Welcome to the Bridge Event

Schools Beating the Odds: Implications for Research and Practice
Wednesday, December 7, 2016
3:00–4:00 p.m. ET

Hosted by the Puerto Rico Research Alliance for Dropout Prevention at REL Northeast & Islands
# Today’s Agenda

| Welcome and Introduction | Sandra Espada-Santos  
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<th></th>
<th>Alliance Facilitator, PR Alliance for Dropout Prevention, REL Northeast &amp; Islands</th>
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<tr>
<td>Overview of the Topic</td>
<td>Dr. Coby Meyers, Chief of Research, Partnership for Leaders in Education; Associate Professor of Education, University of Virginia</td>
</tr>
<tr>
<td>Presentation #1</td>
<td>Dr. Kristen Wilcox, Assistant Professor, School of Education, Department of Educational Theory and Practice, University at Albany—SUNY</td>
</tr>
<tr>
<td>“Schools as Innovation-Ready Learning Organizations: A Multiple Case Study of Odds-beating Schools Implementing Race to the Top Policy Innovations”</td>
<td>Dr. Kathryn Schiller, Associate Professor, School of Education, Department of Educational Administration and Policy Studies, University at Albany, SUNY</td>
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# Today’s Agenda

<table>
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<tr>
<th>Presentation #2</th>
<th>Dr. Erika Stump, Research Associate, Center for Education Policy, Applied Research, and Evaluation (CRPARE), University of Southern Maine</th>
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<tr>
<td>“More Efficient Public Schools In Maine: Learning Communities Building the Foundation of Intellectual Work”</td>
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<td>Presentation #3</td>
<td>Dr. Yinmei Wan, Senior Researcher, American Institutes for Research (AIR)</td>
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<td>“Puerto Rico Schools Beating the Odds”</td>
<td></td>
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<tr>
<td>Moderated Q&amp;A</td>
<td>Dr. Coby Meyers</td>
</tr>
<tr>
<td>Wrap-up and participant survey</td>
<td>Sandra Espada-Santos</td>
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Puerto Rico Research Alliance for Dropout Prevention

**Goal:** The Puerto Rico Research Alliance for Dropout Prevention collaborates with Puerto Rico education stakeholders to support the goal of preventing and reducing the number of students dropping out of school by providing applied research and analytic technical support on how to best utilize available data to both establish robust early warning systems and to identify interventions to help improve outcomes for students at risk.

Sandra Espada  
*Alliance Facilitator*

Claire Morgan  
*Alliance Researcher*
Core Planning Group Members

- Rafael Roman Melendez, PR Secretary of Education
- Harry Valentín, Undersecretary Academic Affairs, PRDE
- Ana Rosado, Interim Deputy Secretary Planning and Development, PRDE
- Lydiana Lopez, Interim Director Office of Statistics, PRDE
- Awilda Iglesias, Assistant to the Secretary, PRDE
- Mario Marazzi, Executive Director, PR Institute of Statistics,
- Orville Disdier, Education Manager, PR Institute of Statistics
- Cesar Rey, Chair Advisory Panel, College Board PRLAO
- Antonio Magriña, Executive Director, Research and Measurement, College Board PRLAO
- Maritza Fernández, Research Director, College Board PRLAO
- Angeles Molina, REL-NEI GB Member; Professor, School of Education, UPR, Rio Piedras
- Nelson Colón, REL-NEI GB Member; President, PR Community Foundation
Works in Progress

- Examination of Puerto Rico school-level characteristics and student graduation
- School restructuring baseline data analysis
Today’s Goals

After participating in the webinar, participants will understand:

• What schools “beating the odds” (BTO) look like and ways they can be identified
• Some factors that contribute to schools beating the odds
• How some jurisdictions in the REL Northeast & Islands Region approach identification of and learning from BTO schools
• Some promising practices of BTO schools and how these might be applied in other settings
Overview of the Topic

• Compared to other schools with similar demographics, BTO schools demonstrate success in serving students at high risk for academic challenges.

• Correctly identifying BTO schools is critical.

• Having a clear focus about what you want to learn is necessary.

• Studying a comparison sample is important to understand differences.
Odds-Beating Schools in the Common Core Era

Kathryn S. Schiller

Kristen C. Wilcox
Project Purpose: The primary purpose of this research was to identify the school practices and policies found in odds-beating elementary and middle schools whose students exceeded performance expectations on New York State assessments aligned with the Common Core State Standards.

