edCount Case Study: 
Implementing Standards and Assessments for Deaf and Hard of 
Hearing Students at Gallaudet University

In 2008, The Laurent Clerc National Deaf Education Center at Gallaudet University found itself faced with the task of choosing and implementing academic standards, standards-based assessments, and accountability measures in its schools for the first time. Like a state, the Clerc Center must ensure and provide evidence that its students are receiving a high-quality education based on challenging content and achievement standards, that they are provided with opportunities each year to demonstrate what they know and can do in relation to these standards, and that the Center itself tracks and reports the degree to which it has succeeded in including all students in this standards-based education.

Because the Clerc Center comprises two small schools serving a specialized population of deaf and hard of hearing students, implementing these pillars of reform poses unique challenges on a number of levels. In bringing standards, assessment, and accountability to its schools, the Clerc Center needs to ensure that these components are implemented in ways that are meaningful and appropriate for its students, while adhering to the principle that all students be held to the same high standards.

For assistance in translating these general federal mandates into appropriate, sustainable systems at its schools, the Clerc Center turned to edCount.

edCount’s work with the Clerc Center is truly a partnership, in which the Clerc Center’s administrators and staff contribute their knowledge and expertise about serving deaf and hard of hearing students, and edCount provides knowledge and expertise about successfully implementing federal policy. We began in 2008 by helping the Clerc Center to partner with a state to use its standards and assessments (as mandated by the EDA, the Education of the Deaf Act) and since then have provided extensive technical assistance to help the Clerc Center’s practitioners to implement these systems in ways that are both rigorous and meaningful. Our services for this client have included:

Standards:
- Choice of a state partner for adopting standards and assessments;
- Development of standards-based curricula in English language arts, mathematics, social studies and science for grades K-12; and
- Support implementing standards-based curricula, including professional development and resources for teachers.
Assessment:
• Coordination of test administration training;
• Administration of a practice assessment in spring 2009 in preparation for official testing starting in 2010;
• Scoring and analysis of practice student assessments in 2009;
• Coordination of data transfer between Clerc Center and testing vendor for assessments starting in 2010;
• Execution of a standard-setting study to determine cut scores and performance levels for the assessment based on the Clerc Center’s population, and at the request of the Center’s state partner;
• Design of reporting templates and interpretive guides for student-, classroom-, and school-level assessment results;
• Selection of student accommodations for assessment, including support for the development of an accommodations manual; and
• Development of a technical manual for test administrations from spring 2010.

Accountability:
• Assistance in designing small school accountability indicators; and
• Evaluating center data systems to ensure they can support accountability and self-evaluation needs.

edCount’s work with the Clerc Center is built around our recognition that holding all students to the same high standards does not entail a ‘one-size fits all’ solution. Rather, successful systems are built on, and reflect, the people and philosophy of the institution in which they are implemented.

Because standards-based instruction and assessment were new for both students and teachers at the Clerc Center, edCount’s technical assistance has focused not only on implementing these new systems, but on empowering all members of the Clerc Center’s community to embrace these systems with confidence. edCount has involved Clerc Center educators in many of its technical processes – such as participating in a standard-setting study to determine cut scores for the assessment – and has provided training and resources to teachers and administrators alike to help them administer assessments successfully, and deliver instruction that will prepare their students to successfully demonstrate what they know and can do.

In the process of completing this work, edCount and the Clerc Center have together identified a number of research questions for future study as they continue to work together to ensure that deaf and hard of hearing students are provided with an education that is challenging, appropriate and rigorous.
Introduction

The Laurent Clerc National Deaf Education Center at Gallaudet University (the Clerc Center) maintains two demonstration schools for deaf and hard of hearing students: the Kendall Demonstration Elementary School (KDES) and the Model Secondary School for the Deaf (MSSD). These schools are partially supported by federal funds.

In 2008, the reauthorization of the Education of the Deaf Act (EDA) applied the standards, assessment, and accountability requirements of the No Child Left Behind Act of 2001 (NCLB) to the Clerc Center’s school programs. The reauthorized EDA mandates that KDES and MSSD adopt and implement challenging academic content standards and assessments, and annually use the results from those assessments to determine how well students are meeting academic standards, as well as how successful KDES and MSSD have been in including all students in standards-based education.

Due to the Clerc Center’s small size and special population, implementing these requirements constitutes a large task. Creating a unique set of standards and assessments for the Clerc Center would have been an expensive and burdensome task for such a small institution, and the small student population would have made it nearly impossible to create and test instruments with adequate technical rigor. As a result, the EDA specifically directed the Center to instead adopt the standards and assessments of a state; under NCLB, all states have already had to submit evidence that their standards and assessments are technically adequate and rigorous to meet the demands of the law.

