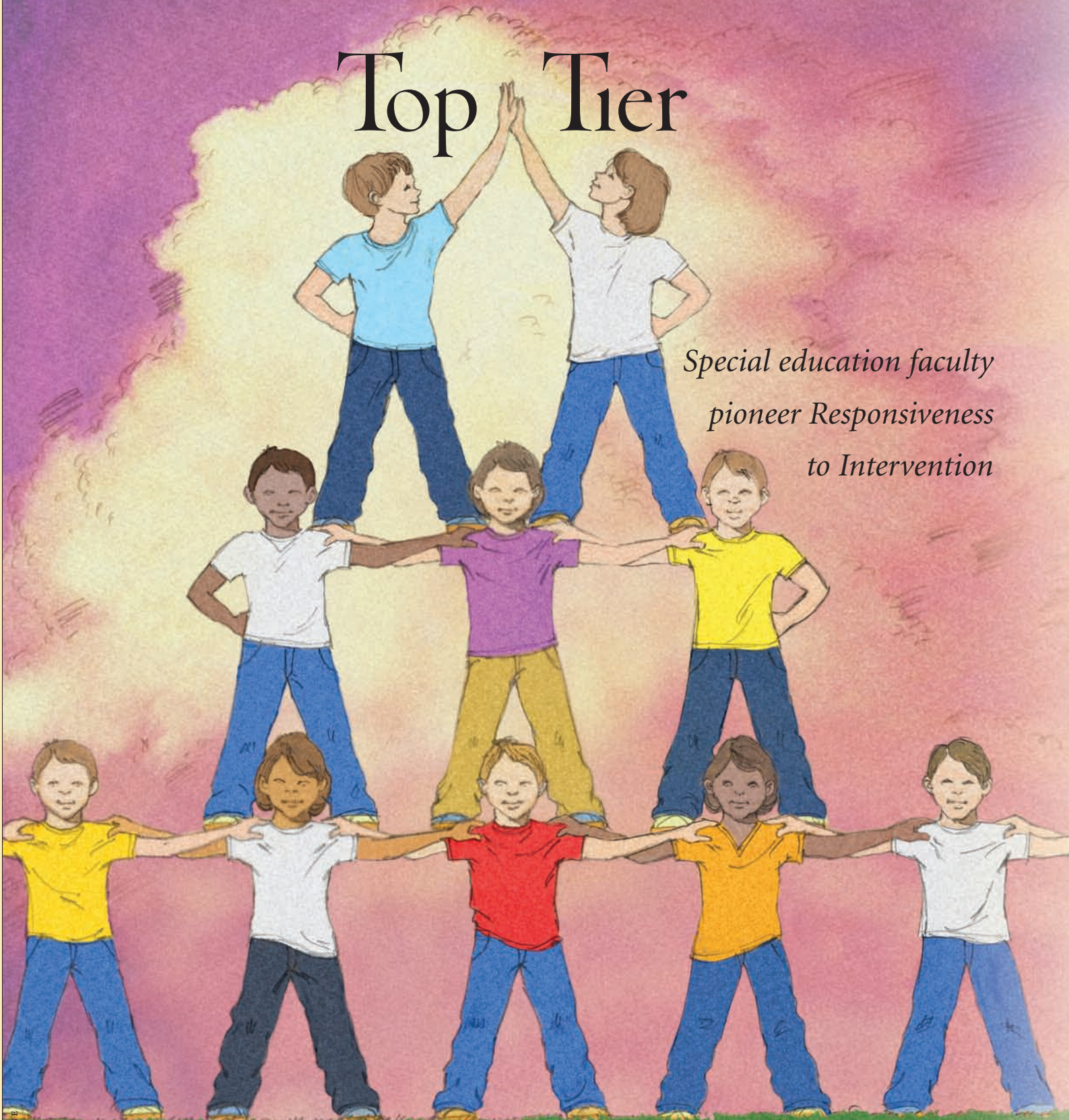


# Top Tier

*Special education faculty  
pioneer Responsiveness  
to Intervention*



Over the 35-year history of the Individuals with Disabilities Education Act (IDEA), the number of students identified as having learning disabilities has increased dramatically. Prior to 1970, students with learning disabilities were rarely identified. Now they comprise nearly 50 percent of all children with disabilities, or 5 percent of the total school population. The apparent increase in the prevalence of learning disabilities has raised concerns about the methods

by which these children are identified.

