We are living in a moment that requires big, audacious ideas and bold action in education. Our big idea - to accelerate deep, relevant learning by drawing from a research-informed “rigor toolbox” of essential curricular tools.

reDesign’s Rigor Toolbox has been in the making for over fifteen years. As an education design lab deeply engaged in professional learning work, we are constantly designing, field-testing, and refining learning tools that reflect the best of what we know about how people learn, and translating the big ideas of learning science research into practical, usable tools that lead to measurable results - and ultimately, a more equitable learning system.

As we continue to navigate the impact of pandemic-era disruptions to schooling, we believe that a focus on more instructional time as the primary solution for combating "learning loss" is ill-placed. Rather than counting on more hours in classrooms –in a world where school disruptions are likely to only become more frequent and severe– what if we dialed up the quality and precision of the learning tools that have demonstrated the ability to accelerate meaningful inquiry-based learning, particularly for young people who have most struggled in traditional school settings?

IMAGINE EVERY YOUNG PERSON...

Thriving in supportive learning communities...

Developing competencies that matter...

Experiencing meaningful connections...

Flexibly driving their own pathway forward...

Preparing to positively impact the world.

www.redesignu.org | May 2022
As we look to evidence from research and the field about how to effectively accelerate learning, which tools will you find in reDesign’s Rigor Toolbox?

The Rigor Toolbox articulates bold new learning outcomes (competencies + concept maps), establishes the inquiry for building important disciplinary or interdisciplinary knowledge and skills (Explorations), defines college- and career-aligned evidence of learning (performance assessments), and clarifies the “hows” (learning strategies) that underpin all aspects of the learning process.
Exploring Each Tool - Why this?

Let's take a closer look at how each tool is designed to fast-track deep, meaningful learning in a supportive community.

WHOLE CHILD COMPETENCY FRAMEWORK

What do learners need to get really good at in order to prepare for post-secondary learning, careers, and community and civic life? The reDesign competency framework defines a set of transferable skills as high-priority learning outcomes for every child, and includes research-informed, classroom-ready learning progressions designed to know and meet learners where they are with precision.

**Why this?** Rather than wade through thousands of learning standards, let’s prioritize the most important competencies for life, work, and participating in community. Rather than rely on age-based academic standards and rubrics used to evaluate and grade learners, let’s employ stable developmental rubrics that will help learners identify where they are in the learning progression, and see visible evidence of their growth over time and across varied learning contexts—an essential efficacy-building experience (Bandura, 1977, 1982).

FUTURE-READY CONCEPT MAPS

In 1892, a Committee of 10 academics and school heads determined the four core content areas that young people explore in school. One hundred and thirty years later, our education system remains organized within the same limited and outdated disciplinary silos. reDesign’s reimagined K-12 Content Maps realign the focus of learning, prioritizing important—and often ignored—concepts across many bodies of knowledge. Reflecting diverse histories and perspectives, these interdisciplinary maps lift up the topics, terms, and ideas that young people need in order to solve society’s most pressing problems and thrive in today’s world.

**Why this?** Current academic standards have failed to improve learner outcomes since 2004 (NAEP, 2022). Lacking grounding in research from the learning sciences and child and youth development, standards artificially separate skill and knowledge acquisition by grade level and discipline, instead of building transferable and interconnected conceptual understandings (Schaef, 2021; Rudenstine, Schaef & Bacallao, 2017; National Research Council, 2000).
Exploring Each Tool - con't.

Let's take a closer look at how each tool is designed to fast-track deep, meaningful learning in a supportive community.

**INQUIRY-BASED EXPLORATIONS**

What if subject area content were organized to support meaningful, learner-directed inquiry? What if curriculum prioritized the investigation of issues and topics based on importance and relevancy, rather than siloed grade-level content? reDesign's **Explorations** are curriculum reimagined: free, adaptable, non-linear, aligned to postsecondary agentic learning. Each interactive, online Exploration is a “starter” curation of diverse learning resources for investigating a compelling issue or topic of importance. The visual display makes the structure of inquiry transparent, and the modular format means any learner can build or contribute to the Exploration’s resources.

