

## **What are the research questions we are trying to answer?**

To accomplish the Center's goals and address the problem of measuring achievement growth for educational accountability purposes, we propose conducting a tightly-linked series of growth modeling studies that address 6 key questions:

1. What is the natural developmental progress in achievement for students with disabilities?
2. What models best characterize achievement growth for students with disabilities who are participating in general achievement tests, as well as those taking alternate assessments?
3. How do various growth models represent school effects for students with and without disabilities, and how do results compare to those derived from status models now in use?
4. What are the reliability and validity of the estimates of school effectiveness for students with disabilities produced by alternative growth models, and how are these estimates influenced by contextual differences among schools and students?
5. How do results from different types of interim assessments of students' achievement meaningfully contribute to a model of academic growth for students with disabilities?
6. How can information about opportunity to learn and achievement growth be used to enhance academic outcomes for students with disabilities?

To answer these questions with scientifically-sound evidence requires the use of longitudinal designs, an understanding of measurement limitations, and a command of an array of statistical analyses and comparison techniques (Barton, 2005; Gong, Perie, & Dunn, 2006; Linn & Haug, 2002; Raudenbush, 2004; Singer & Willett, 2003; Stevens, 2005). It also requires access to large and representative datasets of both summative and interim assessments. Further, we maintain that these large datasets should not only include students with disabilities, but students without disabilities in order to understand how students with disabilities differ from their non-disabled peers, and how well different school-level growth models represent school effects for both populations. This research strategy is in keeping with the principles of "inclusion" and "least restrictive alternative" that underlie many policy decisions regarding students with disabilities, including their participation in current standards-based reforms (McDonnell, McLaughlin & Morison, 1997).