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# Formative Assessment:

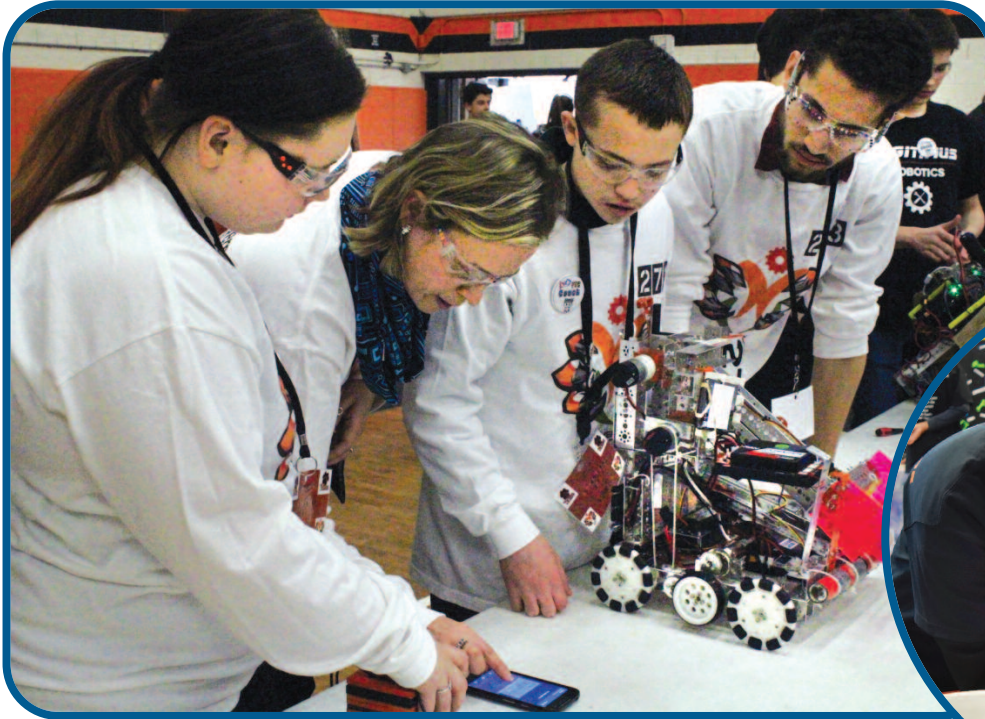
## A Tool for Closing Achievement Gaps in Diverse Classrooms

*By Julie Tibbitt*

Sometimes our deaf and hard of hearing students, especially those from communities in which adults seek personal, societal, and financial recognition, struggle to show academic success. This is too often reflected in standardized tests, including those focused on reading, as they highlight reading gaps instead of content knowledge (Luckner & Bowen, 2006). This means that too many deaf and hard of hearing students often do not show age-appropriate academic achievement, and schools have copious data on how deaf and hard of hearing students—especially those of color or those with additional disabilities—are not performing.

As a former teacher and now a principal, I have sat through hundreds of Individualized Education Program (IEP) meetings and observed as students nervously watched the sharing of the results of their evaluations and saw that they made only modest gains in literacy or mathematics. However, the modesty of these gains was partly a result of the way the data is sought, compiled, and reported. The bulk of data comes from standardized tests and tasks, such as journal writing, weekly vocabulary and spelling quizzes, homework completion, rubric-graded essays, and class tests based on questions that rely on multiple choice or matching. Despite its problematic nature, such data remain the building blocks of the goals and objectives that guide each student's IEP for a full year. Further, too often these

*Photos courtesy of Julie Tibbitt*



**Left and below:** The relationship between teacher and student matters during formative assessment. Here, teachers take the time to check on the students' understanding during performance tasks.



goals are superficially written and rely greatly on quantity over quality. This does not bode well for students' self-esteem, and it stymies deaf education professionals who want to show hard data of successful outcomes.

### **Formative Assessment: A Building Block for Success and Parity**

One way that teachers can combat this dilemma and at the same time improve individual performance is through the use of formative assessment. Some educators shrink from terms that indicate formalized evaluation or testing, and formal assessment remains underutilized by teachers and administrators, including those in special education (Black & Wiliam, 1998a). Yet assessment has always been part of effective instruction. In fact, without assessment, instruction cannot exist.