Nonetheless, adopting and implementing an existing set of standards and assessments is not simply a plug-and-play process. First, the Clerc Center needed to identify and form a relationship with a state partner whose standards and assessments represented skills and knowledge that the Clerc Center deemed appropriate for its students and aligned to its mission and expectations. edCount’s work began with coordinating this effort. edCount president Dr. Ellen Forte organized and facilitated a process through which Clerc Center educators conducted a structured review of the standards from multiple states, and supported these educators in evaluating the standards according to their institution’s needs. Once the Clerc Center chose its partner, edCount served as a liaison to broker the relationship between the two entities.

Since then, our firm’s relationship with the Clerc Center has expanded to include a number of different assistance activities to ensure that the Clerc Center’s ongoing implementation of these standards and assessments is both compliant with the law, and appropriate and fair for its students. In addition, the Clerc Center has had to set its own accountability measures and targets, a process which edCount has also guided.

edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University
Introducing standards and assessments into a school system where they have not previously been used involves many more steps than simply handing the teachers the standards and sending them a test to administer once a year. Since choosing its standards and assessments, the Clerc Center has had to work to make systemic and cultural changes to support the successful implementation of these systems. As always, we framed our technical assistance and research in the context of a larger theory of action about educational systems and how they work, as detailed in this case study and demonstrated in this graphic:

**The Clerc Center’s Theory of Action**

**Instructional Contexts**
Prior to EDA, the Clerc Center’s **expectations for college and career readiness** were not explicitly spelled out in concrete terms in one place. The selection of the state partner for standards provided the Clerc Center with these **clearly defined expectations** for the first time, and are initiating plans to transition to the Common Core State Standards (CCSS) starting in 2012.

Having chosen these standards, the next step was to **equip teachers and administrators with the resources and supports necessary to design and deliver standards-based instruction**. Because most Clerc Center teachers were not used to designing standards-based curricula or delivering standards-aligned instruction, edCount has focused much of its technical assistance since 2009 on supporting teachers in their capacity to learn and apply this skill. To help teachers in this regard, edCount has designed standards-based curricula for English language arts, mathematics, social studies, and science for grades K-12; we have also created pacing guides, scope and sequence documents, and other resources to support teachers in their implementation of these curricula.

edCount is also working with the Clerc center to **develop a sustainable and long-term professional development approach** that aims to strengthen teachers’ knowledge and skills related to effective instructional practices, academic content, and student evaluation. Starting in 2012, edCount will provide **professional development institutes and expand professional learning communities** for the Clerc Center’s teachers, to help them to grow comfortable and competent using these new materials and teaching to the Clerc Center’s articulated performance expectations.
Assessment Design
For the Clerc Center, ensuring an appropriate assessment design has been a unique situation. As far as the test itself, because the Clerc Center adopted a previously existing test from a state, they were unable to ensure during the assessment creation process that the test reflected the needs of the students who will take it at the Clerc Center. As such, much of edCount’s work to ensure appropriate assessment design has focused on ensuring instead that the test conditions, scoring, and reporting systems are all calibrated in ways that ensure fair, accurate and valid results for the Clerc Center’s students.

One aspect of this has been creating inclusion criteria to determine which students participate in the general assessment, and how, and which students participate in the alternate assessment, and how. Based on data and information from the practice administration in the 2009 school year, edCount has created an accommodations manual for the general assessment that identifies appropriate and allowable accommodations for students who take the assessment, as well as decision criteria to help educators match accommodations to specific student needs.

In the 2011-2012 school year, edCount conducted a study of the cognitive processes students use to generate responses to these questions to determine whether the assessment design and delivery conditions allow students to demonstrate their knowledge and skills. This study engaged students in “think aloud” sessions where they communicated their thinking orally or via American Sign Language (ASL) to researchers as they responded to test questions, so that researchers could determine whether students were engaging in the cognitive processes that test questions are intended to measure. The data from this study will help edCount to identify any “construct-irrelevant” factors that may be affecting student performance, such as vocabulary or grammatical structures that are not interpretable for ASL users. edCount and the Clerc Center are also conducting a study of deaf and hard of hearing student achievement on large-scale assessments around the country, to investigate how well current assessments produce scores that accurately reflect the knowledge and skills of this population.

To ensure that test scores appropriately differentiate among levels of performance, edCount conducted a standard-setting study in 2010. The tests and test questions used at the Clerc Center had never been scrutinized to ensure they are free from content or language that would interfere with deaf or hard of hearing students’ ability to demonstrate their knowledge and skills. Therefore, edCount conducted the standard-setting study to allow Clerc Center educators and content experts to ensure that students would not be held accountable for performance on inaccessible questions and to identify scores that distinguish among different achievement levels.

edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University
Finally, edCount has designed student-, classroom-, and school-level score reports, as well as interpretive guides for parents, teachers, and other stakeholders to help these audiences understand what assessment results do (and do not) mean about performance. These reports are designed to maximize readability and accessibility, and the guides that accompany them provide readers with concrete, specific examples about skills that various students may have mastered, or may struggle with, based on the available assessment data.

