



AMERICAN INSTITUTES FOR RESEARCH®

Memo

Date: September 18, 2017
To: BARR Center
From: American Institutes for Research
Re: I3 BARR Validation Study Teacher Survey Results

Introduction

The Building Assets, Reducing Risks (BARR) model is a comprehensive, strength-based approach to education that aims to improve achievement for all students by improving a school's effectiveness at building relationships, leveraging real-time student data, and capitalizing on the strengths of each student. The U.S. Department of Education's Investing in Innovation (i3) program provided the BARR developers with a validation grant that made funding available to bring the BARR model to more high schools around the country. American Institutes for Research (AIR) is conducting an independent evaluation of the impact of the BARR model on student outcomes in 11 high schools over the course of 3 years (2014–15 to 2016–17).

An important objective of the BARR model is to change how teachers view and interact with their students and with each other. By creating structures and activities to bring teachers together and to deepen teachers' relationships with their students, BARR aims to enhance both teacher effectiveness and student engagement. This memo presents findings from survey data comparing the differences between treatment and control teachers at participating schools. It also includes quotes from individual teachers gathered during AIR's qualitative implementation research.

Teacher Survey Results

To evaluate the experiences of the BARR teachers and control teachers who taught ninth grade during the study year, surveys were sent to participating teachers at all study schools. AIR administered an online teacher survey at the end of the school year to systematically assess whether teachers in the BARR groups and control groups reported different experiences and opinions related to eight constructs. The sample contains teachers from all three cohorts, with a total of 113 ninth-grade teachers in 11 participating schools (BARR = 48, Non-BARR = 65).

AIR administered survey items from several validated protocols (i.e., Bandura's Teacher Self-Efficacy Scale [1997], Culture of Excellence and Ethics Assessment [2016], My Voice, My School: Teacher Surveys [2007]) as well as survey items created specifically for this evaluation. Table 1 provides definitions of each of the constructs measured for this study.

Table 1. Teacher Survey Construct Definitions

Constructs	Definitions
Teacher collaboration with and view of colleagues	Teachers work together, trust each other, and have shared responsibilities and teaching approach.
Teacher use of data	Teachers have access to data, discuss data, and use data to differentiate instruction for students.
View of the school's supports	Teachers feel the school provides students and staff with necessary resources and support services.
Teacher self-efficacy	Teachers believe they have the ability and the power to affect learning, motivation, and behavior in classrooms.
Perception of students' behavior, commitment, and attitudes	What teachers think students would do to help their peers or make the right choices in a given situation.
View of students' actual behavior, commitment, and attitudes	What teachers observe students doing in classrooms related to goal setting, motivation, and completing work.
Interaction with parents	Teachers feel confident engaging with parents and helping them understand what students need to learn.
View of student accountability	Teachers believe students are accountable for their own learning and grades, and should meet all deadlines.

Table 2 presents the results from a statistical comparison between the responses of the BARR and control teachers on a range of survey measures, in the form of scale scores. Note that the survey scale scores for each teacher were standardized to a mean of 50 and a standard deviation of 10 for the independent samples *t*-test comparisons. For six out of eight survey constructs, the calculated differences between the two groups were statistically significant.

Table 2. Differences in Teacher Experiences in Participating Schools

Teacher Outcome	N	BARR	Control	Difference	Effect Size ¹
Teacher collaboration with and view of colleagues	110	56.7	45.0	11.7***	1.17
Teacher use of data	109	55.7	45.7	10.0***	1.00
View of the school's supports	111	53.5	47.5	5.9**	0.59
Teacher self-efficacy	112	52.9	47.9	5.0**	0.50
Perception of students' behavior	111	52.7	48.0	4.7*	0.47
View of students' actual behavior	113	52.6	48.1	4.5*	0.45
Interaction with parents	111	52.1	48.5	3.5	0.35
View of student accountability	110	50.3	49.8	0.5	0.05

Note: * = statistically significant at the $p < .05$ level; ** = statistically significant at the $p < .01$ level; *** = statistically significant at the $p < .001$ level.

¹ Note: Effect sizes calculated using Cohen's *d* formula. These group differences are not impact estimates because teachers were not randomly assigned to the treatment or control group. Therefore, although these differences are associated with BARR participation, they may (partially) reflect pre-existing differences between BARR teachers and control teachers.

BARR teachers reported significantly higher collaboration and more positive views of their colleagues than control teachers. *“[Meeting with the BARR team] has significantly changed my teaching. I think it’s so neat. I feel like it needs to be a class, like ‘School Meeting with Teachers’... It’s been super helpful. You have other teachers to rely on, and it’s not just you doing it alone.”* – BARR Teacher, California

BARR teachers reported significantly higher use of data to inform decisions than control teachers. *“It’s prescriptive, is probably the best word for it. Just imagine you’re the doctor sitting back. You see the symptoms and you come up with a plan and then you go practice that plan... It’s tough for us to try to make a kid better, improve a kid with a prescriptive method, but then have no results. The results matter. We’re going to have our results.”* – BARR Teacher, Kentucky

BARR teachers reported feeling significantly more support from their school than control teachers. *“[The administration] was hugely supportive of anything that we needed, resource-wise or anything else, and provided opportunities for us to have out-of-business-hour planning meetings. They would give us a day where they would pay for subs to come into all of our classrooms where we would have planning days. Very, very supportive through the whole thing.”* – BARR Teacher, Texas

BARR teachers reported significantly higher feelings of self-efficacy than control teachers. *“I feel like a different teacher. I feel like my relationships with students are different. I feel like I’ve been able to create different connections with students than I have with the past... I still teach the same math – but the students are growing much more than they would have in the past, as people, which is huge.”* – BARR Teacher, Minnesota

BARR teachers believed that their students would help their peers and make the right choices at a significantly higher rate than control teachers. *“The group of students in the BARR program definitely seem like they’re more positive. They still deal with a lot of the same issues that my last year students dealt with, but they’re more open about it with me than my other kids. They have a closer group of friends it seems like, that I see in the classroom at least, so I feel like that was a big change from last year, too.”* – BARR Teacher, California

BARR teachers reported seeing significantly better student behaviors and interactions in their classrooms compared to control teachers. *“I’ve had less behavior problems. I’ve had so much less drama, less in-fighting. I have less kids who come to classroom and refuse to do anything than I’ve ever had before. I think it’s a lot to do with the relationships that we’ve built. They know you care about them, so they want to show that they care about you, too.”* – BARR Teacher, California