Assessment—or evaluation or testing—should not come only after the instruction has already taken place. It should be incorporated throughout the learning of each lesson. *Formative assessment* simply means assessing students at intervals as they tackle specific goals rather than waiting to administer an assessment when the lesson plan proclaims that a goal should have been reached. It means continual assessment prior to IEP meetings. Using assessment in this manner not only measures student learning, it can help guide

it. With formative assessment, teachers use various tools and strategies to determine what students know, identify gaps in their understanding, and plan future instruction (Pinchok & Brandt, 2009). For example, an expertly done diagnostic interview during math class can unveil precisely how a student's mind might be processing information during subtraction exercises. This would allow the teacher to immediately address any misconceptions. Thus, formative assessment can function like a GPS of instruction, guiding teacher and student toward a given destination.

Further, using formative assessment reminds educators to structure teaching through students' strengths rather than through their perceived deficits. As assessment continues, interactive dialogue between teacher and student becomes the hallmark of instruction. Research indicates that this can make a difference in the learning experience of typically underachieving students, such as students of color and students with disabilities (Black & Wiliam, 1998b). A particular study revealed that low-achieving students and students with learning disabilities who received frequent assessment feedback increased their efforts and tackled more challenging tasks (Fuchs et al., 1997). Black and Wiliam (1998a) reviewed 250 empirical research studies involving classroom assessment and found that formative assessment



**Above:** Children’s curiosity is formative, meant to be shaped and guided by those who believe in them.

unequivocally raised the caliber of learning for students, especially students with learning disabilities and other underachievers. A few studies that focused particularly on self-assessment and peer assessment—two strategies of formative assessment—found improved outcomes among elementary students in their oral reading rates and writing composition; the key difference was that these students received immediate feedback either from self-monitoring or from their classmates.

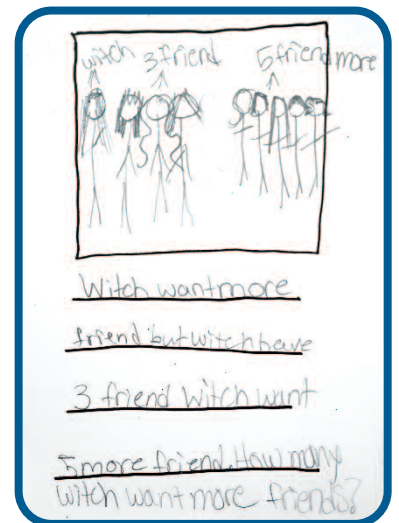
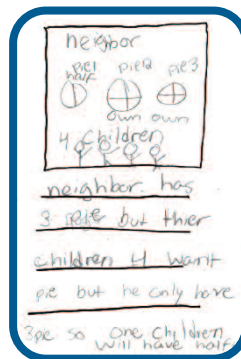
In a follow-up study to their literature review, Black and Wiliam (2004) provided in-service training to more than two dozen teachers across two school districts on the use of three specific types of formative assessment: questioning, feedback, and self/peer assessment. Ultimately, they found that enhanced and more frequent interaction between teachers and students led to substantial learning gains. In addition, most of the teachers felt that their instructional practices improved, and two schools even adopted a policy of giving constructive feedback in lieu of grades on homework. This lends credence to Butler’s 1988 study across high- and low-achieving students; performance for such students improved when they received comments with their grades instead of receiving grades alone.

Hattie & Timperley (2007) also wrote about the power of feedback. To be effective, feedback must be intertwined with a clear purpose; teachers need to understand and connect the feedback tangibly with the lessons on which they are working, and they need to keep the feedback specific (e.g., commenting on the way a student uses transition words in a composition essay is more effective than commenting on that student’s overall writing style).

### Implementation: For Every Age

Formative assessment can be used with students of every age and cognitive level. Assessment focuses on continually modeling and engaging with the child and emphasizing the process of doing a task or learning a skill rather than on the end result (e.g., asking a young child to talk about his or her drawing brings substantially different results than merely exclaiming, “Oh, wow! Is that a dog?”). In formative assessment, teachers may gently ask the child if he or she has any different or better ways of doing his or her work (e.g., addition exercises). This may seem like a rather simple question and it might not even yield a useful response, but if it is done repeatedly and over time, it helps students eventually learn how to ask similar questions on their own—and even catch themselves in the act of doing something incorrectly and correcting it.