Background:
- Collaboration between the University at Albany and the New York State Education Department
- Race to the Top funded
Guiding questions for this presentation:

1. How do we define ‘odds-beating’?
2. What methods were used to identify the sample and conduct the research?
3. What are some of the factors that relate to schools beating the odds?
What Is “Odds Beating”?  

**Odds-Beating Schools**  
- Schools whose students exceeded expectations on state assessments for the population served.  
  - 2013 state Common Core-aligned assessments in English Language Arts (ELA) & mathematics  
  - Three grade levels (3–5 elementary; 6–8 middle)  
  - Demographic characteristics: % Economically Disadvantaged and % English Language Learners in grade-level.

**Typically Performing Schools**  
- Schools whose students performed as expected on state assessments for the population served.
Rates of Economic Disadvantage & Average 4th Grade ELA Score

![Graph showing the relationship between the proportion of 4th graders who are economically disadvantaged and their average ELA score.](image)

- **Typical Performer**
- **Odds Beater**
- **Expected Score**
Cross-Case Study Design
12 Odds-Beating & 6 Typically Performing

- Interviews
- Surveys
- Documents
- Classroom Observations
- Focus Groups

A priori coding
Axial coding
<table>
<thead>
<tr>
<th>District-Level Interviews</th>
<th>School-Level Interviews and Focus Groups</th>
<th>Other Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Superintendent Interview</td>
<td>• Principal Interview</td>
<td>• Interpretive Memo</td>
</tr>
<tr>
<td>• Asst. Super for Curriculum &amp; Instruction Interview</td>
<td>• Building Leadership Team Focus Group</td>
<td>• Classroom observation protocol ELA Part 1</td>
</tr>
<tr>
<td>• Director of Special Education</td>
<td>• Mainstream Content Teacher Focus Group</td>
<td>• Classroom observation protocol Math Part 1</td>
</tr>
<tr>
<td>• Community Outreach Coordinator</td>
<td>• Support Staff Focus Group (School Psychologist, Social Worker, Nurse)</td>
<td>• Classroom observation Part 2</td>
</tr>
<tr>
<td>• Director of Assessment</td>
<td>• ESL Teacher Interview (or Focus Group upon request)</td>
<td>• Documents</td>
</tr>
<tr>
<td>• Director of Professional Development</td>
<td>• Special Education Interview (or Focus Group upon request)</td>
<td>• Surveys:</td>
</tr>
<tr>
<td>• Director of ESL/Bilingual Ed</td>
<td>• Instructional Coach/Master Teacher Interview</td>
<td>• (1) Of all Staff</td>
</tr>
<tr>
<td>• Director of Student Services</td>
<td>• Individual Mainstream Teacher Debrief Interview</td>
<td>• (2) Of teachers of math and English Language Arts</td>
</tr>
</tbody>
</table>
Phase 1
• Creating a priori codes based on relevant literature and theory
• Applying a priori codes to data (Reliability measures: interrater reliability testing and use of data reduction software)

Phase 2
• Generating code reports and organizing code reports into categories and dimensions (Reliability measures: source triangulation)

Phase 3
• Mapping intra-case relationships between categories and dimensions graphically (Reliability measures: testing against theoretical propositions and rival explanations)
• Writing individual school case studies (Reliability measures: investigator triangulation and member checking)

Phase 4
• Mapping inter-case relationships between categories and dimensions graphically and across and between different data sets (e.g. typically-performing and odds-beating; rural, suburban, urban;) (Reliability measures: testing against theoretical propositions and rival explanations)
Factors Related to Odds-beating Outcomes

Positive School Climate Lubricated by Relational Trust

Collaborative Work Structures & Cultures

Strong Communication Networks

A Clear, Adaptable Innovation Implementation Strategy
Factor 1: Relational Trust

- TP
  - Agree: 61.9%
  - Disagree: 38.1%
  - I worry about the security of my job because of the performance of my students or my school on state and/or local tests

- OB
  - Agree: 35.2%
  - Disagree: 64.8%

- TP
  - Agree: 33.3%
  - Disagree: 66.7%
  - State or district content standards have had a positive influence on my satisfaction with my teaching

