# Search Institute

# The Building Assets-Reducing

# Risks (BARR) Program

# Does the BARR model have a positive impact on $9^{\text{TH}}$ grade achievement?

### **Project Overview**

#### **INTERVENTION**

#### THE PROBLEM: What Challenge Did the Program Try to Address?

The Building Assets Reducing Risks Model (BARR)<sup>1</sup> is aimed at improving outcomes for students transitioning to 9<sup>th</sup> grade and is based on the belief that 9<sup>th</sup> grade is a pivotal year for academic performance. A study reports that students are three to five times more likely to fail a class in 9<sup>th</sup> grade than any other grade. Ninth grade is a transition year developmentally, academically, and structurally. For example, this is a time when peer influence increases while parent supervision decreases.

#### THE PROJECT: What Strategies Did the Program Employ?

From 2010–2015, Search Institute received an i3 development grant to expand and conduct a randomized controlled trial of BARR. The model, which began in Minnesota in 1998–99, is designed as a whole-school intervention that reaches all teachers and students in the school and addresses developmental, academic, and structural challenges. It is designed to promote positive student-teacher relationships, use of student data, social emotional learning (SEL) skills, collaboration among teachers and the creation of student cohorts – approximately 90 students who share the same teachers and class schedules in three classes, usually English, math, and social studies. For the evaluation, 555 students in a large, suburban California high school were randomly assigned to the BARR or non-BARR condition, sorting by gender, ethnicity, and prior academic achievement to ensure balance between the treatment and control groups. Two high schools in rural Maine with total enrollments of 302 and 1,018 also participated but their 9<sup>th</sup> grade enrollments were too small to allow for an RCT.

<sup>&</sup>lt;sup>1</sup> Search Institute received an i3 development grant supported by the U.S. Department of Education's Investing in Innovation program through Grant Number U396C101107. Development grants provide funding to support the development or testing of novel or substantially more effective practices that address widely shared education challenges. All i3 grantees are required to conduct rigorous evaluations of their projects. The quality of evidence required to demonstrate a project's effectiveness depends on a project's level of scale or grant type.

#### Development, 2010-2015

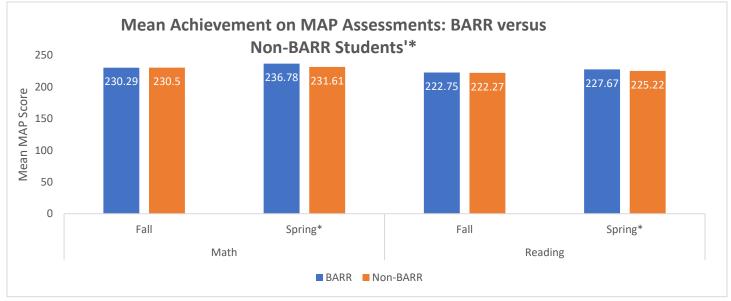
#### THE BARR MODEL

- Professional development. Teachers and administrators engaged in PD focused on using student-teacher relationships to enhance achievement.
- Student cohorts. BARR students take three core courses as a cohort. This is done in order to build and foster connections among students and with teachers.
- Engage families. The BARR model improves communication with families to engage them as active partners. Families are invited to participate in a parent advisory council and to meet with teachers when students need support. This fosters a working relationship between home and school.
- I-Time Curriculum. This 30-minute weekly supplemental lesson fostered a climate for learning by focusing on social-emotional learning and helped students build relationships with teachers and peers.

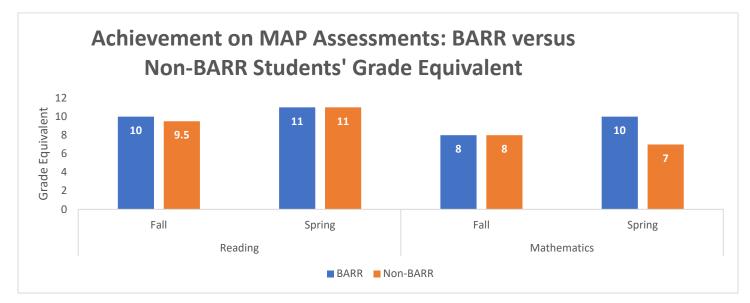
- Regular Teacher Meetings. The cohort teachers had the same planning period and used this time to review data and identify students who needed additional supports.
- Risk-review meetings. Identified students would be referred to the risk review team which included the BARR coordinator, school administrator, and a school counselor to provide external supports.
- Whole student focus. In all interactions with or discussions about students, school staff took academic, emotional, social, and physical needs into account. This emphasis helped teachers address non-academic challenges.
- Administrator engagement. School administrators learn how to integrate BARR into their school culture and engage in ongoing communication with BARR staff.

