

Plymouth Public Schools

The New England Network for Personalization and Performance (NETWORK)

DID SCHOOL-LEVEL PARTICIPATION IN THE NETWORK PROJECT PROMOTE STUDENT ACHIEVEMENT?

Project Overview

THE INTERVENTION

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

Students across New England were not adequately prepared for the challenges of post-secondary education and career pathways. Additionally, both rural and urban areas across New England were suffering from poverty and lack of jobs. To address these issues, the New England Network for Personalization and Performance (NETWORK)¹ aimed to increase student achievement in its network of thirteen high schools across four states (Maine, Massachusetts, New Hampshire, Vermont) and boost the number of students that graduated and left high school with the skills to be successful in their post-college endeavors.

THE PROJECT: What Strategies Did the Program Employ?

Plymouth Public Schools was awarded an i3 development grant award from 2010-2015 to implement and evaluate NETWORK. The UCLA Center X Northeast Region office evaluated NETWORK in 12 high schools using an interrupted time series quasi-experimental design (QED-ITS). The NETWORK program hypothesized that, by collaborating on creating tasks and common rubrics to measure uncommon assessment tasks, a network of schools would promote personalized learning, thereby producing higher student achievement. The evaluators matched comparison schools on measures of student achievement and attainment, including size, demographics, geography, and a history of successful innovation. iRAISE was a year-long learning community in which high school science teachers learn about, practice, and refine ways to improve their students' ability to engage in and understand a variety of scientific texts. iRAISE built from the existing materials, protocols, and key design elements of face-to-face Reading Apprenticeship PD and leveraged interactive, internet-based technologies to enhance teachers' learning. iRAISE was evaluated with a randomized controlled trial in which teachers were randomized to the program or non-program group.

¹ Plymouth Public Schools received an i3 development grant supported by the U.S. Department of Education's Investing in Innovation program through Grant Number U396C100242. 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.

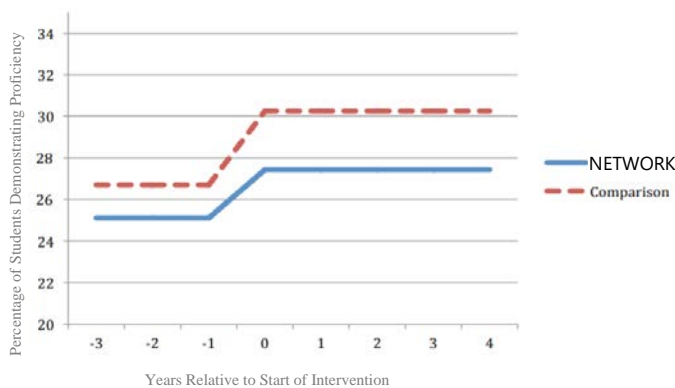
THE NETWORK MODEL

- **Professional Development.** The program's designers implemented a collaborative, peer-mentored, and mediated approach to professional development so as to support the development of instruction and assessments.
- **Leadership Team.** NETWORK created change leadership teams at each participating school in order to facilitate the process of systemic reform needed for the program to be successful.
- **Inquiry Based Learning.** Students in participating schools took part in at least two personalized, inquiry-based learning experiences by the end of the fifth project year.
- **Performance Assessment Review Board.** The project's implementors recruited nationally recognized experts to visit participating schools, validate student experiences, and provide feedback for improvement.
- **Project Steering Committee.** This component was instituted to oversee the project, including progress towards goals and adherence to the timeline and budget.

