

Research Summarized! Collecting and Using Data for Decision-Making

One of the longstanding issues in supporting postsecondary enrollment, persistence, and completion for deaf* individuals is the lack of comprehensive data to identify individual and systemic factors that affect these outcomes. Although there have been several efforts to collect data about the transition from high school to postsecondary settings, including careers, the field often does not have the rigor or depth of information to make truly data-based decisions about policies, programming, or service provision for deaf individuals.

What can be learned from the existing literature on collecting and using data for decision-making related to postsecondary outcomes of deaf individuals?

DATA-DRIVEN DECISION-MAKING

Educational leaders see collecting and analyzing data to make decisions about educational programs, systems, and processes as a critical component to improving student outcomes.^{8,16}

Data-driven decision-making is a key component of the U.S. Department of Education's Results-Driven Accountability framework that the Office of Special Education Programs and states use to measure the outcomes of students with disabilities.²⁶

Data-driven decision-making requires available and accurate data and training on analysis to make valid inferences and lead to positive change in educational processes and programs.^{13,16}

Challenges to finding accurate and accessible data to improve education for deaf individuals include the following:

- Establishing data-sharing agreements between secondary education, vocational rehabilitation, and other agencies is difficult.
- With a greater number of deaf students attending mainstream schools, attendance and outcome data are more dispersed.

*In this report, we use the term *deaf* in an all-encompassing manner to include individuals who identify as Deaf, hard of hearing, hearing impaired, late deafened, and deafdisabled.

- Variables that are important predictors of academic success for deaf individuals, such as social skills⁴ and parental expectations,⁶ are not often captured in research.
- Inaccessible assessments may lead to invalid achievement data.^{1,3}

Most interventions for deaf individuals are not based on significant levels of empirical evidence. The low-incidence categorization of deaf students and the relatively small number of experienced researchers in the field of deaf education are likely factors in weaknesses in data-driven decisions about best fit of interventions to individual student needs.⁵

EDUCATION AND EMPLOYMENT DATA ABOUT DEAF INDIVIDUALS

When making data-driven decisions about deaf individuals, it is important to be aware of the author's background, affiliation with deaf individuals, and perspective toward deafness. The following are two common models:

- The “medical” perspective views deafness as a deficit condition and frames research with an intent to “cure” or “fix” deafness.¹⁷
- The “cultural” perspective views deafness as something to be preserved and embraced. Deaf culture represents shared beliefs of a diverse group of individuals and includes common appreciation for the linguistic richness of sign language.¹²

It is considered “best practice” to use data that are collected and interpreted in collaboration with deaf people when making decisions about programs and practices for deaf individuals.¹²

The range of learning environments, communication modalities, and diverse experiences of deaf students should be considered when using data to make decisions about policies and programs related to deaf education, training, and employment.

- Deaf students attend school in a variety of settings, ranging from those where they may be the only deaf student enrolled to those that enroll only deaf students.
- Deaf students receive instruction in a variety of communication modalities. In some education settings, English is the only language used for instruction, whereas American Sign Language or some other visual communication mode is the primary language used with deaf students in other settings.^{14, 18}
- In addition to diversity in linguistics and communication, deaf students have a wide range of cognitive and sociocultural needs.²²
- Approximately 35% of deaf students come from homes where a language other than American Sign Language or English is used regularly.¹⁰
- Not all data include information about the diverse experiences of deaf individuals. Care should be taken when making decisions based on analyses of limited data sources.
- Variability in the deaf population extends well beyond communication and learning environments and is important to consider. Data such as disability, gender, socioeconomic status, race, and

ethnicity should be included when analyzing data and making decisions about deaf programs and practices.

AVAILABLE EDUCATION AND EMPLOYMENT DATA

The Council of Chief State School Officers⁷ recently outlined the following four areas of students' college and career readiness that were developed by collaboration between state departments of education and industry partners:

- Progress toward post-high school credentials
- Co-curricular learning and leadership experiences
- Assessment of knowledge and skills
- Transitions beyond high school

States face obstacles in collecting and analyzing data that represent these measures in a valid way.

Despite the challenges identified in this brief, useful data about deaf individuals do exist. The second National Longitudinal Transition Survey dataset is one example and includes many variables related to transition to postsecondary environments for students with disabilities.²¹

Employment is a critical outcome in measuring postsecondary success. Multiple sources of national and state employment data are available for analysis, including the following:

- The American Community Survey is a national survey that collects data about jobs, occupations, educational attainment, and other information that aids public officials in planning.²⁵
- American Community Survey data allow analysis of deaf individuals' employment and education attainment.¹¹
- Data sources such as the American Community Survey, population surveys, and state vocational rehabilitation administrative records are available, but more consistency is needed across state vocational rehabilitation agencies in terms of data use to examine employment outcomes.⁹
- Analysis of state vocational rehabilitation data can be used to identify obstacles to employment for youths with disabilities and highlight paths to improved employment outcomes.²⁴

Many colleges and universities use survey instruments to measure factors related to student learning, retention, and graduation with the goal of institutional improvement.²⁰ There is a lack of institutional-level measurement of factors specifically related to deaf students' learning, retention, and graduation at the postsecondary level.

MOVING TOWARD DATA-DRIVEN DECISION-MAKING FOR DEAF INDIVIDUALS

Existing data are available to make informed decisions about programs and services for deaf individuals.

- Depending on the area of focus for analysis, census data, vocational rehabilitation data, and secondary school data (e.g., attendance, achievement, graduation) are available.
- Include deaf educators, administrators, and counselors when analyzing and making inferences from data.
- Use caution when making decisions from sources that lack the demographic data needed to fully represent the diversity of deaf individuals.

Districts and schools can collect and use data to tailor instruction and services.¹⁵

- A variety of survey, assessment, and observation instruments can be used to collect data to improve instruction and programs at a local level.
- Off-the-shelf instruments with English presentation will not necessarily yield valid data for deaf individuals who are American Sign Language speakers. When using English-based assessments, educators need to understand the English language proficiency of the student and English language demand of the assessment before administering.²³
- Professionals administering assessments to deaf students need training to ensure high-quality data collection that will enable good decision-making.²³

TAKE-AWAYS

Using data to drive practices and policies is a key tenet in today's public education system. Data collection and analysis of deaf individuals' education and employment outcomes are challenging due to the diversity and high degree of variability in the deaf population. The data are complex and require analysis by researchers that are knowledgeable of contextual issues. Filling gaps in knowledge about postsecondary outcomes and models to promote success for deaf individuals is critical.

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SUGGESTED CITATION FOR THIS BRIEF

National Deaf Center on Postsecondary Outcomes. (2017). *Research summarized! Collecting and using data for decision-making*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes. Retrieved from www.nationaldeafcenter.org

This document was developed under a grant from the U.S. Department of Education, OSEP #HD326D160001. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government.

