How can high schools be designed to prepare students for success? Could these innovative high schools also build capacity for innovation within their districts and serve as examples for the field? The Carnegie Corporation of New York’s (CCNY’s) Opportunity by Design (ObD) initiative is intended to address the ambitious goal of preparing students for postsecondary success, based on the premise that promising high school reforms need to be integrated into a comprehensive school design and accompanied by appropriate, sustained levels of financial, policy, and implementation supports. This brief summarizes early lessons from RAND’s interim evaluation of the ObD initiative and provides a number of recommendations, based on these early findings, that may be of interest to schools and districts implementing or considering implementation of similar approaches.
The CCNY ObD initiative was founded in 2013 to support the design and launch of a network of small high schools of choice that focus on ten design principles. The initiative provided each school with funding and technical support for a design year prior to the school’s opening and two years of implementation. Implementation of the ObD schools was phased—five schools opened in fall 2014, five opened in fall 2015, two schools opened in fall 2016, and the last schools opened in fall 2017. Through the ObD initiative, CCNY, along with the capacity-building organization Springpoint: Partners in School Design, supports the participating districts in using innovative school design to improve student outcomes and ultimately enable broader district reforms.

RAND researchers, as part of their evaluation of the program, have published an interim report that describes implementation of the ObD initiative after two years, as well as the conditions that facilitate and hinder implementation and how school staffs have addressed those conditions so far. The report emphasizes three key design principles—prioritizing mastery, personalizing learning, and positive youth development (PYD)—which CCNY believes are foundational to the schools’ models.

Focus and Limitations

The interim report focuses on implementation in the ten ObD schools in operation during the 2015–2016 academic year. The findings in this report are based on teacher and student surveys; interviews with principals, teachers, and district staff; student focus groups; brief classroom observations; and artifacts. The schools in the study were in an early phase of implementation—five were in their first year of implementation, and five were in their second year—and these findings provide an early look at the ObD models. The discussion of implementation in this interim report is largely descriptive; the authors do not draw any causal conclusions. In addition, the survey and interview data rely on self-reports and, for the interviews, involve relatively small sample sizes. Despite these limitations, these formative data provide detailed examples of the design principles in the ObD schools and rich descriptions of implementation facilitators and challenges, as well as illuminating areas of similarities and differences across schools and districts with a view to providing early lessons for the field.

The report emphasizes three design principles

**Prioritize mastery**
Students demonstrate deep understanding of clearly defined, rigorous competencies.

**Personalize learning**
Students’ learning experiences are tailored to individual learning needs and interests.

**Integrate positive youth development**
Students have a voice in their learning and access to experiences and relationships that help them develop the skills and mindsets to succeed.

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High-performing high schools should... 

1. have a clear mission and coherent culture
2. prioritize mastery of rigorous standards aligned to college and career readiness
3. personalize student learning to meet student needs
4. maintain an effective human capital strategy aligned with school model and priorities
5. develop and deploy collective strengths
6. remain porous and connected
7. integrate positive youth development to optimize student engagement and effort
8. empower and support students through key transitions into and beyond high school
9. manage school operations efficiently and effectively
10. continuously improve their operations and model
Early Lessons for the Field

Implementation Successes

The data suggest that many aspects of implementation improved over time. Schools were implementing numerous practices consistent with the design principles, including a clearly defined mission, mastery-based and personalized learning approaches, and a positive school climate and culture. Teachers’ opinions about professional development and clarity of school mission improved from the first year of implementation to the second. The five schools that opened in fall 2016 seemed to face fewer challenges than those that opened in fall 2015 did in their first year. Teachers in the five schools that opened in fall 2016 felt more prepared to implement the ObD principles, held more-positive opinions of their schools’ data systems, and reported greater adoption of personalized and mastery-based learning practices than did teachers at schools that opened in fall 2015. It is possible these improvements were due to Springpoint supports, or because schools improved their ability to use data to identify problems and continuously improve the school model or otherwise benefited from lessons learned during the first year of implementation. In addition, school and district leaders found Springpoint’s support—such as connections to consultants, study tours, and resources designed to align with the district vision, systems, and policies to support innovation—helpful.