Because learning disabilities are defined as an unexpected failure to learn, the discrepancy between intelligence and achievement has been the conceptual and procedural keystone in their identification. Yet, use of IQ tests and discrepancy (between IQ and achievement) scores have proved problematic both for political and technical reasons and have prompted calls among academics, policymakers, and practitioners for alternative identifi-

cation methods. The front-running alternative approach is known as responsiveness-to-intervention, or RTI.

According to Lynn and Douglas Fuchs, Nicholas Hobbs Professors of Special Education and Human Development, RTI starts with a teacher providing scientifically validated, or “generally effective,” instruction; identifying at-risk students; and monitoring their academic progress.

“The ones who don’t respond to classroom instruction get



Douglas Fuchs

something else or something more from the teacher, or reading coach, or other school personnel,” says Doug Fuchs. The children who are responsive to the more intensive instruction are returned to the classroom where teachers and others continue to monitor their performance. “The students who are still unresponsive either qualify for

special education by virtue of their unresponsiveness or are provided a comprehensive evaluation to determine special education eligibility, depending on the version of RTI used,” Fuchs says. Where chronic unresponsiveness is the necessary and sufficient condition for special education eligibility, practitioners use a “low-achievement” definition of disability.

The Fuchses, along with Vanderbilt Peabody colleagues, Donald Compton and Dan Reschly, have been at the forefront of the development of RTI since receiving a grant in 2001 from the U.S. Department of Education to establish the National Research Center on Learning Disabilities (NRCLD). Recognizing widespread concern about the traditional IQ-achievement method of identifying children with learning disabilities, the Office of Special Education Programs established the NRCLD during the run-up to the most recent reauthorization of IDEA. The center conducts research on alternative methods of identification within the RTI framework, explores relevant policy at the state and local levels, and provides technical assistance to states and districts. To accomplish this last aim, Vanderbilt has partnered with faculty at the Center for Research on Learning at the University of Kansas.

Supporters believe that RTI can solve many practical problems associated with IQ achievement discrepancy, says Doug Fuchs. “They argue that RTI provides help more quickly to a greater number of struggling students,” he says. “And by providing more intensive instruction to these students, RTI also distinguishes poorly performing students with disabilities from those who perform poorly because of inadequate instruction.” RTI backers reason

### Quick Facts on RTI

#### What is RTI?

A model of collaborative and special education processes addressed in the Individuals with Disabilities Education Improvement Act of 2004. RTI provides increasingly intensive interventions in a three-tier system to students who are not achieving to academic expectations.

- Tier I addresses the core curriculum and is preventative and proactive. Interventions focus on groups of students, addressing the instructional, curricular, and structural variables in the classroom.
- Tier II efforts are still focused on groups, but incorporate targeted, in-depth intervention services to increase student skills.
- Tier III uses intensive, individual intervention to help students achieve specific skill targets. Once the target goal is reached, the level of intensity is adjusted.

#### Who benefits?

Children in need of instructional intervention in reading, math and science, grades K-12.

#### Why RTI?

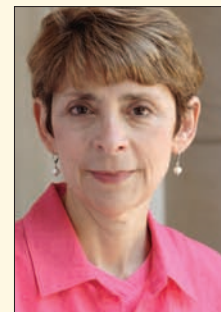
Traditionally, children with learning disabilities were not identified until later grades, at which point many had ingrained problems which required more time and resources to address. An additional problem has been the methodology for LD screening using the IQ Discrepancy model believed to have been responsible for widely misdiagnosing LD students.

#### How is RTI initiated?

Students are tested in the first month of the school year for general academic competence.

that a successful separation of those truly disabled from those who appear disabled but are not will reduce special education enrollments and costs. RTI, then, should encourage serious and sustained early intervention with at-risk children, leading to stronger school performance and to fewer special education referrals, all of which enhances the validity of the disability-identification process.

“At the same time,” says Fuchs, “important questions are being asked about whether teachers will indeed implement scientifically validated instruction with fidelity and whether they and their support staff will correctly identify at-risk students.”



Lynn Fuchs

Whether school districts will use more intensive, best-evidence, “second tier” instruction for the children unresponsive to first-tier instruction; whether their performance will be monitored at this second tier; and whether these many activities will lead to reductions in special education enrollments and cost are also questions, he adds.

