



# Case Study Abstract

*Building Assets, Reducing Risks (BARR) Model: How Building Relationships and Using Data Combine to Create Student Success (Esperanza Preparatory Academy: a secondary school in a challenging urban environment demonstrates the impact of adopting BARR (AIR and Intro to BARR video).*

Transitioning to a new school environment can be challenging for students and reveal vulnerabilities that can worsen over time if not addressed (Neild, 2006). Building Assets, Reducing Risks (BARR) is a comprehensive, strength-based model consisting of eight interlocking strategies designed to build staff to staff, staff to student, and student to student relationships that lead to success. This article discusses the development of the BARR model by a school counselor in a diverse high school twenty-two years ago, testing of the model through twelve randomized controlled trials across the United States, and provides a closer look at the BARR model in action as a New York City high school shares its experience in its first year of implementation.

A discussion of the Model's impact is addressed, incorporating both quantitative and qualitative measures, demonstrating that BARR changes teacher beliefs and behavior, resulting in students feeling more supported, having higher expectations, and engaging more deeply in school. These changes in attitudes and beliefs then produce significant academic improvement (Bos et al., 2019). Teachers implementing the BARR model highlight the importance of fostering the social-emotional well-being of their students and cite working together collaboratively as a team, as a critical component to student success.

## Case Study

*Angela Jerabek, Founder & Executive Director, BARR Center*

*Maryann Corsello, Ph.D., Research and Evaluation Director, BARR Center*

### Videos:

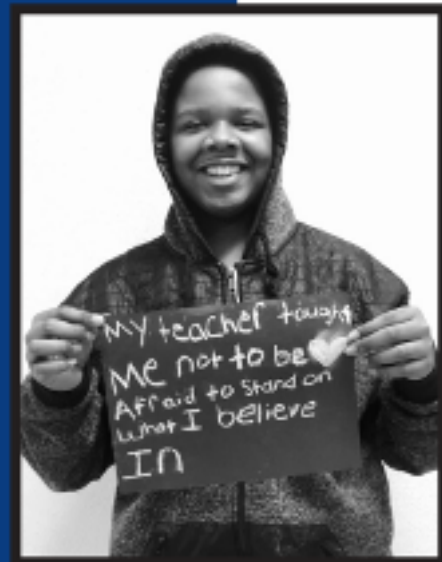
- <https://www.youtube.com/channel/UCop1vJGzQJlc5XPXVaVhdw/videos>
- <https://www.air.org/resource/improving-student-outcomes-and-building-positive-relationships-through-barr-model>

Transitioning to a new school environment can be challenging for students and reveal vulnerabilities that can worsen over time if not addressed (Neild, 2006). Critical to a successful transition is a growing awareness among researchers and educators alike that attention to social-emotional learning can have powerful effects on school climate, student behavior, and student academic performance (CASEL, 2019; Durlak et al., 2011; Kendziora & Yoder, 2016). Key to understanding the relationship between social-emotional learning and student success is the use of rigorous research designs, such as randomized controlled trials (RCT), that can test the causal nature of this relationship.

It is often asserted that RCT are impossible to conduct in a traditional educational setting. Not so fast, says BARR (Building Assets, Reducing Risks), a school improvement non-profit based in the United States. BARR has not only disproved the impossibility assertion, but demonstrated how to use RCT to assess the effectiveness of an educational program.

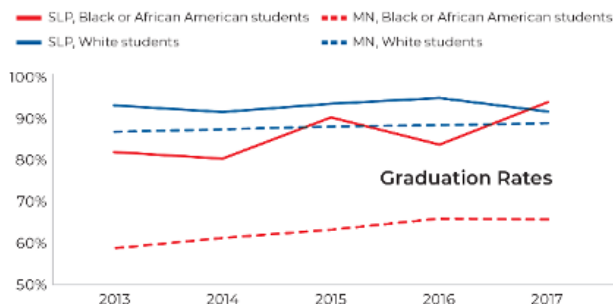
## History of BARR

BARR was developed 22 years ago by a high school counselor who felt ineffective because more than 40% of her 9th grade students were failing at least one core course and were at risk for not graduating on time. She learned from her school's principal that this was not just her high school's problem, but it reflected a troubling national trend. Using strategies from the fields of business and medicine, Executive Director Angela Jerabek created the BARR model and implemented it in the fall of 1998. By spring 1999, 9th grade student failure rate had decreased from 44% the previous year to 20%. Teachers worked together and knew each student – not just from an academic perspective, but from a personal perspective - their interests, strengths, hopes, and dreams. Careful implementation and evaluation continued for ten more years, all with the same findings – students passed more classes, pursued more advanced courses, and graduated on time – the focus of BARR is not just for some students, but all students.



