CASE STUDY

Highly Individualized Literacy Instruction with Station Rotation

Authors: Sivan Tuchman & Isaac Parrish

OCTOBER, 2024

For more information about implementing station rotations, see this guide in our series Promising Practices from Washington State.

CASE STUDY SCHOOL

This guide describes a practice being implemented at Catalyst Public Schools (Catalyst). Catalyst is located in Bremerton, Washington and serves students in kindergarten to high school. The public charter school opened in September 2020. In 2023-24, Catalyst enrolled 485 students, 47% of whom were classified as low-income, and 16% of whom received special education services. For additional information, see appendix A.

At Catalyst Public Schools, station rotations (pods) are modeled from traditional practices that periodically separate classes into smaller groupings to personalize learning. With its co-teaching model, Catalyst has been able to adapt this practice. Having two teachers in each class and two classrooms for each grade level allows teachers to form small pods across classrooms, thus further individualizing instruction.

DEFINING STATION ROTATION

While station rotation has been used for decades and across many countries as an instructional practice, the integration of technology has recently played an essential role in stations. One personalized learning study[1] defined station rotation as having the following attributes:

- The class must be split into groups.
- Students must rotate through two or more stations during a class period.
- Station rotation must be done at least twice a week.
- At least one station must incorporate the use of digital instruction.
- Each rotation must last at least 10 minutes.
- Stations and rotations must be within a single classroom under the same teacher.

Station rotation in this guide will diverge from this slightly because the practice will combine students across multiple classrooms, each led by two teachers, while students still consistently participate in stations in the same classroom and with the same teacher every day.

An example of pods can be seen in Ms. Eely's second-grade class, where she separates the class into groups of three to five students to work on reading skills. At one table, Ms. Eely works with one group of students reading a story, sounding out words and discussing the plot as they go. On the other side of the room, Ms. Hanson, the classroom's small group instructor, carries out a similar activity with another group. Some students read independently from books of their choosing, while another two groups are stationed on computers with headphones to focus on literacy skills at their reading levels. At the same time, two more groups sit at their desks, completing worksheets to target the skills that they need.

A timer sounds. Students put away their books, collect their materials, and line up in their groups before Ms. Eely instructs them to rotate stations. During the class period, each group will rotate through every station. The learning block ends with half of the students returning to their classroom.

The scenario described above is possible because two lead teachers combined their students for reading instruction. At the start of the 2023-24 school year, Ms. Eely and Ms. Hanson blended station rotations with their colleagues' second grade class across the hall. They had previously implemented the practice successfully in their own classrooms for math and literacy curricula. They found that collaborating with another class improved the process without drastically changing the look of station rotation. The larger number of students allowed for better, more homogenous groupings that had students more closely matched by instructional needs.

Catalyst introduced this alternative practice of station rotations at the first-grade level during the 2022-23 school year, combining classes only for literacy instruction. The teachers involved found the method to be highly effective, and the school decided to expand the use of this individualized teaching practice to the rest of the elementary school.

1. Fulbeck, E., Atchison, D., Giffin, J., Seidel, D., & Eccleston, M. (2020). Personalizing student learning with station rotation: A descriptive study. American Institutes for Research. https://www.air.org/sites/default/files/Station-Rotation-Research-Brief-Final-July-2020.pdf

STATION ROTATIONS AT CATALYST

Catalyst's first graders, like all students at the school, take reading and math assessments before the school year begins. The first-grade team — composed of two classrooms, each with one lead teacher and one apprentice teacher — analyzes all first graders' data and then groups students based on existing skills. When school starts, students learn which group they will start in and which teacher will lead their group. For a block of time each day, students stay in their regular classroom or move to the other first-grade classroom, where they work with either the classroom's lead teacher or the apprentice teacher. Where and from whom students learn during these station rotation blocks changes a few times each semester, so teachers in both classrooms hold and reinforce consistent expectations during the learning blocks.

Catalyst introduced this alternative practice of station rotations at the first-grade level during the 2022-23 school year, combining classes only for literacy instruction. The teachers involved found the method to be highly effective, and the school decided to expand the use of this individualized teaching practice to the rest of the elementary school.

