

New Developments in Technology-Enhanced Assessment Methods for RTI Models

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Behavioral Research and Teaching



Disclosure

- We are the authors of easyCBM but have the assigned copyright to the University of Oregon.
- Riverside is the exclusive distributor of easyCBM and provides extensive training and support.
- As authors, we make no profit on this product; income (if any) goes to the UO→BRT to support further research on RTI systems.
- At this point, we have invested approximately 7 million dollars in research and development of easyCBM.



Behavioral Research and Teaching

The projects at BRT concentrate on access to learning so that appropriate and accurate information can be collected from all students to improve decision-making. We focus on developing information systems with three primary goals:

- Improve basic skills assessments so that all students can read, write, and compute.
- Enhance learning of middle and secondary content subject matter so that all students have the opportunity to develop a broad knowledge base.
- Provide accessibility to large-scale testing so that all students can demonstrate their proficiencies on state and local achievement standards.

Teacher Opportunities: Participate in research, help refine reading assessments, earn resources for your classroom! Go to: www.brtprojects.org/about/current-research

District easyCBM™ is an enhanced district assessment system designed by researchers at the University of Oregon as an integral part of an RTI (Response to Intervention) model. Distributed exclusively by Riverside, it provides school districts, administrators, and teachers with a full suite of assessment and reporting options, offering a complete solution at every tier of the RTI process.
Riversidepublishing.com/easycbm

News & Updates

- **Council for Exceptional Children (CEC) 2012 Convention & Expo.-Denver, CO**
Apr, 2012
Invited Session on Accountability and Large Scale Assessment presented by Dr. Gerald Tindal.
- **National Council on Measurement in Education (NCME) 74th Annual Meeting- Vancouver, British Columbia, Canada**
Apr, 2012
The National Council on Measurement in Education (NCME) conducted its annual meeting for its professional members involved in assessment, evaluation, testing, and other aspects of educational measurement.
- **American Educational Research Association (AERA) 2012 Annual Meeting- Vancouver, British Columbia, Canada**
Apr, 2012
"Non Satis Scire: To Know Is Not Enough"
The program consisted primarily of presentations selected through an open call for submissions and a peer review process guided by program chairs of divisions, committees, and special interest groups (SIGs). In addition, there will be invited speakers and symposia, panel discussions, professional development courses, and graduate student programs.
- **Dr. Gerald Tindal Awarded Distinguished Researcher Award** Apr, 2012
Presentation at AERA Conference in Vancouver, B.C. during the Special Education Research SIG Business Meeting.

Current Research

- **Study 5: easyCBM Common Core Math Scaling - Open (Actively Recruiting Participants)**
- **Study 7: easyCBM CCSS Math Item Piloting - Open (Actively Recruiting Participants)**
- **Study 1: easyCBM Beginning Reading Growth - Closed (Recruitment Completed)**
- **Study 2: easyCBM Common Core Math & Response to Intervention - (Recruitment Completed)**
- **Study 3: easyCBM Reading Criterion-Validity - Closed (Recruitment Completed)**
- **Study 4: easyCBM Common Core Math Reliability - (Recruitment Completed)**
- **Study 6: easyCBM Common Core Math Item Writing and Review - Closed (Recruitment Completed)**



Featured Web Project:

[cbmtraining](#)

Register and login for free access to training on interventions in reading and mathematics as well as middle school concept-based instruction.

<http://slds.ziptrain.com>

Technical Reports

A technical report can be described as the nuts and bolts of a research project. Associates are asked to develop technical reports for many of the research projects BRT is involved with to better help colleagues duplicate findings. If you are interested in a technical report not linked below, please feel free to contact BRT for a copy.