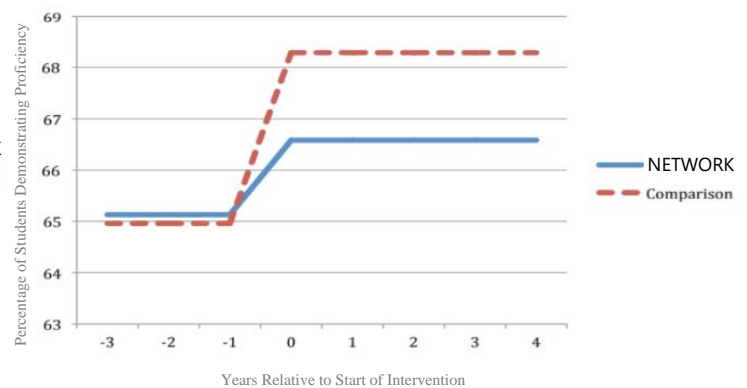
Summary of Results

DID SCHOOL-LEVEL PARTICIPATION IN THE NETWORK PROJECT PROMOTE STUDENT ACHIEVEMENT?

NETWORK students showed some improvements in English Language Arts (ELA), mathematics, and postsecondary enrollment, but not relative to the comparison group.



Math state achievement



ELA state assessment achievement

- LA.** The percentage of students in NETWORK schools demonstrating proficiency on the state ELA assessment increased by 1.45% over the course of the intervention. Comparison schools gained 1.88%. There is no statistically significant difference between groups' proficiency.
- MATHEMATICS.** The percentage of students in NETWORK schools demonstrating proficiency on the state mathematics assessment increased by 2.32% during the intervention, 1.22% less than the comparison group's increase. There is no statistically significant difference between groups' proficiency.
- COLLEGE ENROLLMENT.** The percentage of NETWORK students enrolling in college within 4 months of high school graduation increased by 0.34% during the intervention, a figure that was 1.39% lower than the increase for comparison group students. The percentage of NETWORK students enrolling in college within 16 months of high school graduation decreased by 2.67%, 0.22% more than the decrease among comparison group students. Neither difference was statistically significant.
- GRADUATION RATES.** There was no statistically significant difference between the number of NETWORK versus comparison students graduating in four years decreased.

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

SECONDARY FINDINGS

The intervention did not have statistically significant impacts on achievement for student subgroups and measures of student engagement.

- **ECONOMICALLY DISADVANTAGED STUDENTS.** There was no statistically significant difference in NETWORK versus comparison schools in closing proficiency gaps between economically disadvantaged students and non-economically disadvantaged students in ELA, math, or graduation rates.
- **STUDENT ENGAGEMENT.** Survey results indicated that student engagement in NETWORK schools generally declined between the 2012-2013 and 2014-2015 school years, as measured along the dimensions of academic, social, and emotional engagement. These changes were not statistically significant.

OTHER CONSIDERATIONS

The study noted some takeaways and lessons learned during the project.

- **SLOW ADOPTION.** In most sites involvement with NETWORK spread slowly across the schools. Thus, it is possible that the true impact of the project was not yet evident in the state assessment and graduation rate results by the time the intervention ended.
- **TEACHER LEADERSHIP.** Many teachers took note of the increased leadership roles and confidence they developed through their participation. Networking opportunities provided through the Performance Assessment Work Group (PAWG) and Performance Assessment Review Board (PAR) were cited as mechanisms important for building teacher leadership and skill through peer collaboration.
- **TEACHER PARTICIPATION AND STATE ASSESSMENT SCORES.** In some schools, the number of content area teachers actively participating in the project was associated with changes in student assessment scores. Specifically, in schools where more ELA teachers participated, students' ELA scores tended to improve.

For More Information

Evaluation Reports

[Final Evaluation Report \(Full Report\)](#) (UCLA Center X, June 2017)²

² The information and data for this result summary was collected from the most recent report as of 01/22/2020: UCLA Center X (2017). *Report to NETWORK Steering Committee and the USDOE Office of Innovation and Improvement as part of the Investing in Innovation (i3) Grant Program Evaluation: Analysis and Summary (Five Year)*. Retrieved from <http://i3.cssr.us/sites/default/files/NENPP%20report%20-%20Network%20Final%20Questions.pdf>