Key Challenges

As noted above, the five schools that opened in fall 2016 seemed to experience fewer implementation challenges than the schools that opened in fall 2015 did in their first year. Nevertheless, staff members in all schools reported challenges related to developing high-quality curriculum, hiring qualified staff, ensuring high-quality instruction, and maintaining universally high expectations for students.

In particular, the lack of curriculum materials, staffing challenges, a need to personalize across multiple student ability levels, and a lack of clarity on how mastery should be implemented made it difficult to implement high-quality instruction. External pressure to advance students at a certain pace, wide variation in the complexity of tasks used to assess mastery, and inconsistent application of mastery-based grading systems were barriers to maintaining universally high expectations for students. Teachers also reported varying access to student data useful for informing mastery-based instruction. Although most teachers reported receiving various types of achievement data at least monthly, and using it to inform their instruction, many teachers expressed a need for more or better data.

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This brief describes work done in RAND Education and documented in Designing Innovative High Schools: Implementation of the Opportunity by Design Initiative After Two Years, by Elizabeth D. Steiner, Laura S. Hamilton, Laura Stelitano, and Mallie Rudnick, RR-2005-CCNY, 2017 (www.rand.org/r/RR2005). To view this brief online, visit www.rand.org/r/RR9985. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark. © RAND 2017

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Recommendations

1 CURRICULUM SUPPORTS

Provide teachers with support and assistance to develop and select curriculum materials. While many teachers appreciated the autonomy to develop their own curriculum, they also reported spending a lot of time creating or finding materials. To promote teacher autonomy and support teachers’ abilities to create their own materials, school and district leaders could provide additional supports for developing curriculum, such as support from external experts or more time dedicated to co-planning or vetting materials.

2 ACCESS TO HIGH-QUALITY DATA

Ensure access to high-quality data to implement mastery-based and personalized approaches and the support to use them effectively. Teachers need high-quality data to implement mastery-based and personalized learning but do not always have access to such information. School and district leaders can play a role in ensuring that teachers have access to high-quality data that are frequent, aligned with the curriculum, and easily accessible.

3 ENSURE HIGH-QUALITY INSTRUCTION

Develop systems and processes to ensure that all students receive high-quality instruction and are held to high expectations. Across classrooms, there was great variation in the complexity of assessments used to gauge mastery and in how mastery was defined and measured. This variation, along with the need to personalize instruction, made it difficult for school staff to ensure that all students received high-quality instruction and were held to the same high expectations. District and school leaders could work together to put systems in place that focus on strategic staffing (e.g., team teaching, more-experienced teachers co-teaching with less-experienced teachers) and could work to develop quality curriculum, assessments, and measures of mastery.

4 SUPPORT FOR RECRUITMENT, HIRING, AND RETENTION

Offer specialized support for recruiting, hiring, and retention, while encouraging autonomy and flexibility in district policies. Many school leaders struggled to find high-quality teachers willing to work in schools implementing innovative practices, such as mastery-based and personalized learning. High teacher turnover and vacancies in high-needs subjects such as mathematics and science exacerbated the challenge of hiring quality teachers. Districts could consider providing additional supports and encouraging flexibility in teacher hiring policies that could help schools recruit, hire, and retain teachers.

5 ONGOING SUPPORTS FOR PRINCIPALS

Offer principals continued support beyond the first two years of implementation as they refine their models and hire new staff. The implementation of a complex innovation is an ongoing process. Schools that opened in fall 2015, even in their second year of operation, were continuing to refine their school models and could benefit from continued implementation support beyond their second year. This implementation support could take a variety of forms based on schools’ needs and contexts and could include additional support from Springpoint in the form of study tours or connections to consultants, as well as targeted support from the districts. Additionally, schools that opened in fall 2016 seemed to have experienced fewer challenges in their first year of implementation than did the schools that opened in fall 2015, and some principals of schools that opened in fall 2016 said they benefited from continued interaction with and support from schools with more ObD implementation experience. Therefore, one potentially valuable support for principals could be networking opportunities that allow them to learn from one another’s experiences and share their own successes.