

LEAP Learning Framework External Review: Executive Summary

By
Chris Dede, Harvard University
Edith Gummer, Arizona State University

BACKGROUND

This report is a summary of an 18-month, multi-disciplinary effort to review and evaluate the strength and applicability of the LEAP Learning Framework for LEAP Innovations.

LEAP Innovations works to catalyze learning innovation by creating access to equitable, high-quality, whole child-focused, personalized learning experiences for all learners. The Chicago-based 501(c)(3) organization works to innovate within the education system, building new learning pathways and helping to shape systems change. This includes changing the methodology of teaching; incorporating and evaluating new technology innovations; redesigning to create next-generation schools; and conducting and pioneering research and evaluation efforts.

All of LEAP’s work in the field to date—with more than 140 schools and 2400 educators in Chicago, as well as more than 400 schools in 23 states via its personalized learning surveys—is anchored in the LEAP Learning Framework. The Framework serves as LEAP’s definition of “personalized learning.” Since 2016, its components and guidelines have undergirded educator strategies to implement personalized learning practices.

The Framework is organized around four key pillars of personalized learning—Learner Focused, Learner Led, Learner Demonstrated, and Learner Connected—and articulates the components and guidelines students should experience.

Given the growth of personalized learning, as well as mounting misperceptions around the term, LEAP formally commissioned us to conduct an evaluation of its Framework. By design, the LEAP Learning Framework is an amalgamation of evidence- and research-based best practices in teaching and learning. The research and science is not new, but the synthesis of it into the Framework is. As the research professionals and educators at LEAP continue to refine and expand their work, the organization regularly taps field representatives to review, challenge, and provide perspectives on what’s working well—as well as how to strengthen the components and guidelines within it.

The framework assumes, as a given, these three guiding principles:

Every learner will succeed with support that’s customized to the child’s interests and needs

When they are engaged in a more personalized manner, students will often master content well above curriculum standards or developmental guidelines. We can and should reframe how educators set and raise expectations for our students.

Every learner brings strengths and talents to the classroom

The diverse knowledge bases, life experiences, languages and cultures of children are powerful assets for their learning—as well as the learning of those around them—and need to be leveraged as such.

Learner agency is essential

Our world of work increasingly requires more leadership, agility and self-direction. At an early age, we must inspire our students to assume responsibility of their own learning, and help co-design it.

In this external review of the Framework, we leveraged a specific validation process called AGREE II, which is explained in more detail below. The study was aimed at pressure-testing the Framework to determine if it reflected best practice—if the strategies as written were clear, actionable, and supported by the latest research.

What we learned from this external review was deeply reassuring and reflects a positive consensus: A diverse set of education stakeholders, including many skeptics of personalized learning, broadly validated the Framework as an actionable guideline for informing a modern, personalized education. **In sum, the review suggests the Framework structure rests on a very solid foundation. With some minor—though meaningful—refinement, the field representatives affirmed the power of the LEAP Learning Framework for classroom practice, research, and broader adoption.**

Below we summarize the validation study: the methodology, findings, and next steps.

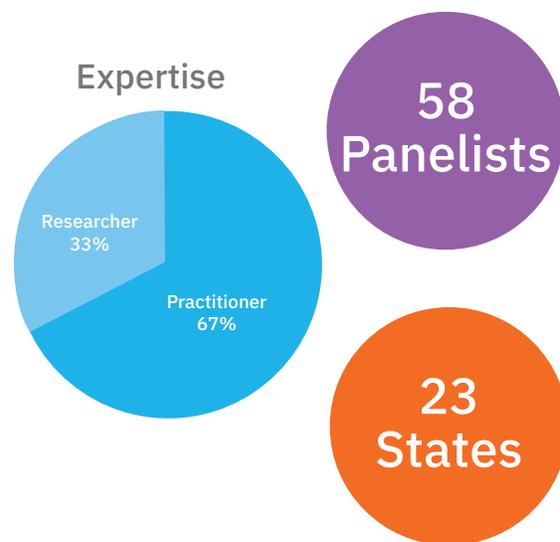
METHODOLOGY

The purpose of this study is to examine the quality of the Framework as a set of “practice guidelines.” Practice guidelines are more common in the medical field than in education, because medicine tends to focus on the “how” of teaching, while education standards typically focus on “what” is being taught. For this reason, we used an instrument originally developed to analyze the quality of medical practices called The Appraisal of Guidelines for Research and Evaluation, or AGREE II. The AGREE II process gauges quality by measuring the methodological rigor and transparency through which guidelines are developed. The process typically analyzes six domains of guideline development; it was adapted here to work for educational practice.