### BARR Closes the Gap in Graduation Rates

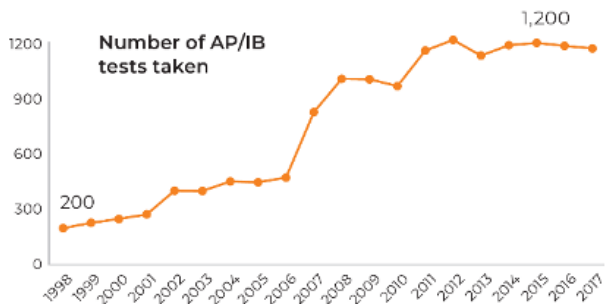
St. Louis Park Senior High School (MN) was the first school to pilot the BARR model, and it has been implementing it for 20 years. During that time, St. Louis Park closed its opportunity gap in graduation rates surpassing persistent statewide disparities. In 2014, it was recognized with ACT's National College and Career Transition Award.



Source: Minnesota Department of Education (2018). Minnesota Report Card. St. Louis Park Senior High Graduation Rate Trend. Retrieved from: <http://bit.ly/BARRslpgrad>

### More Students Take AP and IB Courses with BARR

St. Louis Park Senior High School has also seen a 500% increase in the number of students enrolled in Advanced Placement (AP) and International Baccalaureate (IB) courses—and taking AP and IB tests. The student composition of these honors classes mirrors the entire student population based on race, ethnicity, and socio-economic status.



Source: St. Louis Park District data.

# The BARR Model

The BARR model uses eight interlocking strategies that build intentional relationships (staff to staff, staff to student, and student to student) and utilizes real-time data to enable schools to achieve concrete academic, social, and emotional outcomes for each and every student. These strategies include a focus on the whole student; professional development for teachers, counselors, and administrators; use of BARR's I-Time Curriculum to foster a climate for learning; creation of cohorts of students; regular meetings of the cohort teacher teams; conducting risk review meetings; engaging families in student learning; and engaging administrators.

The BARR model uses eight interlocking strategies that build intentional relationships, utilize real-time data, and enable schools to achieve concrete academic, social and emotional outcomes for all students.

[www.BARRcenter.org](http://www.BARRcenter.org)



# BARR™

Same Students. Same Teachers.  
Better Results.



STRATEGY

1

## Focus on the whole student

In every interaction with—or discussion about—students, educators address students' academic, emotional, social, and physical needs. Teachers work to better understand and build on students' strengths, proactively address the non-academic reasons why they may fall behind in school, and identify what they need to thrive.



STRATEGY

2

## Provide professional development for teachers, counselors, and administrators

BARR's professional development focuses on building strength-based relationships to ensure every student thrives. BARR educators participate in yearly in-person trainings and coaching and receive unlimited remote support throughout the school year focused on the importance of building student-teacher relationships and using relationships to enhance achievement.

In-person training topics include BARR model implementation, promoting equity, reducing substance abuse, increasing meeting effectiveness and addressing trauma. These trainings begin prior to implementation and continue with daily, weekly, and monthly team meetings and coaching.



STRATEGY

3

## Use BARR's I-Time Curriculum to foster a climate for learning

I-Time is a weekly lesson that students take with others in their cohort as a supplement to the school curriculum. Facilitated by the cohort's core-subject teachers, I-Time's social/emotional focus helps students build strong relationships with teachers and each other—and practice essential life skills, such as communicating effectively and setting personal goals. I-Time also addresses important issues for adolescents, including grief and loss, bullying, and substance use.



STRATEGY

4

## Create cohorts of students

In the BARR Model, students take a group of core courses as part of a block, or cohort. Each cohort typically has three core-subject teachers (typically math, English, and science or social studies), and the teachers' and students' schedules are aligned so the students take these three core subjects only with other students in their cohort.