- OB
  - Agree: 61.4%
  - Disagree: 38.6%
Factor 2: Strong Communication Networks

Poster from Spring Creek Elementary School District Office

Culture and Communication

- Leadership, Leadership, Leadership – open, honest, transparent, approachable with strong follow through
- Collaborative, Consistent and Continual
- “Borish Redundancy”
- One on one meetings with teachers and attend grade level meetings
- Blog posts, newsletter, emails, BOCES staff development opportunities
- Parent and Community Evening Forums
Factor 3: Collaborative Work Structures and Cultures

When I think of the culture of Bay City, I think of a whole group working together. It’s such a group effort here. We have a very good support system. We all work together, just with different support systems. . . . I think how we work together is what makes it work. It comes from central office, where they know every building is different. Every building has different needs. . . . They listen, listen to what we need. As far as the leadership goes in this building, it is one of mutual respect. Everyone has a different job to do, and I think everyone can speak freely about what they need, what are their problems.

- Bay City ES instructional coach
## Factor 4: Innovation Implementation Strategies

<table>
<thead>
<tr>
<th>District Office &amp; School Leaders’ Implementation Strategy</th>
<th>Make It Happen:</th>
<th>Help It Happen:</th>
<th>Let It Happen:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top-down compliance directives with scripted protocols, strict implementation timetable and fidelity standards, tight monitoring, and narrow training</td>
<td>Implementation entails mutual adaptation, and it is facilitated by responsive technical assistance, social supports, and needed resources, together with organizational learning mechanisms</td>
<td>Loosely-configured implementation plan with variable guidance and monitoring, technical assistance, social supports, and resources</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teachers’ and Other Front-line Professionals’ Motivations for Implementation and Performance Adaptation</th>
<th>Have-to Motives:</th>
<th>Want-to Motives:</th>
<th>Ought-to Motives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-line professionals feel likeImplementation puppets, not expert professionals with discretion</td>
<td>Front-line professionals value the innovation and are committed to adapt, learn, and improve as they implement it</td>
<td>Front-line professionals feel a sense of obligation, but “their hearts aren’t in it,” resulting in variable implementation</td>
<td></td>
</tr>
</tbody>
</table>
Summing Up

Positive School Climate Lubricated by Relational Trust

Collaborative Work Structures & Cultures

Strong Communication Networks

A Clear, Adaptable Innovation Implementation Strategy
Select References


Odds-Beating Schools in the Common Core Era

Other reports available at:
http://www.albany.edu/nykids/publications_and_presentations.php
More Efficient Public Schools in Maine: Learning Communities Building the Foundation of Intellectual Work

An Examination of Strategies and Practices in Selected Maine Schools

Dr. David L. Silvernail                      Dr. Erika K. Stump

Maine Education Policy Research Institute
University of Southern Maine
Study Overview:

In 2010-11, the Maine Legislature requested that the Maine Education Policy Research Institute (MEPRI) at the University of Southern Maine conduct a study of higher performing, more (fiscally) efficient Maine public schools.

Study Goals:

- To identify strategies and practices schools are using effectively to support all learners.
- To identify schools in which students are demonstrating achievement and education professionals are practicing efficient use of resources.
Phases of More Efficient Schools Study

- Identify Maine schools that qualify as producing both higher performance and higher returns on spending, thereby acquiring the status as a More Efficient school. (2011)

- Conduct qualitative cases studies of a sample of More Efficient and Typical schools at different grade levels, geographic locales (Maine), poverty levels & enrollment. (2011-2012)

- Disseminate the school profiles as well as the distinguishing strategies and practices found in Maine’s More Efficient schools. (2012 – present)
To qualify as a **Higher Performing** school, a school must:

- perform better than the statewide average and better than predicted (history & peers) on state test
- demonstrate higher performance from various groups of students
- in the case of high schools, have a graduation rate above the state average

To qualify as a **More Efficient** school, a school must:

- meet the performance criteria
- have a return on spending better than the statewide average and better than predicted.
## SAMPLE
### School Efficiency Profile

