The Riverside County Office of Education is raising the expectation for what all students can achieve, including those students with significant intellectual disabilities, by using the nationally vetted Student Annual Needs Determination Inventory.

The principal had reservations going into the IEP meeting. The parents had been vocal, unhappy with the minimal progress their child with intellectual disabilities had made in a previous district. They were bringing an advocate to the IEP. The teacher had assured the principal that she had communicated frequently with the parents prior to the IEP, and had what she felt were valid and reliable results from the SANDI assessment, prioritized need areas, and challenging but realistic IEP goals.

As the IEP meeting progressed, the principal felt the tension in the room quickly dissipate. The teacher had data from the assessment that she shared with the parents, then discussed possible IEP goals and services giving the student access to grade level standards.

The mother became emotional, and said to the team, "My son is 12 years old, and in all these years of IEP meetings I have never felt like the school actually knew who he was, or thought he could achieve more. Now I do. Thank you."

This same scenario has been played out repeatedly in Individualized Education Program meetings across the United States, as teachers, parents, and districts come together to support the achievement of students with intellectual disabilities.

Support for students

The adoption of Common Core State Standards across the U.S. significantly raised the expectation for what all students can achieve, including those students with significant intellectual disabilities. However, students with disabilities needed meaningful, reliable data – both summative and formative – based on multiple measures.

Riverside County Office of Education (RCOE) set out on a path to address this need. The Student Annual Needs Determination Inventory, better known as SANDI, was created for students with intellectual disabilities as a response to the general education focus on data-driven instruction as a result of ESSA, NCLB and IDEA.

The recent Supreme Court decision, Endrew v. Douglas County, 2017, rejecting a low-bar of expectations for students with disabilities to make progress and show educational benefit further highlights the need for districts to be equipped to show growth and student progress over time.

By Kate Cahill, Rebecca Silva and Chun-Wu Li

Limitations of assessment

Alternate assessment is required by federal and state legislation for all students in the United States, regardless of the nature or severity of their disability. Including students with disabilities in alternate assessments has provided a means for states to track progress and proficiency of those students whose "IEP team determines cannot participate in state assessments…even with appropriate accommodations" (34/CFR 200.6a).

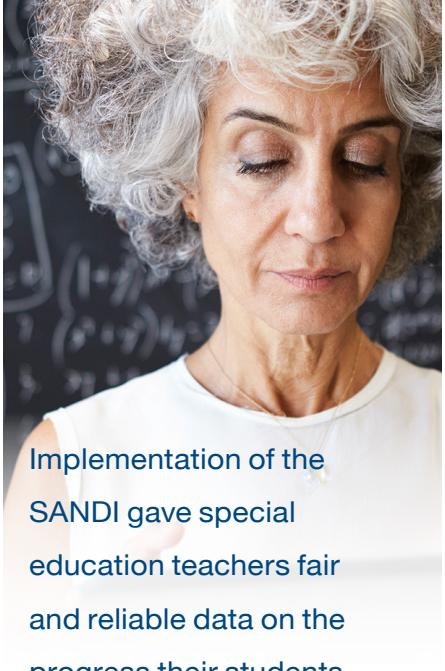
State assessments and Adequate Yearly Progress (AYP) data provided critical information to districts that informed student achievement overall and by subgroups within proficiency levels in core areas. However, few state alternate assessments are able to inform or guide instruction. In this respect, alternate assessment has some inherent limitations.

State alternate assessments are summative in that they assess the state alternate assessment blueprint once yearly to show what students know and are able to do after instruction. Alternate assessment does not report progress by standard or identify need areas for student learning. It does not guide instructional decision making, but rather tests the alternate assessment blueprint showing proficiency across core areas of English language arts (ELA), math and science at selected grade levels, and at best includes progress on broad strand areas.

Description of the SANDI

The SANDI assessment was developed for students with significant cognitive disabilities, identified as 1 percent of the students who are administered alternate assessments as part of each state's annual assessment program (U.S. Department of Education, 2005). The first edition of the SANDI was aligned with the California Alternate Performance Assessment (CAPA) blueprint and field tested by hundreds of teachers in California who assisted with item development through specific feedback and critique.

The second edition (2009) of the SANDI was aligned with the New York State Alternate Assessment blueprint and pilot tested for two years by teachers in New York City



Implementation of the SANDI gave special education teachers fair and reliable data on the progress their students were making.

Department of Education District 75. During this time, the SANDI was revised and developed into an electronic assessment utilizing online access through iPads and computers.

The third edition of the SANDI was developed in 2010 to reflect grade-level content and align with Common Core State Standards (CCSS) and continued to incorporate revisions based on feedback from teachers, administrators, content experts, and other instructional support specialists.

The alignment process considered the alignment criteria from the Links for Academic Learning (LAL) a procedure to determine the degree of alignment of alternate assessments to alternate achievement standards (Flowers, Wakeman and Browder, 2009). The SANDI has continued to be organized into content area sections including reading/language arts, communication, writing and math.

Early results for RCOE

Consistent use of the SANDI across RCOE's 23 districts demonstrated student achievement for students with disabilities on state alternate assessments. The CAPA Adequate Yearly Progress data for RCOE, from 2005-2013, reflects continuous growth in student achievement in both ELA and math.

Growth in CAPA percent proficient during this nine-year period for RCOE increased from 55 percent to 92 percent in ELA and from 42 percent to 82 percent proficient in math. In a nine-year comparison between RCOE and the state CAPA proficiency, RCOE outperformed the California average rates in ELA by 37 percent, compared to a state proficiency increase of 19 percent. In math, RCOE's proficiency rate change was 40 percent as compared to the state average of 15 percent.

