SpringMath Fit Matrix: Alignment with North Dakota Personalized, Competency-Based Learning (PCBL)

This matrix outlines how SpringMath aligns with the 12 Enabling Conditions from North Dakota's Personalized, Competency-Based Learning (PCBL) Framework, developed in collaboration with KnowledgeWorks and the North Dakota Department of Public Instruction (NDDPI). It highlights how SpringMath supports learner-centered, mastery-based, and data-driven practices.

ND PCBL Enabling Condition	Description	How SpringMath Aligns / Supports	Notes / Recommendations
Shared Vision for PCBL	A clear, community-developed vision that defines what personalized, competency-based learning looks like and why it matters.	SpringMath supports this vision through its mastery-based structure (advance when proficient). Data dashboards can help communicate progress aligned to PCBL goals.	Frame SpringMath implementation as one component of realizing the district's PCBL vision in math, not just an intervention tool. Connect student mastery data to your local 'Portrait of a Learner.'
Learner Agency	Students actively shape their learning—goal-setting, self-assessment, reflection, and ownership of progress.	Students can set goals around SpringMath mastery targets and track their own progress on dashboards and graphs.	Build reflection routines: have students chart progress weekly, set goals, and celebrate mastery milestones to reinforce agency.
Equity and Inclusion	Every learner has access to personalized pathways, support, and high expectations.	SpringMath provides data-driven interventions ensuring all learners get targeted support. It closes gaps early through classwide and individual interventions.	Ensure equitable implementation—monitor that all subgroups are accessing interventions and demonstrating growth.
Competency-Based Structures	Learning is organized by clearly defined competencies; students progress upon mastery.	SpringMath's scope-and-sequence of 'tool skills' and mastery criteria directly model competency-based advancement in math.	Align SpringMath competencies to district math proficiency scales or the ND Learning Continuum for transparency and coherence.

Balanced Assessment System	Continuous, formative assessment guides learning and progression.	SpringMath's screening, mastery checks, and progress monitoring provide real-time formative data.	Integrate SpringMath results into district's assessment system (RTI/MTSS dashboards, data days) for a balanced, unified approach.
Responsive Supports and Interventions	Instruction adjusts in response to data to meet learner needs.	SpringMath automatically identifies needed interventions and provides targeted practice and scripts for teachers.	Ensure intervention time is built into schedules. Monitor fidelity using implementation checklists and progress reports.
Rigorous, Relevant, and Engaging Learning	Learning connects to real-world application and higher-order thinking.	SpringMath builds fluency and automaticity—foundations of rigorous math.	Pair SpringMath with project-based or applied math tasks to connect procedural fluency to real-world problem-solving.
Anytime, Anywhere Learning	Flexible pathways beyond traditional seat-time or classroom structures.	SpringMath can be used flexibly for classwide, small-group, or remote learning contexts.	Combine with digital learning days or intervention blocks to give students choice in when/how they complete practice.
Data Systems and Interoperability	Systems capture and share student progress to inform teaching and learning.	SpringMath's online dashboards visualize class and individual mastery, enabling data-driven coaching and team planning.	Connect SpringMath reports to your district's data warehouse or MTSS platform for unified progress tracking.
Professional Learning and Collaboration	Educators collaborate and build capacity for PCBL design and implementation.	SpringMath's structured process supports PLC data discussions around student progress and intervention outcomes.	Incorporate SpringMath data reviews into PLC cycles (Plan-Do-Study-Act) to align with continuous improvement.
Leadership and Policy Alignment	Leaders model the PCBL vision, allocate resources, and remove policy barriers.	SpringMath provides measurable growth data leaders can use to monitor progress toward PCBL goals.	Leaders should frame SpringMath as a key data source for evidence of mastery and progress under SB 2196 flexible learning policies.

Continuous Improvement and Innovation	The system regularly reflects, refines, and scales effective practices.	SpringMath's consistent, quantifiable data enables evaluation of intervention effectiveness and system-level improvement.	Use SpringMath metrics in PDSA or driver diagrams for district improvement cycles aligned to ND PCBL goals.

Summary of Fit

Overall Alignment	Fit Level	Comment
Instructional Practices	✅ Strong Fit	Supports personalized pacing, mastery, and targeted feedback.
Assessment & Data Use	✅ Strong Fit	Provides continuous, actionable, competency-aligned data.
Student Agency	⚙️ Moderate Fit	Needs intentional design to include reflection and ownership components.
System & Leadership Integration	⚙️ Moderate Fit	Works best when embedded within broader PCBL and MTSS frameworks.
Equity & Inclusion	✅ Strong Fit	Data-driven differentiation ensures support for all learners.