This structure helps educators cultivate connections—with students and with each other—that allow for more effective education. For example, in a school with an average of 30 students per class, a cohort typically would include three teachers and 90 students. Each of the three teachers (English, math, and social studies, for example) would teach three 9th grade sections of his or her class—30 students per class to make up the cohort of 90 students. In some schools, cohorts have four teachers.



STRATEGY

5

## Hold regular meetings of the cohort teacher teams

The teachers in a cohort have a shared meeting time. Teacher team meets weekly to discuss each student in the cohort using student-level data that is updated weekly. The teacher team evaluates each student's progress as well as academic and non-academic barriers to learning. In these collaborative sessions, teachers identify students who are struggling and determine how to intervene to support them as well as students who should be accelerated. Each teacher provides a unique lens on the student and these perspectives combine during the meeting to create a more holistic view of the student.



STRATEGY

6

## Conduct risk review meetings

Cohort teacher teams identify the most at-risk students and move them into a structured Risk Review process that engages the community to determine the most effective response.

This team includes the school's BARR coordinator, a school administrator, a school social worker/counselor, and other professionals as needed. They are trained to use this process to identify and execute interventions to get essential external support for these students. Moreover, because the highest-risk students are getting additional support, the cohort teachers have more time for their students who need support but are not in crisis.



STRATEGY

7

## Engage families in student learning

BARR improves communication with families, treating them as active partners. Families are invited to participate in an initial orientation and a parent advisory council. Teachers also regularly call and meet with the families or guardians of students who need more support so the educators and families can share successes, assess challenges, and work together more effectively.



STRATEGY

8

## Engage administrators

As a school implements the BARR Model, administrators learn how they can integrate BARR into their school culture and use it to reach their specific school goals. Throughout the school year, administrators regularly communicate with and provide ongoing support to the BARR teams in their schools.

BARR—Building Assets, Reducing Risks—is a strengths-based model that provides schools with a comprehensive approach to meeting the academic, social, and emotional needs of all students. Schools within the BARR Network harness the power of relationships and data to become more equitable, ensure that no student is invisible, and remove both academic and non-academic barriers to learning.



# BARR

## Testing the BARR model - Completing 12 randomized controlled trials

After ten years of implementation and positive results in one high school, Jerabek sought to test the BARR model outside of the school where it was first developed. In 2010, the U.S. Department of Education issued a call for proposals for innovative educational practices that could be subjected to rigorous scientific testing. Jerabek took up the challenge, wrote a federal grant proposal, and BARR was awarded an i3 (Investing in Innovation) development grant from the U.S. Department of Education, earning the second highest score.

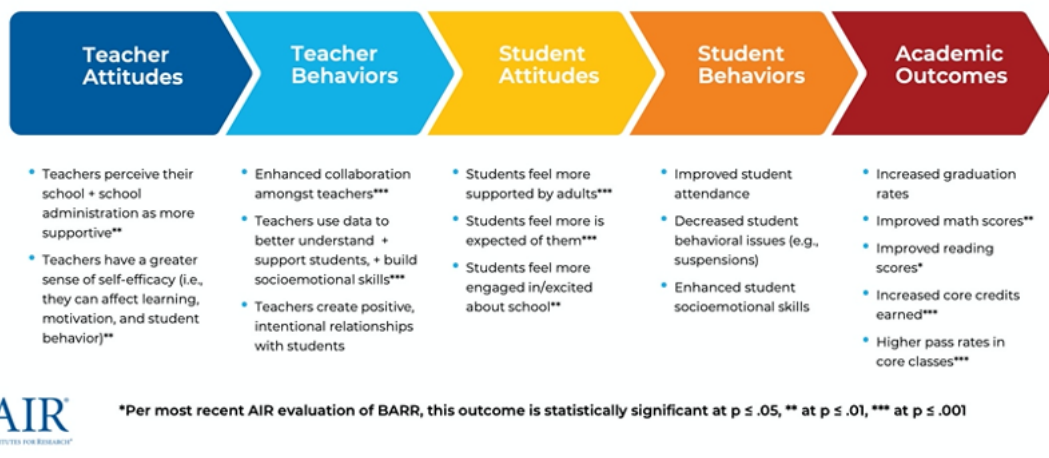
With this grant, the BARR model was scientifically tested in a large suburban high school in southern California using a within-school RCT design in which 9th grade students were randomly assigned to receive either BARR or the control condition, school as usual. Two other rural schools in Maine also implemented the model but were not part of the scientific test of BARR. After one year, the BARR model caused statistically significant academic improvements. Students who received the BARR model earned more core course credits, higher grade point averages and standardized test scores in mathematics and English language arts than did students in the control group (Corsello & Sharma, 2015).

