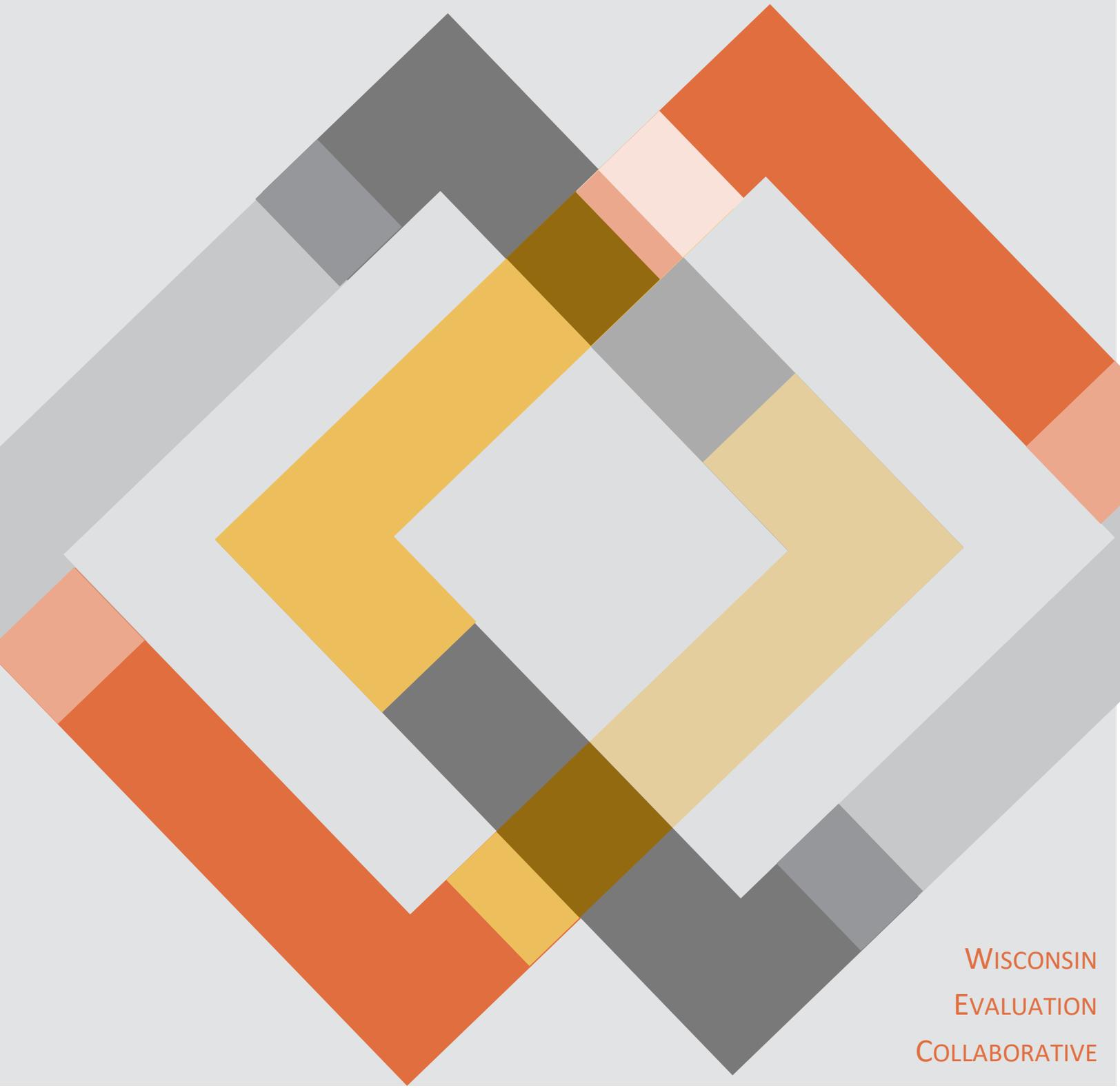


Personalized Learning in Practice

An Evaluation of Breakthrough Schools: Chicago

Executive Summary



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EVALUATION
COLLABORATIVE

PERSONALIZED LEARNING IN PRACTICE

AN EVALUATION OF BREAKTHROUGH SCHOOLS: CHICAGO

Executive Summary

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INTRODUCTION: PERSONALIZED LEARNING IN PRACTICE

A growing number of U.S. schools are now experimenting with the implementation of personalized learning, an instructional approach where teachers and students co-create a learning environment with students' interests and needs at the center. School districts, and in some cases, states are in turn considering promising practices in personalized learning implementation, including the adoption of frameworks and other strategies to replicate whole-school models with evidence of efficacy.

Against that backdrop, practitioners are grappling with critical questions about the implementation of personalized learning frameworks: What should schools prioritize when implementing personalized learning? How do certain practices play out differently in certain contexts? How do local and environmental considerations affect implementation -- and impact? What does fidelity to a framework look like and how might it impact efficacy? What are the prospects for replication?

