



Implementing a Screening Program

Donald Compton, Ph.D. • September 2009

Topic: Response to Intervention in Primary Grade Reading Practice: Universal Screening

Highlights

- Dr. Compton provides advice to schools on how to implement an effective screening program.
- Schools should begin by developing a schoolwide team to develop a multiyear strategic plan. Dr. Compton outlines who should be on the team and the type of expertise that will be needed.
- Dr. Compton describes the components of a screening system and provides a detailed example of how a school might set up a universal screening system.
- Benchmarks and cut scores improve the accuracy of the identification of atrisk students and placement in tiered interventions.
- Dr. Compton clearly explains cut scores and provides details on how to set cut scores. He talks about selecting benchmarks and setting cut scores tailored to a school's student population and addresses the issue of accurate identification and false positives.
- Although each district or school can develop its own screening benchmarks and cut scores, it may be useful to begin with guidelines from the screening instruments. Schools may need to tailor the initial benchmark cut-points to suit their own student populations.



About the Interviewee

Donald Compton is associate professor of special education and a John F. Kennedy Center Investigator at Peabody College, Vanderbilt University. He earned a Ph.D. from Northwestern University's School of Communication Sciences and Disorders. He worked as a learning disabilities resource teacher for five years in Skokie, Illinois. Dr. Compton then worked for four years as an assistant professor in the Department of Curriculum and Instruction at the University of Arkansas, Fayetteville. He then accepted a National Institute of Child Health and Human Development (NICHD) postdoctoral research fellowship at the Institute for Behavior Genetics, University of Colorado. From there he accepted his current position at Vanderbilt University.

Dr. Compton is experienced in designing, managing, analyzing, and disseminating data from cross-sectional and longitudinal studies. He is currently principal investigator or coprincipal investigator on five federal grants (two NICHD, three Institute of Education Sciences) using randomized controlled trials to evaluate academic interventions for children with learning difficulties. He is knowledgeable in the statistical modeling of growth in individuals and groups. His research involves modeling individual differences in the development of children's reading skills. He has written over 40 peer-reviewed publications and is on the editorial boards of the *Journal of Learning Disabilities*, *Scientific Studies of Reading*, *Exceptional Children*, and five other journals. Dr. Compton is currently coeditor of *Annals of Dyslexia* and vice president/ president-elect of the Society for the Scientific Study of Reading.

Full Transcript

I am Don Compton. I am an associate professor of special education at Vanderbilt University.

I am sure districts and schools are wondering what it takes to implement an effective screening, a universal screening procedure. And what we recommend is that first they develop a schoolwide team and they come up with a strategic plan, and then that plan maybe is multi-year in terms of rolling this out. Members on that team could include classroom teachers, an administrator, psychologist, special ed teachers, paraprofessionals, all sorts of people. They're going to need people who have expertise in screening and in testing, those who can actually go out and assess kids. Universal screening lasts for—depending on how big your school is, how many kids—it may take a few days, it may take a week.

Components of the System

Once all kids have been screened, then the process needs to go forward with putting data into the system, making decision on cut scores, looking at that, making sure it makes sense, bringing teacher judgment to make sure that the kids we've identified fit within what they think about is going on in their classroom. And the system is going to take money.



Setting Up a Screening System

Let me give you an example of how a school might set up a universal screening system. I think it would be good to start the year before by planning. The school needs to identify what type of universal screener they want to administer, who is going to administer that measure, who is going to score, who is going to set cut-points. The first year of universal screening, probably what schools can do best is just give the screener to all children. They're going have to rely on some kind of cut-point benchmark that is set by the screening vendor. And that might be the best they can do the first year. We recommend then that schools slowly adopt a system where they give the universal screener, identify the kids who are at risk—fairly liberally—and then progress monitor over time to really figure out the kids who are not benefiting from classroom instruction and are truly at risk. So that might be the second or third year. Then a school might decide, okay, after we've implemented universal screening, progress monitoring, we're going to watch and follow up the outcomes of kids to see how good our screener is working. That gives you better data as to who you missed, how many extra kids you are identifying. And then maybe in the last phase, they would use that data to actually refine their own cut-points, set their own district or school cut-points, and then they have a much better screener that's tailored to their population.

What Is a Cut Score?

Some may be wondering what a cut score is. A cut score can be used either in a benchmarking system or in a progress monitoring system. It's just a dichotomized score, either yes or no, of whether kids are considered to be at risk or not. So you give your universal screener or you give a series of progress monitoring probes, and you score the children on that and then you just decide, does the child score above or below a critical cut score that you, the school, sets. So our objective is to try to identify with 100 percent accuracy those children who are going to have future reading problems and those who aren't. That way, we can give the children who are having problems structured intervention to help their reading outcomes.

So what does that mean? How does that work? Well, we're trying to predict behavior in the future, which is not an easy thing to do.

Using Cut Scores

In terms of trying to pick the right children, it's impossible to be 100 percent accurate. So we have this cut score that we can use to put kids into risk and not-at-risk classes. That cut-point is fairly arbitrary. Schools can move that up or down. A more lenient cut score means you have a better chance of getting all the children who are going to have problems. However, what happens is you get a lot of what are called false positives. Those are kids who score below the cut-point, making them seen as if they are at risk, but they develop normal reading skills. So you would be putting children who don't need intervention into structured



intervention, which costs money and is inefficient. You can make the cut-point more stringent, and what happens then is you miss some of your kids but you put less kids into tutoring, but the ramifications of that is that kids who need tutoring don't get tutoring.

Deciding on a proper benchmark for a screen or cut-point for a screen or progress monitoring is a difficult process. It's one that schools are going to have to struggle with a little bit. Initially, I think most vendors will have cut-points or benchmarks for their measures that schools can immediately use. The issue with these is you're not sure whether those are going to generalize to your school population. So we recommend that schools, if possible, start to develop their own cut-points for their populations. This may take time. They may have to start with the vendor's suggested cut-points and modify those over time.

Schools have to kind of play the balance off of how many kids can they afford to give tutoring and how many kids are they willing to miss. And in general, we try to—all things being equal—we try to identify as many of the true positives as we can, and as we can afford. And we'll bring some kids into tutoring that maybe don't need it, but usually it's a good experience for them.