The success of the i3 development grant enabled BARR to apply for an i3 validation grant to conduct 11 more within school RCT in varying environments across the country – rural, urban, suburban locations - with 4,723 9th grade students and 149 teachers. Our sample included Caucasian, Black, and Hispanic students, as well as economically advantaged and disadvantaged students. Results from those 11 RCT replicated the statistically significant findings in the original RCT – BARR students earned more core course credits, higher grade point averages and standardized test scores in mathematics and English Language Arts than students in the control group. In addition, students reported more supportive relationships, higher rigor and expectations in classes, and higher levels of engagement in school than students in the control group. All of these academic and social-emotional increases were statistically significant when compared to the control group, and effect sizes were highest for students of color, males, and economically disadvantaged students. BARR teachers reported significantly higher levels of support by administration, a greater sense of self-efficacy, more collegiality, a better understanding of student behaviors, and more effective use of data than did teachers in the control group (Borman et al., 2020). In addition, our external evaluators, the American Institutes for Research (AIR) conducted a mediation analysis to better understand how the BARR model worked (Bos et al., 2019).



# Theory of Change/Mediation Analysis:

**BARR improves ELA/math outcomes by changing teacher and student attitudes and behaviors**



According to this analysis, BARR changes teacher attitudes and behaviors, creating changes in student attitudes and behaviors, resulting in increased student academic achievement.

The i3 validation study results led to BARR being awarded an i3 scale up grant to conduct a large between school RCT with 66 schools across the United States – 33 schools randomly assigned to BARR and 33 schools randomly assigned to the control condition of business as usual. This study is currently in its third year.

BARR has the unique distinction to be the only recipient to earn all three stages of i3 Investing in Innovation grants: Development, Validation, Scale-Up (Mathewson, 2018).

## Challenges in conducting RCT

Conducting twelve within-school RCT was not without its challenges. There were major impedances to overcome. For example, schools faced the challenge of having to change their master course schedules to create cohorts of students and provide common meeting times for teachers. If schools struggled with this change, BARR suggested that they start with a smaller group of students and expand the following year.

In addition, some school district leaders and school boards felt uncomfortable supporting an RCT in which some students receive the intervention and others do not. To circumvent this issue, BARR discovered that limiting the RCT to one year and then offering the intervention to the whole grade in the following year helped to mitigate this concern. BARR also suggested that often schools pilot a program before extending it to the other grades to make sure the intervention is successful. Another concern was contamination of the treatment effect in which BARR teachers might share strategies with control teachers. BARR found this to be difficult to eliminate.

However, in terms of testing the effectiveness of the model, this spillover of the BARR intervention to the control condition actually made it more difficult to detect differences, making the BARR outcomes even more impressive. A third concern was whether schools would share data with the external evaluator. To mitigate this concern, a BARR staff member functioned as a liaison with the external evaluator and helped explain how the data would be used and reassured the schools of protocols in place to protect student and staff data. Several external organizations, such as the Collaborative for Academic, Social, and Emotional Learning (CASEL), ACT, Evidence for ESSA, What Works Clearinghouse (WWC), and the national Substance Abuse and Mental Health Services Administration (SAMHSA), evaluated the research on the BARR model and found the research to meet the highest level of evidence-based standards.