The framework evaluated in this report, which was developed by nonprofit LEAP Innovations in collaboration with a network of schools in Chicago, conceptualizes a model of personalized learning comprised of four components of learning and instruction: Learner Focused, Learner Led, Learner Demonstrated, and Learner Connected.

In 2014, LEAP/Chicago was one of two cities chosen for funding for Breakthrough Schools: Chicago (BSC), a multi-year initiative where cohorts of schools worked with LEAP to implement whole-school models for personalized learning.



As part of the initiative, cohorts of BSC received:

- Planning grants to develop proposed models or “blueprints”;
- An additional round of grant funding to implement their proposed models;
- Ongoing workshops and professional development;
- Participation within a community of practice of other schools implementing personalized learning;
- Access to national experts on personalized learning

The BSC initiative is funded through a partnership between Next Generation Learning Challenges, EDUCAUSE, Bill and Melinda Gates Foundation, The Chicago Public Education Fund, Joyce Foundation and Northern Trust.

AN EVALUATION OF BSC: PURPOSE AND DESIGN

Beginning in Fall 2016, the Wisconsin Evaluation Collaborative (WEC) at the University of Wisconsin-Madison conducted an evaluation of personalized learning at the six LEAP BSC of the 2016-17 cohort (Gwendolyn Brooks College Preparatory Academy, Chicago International Charter School Irving Park, Disney II Magnet School, Patrick Henry Elementary School, Robert Lindblom Math and Science Academy, and Joseph Lovett Elementary School).

Consistent with calls for more in-depth studies of implementation, the purpose of this evaluation project was to map and explore variables at play in the implementation of the LEAP Framework within the BSC, as well as potential patterns in student outcomes. Our guiding evaluation questions included:

- 1. What are the proposed personalized learning models in Breakthrough Schools: Chicago and how are they aligned to the LEAP Framework?**
- 2. What are patterns in practice and readiness in the first year of implementation at the school site level, and is implementation consistent with intended and proposed program models?**
- 3. What are patterns in academic outcomes for students engaged in personalized learning in Breakthrough Schools: Chicago?**

As with any educational innovation in its design, development and implementation stages, evaluation is critically important as a systematic way to capture salient conditions, relationships, resources, and processes. Yet evaluating potential outcomes and impact at this stage can be challenging, due to limitations such as small sample sizes or variability in the “treatment” (i.e. what personalized learning actually looks like in schools). Towards that end, we examined patterns in outcomes at the school and student levels with the goal of informing the field with a more granular understanding of personalized learning implementation variables, including educators’ perspectives. Our mixed-method design was based on a) extensive qualitative fieldwork, including classroom observations, interviews, survey text and artifact collection; and, b) quantitative analysis of the LEAP Personalized Learning Survey and standardized test scores at the cohort, school, and grade level via data provided by Chicago Public Schools. Descriptive analysis of academic outcomes provided insights into potentially promising patterns, but we ultimately determined neither the descriptive nor the quasi-experimental analyses allowed causal claims about the impact of personalized learning on student outcomes.

Summary of data collection and analysis

- 49 school-wide and classroom observations
- 6 observations of school-level meetings
- 24 interviews with 25 school-level staff; 6 conferring discussions
- Document analysis of “blueprints”, curricular materials, etc.
- Analyses of LEAP Personalized Learning surveys
- Descriptive analysis using publicly available quantitative data from the Chicago Public Schools website
- Descriptive and quasi-experimental analysis of student level data from Chicago Public Schools

We explored connections between the LEAP Framework, implementation patterns and student outcomes in ways that, we hope, establish a foundation for future research on personalized learning on student learning. A detailed description of our evaluation design can be found in the full report.

SUMMARY OF FINDINGS: IMPLEMENTATION

A deeper look into implementation practices offers insights and potential strategies for schools and districts interested in personalized learning.

- In the schools where we observed deep implementation of personalized learning practices, we tended to also see promising outcomes in terms of student learning. Schools can feel confident that personalized learning is a promising approach to improving student learning.
- But conditions matter to implementation - and certain conditions matter more than others: time (e.g., a full planning year), funding (e.g., pay for substitute teachers to support teacher professional development), capacity (e.g., the degree to which students, families and teachers develop understanding of personalized learning concepts) and the digital tools available to students and teachers (e.g., hardware and software are compatible).
- Teacher collaboration, including across schools, was central to adopting a personalized learning model. Implementation benefitted when schools prioritized time and space for teachers to regularly plan, implement and reflect together on their personalized learning initiatives.

