

Data: The Guide on the Path to Personalized Learning for ALL Students

by Susan A. Gendron and Scott Traub

Are we teaching for yesterday's world or tomorrow's? That is the question we as educators must habitually ask ourselves, whether we work in the district office or the classroom. Honestly answering this question will inevitably put you and your team on the path toward personalized learning, as it's impossible to teach to tomorrow's world without engaging each student individually and relevantly.

To be able to deliver effective personalized learning for every student begins by committing to a five-stage process—one that determines a personalized learning blueprint on the district/school level, a strategic personalized learning plan for each student, attendant personalized tactics for every learner, and tools to monitor ongoing instructional and student progress. It might sound daunting—and without data, it would be. Without data, to attempt personalized learning would be to throw darts in the dark. But when applied throughout the process, data becomes a guide down the path of finding the most effective way to deliver personalized learning to ALL your students.

The most successful and consistent process to deliver learning that addresses the specific needs and interests of each student will be systemwide. The more aligned a system is to collect, analyze and apply data, the more the guesswork is taken out of student-centered learning and the more our students achieve. When moving through the process to personalize learning, certain forms of data will be most revealing and relevant, and certain inputs will foster and enhance the success at each stage.

Stage 1: Start by Understanding the Situation

Before you know where to go, you need to know where you are. To determine the most effective blueprint for personalized learning planning, it's critical to assess where you are as a district or school in terms of student achievement and progress. Where are you having consistent successes? Where are you having consistent failures? How engaged are your students? Use multiple forms of data—quantitative and qualitative, and leading and lagging indicators—to fill in gaps and uncover a complete story of where you are.

Data tools for this stage:

- Demographic data: Whom are you teaching? Who are your teachers? What trends do you see in student population? What factors outside of school can help you better understand your students?
- School process data: How is classroom time used? How aligned is curriculum to assessments and standards? How rigorous and relevant is learning?
- Perception data: How do all stakeholders, including staff and students, perceive the learning process? Are there mismatches?
- Diagnostic and summative and assessments: What do students already know? What are their strengths and weaknesses? What are the results after a unit of instruction?

Inputs for success at this stage:

- A vision of student-centered learning
- A culture that reaches high in expectations but is grounded in data
- Leadership that supports and enables use of data tools that are relevant to the school's DNA
- Data Teams that meet regularly to review and analyze data results

Stage 2: Define Goals and Articulate an Accountability System

After gathering a picture of where you are as a district/school, you can begin defining student-centered instruction and personalized learning goals, and then develop a strategic blueprint to get there. Winning stakeholder buy-in around goals is possible through clear articulation and broad communication. Motivating everyone to work toward objectives requires a culture of high expectations and, importantly, explicit milestones and rubrics for evaluation. When there's confusion around how progress will be measured, staff will inevitably reject the initiative.

Data tools for this stage:

- Goal-aligned classroom observation rubrics and corresponding data results
- Professional learning data, e.g., effectiveness of initiatives and teacher growth

Inputs for success at this stage:

- Readiness for shifting to a culture of high expectations and positive relationships
- Professional learning and an agreement among leaders and teachers that the purpose of classroom data is to help leaders support teachers' success
- Transparency, where observation rubrics are openly shared with stakeholders

Stage 3: Strategic and Tactical Lesson Planning Per Student

Once a strategic personalized learning system is in place, teachers can begin to individualize the strategy. This means adapting lesson plans and instructional strategies built for personalized learning to each learner and applying best practices and tactics accordingly.

Does this student learn best working alone or in teams? Does she tend to be challenged most by literacy or numbers? What are his interests? How can the level of rigor and relevance be escalated for that student?

Data tools for this stage:

- Qualitative, relational data, e.g., having conversations with each student about what they perceive as their challenges, their preferred learning style, their interests, etc.
- Preexisting student performance data

Inputs for success at this stage:

- Deep understanding of rigor, relevance and relationships
- Teacher empowerment and leadership
- Personalized learning and teaching best practices

Stage 4: Frequently Assess and Document Learner Growth

Summative assessments do a great job of telling you about a student's aptitude—after the fact. Frequent and varied formative assessments are far more effective in providing regular student progress snapshots and helping direct any necessary intervention plans; such leading indicators are a cornerstone of personalized learning. Are your personalized learning strategies and tactics working? What tools can you use to discover which students are showing growth, and which are not? Are you tracking the right data to help reveal and solve learning dilemmas?

Communicating expectations to students by sharing rubrics that outline criteria for student learning is known to foster accountability—for both students and teachers. When students know how their teachers will evaluate them, students feel empowered to reflect on their own work and discuss results. When they understand the data being collected and why, the data

become conversation starters, not gotcha devices.

Data tools for this stage:

- Rubrics that outline criteria for student learning and corresponding results data
- Simple and swift in-classroom assessments, e.g., The Exit Ticket, a quick pre/post-lesson student survey
- Standards-based proficiency grading to track skills-per-standard development

Inputs for success at this stage:

- Data training to ensure teachers know how to use and track data and feel supported
- A broad toolkit of formative assessment best practices
- Evaluation and data transparency

Stage 5: Apply Data Analysis for Strategic Personalized Learning Recalibration

Frequent formative assessment data will tell you how each student is progressing. Analysis and focused questions will tell you why. In the event of learner progress, relevant data will help teachers determine how to increase the rigor for a student. Qualitative data will help a teacher apply relevance and relationships to that end.

When data reveals student setbacks, correction will only be possible after getting to the root cause of an issue. Tools such as the 5 Whys and the Fishbone Diagram are excellent conversation guides to help form a hypothesis of the underlying problem and inform and individualize the most appropriate intervention plan.

Data tools for this stage:

- Qualitative root cause data tools to guide conversations and data analysis
- Historical data around intervention strategies' and tactics' success and failure rates

Inputs for success at this stage:

- Culture of high expectations and support
- Leadership support in data analysis training
- Data teams to support each other through rigorous, root-cause data analysis
- Intervention tools and best practices

The process to realize personalized learning for ALL students is dynamic because we learn in a dynamic world. After initially going through this process, each stage requires ongoing reflection and maintenance; stages should be regularly revisited and tweaked as needed. To fail to check in on attainment of goals, effectiveness of personalized learning strategies, data teams and the entire data system is to devolve into a static system that can't change with changing student needs.

Additional Reading

Power of Effective Data Use in Learning
[Designing Data Systems to Support Rigor, Relevance, and Engagement](#)

[What's Your School's DNA? Using Data to Drive Innovation](#)

[Using Leading and Lagging Indicators to Inform Systemwide Change](#)

Inputs for Success and Best Practices
[*Rigor, Relevance, and Relationships in Action: Innovative Leadership and Best Practices for Rapid School Improvement*](#)

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