### Summary of Results

# DID THE WISDOM PROJECT, INCLUDING AVID COURSE PARTICIPATION, IMPROVE ACADEMIC OUTCOMES AND COLLEGE READINESS?



<sup>\*</sup>Measures of Academic Progress (Northwest Education Alliance)



In California, BARR students outperformed, in all measures, their counterparts in the control group, which received "business as usual" instruction. The intervention had a positive, significant (p<0.011) impact on the following areas:

- GRADE POINT AVERAGE. Students in the BARR condition earned a higher GPA at the end of the year than their counterparts in the non-BARR group. BARR students averaged a 2.91 GPA, and non-BARR students averaged a 2.67.
- NUMBER OF COURSE CREDITS. Students in the BARR condition earned more course credits on average than those in the control condition. BARR students earned an average of 5.65 course credits, and non-BARR students earned an average of 5.26.
- STANDARDIZED ASSESSMENT SCORES IN MATH AND READING. Students earned higher standardized test scores on the Northwest Education Association's (NWEA) Measures of Academic Progress (MAP) in both reading and math. In math scores, BARR students earned an average of two years of growth compared to a year of decline for the non-BARR condition students.

Please see Appendices B and C for information about the evaluation's design and the quality of the evidence, respectively.

#### **SECONDARY FINDINGS**

After the intervention period, the school elected to continue BARR and collect impact and implementation data for two more years. Some of the findings are listed here.

- HISPANIC STUDENT ACHIEVEMENT. The study indicated that Hispanic students in the BARR condition improved academic performance and closed the academic achievement gap between Hispanic and non-Hispanic students. Between years 2 and 3 of the intervention, this gap was closed to reveal no significant difference in course failure rate between Hispanic and non-Hispanic students in the BARR condition.
- IMPORTANCE OF IMPLEMENTATION. The evaluators stressed the importance of a high implementation fidelity to the success of the program. Schools that implemented BARR with fidelity showed positive outcomes, including sustained improvements, while a school in Maine that did not implement with fidelity did not achieve these high levels of success.
- TEACHER EFFICACY. Teachers in the BARR condition reported improved relationships with students, improved ability to perceive student strengths, a stronger sense of how to use data to improve student performance, and better communications across the school and with administration. Teachers felt less isolated and felt more prepared to resolve student issues. These perceptions of efficacy and improved culture were experienced by both new and veteran teachers.

### For More Information

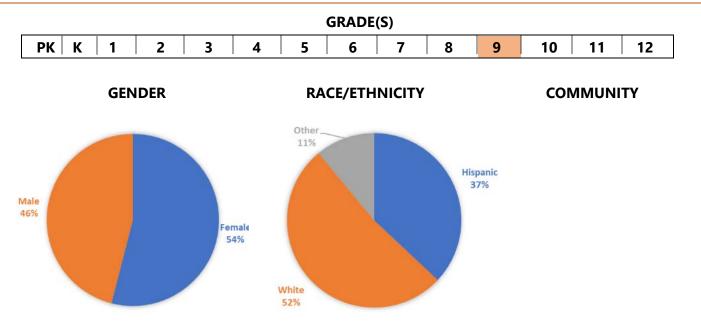
**Evaluation Reports** 

Final Evaluation Report (2015) (PDF) (Corsello Consulting, S & S Consulting, October 2015)<sup>2</sup> **Additional Reports** 

https://barrcenter.org/

<sup>&</sup>lt;sup>2</sup> The information and data for this report was collected from the most recent report as of 01/23/2020, The Building Assets-Reducing Risks Program: Replication and Expansion of an Effective Strategy to Turn Around Low-Achieving Schools from Corsello Consulting and S & S Consulting, (2015).