**Why this?** Explorations provide the compelling inquiry frame for learning important disciplinary content and engaging with complex ideas in the context of real-world issues, challenges, and observable phenomena. These interactive resources are designed to help learners develop conceptual understandings that form the “coat hangers” on which we interpret and assimilate new ideas, and relate and extend them (Hattie, 2012; Stern, Ferraro, Mohnkern, 2017).

**HIGH-QUALITY PERFORMANCE ASSESSMENTS**

How can we provide learners with recursive skill and knowledge-building opportunities in the context of authentic, meaningful tasks? How do we ensure assessments are both rigorous enough and scaffolded enough to ensure every learner can achieve desired outcomes? Our **performance assessment suite** includes an adaptable set of tasks that can be used across disciplines and age cohorts. This unique set of transferable “formative tasks” is designed to create a visible and flexible pathway for each learner, enable timely feedback and revision opportunities, and help learners see and practice the processes that are essential to the creation of any product, project, or creative endeavor.

**Why this?** Performance assessments are both the ends and the means of relevant and rigorous learning: done well, they situate skill and knowledge development in a real-world context that can foster a sense of purpose and relevance for learners, and they serve as an important form of evidence for the development of high-order thinking, interpersonal and collaboration skills.
Exploring Each Tool - con't.

Let’s take a closer look at how each tool is designed to fast-track deep, meaningful learning in a supportive community.

GUIDES FOR USING AGENTIC LEARNING STRATEGIES

What are the specific thinking strategies that experts use to make meaning of new information rapidly, plan and reach their goals, solve problems, and adjust and expand their schema? reDesign’s set of **agentic learning strategies** defines the critical cognitive and metacognitive techniques for learning, memory, and developing expertise. Each strategy includes a student guide to facilitate driving your own learning by practicing and applying each strategy in any learning context.

Example: **A Guide to Questioning**.

**Why this?** Agentic learning strategies unlock the “how” of self-regulated learning, problem-solving, mindfulness, emotional intelligence, and developing expertise. While they are often invisible to learners, when these strategies are taught explicitly and nurtured in all learners, their cognitive, social, and emotional development is profound (Cuoco, 2010, Goleman, 1998; National Research Council, 2000; Palinscar, 1986; Winne & Perry, 2000).

Remarkable Gains Are Possible: Case Examples from the Field

Several years ago, our Detroit partners at the School for the Future provided a powerful community for adolescents who had been effectively trapped in middle school unable to pass enough courses to graduate. Despite their history of trauma and exclusion, within eight months, these “significantly behind” learners gained an average of five grade levels in reading, and two in mathematics.

At **North Queens High School in New York**, learners who were about to age-out of the system because they were unable to pass the NY State Regents Algebra Exam, went from a 30% passing rate to a 100% passing rate just two years later.

We believe the remarkable gains achieved by learners in these school contexts are possible at scale, with the right learning tools in their hands, and adult supporters alongside them who know how to use these tools effectively.
Underlying Principles

How do all the pieces of the toolbox work together?

Fundamentally, the rigor toolbox is designed to support all learners in developing and demonstrating agency as learners, thinkers, community members, and problem-solvers.

It relies on a principle of radical transparency – making visible the learning pathway, the structure of inquiry, the thinking skills and strategies of experts – and a set of tools that allow for both precision and focus in designing learning experiences, so that every learner can:

- **Self-regulate their learning process**: Set a learning agenda for themselves, so they know what they want or need to learn and can make a plan for learning it.

- **Apply automaticity**: Rely on a developed automaticity around learning and thinking skills and habits; great learners don’t have to think about how to learn, since their brains automatically engage with the learning process.

- **Build knowledge rapidly**: Develop extensive background knowledge that they can apply to new learning challenges, allowing them to quickly expand and adjust their schema.

- **Transfer learning**: Adapt and apply learning from one context to another as they notice patterns and relationships, identify significant information, and move back and forth between the general and the particular.

Contact jane@redesignu.org to learn more about reDesign's systems transformation tools & services.