Formative assessment lends itself to higher-level problem solving. When I taught elementary math, I loved asking students to compose their own word problems. This was my favorite way to gain insight into their conceptual understanding. I would usually require that students incorporate five elements into their problems—numbers, key words, a drawing, a number sentence, and a statement of the whole problem in a way that made sense—and I would make sure their problems made sense to them. These five elements, if each correctly done and put together well, would deliver a solidly written word problem. Creating word problems is a higher-level task than merely having students respond to number drills. Students think creatively and even reason explicitly about structure in order to design and write a math problem; they actively construct authentic meaning. If there is a gap in the student’s concept, it becomes clear as student and teacher confront the problem; and this in turn creates teachable moments. These teachable moments allow for teacher and student collaboration, discovery, and reflection.



**Above and right:** Too often a teacher or parent may get sidetracked with the quality of writing and overlook the target of the lesson—mathematical conceptual understanding.



Frequently, teachers and service providers express concerns that students do not appear to retain skills taught in earlier grades. As a result, educators feel obligated to reteach the same skills or simply move on to the next unit, leaving behind significant conceptual gaps. Sometimes the cause for this is language delay or some other circumstance beyond the school's control. The first step in addressing such gaps would be to abandon the widespread belief that knowledge must come before understanding. For example, if a fifth grade student cannot memorize basic multiplication facts, the origins of this struggle might be viewed not only in neurological terms but also cultural origins (Ben-Yehuda, Lavy, Linchevski, & Sfarid, 2005). Exposing the student to accessible and tangible discourse and using multiplication across different content areas can lead the student to new connections and better understanding. Using frequent feedback, one of the hallmarks of formative assessment, allows a teacher to reach expertly into a student's perceptions on multiplication as well as coach on the type of tools, not always rote memorization, which might be used to find the solution.

### **A Win-Win: Assessing Assessment**

Although there is limited literature on the use of formative assessment among deaf and hard of hearing learners, a strong consensus exists that relying exclusively on standardized assessment offers limited benefits. Scholarly research has consistently pointed to formative assessment as a more promising practice for high-quality education. Further, federal laws promote formative assessment as a research-evident means of improving learning outcomes for all students with disabilities (Madison-Harris & Muoneke, 2012).

Formative assessment is part of a commitment to using inclusive practices in the classroom. Through ongoing evaluation and guidance, formative assessment allows us to reach and educate every single student. With the multiple and intersectional identities of the students that educators serve, the learning process benefits from consistent social-cultural awareness and application. This is integral to formative assessment; it functions like a process in which the knowledge, interests, and experiences of our diverse students drive instruction and allow teaching through students' strengths rather than through their weaknesses.

As a professional educator, I feel ethically obligated to showcase our students in a manner that highlights their abilities and to help them see themselves in a positive light.

After all, our diverse students have enormous potential. Someday, they will be the ones handling our needs. While we can provide fair and thorough assessment to ensure appropriate education, it is up to us to take a step further and use formative assessment to elevate the teaching and learning experience, especially for students of color and those who have disabilities.

### **References**

- Ben-Yehuda, M., Lavy, I., Linchevski, L., & Sfarid, A. (2005, May). Doing wrong with words: What bars students' access to arithmetical discourses. *Journal for Research in Mathematics Education*, 36(3), 176-247.
- Black, P., & Wiliam, D. (1998a). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Black, P., & Wiliam, D. (1998b). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139-148.
- Black, P., & Wiliam, D. (2004). The formative purpose: Assessment must first promote learning. *Yearbook of the National Society for the Study of Education*, 103(2), 20-50.
- Butler, R. (1988). Enhancing and undermining intrinsic motivation: The effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology*, 58(1), 1-14.
- Fuchs, L. S., Fuchs, D., Karns, K., Hamlett, C. L., Katzaroff, M., & Dutka, S. (1997). Effects of task-focused goals on low-achieving students with and without learning disabilities. *American Educational Research Journal*, 34(3), 513-543.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- Luckner, J. L., & Bowen, S. (2006). Assessment practices of professionals serving students who are deaf or hard of hearing: An initial investigation. *American Annals of the Deaf*, 151(4), 410-417.
- Madison-Harris, R., & Muoneke, A. (2012). *Using formative assessment to improve student achievement in the core content areas*. Retrieved from Southeast Comprehensive Center in SEDL website, [http://secc.sedl.org/resources/briefs/formative\\_assessment\\_core\\_content](http://secc.sedl.org/resources/briefs/formative_assessment_core_content)
- Pinchok, N., & Brandt, W. C. (2009). *Connecting formative assessment research to practice: An introductory guide for educators*. Naperville, IL: Learning Point Associates.