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Academic Performance and Return on Spending Criteria</th>
<th>Met Criterion?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Performance</td>
<td>P1. Average school score on statewide assessment compared to state comparison score.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>P2. Average school score on statewide assessment compared to expected score.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>P3. School percent of students that Meet or Exceed standards on statewide assessment compared to state percentage.*</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>P4. School percent of students that Partially Meet, Meet, or Exceed standards on statewide assessment compared to state percentage.*</td>
<td>✓</td>
</tr>
<tr>
<td>Return</td>
<td>R1. School's return on spending ratio compared to state ratio.</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>R2. School's return on spending ratio compared to expected ratio.</td>
<td>✓</td>
</tr>
</tbody>
</table>

*This study uses the 2008-2009 Maine Department of Education standards-based proficiency levels: “Does Not Meet,” “Partially Meets,” “Meets,” and “Exceeds.”
<table>
<thead>
<tr>
<th>School Level</th>
<th>Schools Evaluated</th>
<th>Higher Performing</th>
<th>More Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-8 Schools (gr 4&amp;8)</td>
<td>96</td>
<td>16 (16.8%)</td>
<td>10 (10.5%)</td>
</tr>
<tr>
<td>Grade Schools (gr 4)</td>
<td>228</td>
<td>67 (27.8%)</td>
<td>54 (23.6%)</td>
</tr>
<tr>
<td>Middle Schools (gr 8)</td>
<td>93</td>
<td>22 (23.7%)</td>
<td>17 (17.9%)</td>
</tr>
<tr>
<td>High Schools (gr 11)</td>
<td>107</td>
<td>14 (13.3%)</td>
<td>9 (8.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>524</td>
<td>119 (22.7%)</td>
<td>90 (17.2%)</td>
</tr>
</tbody>
</table>
Distinguishing Features of More Efficient Public Schools in Maine

- Intellectual Work
- Student Focused
- Efficiency
- Equity
Defining Student-Focused

Students and their intellectual development are at the core of the school’s work.
Defining Student-Focused

Greater consistency among students’ educational experience.

Professional collaboration that improves student learning.

Efficient, strategic, focused use of school day and instructional time.
Defining *Intellectual Work*

Students engage in intellectual work that involves developing practices of mind regarding academic knowledge and skills as well as social and behavioral learning.

Adults engage in collaborative and independent intellectual work to develop and sustain practices of mind that improve organizational knowledge and student performance.
Defining *Intellectual Work*

“We are not going out and buying something; we are building it from within.”

Sustain a concise schoolwide focus, which often incorporates literacy.

Students can explicitly discuss and clearly demonstrate the academic and behavioral expectations through their own successes and struggles.
Defining Equity

Equity

Teachers and leaders believe they have a moral obligation to focus on the intellectual development of students as a means towards a better world.
Defining *Equity*

High standards and high expectations for all members of the school community.

“I really became a teacher for social justice reasons… in our society, every single kid deserves to be able to do the things in the Common Core Standards.”

Literacy is not a mundane set of skills, rather it is a tool to fight social, educational, and political inequity.
Defining Efficiency

Human and financial resources are used efficiently to maximize learning opportunities for students and staff.
Defining Efficiency

More efficient use of the school day could gain students over six months more learning time.

Educators teach and directly interact with students.

Professional development and use of external resources closely align with school vision and priorities.
Distinguishing Features of More Efficient Public Schools in Maine

- Intellectual Work
- Student Focused
- Efficiency
- Equity
More Efficient Schools Study Report:

Maine School Efficiency Profiles:
http://www.usm.maine.edu/cepare/maine-public-school-efficiency-profiles
Questions?

Dr. Erika Stump
University of Southern Maine
Maine Education Policy Research Institute

erika.stump@maine.edu
A Comparison of Two Approaches to Identify Beating-the-odds High Schools in Puerto Rico

Coby V. Meyers
University of Virginia
American Institutes for Research

Yinmei Wan
American Institutes for Research
Research Questions

• What is the agreement rate of schools identified as beating the odds between the two methods?
• What are the characteristics of schools that are identified as beating the odds by each method?
Sample

- Regular public high schools (vocational schools and alternative schools were not included)
- With poverty rate of 40% or higher
- With valid data on 2011/12 grade 11 reading and mathematics assessment results AND 2012/13 graduation rates
- 159 high schools
Outcome Measures

- 2012/13 cohort graduation rate
- 2011/12 grade 11 proficiency rate for reading (in Spanish) and mathematics combined, weighted by number of students tested in each subject
Two Methods

**Status Method**
Ranks schools based on their actual (observed) performance on outcome measures

**Exceeding-Achievement-Expectations Method**
Ranks schools based on how much their actual performance exceeded (or fell short of) their expected performance (performance net of expectations)
Status Method

- Schools are ranked based on their actual (observed performance) on the two outcome measures (2012/13 graduation rate and 2011/12 proficiency rate).
- Schools that ranked among the top 25 percent on both outcome measures were identified as beating-the-odds schools.
Exceeding-Achievement-Expectations Method

- Schools’ expected performance on the two outcome measures is estimated using statistical techniques that controlled for schools prior achievement, school poverty rate and other student and school characteristics.