## BARR's Research at a Glance

12 Within-school randomized controlled trials (RCT) for one year - BARR vs. Business as usual	Schools in Minnesota, California, Maine, Kentucky and Texas	4,723 9th grade students and 149 teachers	Measures: Credits earned, passing courses, NWEA scores, student perceptions, teacher perceptions
---	---	---	--



## Key steps in implementation

The BARR team's rigorous methodology included several key steps to ensure that the model was implemented with fidelity at the school. BARR is a three-year model. Each school receives two days of on-site implementation training in the BARR model prior to the start of the school year and selects a staff member to be the BARR Site Coordinator. This staff member functions as the contact person for coaching, organizing BARR activities, and communicating with administration. During the school year, the BARR site coordinator receives one hour of coaching per week and attends a monthly professional learning community of BARR Coordinators across the country. The school's administrator participates in BARR meetings and attends the quarterly administrator professional learning community. The administrator, BARR coordinator, and staff attend the annual BARR National Conference. Schools receive four onsite or virtual coaching visits in year one, and three visits in years two and three.

During the visits, the coach observes BARR activities and interviews the BARR Coordinator and administrator. In years two and three, BARR activities continue with professional development, coaching, PLC meetings, school visits, and attendance at the annual BARR National Conference. Two-day trainings include BARR implementation, effective team meetings, equity, trauma, and substance abuse. All schools have access to BARR materials and the BARR website, including dedicated school pages, social media, and newsletters. Overall, the closer schools came to implementing BARR with fidelity, the better results they obtained. Critical to a school's success is an unwavering focus on the pillars of BARR: data and relationships, and an attention to detail in protocols for implementation fidelity, coaching, and measurement of outcomes.

## The model in action

Perhaps the best way to understand the BARR model is through a case study of one of the BARR schools in New York City (NYC) in its first year of implementation during the 2019-20 school year when the COVID-19 pandemic struck.

Esperanza Preparatory Academy is located in District 4 of NYC. In 2019, Luisa Morales, Executive Principal, was invited to attend the BARR Annual Conference. He was encouraged by Alex Marrero, former Superintendent at East Ramapo Central School District in Spring Valley, New York, who attended the conference and applied for a grant to implement BARR. East Ramapo Central School District was already implementing the BARR model and experiencing great success. Esperanza had two challenges that they hoped BARR would address. The first challenge was to enhance internal team dynamics among the 9th grade team. The team consisted of strong, talented, and creative individuals who were hoping to improve their group cohesiveness. BARR's strategy of holding regular meetings with cohort teacher teams became instrumental in building team cohesion and facilitating multiple opportunities to collaborate. The second challenge was to address low student attendance.

During the first year of BARR implementation, team members became more effective at communication, and staff to staff relationships were enhanced. The coach helped the staff work on interventions for better attendance during weekly calls and site visits. Attendance was at 70% at the beginning of the year, which increased to 88% just prior to COVID-19, and then to 95% during the COVID-19 pandemic. The staff learned to build upon positive aspects of a school's climate that focused on the whole student. The coach formed strong relationships with the site coordinator, principal, and staff, reporting, "They are amazing...such a talented group! And Luisa possesses the leadership qualities that every principal needs."

At the end of the year, several teachers shared their reflections:

"One of the best successes I had with BARR would have to be working on some of the activities with the students. Seeing them work together as well as seeing how they express themselves creatively has been one of the things that show their growth," said BARR Teacher Kevin Torres.



“Executing BARR has created a shared responsibility for the team. We dedicate more time to collaborate as a grade team and bond with our colleagues during times when we created activities and exemplars. Lessons have provided time and space to bond more with our students, highlighting the importance of the social-emotional well-being of our students,” expressed BARR Teacher Maria Salazar.

These examples show how systematically attending to the relationships between students and teachers makes a difference toward achieving better academic and behavioral results. If we know our students — really know each and every one of them — understand them and expect them to meet high standards, they achieve more, attend school more, get into trouble less, and ultimately succeed in school. We’ve seen positive results in the 150+ schools that have implemented with fidelity. Whether under-resourced or excelling, we have a 100% success rate in schools that implement with fidelity. This success rate speaks for itself.

While 2020 has presented us all with unique challenges, the focus on relationships continues to be at the forefront of educators’ minds. Jerabek recently wrote an important reminder about the impact of COVID-19 and distance learning on schools in *The 74* expressing, “We must remember the centrality of relationships in pursuit of learning and growing up... Relationships are critical, and when we get back together, we need to start there.”