### Appendix A: Students Served by the Project<sup>3</sup>



#### HIGH-NEED STUDENTS<sup>i</sup>

Economically Disadvantaged	English Learners	Students with Disabilities
68%	17%	Included in study population

<sup>&</sup>lt;sup>3</sup>These data reflect the entire student population served by the intervention, not ju st the evaluation sample used in the impact study.

### Development, 2010-2015

### Appendix B: Impact Evaluation Methodology<sup>4</sup>

#### **RESEARCH DESIGN:**

Design:	Randomized Control Trial
Approach:	<ul> <li>Students were randomly assigned to the BARR or non-BARR condition by the evaluators and sorted to ensure balance by gender and ethnicity. Ineligible students, such as those in sheltered special education classes, were identified and removed from the sample frame prior to randomization.</li> <li>Teachers were selected and sorted by the principals into BARR or non-BARR conditions. Teacher course loads did not allow for randomization.</li> <li>Data was collected at the end of the semester on credits earned and NWEA achievement scores. Separate OLS regression analyses were conducted to predict total core credits earned and spring NWEA reading and math scores.</li> </ul>
Study Length:	One year – 2011–12 school year
DATA COLLECTION AND ANALYSIS	
Study Setting	One large suburban high school in southern California

Study Setting	One large suburban high school in southern California	
Final Sample Sizes	<ul> <li>Total Sample: 555 9<sup>th</sup> grade students</li> </ul>	
Impact Study Characteristics- BARR and Non-BARR	<ul> <li><i>Percent</i>: 54% Female, 52% Caucasian, 37% Hispanic, 11% African American, Asian American, or mixed races</li> <li>68% Free and Reduced Lunch</li> <li>17% English Learners</li> </ul>	
Data Sources	<ul> <li>Credits earned, NWEA achievement scores</li> </ul>	
Key Measures	<ul> <li>Northwest Education Association's Measures of Academic Progress</li> <li>GPA</li> <li>Credits obtained</li> </ul>	

<sup>&</sup>lt;sup>4</sup> These data reflect only the evaluation sample in the impact study, not the entire population served.

### Appendix C: Quality of the Evidence

Although an evaluation may not have been reviewed by the time of publication for this summary, it is possible that the study will be reviewed at a later date. Please visit the websites found in the footnotes on this page to check for updates.

#### WHAT WORKS CLEARINGHOUSE REVIEW<sup>ii</sup>

STUDY	RATING	
The Building Assets-Reducing Risks Program: Replication and	<ul> <li>Study meets WWC standards without</li></ul>	
Expansion of an Effective Strategy to Turn Around Low-	reservations	
Achieving Schools.	<ul> <li>At least one statistically significant positive</li></ul>	
https://ies.ed.gov/ncee/wwc/Study/132	finding	

#### **EVIDENCE FOR ESSA REVIEW**<sup>iii</sup>

STUDY	RATING
Building Assets Reducing Risks (BARR) – Math https://www.evidenceforessa.org/programs/math/middlehigh-school/building-assets- reducing-risks-barr-math	Strong
Building Assets Reducing Risks (BARR) – Reading https://www.evidenceforessa.org/programs/reading/middlehigh-school/building-assets- reducing-risks-barr-reading	Strong

#### NATIONAL CENTER ON INTENSIVE INTERVENTIONS REVIEW<sup>iv</sup>

STUDY	RATING
Not reviewed as of 01/23/2020	N/A

The *Investing in Innovation Fund (i3)*, established under section 14007 of the American Recovery and Reinvestment Act of 2009, is a Federal discretionary grant program at the U.S. Department of Education within the Office of Innovation and Improvement. i3 grants help schools and local education agencies work in partnership with the private sector and the philanthropic community to develop and expand innovative practices that improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, and/or increase college enrollment and completion rates for high-need students.

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<sup>&</sup>lt;sup>i</sup> "High-need student" refers to a student at risk of academic failure or otherwise in need of special assistance and support, such as students who are living in poverty, attend high-minority schools, are far below grade level, who have left school before receiving a regular high school diploma, at risk of not graduating with a diploma on time, who are homeless, in foster care, have been incarcerated, have disabilities, or who are English learners. For more information see: <u>Applications for New Awards; Investing in Innovation Fund-</u> <u>Development Grants, 81 FR 24070 (April 25, 2016)</u>.

https://ies.ed.gov/ncee/wwc/FWW

https://www.evidenceforessa.org/

iv https://intensiveintervention.org/