- *Examples of practices* supporting or furthering implementation of personalized learning included:
 - “Genius Hour,” an example of project-based learning in which students select a *long-term project based on their interests*. Genius Hour is modeled on Google’s idea that people should have time in the day to work on projects they love. For example, one student researched the Pokémon card game, while another created a presentation on how diseases spread. Students take notes while researching in a Genius Time Notebook, then present to their classmates and give peer feedback to one another.
 - “Flex Fridays,” in which elementary school students can *choose different academic or nonacademic courses based on their interests*. Some students sometimes even teach courses, which also involved lesson planning. For example, Spanish-speaking students in one school taught Spanish language classes to their peers.
 - “Colloquia,” in which high school students sign up for 3 flex classes each week depending on *what they need help with or are interested in*.
 - Purposeful use of multi-grade classrooms, allowing *more advanced students to move more quickly* through material while also providing necessary support to other students.
 - *Involving families* in crafting a school-wide vision plan and working with students.
- Models of personalized learning in practice often changed over the course of implementation in response to shifts surrounding conditions (e.g. funding, staff turnover, district calendar changes) and needs (e.g., students need more practice with online platforms, parents/caregivers need more frontloading on the concept of competency-based progression).
- Personalized learning practices are not implemented in isolation, but are best understood in relationship to one another in what we describe as “*practice clusters*.” This evaluation suggests schools may want to consider which practices tend to work well together, purposefully plan to implement clusters to help embed personalized learning, and assess the actual implementation of clusters through relevant survey questions.

“Flexible learning required reflection on part of students and teachers. Working with students on how to self-regulate, self-direct.”

-Assistant Principal

SUMMARY OF FINDINGS: STUDENT ACADEMIC OUTCOMES

Although there are important considerations and real challenges in how best to estimate impact, this evaluation suggests the potentially promising influence of personalized learning on student outcomes.

Despite the inability to make strong causal claims with this evaluation, our analysis of impact in combination with detailed descriptive analysis of academic performance holds out the possibility that *personalized learning improves students' academic achievement*.

In particular, descriptive analyses of students' academic outcomes show interesting and *potentially promising patterns*:

- The proportions of elementary school students meeting math and reading growth targets in BSC sites increase in the first year of participation in BSC, both overall and relative to non-BSC sites.
 - 58% of elementary students in BSC sites initially met growth targets on the universal math assessment (NWEA MAP), increasing to 63% in the first year of being in the BSC cohort. This is compared to 52% of students in non-BSC schools initially meeting growth targets, increasing to 55%.
 - BSC and non-BSC schools started with approximately 58% of elementary students meeting growth targets on NWEA MAP reading assessment. This increased to 61% after the first year of being in the BSC cohort, while non-BSC schools decreased to 56%.
- BSC schools implementing personalized learning in middle school grades, which started with already high average attainment levels in reading or math, maintained high *attainment* levels during the first year of being a BSC school.
- BSC schools implementing personalized learning in elementary or middle school grades, which started with low average *attainment* levels in reading or math, improved the first year of being a BSC school.

The school "*attainment*" level compares the average spring MAP NWEA test scale score for a particular school to the national average score. Schools are then ranked and assigned a corresponding percentile point.

Evaluations of dynamic programs are complex and given the constraints we must be *careful about making claims about the direct (and causal) of an initiative on something like academic achievement*. That said, focused and detailed descriptive work can provide hints of where to look for potential evidence of impact.

RECOMMENDATIONS FOR PERSONALIZED LEARNING IN PRACTICE

Implementing and evaluating personalized learning is complex work, but shows promising connections between the depth of implementation, surrounding conditions, and outcomes for students.

In addition to formative feedback provided to LEAP and the BSC, we also offer broad recommendations to the field, drawn from our evaluation findings:

- Give purposeful attention to the persistent surrounding conditions (e.g. policy contexts, staff turnover, available technology, budget structures) that impact implementation when designing models, funding structures and professional development approaches.
- Focus on understanding the nuances of implementation and why it might look different at different schools, which can inform the planning process for schools considering personalized learning models.
- Structure and support opportunities for schools to educate one another on their own promising practices, drawing on the persistent theme of collaboration in the data.
- Schools may want to consider which practices tend to work well together, and purposefully plan to implement practice clusters to help embed personalized learning.
- Draw on suggestive descriptive outcome data and explore the personalized learning practices of schools showing strong implementation and outcomes.
- Similar to other school-wide change models, defining and capturing the “dosage” of personalized learning is complicated by the existence of differences within and between schools. This variability is not only in terms of the scope of implementation (e.g. classroom, grade, or school level) but also the nature of the programming itself (e.g. flexible seating combined with station rotation versus a 1:1 device initiative where all students use personalized learning plans to complete a project). Schools and districts must develop a common understanding or definition of personalized learning practices early in implementation process.
- When considering a research or evaluation design:
 - Think carefully about how to structure observations of classroom practice given some elements (e.g. “growth mindset”) are challenging to observe and many are found in “practice clusters”. Also consider how to leverage teachers’ observations of one another’s practice.
 - Given limitations of using quasi-experimental estimates of impact, explore descriptive analyses of quantitative outcomes.

The purpose of this evaluation was to draw on rigorous, mixed-method approaches to understanding the implementation of personalized learning in the context of the Breakthrough Schools: Chicago initiative, as well as examine potential patterns in student outcomes. Our key insights can guide educators, schools and districts interested in personalized learning, and strengthen the call for nuanced studies of implementation to better understand the conditions and practices that matter most to student learning.

Please see the full evaluation report for a detailed description of the analysis behind these key insights.

WEC

Supporting PreK-12