Appendix A: Students Served by the Project³

GRADE(S)													
PK	K	1	2	3	4	5	6	7	8	9	10	11	12

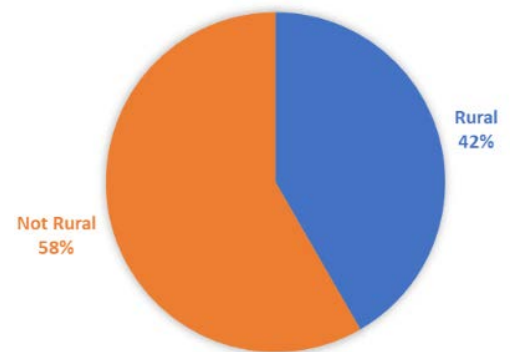
GENDER

Not Reported

RACE/ETHNICITY

Not Reported

COMMUNITY



HIGH-NEED STUDENTSⁱ

Free/Reduced-Price Lunch	English Learner	Students with Disabilities
N/A	N/A	N/A

³These data reflect the entire student population served by the intervention, not just the evaluation sample used in the impact study.

Appendix B: Impact Evaluation Methodology⁴

RESEARCH DESIGN:

Design:	Quasi-Experimental Design (QED)
Approach:	<ul style="list-style-type: none"> ▪ The design is a multi-site, interrupted time series quasi-experimental study (QED-ITS) in which schools were selected based on a history of successful experiences with high school reform. ▪ Teachers in intervention group schools participated in professional development experiences while receiving mentoring and support from network partners. ▪ Comparison schools were matched on student achievement and attainment indicators, including size, demographics, geography, and a history of successful innovation.
Study Length:	Five school years (2010-11 through 2014-15)

DATA COLLECTION AND ANALYSIS

Study Setting:	Thirty-six high schools across Maine, Massachusetts, and New Hampshire
Final Sample Sizes:	<ul style="list-style-type: none"> ▪ <i>Intervention Group</i>: 12 high schools in Maine, Massachusetts, and New Hampshire ▪ <i>Comparison Group</i>: 24 high schools in Maine, Massachusetts, and New Hampshire
Intervention Group Characteristics:	<ul style="list-style-type: none"> ▪ <i>Not Reported</i>
Comparison Group Characteristics:	<ul style="list-style-type: none"> • <i>Not Reported</i>
Data Sources:	<ul style="list-style-type: none"> ▪ Student assessments ▪ Administrative data ▪ Survey results ▪ Interviews ▪ Classroom observations ▪ School performance data ▪ Site visits
Key Measures:	<ul style="list-style-type: none"> ▪ Student achievement in reading and mathematics – Massachusetts Comprehensive Assessment System (MCAS); Maine State Assessment (MSA); New England Common Assessment Program (NECAP); Smarter Balanced Assessment Consortium (SBAC) ▪ Graduation rates - New England Secondary School Consortium ▪ College enrollment rates - National Student Clearinghouse

⁴ 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 REVIEW⁵

STUDY	RATING
The Investing in Innovation Fund: Summary of 67 Evaluations. Final Report. https://ies.ed.gov/ncee/pubs/20184013/pdf/20184013.pdf	Unofficially meets WWC standards with reservations

EVIDENCE FOR ESSA REVIEW⁶

STUDY	RATING
Not reviewed as of 01/22/2020	N/A

NATIONAL CENTER ON INTENSIVE INTERVENTIONS REVIEW⁷

STUDY	RATING
Not reviewed as of 01/22/2020	N/A

⁵ <https://ies.ed.gov/ncee/wwc/FWW>

⁶ <https://www.evidenceforessa.org/>

⁷ <https://intensiveintervention.org/>

Investing in Innovation (i3) Grantee Results Summary

Development, 2010-2015

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 Elementary and Secondary Education (OESE). 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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ⁱ “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: [*Applications for New Awards; Investing in Innovation Fund-Development Grants, 81 FR 24070 \(April 25, 2016\)*](#).