This growth was due in large part to districtwide systematic implementation of the SANDI, and the capability to give special education teachers fair and reliable data on the progress their students were making.

SANDI scales up nationally

As of 2017, the SANDI has been administered to more than 30,000 students with intellectual disabilities nationally, capturing student data through meaningful summative and formative assessment and allowing access to standards-based, data-driven instruction. The SANDI, updated prior to the IEP, reports out all present levels of performance, shows student progress since the previous IEP, and aligns instructional need areas to the Common Core State Standards. New IEP goals are identified by prioritizing student need areas and clearly supporting access to standards-based instruction.

The SANDI Standards Reports further inform the selection and implementation of standards-based instruction using evidence-based practices to meet the needs of students with intellectual disabilities. District leadership can now, often for the first time ever, view individual student progress, and track student data by classroom, by school site and districtwide.

Validity and reliability

The results of a validity and reliability study, completed in May by Hanover Research, evaluated the efficacy of the SANDI as a fully developed research-based comprehensive student assessment system. The SANDI third edition was tested for its psychometric properties to offer teachers, parents, school districts and other shareholders an evidence-based method for evaluating student academic skill levels on the CCSS.

The data was tested for validity and reliability across the United States using a large number of students for the purpose of giving

all users confidence in the efficacy of the results. Key findings include:

• Alternate assessment was introduced with the 1997 reauthorization of the Individuals with Disabilities Education Act, and was followed by a gradual intensification of expectations for students with severe disabilities. It is intended for a small audience of a state's or district's total population, with a cap on using alternate assessments of only 1 percent of students. As a result of subsequent legislation, all states now have an alternate assessment plan in place.

– The federal government funded development of two widely used national alternate assessment models aligned to educational standards and policy: National Center and State Collaborative/Multi-State Alternate Assessment (NCSC/MSAA), and Dynamic Learning Maps (DLM). Twenty-seven states explicitly rely on one of these two systems for their own alternate assessment program. Both systems are constructed around valid and reliable alternate achievement standards and offer digital, adaptive technologies to facilitate testing.

– The SANDI presents an important innovation in this assessment space by offering not just an assessment instrument, but a larger framework for implementing the assessment effectively and appropriately for students with significant disabilities.

• As with all assessments, technical quality is the most important characteristic of an effective alternate assessment. It can be difficult to develop technical quality in an alternate assessment because the population for an alternate assessment is both small and diverse. The population size makes it difficult to follow standard quantitative investigation of validity and reliability, while the population's diversity challenges typical assumptions about how to operationalize these assessment characteristics.

– The SANDI has a demonstrated technical quality in terms of correlation with other key alternate assessment instruments, internal item content validity, and inter-rater reliability. Students' SANDI outcomes are highly and significantly correlated with their performance on CAPA, WJ and Vineland assessments. Likewise, the level of inter-rater agreement is high, denoted by a kappa of 0.70 ("substantial agreement"). There is variation in the level of agreement among teachers in their ratings of different subject items, but in general the level of agreement among teachers is significantly higher than random agreement. Finally, experts rated most content area items very highly in terms of content representativeness, with little variation among participating scorers.

• Designating a student as eligible for an alternate assessment is a complex choice that influences his or her education, as well, because it allows for a lowering of academic achievement expectations. Alternate assessments must consider issues of inclusion, appropriateness, meaning and cultural relevance, so as to maintain as high a standard as is appropriate for these students. Researchers consider this a second essential quality to examine, referred to as "consequential validity."

• Communication is central to effective implementation of alternate assessment systems. Parents, specialists, and other stakeholders must receive adequate training and support to advocate effectively for their child or student. Such collaboration is facilitated through the IEP development process, and through professional development opportunities for administrators and teachers.

– The SANDI uses professional learning communities (PLC) as a central component of its alternate assessment model to analyze student data, explicitly led through accompanying professional development modules. Specifically, modules have been developed and implemented through consistent and ongoing teacher input, teacher and administrator training, leadership team and administrative coaching, and feedback cycle. Each module may be customized depending on the site staff availability and needs. To ensure consistent administration of the SANDI assessment, professional development modules are delivered by site-level leadership teams, and implementation is supported and monitored by district leadership. All modules are available online 24/7 for review.

Beyond alternate assessment

Hanover results demonstrated to RCOE, its SANDI users across California districts, and users across the United States, that the full value of the SANDI goes beyond that of other current alternate assessment options to provide a larger framework for guiding the kinds of communication and collaboration that effective alternate assessment requires: defining appropriate standards, differentiating instruction to meet those standards, and accurately observing the success of such efforts in providing students access to those standards.

The SANDI further supports the bigger picture for a district – demonstrating student progress and educational benefit. The biggest benefit to districts is providing the ongoing data required by the Supreme Court to show growth that is "reasonably calculated."

By providing districts, teachers, parents and students with an assessment system that measures current, present levels of performance and tracks progress of IEP goals for yearly and triennial IEPs, educational benefit is no longer an opinion, but based in reliable and fair data.

And a huge and unexpected benefit of the SANDI? The building of strong, positive teacher-parent-school relationships by providing assessment information in an organized and meaningful format for all stakeholders.

Resources

• Federal Code of Regulations, Inclusion of all students (34/CFR 200.6a): www.law.cornell.edu/cfr/text/34/200.6.

• Hanover Research, "The Effectiveness of the Student Annual Needs Determination Inventory (SANDI) within the Special Education Context" (2017).

• Flowers, C., Wakeman, S. and Browder, D. (2009). "Links for Academic Learning (LAL): A Conceptual Model for Investigating Alignment of Alternate Assessments Based on Alternate Achievement Standards." National Council on Measurement in Education.

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