some of their homework for this unit and there is an overall increase in parental interest. Look at the homework sheets for each child on the chalkboard.”

Child Outcomes

Analysis of the pre- and post-tests administered to the students revealed no significant group differences on any of the areas assessed. There were however, very encouraging and exciting results for individual students who typically would not be expected to demonstrate progress on the generalized application of skills taught during an eight-week period. None of the students earned a lower score at post-test than pretest. Some students across all ability levels demonstrated progress. The table below summarizes the scores students achieved across all of the components at pre and post-test.

Literacy Tasks	Percent of students Attempting Pretest	Percent of students Attempting Posttests	Pretest – Posttest Percent Change	Pretest Mean (standard deviation)	Posttest Mean (standard deviation)	Pretest – Posttest Mean Difference
Writing	83	88	+5	1.54 (1.18)	1.96 (1.60)	+.42
Upper Case Letter Id.	63	83	+20	6.21 (8.24)	7.42 (9.09)	+1.21
Print Concepts	50	63	+13	1.79 (3.11)	2.88 (3.71)	+1.09
Letter Id.: Lower Case	25	38	+13	3.88 (8.16)	5.96 (9.48)	+2.08
Phonological Awareness	25	33	+8	2.29 (4.85)	2.79 (4.77)	+0.5

In addition to the outcomes noted through the informal assessment, other positive outcomes were observed during the day-to-day implementation of the study. For example, students began initiating more communication and interactions with adults and peers. Pre-implementation observations suggest that very few students initiated interactions and those who did, initiated rarely. Most students did not appear to be actively engaged and/or eager to communicate. When technology was present during the pre-implementation phase, students appeared to wait for the device to appear in front of them or for a direct prompt from an adult before they used the device. By the end of the project many of the students demonstrated increased levels of engagement with a clear desire to interact with both the adults and other students around them.

Conclusion

This investigation employed a mixed methods design to study the implementation of the *MEville to WEville: Early Literacy and Communication Curriculum* across six weeks in three classrooms. The students involved had as many as 6 years of school with little to no success in developing formal means of communication or literacy, yet, *MEville to WEville* yielded across the board success. *MEville to WEville* clearly warrants further investigation and use.