Among the pine tree forests of Mackworth Island, just across the water from Portland, Maine, deaf, hard of hearing, and hearing children flourish in the Mackworth Island Preschool Program at the Maine Educational Center for the Deaf and Hard of Hearing/Governor Baxter School for the Deaf (MECDHH/GBSD). At MECDHH/GBSD, we immerse our students, 3-5 years old, in American Sign Language (ASL) and spoken English, enrich their sense of Deaf identity, and teach them alongside their hearing peers.

Our program was developed in response to three groups:

- **State Department of Education**—Maine requested that all preschools offer inclusive programming. For a program for deaf and hard of hearing children, that meant enrolling hearing children.

- **Parents**—With the advent of digital hearing aids and cochlear implants, many families requested a program in which use of spoken language was added to or replaced use of ASL.

- **Educators**—The teachers and staff of MECDHH/GBSD noted that more deaf and hard of hearing children were entering kindergarten already behind their hearing peers and without a strong language base. We wanted to teach those children while they were in preschool, recognize, support, and strengthen their Deaf identity, ensure they developed a strong language base, and ensure they were ready when the time came to enter kindergarten.

*Photos courtesy of Karen Hopkins*
First the Research

Originally part of a program in which deaf and hard of hearing children learned in a single classroom, we knew change was critical. As far back as 15 years ago, parents had encouraged our early interventionists and preschool team to increase focus on use of cochlear implants, listening, and spoken language. More recently, many families offered feedback in annual written surveys and parent-infant support meetings, stating that they wanted their children to attain goals in both ASL and spoken English.

Our focus became building a strong early childhood program that fostered growth in language development and literacy in both ASL and English and ensured our students were ready for kindergarten. We also wanted to foster children’s social-emotional growth and support their Deaf identity. We would team teach and ensure deaf and hard of hearing adults were included on each teaching team. We would provide opportunities for children to interact with a variety of adults throughout their day.

We would have high expectations for our young students, and we would establish a pair of classrooms—one that would support students’ development of ASL and one that would support students’ development of spoken English. We would foster student interaction with peers and adults, both deaf and hearing, and provide specialized technical support. We would honor the language choices of families while offering children a time to make choices of their own.

Today we have it—a bilingual, bimodal, inclusive, deaf education preschool program that continues to evolve based on the needs of the children and our continued research. Children with a range of language and communication styles are guided to play, interact, and explore their environment. Our classrooms and our island serve as a palette for children’s learning, directed by the children and nurtured by the staff, to promote growth in all areas indicated in state and national education guidelines.

Adults Collaborate, Children Choose

The Magic of a Door

We sought guidance from contractors to install a door between the neighboring classrooms for ASL and spoken language. Little did we know that this door would become part of the magic of our program. While each classroom offered exclusive use of a single language, the door provided a physical and symbolic connection. It represented openness and a sense of collaboration.

At MECDHH/GBSD, each child’s individual language plan, crafted with his or her family and based on individual language and communication goals, is the force that guides the child through various experiences in one or both languages throughout the instructional portions of the day. Whatever their language and goals, when children arrive they are immersed in one language at a time. In the ASL classroom, they use visual language and in the spoken language classroom, they use auditory language.
Every morning they enter either the ASL or the spoken language classroom for their morning routines, snack, and morning meeting. While some children start their day in the same language every day, others may begin their week in one language and switch to another language later in the week. The door between the classrooms opens at a specified time.

This is the “child choice” portion of our program that we call “center time,” during which children explore the learning centers in the classroom of their choice. Children engage daily in these centers, which are the same in both classrooms, choosing between the spoken language and the visual language classroom to engage in block building, dramatic play, art, writing, book exploration, sensory experiences, and small manipulatives.

The children play as they wish and the teachers interact with all the children who enter the play space in the designated language of their classroom. Exposure to one language at a time is our goal. The children, however, communicate as they choose. An ASL interpreter is subtly present in the spoken language classroom to facilitate communication and ensure access to auditory information for children without auditory access.

At times we see children using spoken language in the ASL classroom or ASL in the spoken language classroom. This changes as children become more comfortable in both languages and follow their adult language models. Our teaching and therapy team observes children’s preferences and skills and sees where developmental growth and language preferences emerge.

Both classrooms have been acoustically modified to minimize background noise and reverberation. Hearing assistance technology, compatible with individual children’s personal hearing aids and cochlear implants, is used throughout the school day in both classrooms. Each classroom is equipped with Phonak Roger WallPilots and Oticon Amigo eZync units. These devices automatically place each child’s hearing assistive technology on the appropriate network or FM channel based on which room they enter. They provide automatic access to the teacher’s verbal instruction in the spoken language classrooms and automatically prevent the children in the ASL classrooms from overhearing instruction in adjacent rooms.

We use the “Opening the World of Learning” curriculum that is aligned with the Maine Early Learning and Development Standards. This curriculum covers all domains of early learning. Each unit is built around a daily routine within an activity-centered day. It has a strong literacy component that ensures kindergarten readiness for our students.