To help answer questions about the effectiveness of RTI, the Fuchses and Compton, associate professor of spe-

cial education, are currently conducting two, large-scale, school-based randomized control trials (one in reading and another in math) in the Metropolitan Nashville Public Schools. The reading and math studies both began with about 250 at-risk students in 40 first-grade classrooms. A portion of each sample was assigned randomly to receive first-grade tutoring (in reading or math) as a supplement



Donald Compton

to their general education program or to continue in their general education program without tutoring.

The three researchers assessed how much the tutoring contributed to the children's academic development in first grade and are following them through fifth grade in reading and through fourth grade in math to deter-

mine long-term outcomes. They also looked for best methods of identifying young children at risk for later development of severe academic difficulties and what the early cognitive markers may be for academic development.

According to Donald Compton, "Results to date suggest that tutoring can be effective in promoting better academic results for these at-risk children." Lynn Fuchs adds, "In math, for example, children who received tutoring for 20 weeks, 3 times per week, developed much stronger skills for solving computation problems, concept application problems, and word problems than their non-tutored at-risk peers. Many fewer tutored children were identified as having a math disability." She notes that the reduction in

### FYI: RTI

More on the specific research and methodology being used to test RTI by the NRCLD can be seen in the Vanderbilt Learning Sciences Institute Colloquium Series video, "Responsiveness to Intervention: A Framework for the Prevention and Identification of Learning Disabilities." The video can be viewed online at [www.vanderbilt.edu/lsi/videogallery.html](http://www.vanderbilt.edu/lsi/videogallery.html).

number was evident more than one year after tutoring was completed. Such results, says Compton, may be seen as support for RTI's multi-tier structure of increasingly intensive instruction.

In another series of center studies, the researchers seek to redefine conventional thinking about RTI in terms of dynamic assessment. Dynamic assessment is based on the work of Russian psychologist Lev Vgotsky and uses a test-teach-test sequence to determine how much support a child needs to solve a task successfully. The index of interest becomes the level of support necessary to facilitate task completion. Center researchers are exploring whether dynamic assessment may be a more efficient form of RTI.

"RTI has been a useful notion to help researchers like myself and my colleagues at the LD Center re-think methods of identifying children at risk for severe reading and math problems," says Lynn Fuchs. "And if we can identify them more quickly, we can help them sooner."

The Web site for the National Research Center for Learning Disabilities contains a wealth of materials on RTI. Visit [www.nrclld.org](http://www.nrclld.org).

### IRIS Center Offers Online RTI Tutorials

In the spring of 2005, Professor Douglas Fuchs, co-director of the National Research Center on Learning Disabilities, was asked by the Tennessee Department of Education about professional development possibilities for Tennessee's teachers. Professor Fuchs suggested collaborating with Vanderbilt's IRIS Center to develop a series of modules on Responsiveness to Intervention (RTI).

The IRIS Center for Faculty Enhancement (IDEA '04 and Research for Inclusive Settings), based at Peabody College, is a national center that provides free, online, interactive resources about students with disabilities for college and university faculty and professional development providers. Funded by the U.S. Department of Education's Office of Special Education Programs (OSEP), the IRIS staff work with nationally recognized experts to translate research about the education of students with disabilities into practice.

The result of the collaboration between IRIS,

Fuchs and the state of Tennessee is four RTI modules now accessible on the IRIS Center's Web site at <http://iris.peabody.vanderbilt.edu/online-modules.html>. The modules take educators through a theoretical RTI assessment and possible teaching strategies.

More than 20,000 visitors have accessed the modules online, and they are being used in both preservice and inservice trainings, an impact far greater than originally envisioned.

Two additional modules are being created and will be posted during the summer of 2007. RTI: A Guide for Administrators will address many of the questions posed by school leaders who are considering implementing the RTI approach in their schools. RTI: Tier 3 will provide information on the options within the RTI approach for the services to be provided at Tier 3, which provides more intensive and individualized interventions than those in Tiers 1 and 2.

According to Naomi Tyler, Co-Principal Investigator, IRIS Center Director and Research Assistant Professor at Peabody, "States and local school districts are currently in the awareness stage of RTI adoption. Although the IRIS RTI modules were originally developed for Tennessee,



Naomi Tyler

OSEP is now directing educators nationwide to them because they provide a good overview as well as technical practice on how to implement the tier assessments."

Tyler continues, "Many of the practices used in RTI have been used for years by special educators but now RTI asks regular teachers to use them. We're excited that the IRIS modules are being disseminated broadly to help this process."