2012

- ➡ Irvin, P. S., Park, B. J., Alonzo, J., Tindal, G. (2012). The Alignment of the easyCBM Grades 6-8 Math Measures to the Common Core Standards (Technical Report No. 1230). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Park, B. J., Irvin, P. S., Alonzo, J., Tindal, G. (2012). The Alignment of the easyCBM Grades 3-5 Math Measures to the Common Core Standards (Technical Report No. 1229). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Irvin, P. S., Park, B. J., Alonzo, J., Tindal, G. (2012). The Alignment of the easyCBM Grades K-2 Math Measures to the Common Core Standards (Technical Report No. 1228). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Sáez, L., Irvin, P. S., Alonzo, J., Tindal, G. (2012). Phoneme Segmenting Alignment with the Common Core Foundational Skills Standard Two: Grades K-1 (Technical Report No. 1227). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Alonzo, J., Park, B. J., & Tindal, G. (2012). The Development of the easyCBM CCSS Reading Assessments: Grade 8 (Technical Report No. 1226). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Alonzo, J., Park, B. J., & Tindal, G. (2012). The Development of the easyCBM CCSS Reading Assessments: Grade 7 (Technical Report No. 1225). Eugene, OR: Behavioral Research and Teaching, University of Oregon.
 [\(Click to Download PDF Document\)](#)
- ➡ Alonzo, J., Park, B. J., & Tindal, G. (2012). The Development of the easyCBM CCSS Reading Assessments: Grade 6 (Technical Report No.

Overview

Presentations

Technical Reports

Training Modules

Archives

BRT Research Partnerships

➡ [For Districts](#)

➡ [For Teachers](#)

Use of Technology

- Three critical aspects in which technology can be very useful
 - **Data collection**
 - **Data management**
 - **Display of results**
- Automation is achieved and error is reduced
- Student record archival is available
- We have developed easy CBM to reflect these various features and this presentation will focus on all three.

easyCBM Data Collection

- First we provide an overview of the measures and procedures – administration scoring practices – for collecting performance and progress data.
 - Reading and Mathematics
 - Grades K-8
 - CCSS standards aligned (beginning with National Reading Panel and NCTM)

easyCBM Data Management

- Second we present screenshots of a few data management tools
 - Teachers can determine who is at risk on the benchmark measures and use this information to group students.
 - We used item response theory (IRT) to place items and people on the same scale. Therefore, teachers also can view how students perform on specific items.

easyCBM Display of Results

- The major function for all curriculum-based measurement is progress monitoring students overtime to evaluate instructional programs.
 - teachers can login both the label of their instructional program and more rich description of it.
 - A time series graph is displayed in which students are monitored on a particular measure and these instruction programs interrupt the time series.

Response to Effectiveness of Progress Monitoring and Formative Assessment

A tribute to Marshall McLuhan:

“I may be wrong, but I’m never in doubt”

Acknowledgements

- 15 year period of peer reviewed publications
- Stellar record of tackling 'intractable' problems
- More specifically....
 - Attention to more than just outcomes
 - Consideration of intervention integrity
 - Use of a control group (more on that later) and even better (e.g., randomized controlled experiment)
 - Multiple measures (of teachers and students)
 - An important criterion variable (state test)
 - Two years of implementation (more on that later)
 - Non-trivial findings (see tables)

General Study Questions

- Algorithm for matching to student level of skill development in AM – a.k.a. learning progressions (or back to the future?)
- Specific reports for students and teachers?
- Who received summer school (from larger population (a.k.a. recommendation process)? Or, who qualified but didn't attend?
- What was being controlled for in instruction?
- ...improvement for students who participate in AM significantly outperform those who do not...but was it AM or summer school?

A Conundrum for the Field

- “...lack of **information** on individual student progress at the classroom level”: Why do we drive on the parkway and park on the driveway?
 - Group designs for treatment effects to make recommendations for individuals?
 - Subgroup analyses: Why gifted vs. non gifted? Definitions of low, medium, and high
 - Outliers: “considerable **variability** in student performance”

Another Conundrum for the Field

- ...If teachers could monitor instruction
...and knew how to incorporate evidence-based principles
 - Principles of professional development:
“variability among teachers in their implementation of the program”
 - Feedback to students but to teachers?...
 - Role for school psychologists