Annual Report of Language Assessment Program-Deaf/Hard of Hearing

For FY 2023

In accordance with K.S.A. 75-5397e which created a language assessment program for children who are deaf or hard of hearing

Submitted by the Kansas School for the Deaf to:
Kansas Commission for the Deaf/Hard of Hearing
Senate Committee on Education
House Committee on Education
Report Date: January 31, 2024

This report is submitted in compliance with K.S.A. 75-5397e which requires Kansas Commission for the Deaf/Hard of Hearing (KCDHH) to "publish a report that is specific to language and literacy developmental milestones of children who are deaf or hard of hearing for each age from birth through the age of eight, including those who are deaf or hard of hearing and have other disabilities, relative to such children’s peers who are not deaf or hard of hearing. Such report shall be based on existing data reported in compliance with the federally required state performance plan on pupils with disabilities. KCDHH shall publish the report on its website."
INTRODUCTION

Early fluent communication is critical and essential to typical cognitive, social, and emotional development and should be pursued vigorously by any mean or mode that is effective for each individual child. The purpose of K.S.A. 75-5397e is to ascertain and monitor the acquisition of language by young children who are deaf/hard of hearing, which will provide the data needed to determine whether current interventions are effective and should be continued or whether alternative interventions should be considered.

The Language Assessment Program-Deaf/Hard of Hearing (LAP-DHH) is housed at and administered by Kansas School for the Deaf (KSD). KSD is committed to the mission and continued expansion of the LAP-DHH. The LAP-DHH is expanding pending funding and staffing of the program. Beginning in July 2018, LAP-DHH specialists began assessing children who were currently being seen through KSD's Sound START program (ages birth-three). In August 2019, children who were in KSD's Early Childhood were added to LAP-DHH. Children who were seen through KSD's Outreach Program were also added. While additional funding was not obtained for FY 2020 or FY 2021, the program expanded as was able. Sound START continued to enroll newly identified children in their program, and all children ages three through eight at KSD were enrolled in the LAP-DHH. Moving forward, children will be enrolled in the program when they are ages birth to three. In FY 2022, the LAP-DHH began billing school districts and/or special education cooperatives for the assessments of children who were ages three through eight.

METHODOLOGY

From July 1, 2022 to June 30, 2023, 133 children who were deaf/hard of hearing were assessed through the LAP-DHH. Fifty-six children were ages birth to three, 30 children were ages three to five, and 47 children were ages five through eight (Figure 1). Fifty-six children were receiving early intervention services, 67 children were receiving special education services, three children had a 504 plan, and seven children were not receiving any additional services (Figure 2).
Thirty-five children attended Kansas School for the Deaf. Children were assessed in 32 counties. The number of children in each county can be seen in Figure 3.

Figure 3
Number of Children Assessed in Each County

Children were assessed following a specific assessment protocol which included using one or more of the following assessments: a narrative, conversation and/or play language sample; MacArthur-Bates Communicative Development Inventories-English; ASL-CDI 2.0, Visual Communication and Sign Language Checklist; Cottage Acquisition Scales for Listening, Language, and Speech; Peabody Picture Vocabulary Test; Expressive Vocabulary Test; Structured Photographic Expressive Language Test; and Language Processing Test. If a child had additional disabilities and/or used pre-linguistic communication, that child was assessed using the Communication Matrix. If possible, children were also observed in their home environment and/or their school setting. The assessments were administered and analyzed by LAP-DHH specialists trained in the administration of those specific assessments.

Using the results of the assessments, LAP-DHH specialists completed a Language Milestones: American Sign Language and English document for each child. The document indicated whether or not the child had met their age-appropriate language milestones. The results reported below are based on that document.

RESULTS
Of the 133 children who were assessed through the LAP-DHH, 116 did not meet milestones in either ASL or spoken English. Eighty-seven percent (17 children) met age-appropriate milestones in one or both languages (Figure 4). Of the children who met their milestones, 14 were ages birth to three, one was age three to five, and two were ages five to nine (Figure 5).
Of the 71 children whose ASL was assessed, 94% (67 children) did not meet the age-appropriate milestones (Figure 6). Of the 109 children whose English was assessed, 86% (94 children) did not meet the age-appropriate milestones (Figure 6). Nineteen children had an identified additional disability, and ten children were assessed using the Communication Matrix. When accounting for children who had an identified secondary disability, 86% of the children did not meet milestones in either ASL or spoken English. There is not a significant difference when including and excluding children with secondary disabilities (Figure 7).

Figure 4
*Percent of DHH children who did not meet milestones in one or more language (FY 2021, FY 2022, FY 2023)*

![Graph showing percentage of DHH children who did not meet milestones in one or more language for FY 2021, FY 2022, and FY 2023.](image)

- **FY 2021 (102 children assessed):** 80%
- **FY 2022 (132 children assessed):** 84%
- **FY 2023 (133 children assessed):** 87%

Figure 5
*Number of Children Who Met Milestones in Each Age Range*

![Pie chart showing number of children who met milestones in each age range: Birth to 3, 3 to 5, 5 to 9.](image)

- **Birth to 3:** 14
- **3 to 5:** 1
- **5 to 9:** 2
Figure 6
Percent of DHH children who did/did not meet milestones in ASL and English (FY 2022, FY 2023)

Percent of DHH children who did/did not meet milestones in ASL

<table>
<thead>
<tr>
<th></th>
<th>FY 2022 (62 children assessed in ASL)</th>
<th>FY 2023 (71 children assessed in ASL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>87%</td>
<td>94%</td>
</tr>
<tr>
<td>Not Met</td>
<td>13%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Percent of DHH children who did/did not meet milestones in English