- Differences are calculated between schools’ actual performance and their expected performance.

- Schools are ranked based on the differences between actual performance and expected performance.

- Schools that ranked among the top 25% on both outcome measures were identified as beating-the-odds schools.
## Agreement Rate Between Two Methods

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>Number of high schools identified</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Criterion</td>
<td>Status method</td>
</tr>
<tr>
<td>Graduation rate, 2012/13</td>
<td>Top 25%</td>
<td>40</td>
</tr>
<tr>
<td>Grade 11 proficiency rate, 2011/12</td>
<td>Top 25%</td>
<td>40</td>
</tr>
<tr>
<td>Both measures (beating-the-odds schools)</td>
<td>Met both criteria</td>
<td>17</td>
</tr>
</tbody>
</table>
## Correlations of Rankings on Outcome Measures

<table>
<thead>
<tr>
<th>Ranking by status method</th>
<th>Ranking by exceeding-achievement-expectations method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduation rate, 2012/13</td>
</tr>
<tr>
<td>Graduation rate, 2012/13</td>
<td>.76**</td>
</tr>
<tr>
<td>Grade 11 proficiency rate, 2011/12</td>
<td>.20*</td>
</tr>
</tbody>
</table>
## Characteristics of BTO High Schools

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Identified by status method ((n = 17))</th>
<th>Identified by exceeding-achievement-expectations method ((n = 15))</th>
<th>Identified by both methods ((n = 6))</th>
<th>All schools in sample ((N = 159))</th>
</tr>
</thead>
<tbody>
<tr>
<td>School enrollment</td>
<td>466</td>
<td>470</td>
<td>451</td>
<td>490</td>
</tr>
<tr>
<td>School percentage of female students</td>
<td>55.9</td>
<td>51.2</td>
<td>51.8</td>
<td>52.1</td>
</tr>
<tr>
<td>School percentage of students below poverty level</td>
<td>61.3</td>
<td>74.4</td>
<td>73.5</td>
<td>71.2</td>
</tr>
<tr>
<td>Cohort percentage of students with disabilities</td>
<td>9.6</td>
<td>17.9</td>
<td>12.9</td>
<td>15.9</td>
</tr>
</tbody>
</table>
Observed Performance for BTO High Schools

- Beating-the-odds schools, status method (n = 17)
- Beating-the-odds schools, exceeding-achievement-expectations method (n = 15)
- Beating-the-odds schools, both methods (n = 6)
- All schools in the sample (N = 159)

Graduation rate, 2012/13

84
77
83

Grade 11 percent proficient, 2011/12

65
47
36
40

24
Differences Between Actual Performance and Expected Performance for BTO High Schools

- Beating-the-odds schools (status method, n = 17)
- Beating-the-odds schools (exceeding-achievement-expectations method, n = 15)
- Beating-the-odds schools (both methods, n = 6)
- All schools in the sample (N = 159)

Percentage point difference

Graduation rate, 2012/13

Grade 11 percent proficient, 2011/12

9, 15, 16

9, 16, 15
Implications and Limitations

• Identification of beating-the-odds schools can be affected by methodological choices.

• It may be useful to consider both methods for identifying beating-the-odds schools.

• The cutpoint (top 25%) was used here and in other BTO studies, but other cutpoints could be justified for other local contexts.

• Analyses could be improved by using multiple years of performance data and a more complete set of school factors.
Contact Authors

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Download the Report

Moderated Q&A
The US Department of Education and REL Northeast & Islands want your feedback on this Bridge Event:

https://www.surveymonkey.com/r/PR12072016
Thank You!

Visit the Puerto Rico Research Alliance for Dropout Prevention at relnei.org

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