Catalyst uses data to help teachers determine students' various learning levels, allowing them to optimize grouping. As the lead teacher, Ms. Eely has been able to improve their practice of station rotations through data meetings with the school leader, who coaches Ms. Eely and other lead teachers in optimizing pod learning.

"We take their problem sets with us to a combined data meeting with myself and [the other lead second grade teacher] and [our coach]. We all sit and look at our most recent problem sets, and then we make goals. We decide what we can work on with the kids, how we can restructure groups, and then we take another problem set with us and look at that," said Ms. Eely.

At lower grade levels, some teachers were hesitant about implementing pods in their classrooms. Station rotations require two or more student groups to learn independently while teachers instruct the other groups. Teachers had concerns about student behavior. As one teacher explained, "This year particularly, there's a lot of behaviors more specifically in the classroom that I think made [us] a little nervous to try to do the movement of rotations."

In kindergarten classrooms — where students need extra support with directions and some independent work — teachers realized that they could adapt their rotations to address these concerns. One teacher described their solution: "I rotate with my three groups, and she rotates with her three groups, and just the teacher rotates [within their three groups.] We have them do the same set of work with us. And then we move from the activity to the next group. For the most part, I have one group doing Lexia on iPads. They're doing some type of technology. We're introducing more reading to them because we're trying to encourage more independent reading and reading for pleasure."

Teachers have been able to gradually add more independence into students' rotations to strengthen pods in the elementary school.

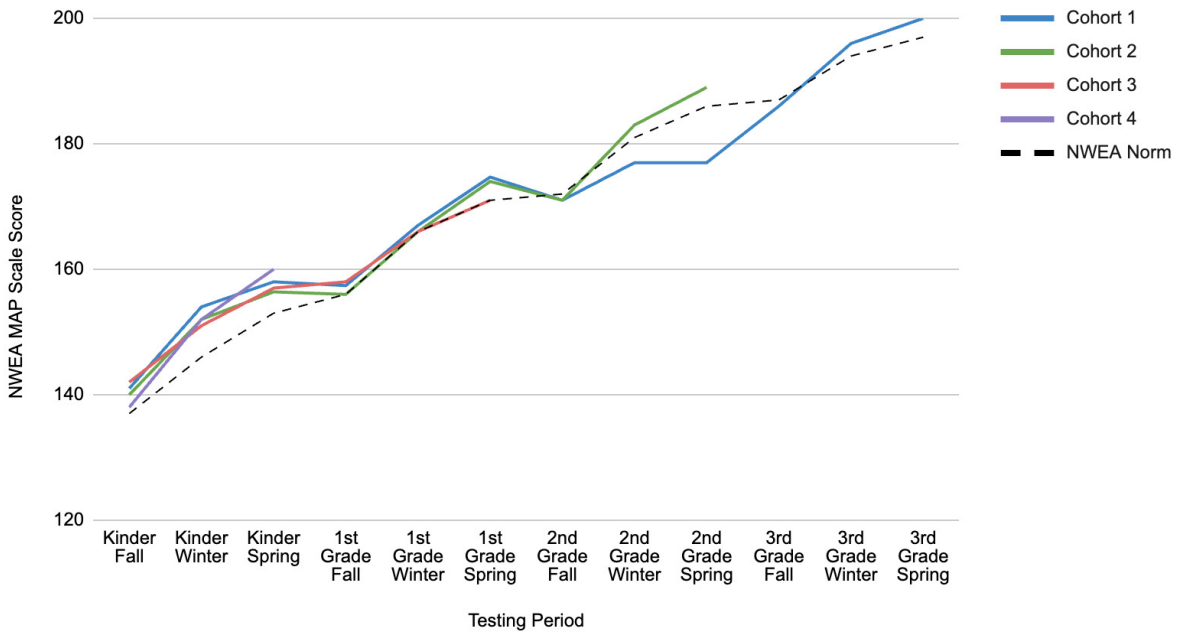
"I've been slowly trying to trickle in a little bit of independence and stuff like: 'Okay, now you guys are done with your iPads, just go hand it to someone at the other table and then come back,'" explained one kindergarten teacher.