The hearing students—children of interpreters, our staff, deaf adults, and parents who want their children to be fluent in ASL—are screened to ensure their linguistic, cognitive, and social-emotional development are within the typically developing range. They have turned out to be phenomenal language models for both our ASL and our spoken language students and raised expectations for all our preschoolers.

Assessment: Always Critical

Throughout the year, children are observed and assessed both formally and informally. The staff uses standardized assessments, anecdotal evidence, checklists, progress reports, and portfolios to document what children are learning and how they are acquiring new information. Data is collected for the goals of each child’s Individualized Education Program (IEP) and preferences for communication. This information guides developmental and language planning for children and provides the basis for discussions with families on language and communication growth.

Each child’s path to becoming kindergarten ready is unique; therefore, systematic individualized planning and monitoring of the development and use of each language is central (Nussbaum, Scott, & Simms, 2012). The Mackworth Island Preschool uses an assessment package, aligned with the Maine Early Learning and Developmental Standards, that looks at:

- Personal and social development
- Approaches to learning
- Creative arts
- Early language and literacy
- Health and physical education
- Mathematics
- Science
- Social studies

Additional assessment tools focusing on the child’s language and communication skills include:

- California ASL Assessment Checklist
- Cottage Acquisition Scales for Listening, Language, and Speech
- Auditory Skills/Functional Listening Assessments
- Pragmatics Language Scale

Communicating with Parents

We encourage communication between parents and children through daily communication logs, newsletters, face-to-face meetings, e-mail, and phone. Regular communication allows us
to relay information about the child’s day, which is important for communication carry-over at home. Parent-teacher conferences allow for in-depth discussions on each child’s language growth and communication. At IEP meetings, information is shared related to how the child communicates; observations, assessment data, and parent information are discussed. The child’s language plan often changes based on input from the parents, teacher, and therapist.

Families have the option of participating in ASL classes at no cost, either on site or via distance learning. The IEPs of some children specify that parents train in ASL. Occasionally families wish to participate in spoken language therapy sessions with their child. Family involvement is a critical factor in the language development of deaf and hard of hearing children, especially when the parents are hearing (Baker, 2011).

Scheduling time for planning is integral, and professionals meet and plan together weekly. We look at day-to-day events, collaborative planning for the curriculum, sharing perspectives on assessment data, parent connections, and what we call “Kid Talk” for which all the professionals on a child’s team come together and discuss the strengths and challenges they see in each child. Observations are shared on how the child is choosing to communicate throughout his or her day.

Bilingual Achievement, Academic Success!
Last year, 90 percent of our students passed kindergarten screening at their public school, and the 10 percent of students who were not considered kindergarten ready had additional disabilities. Accommodations, such as ASL interpreters or hearing assistive technology, were provided, and schools were impressed with the skills of our children.

We have noticed that once children start getting a strong base in one language, they begin developing skills in a second language fairly quickly. We have seen this most often with the hard of hearing children and children with cochlear implants. Some children develop a firm base in English but code switch for their peers or teachers in the ASL room, and others develop a strong base in ASL but code switch for their spoken language peers and teachers in the spoken language environment.

Our children are often able to go back and forth between the “listening and seeing” classrooms, responding appropriately to their environment and communicating fluently in ASL or spoken English. We have also seen what linguists call “pragmatics” developing; children take turns, extend their conversations, and, perhaps the most enjoyable pragmatic development of all, use humor. We watch as our children joke with their conversational partners and laugh at funny situations.

Our children show social awareness, interest, and empathy for other children in ways we hadn’t seen in the past. They are more self-aware and self-confident. As our students explore, they become flexible learners. They direct their own language learning. For example, we had one family who wanted the child to focus on spoken language. The child spent morning, lunch, and instructional time in our spoken language environment. Once the door between the two classrooms opened, however, the child was drawn to the ASL classroom and began to spend more time interacting with both adults and peers in ASL. His ASL blossomed and his spoken language skill increased as well. We had another family who chose ASL as the dominant language for their child. Accordingly, the child had his morning, lunch, and instructional time exclusively in the ASL classroom. However, once the door opened, this child chose to spend time in the spoken language class and his primary language became spoken language.

We have seen children adapt to both environments, playing differently in each depending on which language they and their parents have identified as “primary.” If the environment is that of his or her primary language, children play more independently, show more leadership skills, and explore more materials. Often children’s personalities change from one room to the next; they are more outgoing and interactive in the communication environment with which they are more comfortable.

Early research in bilingual education found cognitive benefits from learning two languages; bilinguals have been reported to have greater cognitive flexibility and greater sensitivity to linguistic meaning than monolingual children (Moeller, 2000). Multisensory approaches to language acquisition ensure that when one pathway is less effective, another pathway can be used as an avenue for language learning (Moeller, 2000).

To us, what we see is beautiful because it is children making choices and responding to their own comfort and needs in a natural manner for preschoolers. As they choose to play with different materials, children, and adults, they are developing skills in ways their families never imagined. The face of deaf education has changed, and it will continue to change as new technologies and research support the development of bilingualism and auditory and visual learning for deaf and hard of hearing children.

References