<table>
<thead>
<tr>
<th></th>
<th>FY 2022 (104 children assessed in English)</th>
<th>FY 2023 (109 children assessed in English)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>Not Met</td>
<td>14%</td>
<td>14%</td>
</tr>
</tbody>
</table>
EXISTING DATA/State Performance Plans

K.S.A. § 75-5397e(h) requires that this report include “existing data reported in compliance with the federally required state performance plan on pupils with disabilities.” The Kansas State Department of Education (KSDE) is responsible for submitting the state performance plan under Part B of the Individuals with Disabilities Education Act, the federal law with rights and responsibilities for children with disabilities and an individualized education program (IEP). The advisory committee on the language assessment program determined that the most relevant portion of the Part B state performance plan to the current population and focus of the language assessment program is Indicator 7.B1: The percent of preschool children aged 3 through 5 with IEPs who demonstrate improved acquisition and use of knowledge and skills (including early language/communication and early literacy). During the 2022-2023 school year (the FFY 2022 state performance plan), 88.26% of preschool children aged 3 through 5 with IEPs with any primary or secondary disability category that is not deaf/hard of hearing (DHH)* demonstrated improved acquisition and use of knowledge and skills (including early language/communication and early literacy). In contrast, during the 2021-23 school year (the FFY 2022 state performance plan), 90.91% of preschool children aged 3 through 5 with IEPs with a primary or secondary disability category of DHH demonstrated improved acquisition and use of knowledge and skills (including early language/communication and early literacy).

This reflects an improvement from the 2021–22 school year (the FFY 2021 state performance plan). During the 2021-22 school year (the FFY 2021 state performance plan), 87.64% of preschool children aged 3 through 5 with IEPs with any primary or secondary disability category that is not DHH demonstrated improved acquisition and use of knowledge and skills (including early language/communication and early literacy). During the 2021-22 school year (the FFY 2021 state performance plan), 82.61% of preschool children aged 3 through 5 with IEPs with a primary or secondary disability category of DHH demonstrated improved acquisition and use of knowledge and skills (including early language/communication and early literacy).

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**Figure 7**

*Comparison of results when children with an identified secondary disability are included and excluded*

![Comparison of results](image_url)

- FY 2023 (133 children assessed; children with an identified secondary disability included)
- FY 2023 (114 children; children with an identified secondary disability excluded)
PROGRESS REPORT

Sharing the findings from LAP-DHH data provides the opportunity to share current results with others as well as explain the impact and growth of the program. To that end, during FY 2023, six in-person and three poster presentations were provided. Of those presentations, six were at the national level and three were at the state level.

In addition to collecting data to fulfill the requirements of K.S.A. 75-5397e, the LAP-DHH collaborates with researchers at Vanderbilt University, Temple University, and Sacramento State. They are investigating various research questions using LAP-DHH data to improve the education of students who are deaf. Their most recent research questions looked at ways to determine the rate of language growth from across multiple time points for users of ASL and spoken English using the ASL/English Language Milestones tool as well as patterns of relationships among several characteristics of social identity and language development.

The ASL/English Language Milestones measure can capture a variety of language development patterns across both ASL and English. A preliminary analysis of the cumulative data gathered from the measure indicates that most participants show gaps in their ASL and/or spoken English language skills relative to age expectations at both time points. Although some children are narrowing the gap between their typically-developing peers, most are not doing so at a rate to catch up to their peers. This research will lead to psychometric analyses and refinement of the ASL/English Milestones measure, identification of areas of strength and needs for language growth and to address the needs via intervention studies, and the development of resources for clinical use of the measure.

Identifying the presence of and then the contributing factors for health disparities is also important for supporting optimal outcomes for DHH children. To explore the relation between social identity and language skills in ASL and spoken English for DHH children, data were analyzed (with family consent) from 44 DHH children who participate in the LAP-DHH. Twenty-three of the participants use ASL (mean age = 56 months; range: 13 – 107) and 37 use spoken English (mean age = 56 months; range: 13 – 96). Language skills were quantified by the ASL/English Milestones.

Findings from this preliminary analysis show lower English language skills for DHH children of color relative to their white peers (when excluding the six participants with a secondary diagnosis). For ASL, the difference between children of color and white children was nonsignificant; however, the large effect size warrants additional investigation with a larger sample. When analyzing urban versus non-urban, there was also no significant difference.

CONCLUSION

Limited access to language (signed and/or spoken) remains a primary factor causing the language delay of deaf/hard of hearing children (DHH), and the potential impacts of a language delay have significant, long-reaching effects. In fact, limited access to language and communication has been identified as a critical root cause for the gaps in postsecondary outcomes of people who are DHH. Language and communication are the basis for development in all aspects of life. Language delay can have a negative effect on an individual's social-emotional well-being, disposition, cognitive ability, daily living skills, and the ability to be a contributing, tax-paying citizen. Without language, our DHH children will not have the same opportunities to reach social, academic, and employment success as their hearing peers.
The Language Assessment Program-Deaf/Hard of Hearing looks forward to continuing to work collaboratively with all stakeholders to implement and advance the program which will lead to positive language acquisition in Kansas’ children who are deaf/hard of hearing. Early language acquisition will result in early fluent communication, data-driven interventions, language without limits, and deaf/hard of hearing children with age-appropriate language facility.

*Hearing impairment is the term used in federal special education law. Deaf/Hard of Hearing (DHH) is the preferred term by the Deaf Community. This often includes the DeafBlind, Deaf Disabled, and late-deafened communities.