Teachers have noted a need for more independent work to be included in the curricula for Catalyst's youngest students, as this would allow the teachers to create more groups during station rotations. While technology-based programs with audio directions help to maintain stations of independent learning, teachers do not necessarily want students to have excessive screen time.

Catalyst's improved strategy for station rotation appears successful. While these gains cannot be attributed solely to station rotation, students have made consistent progress above their grade level norms. Catalyst's 2023-24 kindergarteners (Cohort 4) began the year close to the NWEA MAP's grade-level norm but finished with the highest average scale score. Catalyst's first graders in 2023-24 were the only cohort that did not surpass the prior cohorts' first-grade scores. Nevertheless, all cohorts have met or exceeded NWEA MAP's grade-level norms for reading (see figure 1).

Looking forward, Catalyst aims to build on their success and continue strengthening their approach to station rotation.

FIGURE 1. ***NWEA MAP Reading scale scores for each of Catalysts Kindergarten cohorts***



APPENDIX A:
Profile of Catalyst Public School

Location: Bremerton, Washington
Founded: 2020
Level: K-8 (will include high school as of fall 2024)
Teachers: 29

ENROLLMENT	2022-23 SY	2023-24 SY
Number enrolled	439	485
Students with disabilities	15.7%	15.5%
Multilingual learners	0%	0%
Foster youth	0%	0%
Low-income students	49.2%	47.0%
Homeless students	0%	0%

Source: *Washington Office of Superintendent of Public Instruction school report card*

RACE/ ETHNICITY	2022-23 SY	2023-24 SY
American Indian or Alaska Native	0.9%	0.2%
Asian	3.6%	3.9%
Black or African American	8.7%	8%
Hispanic or Latino	15.0%	16.5%
Native Hawaiian or Pacific Islander	0.5%	0.2%
Two or more races	12.1%	11,3%
White	59.2%	59.8%

Source: *Washington Office of Superintendent of Public Instruction school report card*

ACADEMIC PROFILE	2021-22 SY	2022-23 SY
Attendance	71.1%	73.0%
Percent meeting ELA standards	57.7%	48.8%
Percent meeting math standards	49.2%	45.1%

Source: *Washington Office of Superintendent of Public Instruction school report card*

About the Project

Project Description

This guide is part of a two-year participatory evaluation that concluded in May, 2024. We worked with Washington State public charter schools Lumen High School and Catalyst Public School. The evaluation started with a single question: "What is working in your school?" Researchers Georgia Heyward and Sivan Tuchman worked closely with school leaders to identify promising practices and create research plans to study implementation and outcomes. The result is six guides for each of the practices identified:

- Collaborative Conversations: A Skill-Building Restorative Practice
- Co-Teaching for All: Using Two Educators in a Classroom
- Cultivating Connection: How to Design and Implement School-Based Mentoring
- Social Health: A New Model for Wrap-Around School Services
- Station Rotation: Grouping Students for Individualized Learning
- Summer Professional Development: Creating a Foundation of Teacher Relationships

We also produced a summary report identifying how schools and systems can create learning environments that promote whole-school wellbeing. See that report for a full description of the research methodology.

Author

Sivan Tuchman, PhD is the founder of Datability Education Consulting. Dr. Tuchman is committed to helping her clients use data and evaluation to improve outcomes for all learners. Sivan spent 8 years as a special education teacher before earning her doctorate in education policy at the University of Arkansas, Fayetteville. Prior to founding Datability, she was a researcher at the Center on Reinventing Public Education.

Funder

This research project was funded through the Washington State Charter Schools Association (WA Charters), using federal Charter Schools Program (CSP) grant funds. These funds were awarded by the U.S. Department of Education, award number U282A190002, "Washington's Innovation and Excellence CSP Award."

Acknowledgements

We are indebted to the administrators, educators, and students who contributed valuable perspectives to this research. This report would not have been possible without their candor and thoughtfulness. In addition, a team of writers, editors, designers, and research assistants contributed to this report. Isaac Parrish wrote each case study and Kelley Prosser and Kate Caldwell edited each guide, and Jacqueline Sanz designed the reports. Special thanks to Mark Isero, our practitioner reviewer.

fig Education Lab

Datability Education Consulting

WASHINGTON STATE CHARTER SCHOOLS ASSOCIATION