**Score and Interpretation Uses**
Starting in 2012, edCount is helping the Clerc Center to design and implement a system of interim and formative assessments that will complement the annual assessment system and collect information that may help teachers and administrators to track student progress over time. An additional expected outcome from these assessments will be results that will help teachers to plan and deliver standards-aligned instruction that targets student needs and goals. The results from these formative and interim assessments, as well as the results from the annual summative assessments, will be tracked in a data management system that edCount is helping the Clerc Center to design; this system will allow educators and administrators to access and utilize different pieces of student, classroom, and school-level data for a variety of purposes.

**System Goals**
Ultimately, by helping the Clerc Center to implement a set of standards it has chosen as appropriate and relevant for its students, and by helping teachers to deliver instruction that is aligned to these standards, edCount is helping to ensure and provide evidence that all students at the Clerc Center’s schools receive high-quality instruction and achieve increasingly higher academic outcomes as a result. As Clerc Center students continue to acclimate to this new system, and as teachers grow more confident and competent delivering instruction in this way, the Clerc Center will continue to approach the ultimate goal for all educational institutions: that all students leave high school ready for college and careers.

**Lessons Learned**
One of the most striking lessons learned in edCount’s work with the Clerc Center has been how little is known about the performance of students who are deaf and hard of hearing on academic content assessments throughout the country. In the course of implementing standards, assessments, and accountability at the Clerc Center, we have encountered a number of accessibility issues and identified various non-academic factors that could affect student access or performance. Because the Clerc Center was instructed to implement the standards and assessment of a state partner, the deaf and hard of hearing community had no voice in the development process for these materials, which are now being administered to that population.

*edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University*
This discovery has inspired both the Clerc Center and edCount to work to bring this population more to the forefront in discussions of access and equity. edCount has sought to include representation from the Clerc Center and from Gallaudet on a number of other collaborative projects to ensure that the voice of the deaf and hard of hearing community is heard in discussions of how to develop or improve educational systems throughout the country. Gallaudet University has also chosen to implement a study of achievement among deaf and hard of hearing students across the country, to which edCount is contributing. This study will aim to collect information about how other education agencies are addressing the needs of their deaf and hard of hearing students and how these students are performing relative to hearing students and relative to deaf and hard of hearing students in other states.

We hope that by collecting this information, and establishing community among education agencies and institutions that serve deaf and hard of hearing students, we can foster collaboration and communication about best practices for this population, so that all deaf and hard of hearing students may have access to appropriate systems and resources to measure their achievement.

**Conclusion**

As edCount continues to support the Clerc Center’s efforts to implement standards and assessments, we continue to identify new areas for research and consideration to ensure that deaf and hard of hearing students receive access to high-instruction, and opportunities to demonstrate what they know and can do. While it is clear that deaf and hard of hearing students are capable of meeting the same high standards we would expect for all students, this population does face unique issues of access that have largely been unexplored up to this point.

As a result, in addition to partnering with the Clerc Center and Gallaudet University to conduct additional research about the achievement of deaf and hard of hearing students throughout the nation, edCount has also sought to include experts representing the deaf community in other assessment-related projects in which it is involved, to ensure that this population has adequate representation in discussions about the next generation of instruction and assessments.
Case Study Appendix: Theory of Action Slides for The Clerc Center

edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

- Students are appropriately identified for available testing options.
- Test content represents an adequate sampling of the knowledge and skill expectations.
- Test design and delivery conditions allow all students to demonstrate their knowledge and skills.
- Scoring processes differentiate among levels of performance accurately and appropriately.
- Reports present accurate score information along with guidance on appropriate score inferences and uses.
- Test scores appropriately reflect student knowledge and skills.

edCount worked with Clerc Center educators and content experts to set appropriate assessment cut scores based on a careful analysis of real test items.

edCount: designed, and annually produces, student, classroom, and school-level score reports, as well as interpretive guides for parents, teachers, and other stakeholders to help these audiences understand what assessment results do (and do not) mean about performance.

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

www.edcount.com
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

Ultimately, by helping the Clerc Center implement a set of appropriate and relevant standards and by helping teachers deliver instruction aligned to these standards, edCount is helping to ensure - and provide evidence - that all students receive high-quality instruction and achieve higher academic outcomes.
edCount Case Study: Implementing Standards and Assessments for Deaf and Hard of Hearing Students at Gallaudet University

As Clerc Center students continue to acclimate to this new system, and as teachers grow more confident and competent delivering instruction in this way, the Clerc Center will continue to approach this ultimate goal for all educational institutions.

All students leave high school ready for college and careers.

All students achieve increasingly higher academic outcomes.

All students get greater exposure to high quality academic instruction.