As adapted, the AGREE II process honed in on two domains most relevant to this work—“rigor of development” (which examines how thoroughly guidelines are reviewed by outside experts) and

“clarity of presentation” (which assesses the specificity and lucidity of guidelines). This analysis also builds off two literature reviews that examined the scholarly evidence underlying the Framework components.

The expert process convened four panels over nine months, reflecting a diversity of background, race, profession, geography, and opinions about personalized learning. A total of 58 reviewers from 23 states participated—researchers and practitioners, teachers and superintendents, leaders from all types of schools, early adopters of personalized learning, and skeptics, philanthropists, and nonprofit entities. These reviewers represented such organizations as Christensen Institute, Harvard University, Dell Foundation, Chicago Public Schools, CityBridge, Digital Promise, Teach for America, Turnaround for Children, and The Fellowship: Black Male Educators for Social Justice. During these panels, with the intention of ensuring cross-discipline debate and discussion, the reviewers split off into diverse working groups of two to three individuals.



The reviewers completed crucial analyses before and during the validation panel process. They:

- Reviewed the existing framework and rated how confident they were that a particular element is crucial for student success and developmentally sound.
- Reflected upon their own experiences with personalized learning and created a list of essential strategies.
- Pinpointed popular personalized learning strategies perceived as ineffective or risky.
- Sorted out which elements in the Framework should stay the same, be changed or clarified, or eliminated altogether.
- Identified the knowledge, skills, and attributes teachers demonstrate when successfully engaged in personalized learning, reviewing whether they align with well-respected teaching practices.

Overall, this process was a powerful validation method that we feel can become a model for other types of educational practice guidelines.

FINDINGS

Broadly speaking, reviewers developed a shared, substantial agreement that nearly all of the LLF elements should be preserved as best practice components and guidelines informing personalized learning.

Even with this widespread endorsement, the process illuminated which elements needed to be rewritten or clarified. These clarifications included:

- **Eliminating** deficit model language, to reflect the viewpoint that all students have considerable strengths
- **Emphasizing** how essential a rigorous curriculum is to guiding classroom activity
- **Elevating** the role families and communities can play in personalizing learning
- **Rethinking** assumptions around developmental levels, or what students can accomplish at various ages
- **Streamlining** elements and clarifying ambiguous language

Reviewers also wanted the elements to be consistently expressed as educator strategies, not learner outcomes. Here are some key takeaways from each of the four Framework components (see addendum for original components and guidelines, alongside the changes inspired by the evaluation):

Learner Focused

Overall, the seven elements of this component were well-received by the panelists. Most notably, the panelists identified “Learners will experience learning that is relevant, contextualized, and designed for their individual needs, interests, and strengths” as being central to personalized learning. Panelists noted concerns around the language used in one of the elements that addressed that “[l]earners develop a deep understanding of their needs, strengths, and interests” that are associated with their “living situations.” Panelists noted concerns that the term “living situation” is ambiguous and potentially stigmatizing.

Learner Led

Panelists widely agreed that the five Learner Led framework elements presented important characteristics of personalized learning, and varied little in how they rated each element. Most concerns focused on whether each guideline element as written was appropriate for every age level, notably around the element that learners will “co-design their learning experiences,” especially for early-grade students.

Learner Demonstrated

Overall, panelists identified the Learner Demonstrated component as important with the strongest support for the elements that learners will “begin at a level appropriate to their prior knowledge and learning needs,” and “progress at a pace that fits their learning needs.” Recognizing the complexity of assessments in education, panelists indicated the elements that focused on how learners “receive recognition based on demonstrated competency, not seat time” and “demonstrate competency when ready” raised some concerns.

Learner Connected

One Learner Connected guideline—that learners will “collaborate with peers, family, educators and others”—surfaced as relatively easy to rank and endorse. In the discussion about the rest of the component, participants believed the subsequent elements focused more on conditions of educational systems rather than actionable strategies for teachers and learners. Panelists indicated that equity, cultural, and developmental issues needed greater articulation.

CONCLUSION: NEXT STEPS FOR THE FIELD

The LEAP Learning Framework should continue to evolve as a tool for teachers, but teachers alone cannot shoulder the responsibility of reshaping our system of learning. Schools and districts must support and develop educators along this complex journey, with community resources, targeted professional learning, technology, and a culture of innovation. Personalization is about learning all the time and everywhere, not just in schooling.

Recommendations for broader action:

- **Build a roadmap:** The Framework can unpack how a teacher, school, or district progresses to personalized learning.
- **Show, don't tell:** Educators can benefit from even more concrete examples of how successful teachers implement these practices in their classrooms.
- **Deepen the research base:** Release all materials in this validation study to a research team that can examine these findings in a way that will stand the scrutiny of a peer-reviewed publication.

AUTHOR BIOS:

Chris Dede: Dr. Dede the Timothy E. Wirth Professor in Learning Technologies at Harvard University's Graduate School of Education (HGSE), , led the Learning Framework's external review. His research interests span emerging technologies for learning, educational policy, and leadership in educational innovation. He has served as chair of Harvard's Teaching and Learning department and been honored as an outstanding teacher. He also served on the National Academy of Sciences Committee on Foundations of Educational and Psychological Assessment and was named a Fellow of the American Educational Research Association.

Edith Gummer: Dr. Gummer, Executive Director for the Office of Data Strategy at Arizona State University's Mary Lou Fulton Teachers College and an expert validator, co-authored the LEAP Innovations research agenda and provided early recommendations for this external review. At ASU, is, she is working to transform the current iTeachAZ teacher preparation database into a longitudinal, research-enabled data system. Before her current role, she was the education research program director at the Ewing Marion Kauffman Foundation and a program officer in the Division of Research on Learning at the National Science Foundation.

ADDENDUM

Before and after the external review: LEAP Learning Framework components and guidelines:

2016 EDITION

LEARNER FOCUSED

Empower learners to understand their needs, strengths, interests and approaches to learning

Elements:

- Develop a deep understanding of needs, interests and strengths around:
 - Academics
 - Health & wellness
 - Social emotional development
 - Culture & language
 - Living situation and cognitive skills
- Experience learning that is relevant, contextualized and designed for their individual needs, interests and strengths

LEARNER LED

Entrust learners to take ownership of their learning

Elements:

- Co-design their learning experiences
- Articulate their interests, strengths and needs
- Assess, monitor and reflect on their own progress
- Partner in setting their learning goals and plans
- Advocate for support from teachers, peers, technology and other sources

LEARNER DEMONSTRATED

Enable learners to progress at their own pace based on demonstrated competencies

Elements:

- Begin at a level appropriate to their prior knowledge and learning needs
- Engage in productive struggle
- Progress at a pace that fits their learning needs
- Demonstrate competency when ready
- Demonstrate evidence of learning in multiple ways
- Receive recognition based on demonstrated competency, not seat time

LEARNER CONNECTED

Learning transcends location in relevant and valued ways, connected to families, educators, communities and networks

Elements:

- Collaborate with peers, family, educators and others
- Cultivate meaningful relationships
- Advance personal opportunities through connections
- Engage in real-world experiences to develop academic knowledge, community engagement, workplace experience and global citizenship
- Earn valued recognition for all demonstrated competencies (regardless of where and when it happens)

2020 EDITION

LEARNER FOCUSED

Learners are empowered to holistically understand their needs, strengths, and interests

Learners:

LF.1 Deepen their understanding of themselves holistically, including:

- LF.1.1 academic needs, strengths, and interests
- LF.1.2 physical and mental health
- LF.1.3 social and emotional learning
- LF.1.4 cognitive skills (i.e. focus, working memory)
- LF.1.5 identity and culture
- LF.1.6 social and community context

LF.2 Experience learning that is relevant, challenging, contextualized, and designed for their individual needs, strengths, and interests

LEARNER LED

Learners are entrusted to take ownership of their learning

Learners:

LL.1 Articulate their needs, strengths, and interests

LL.2 Partner in setting their learning goals

LL.3 Partner in shaping their learning pathways and experiences

LL.4 Assess, monitor, and reflect on their progress

LL.5 Advocate for needed support from teachers, peers, technology, and other sources

LEARNER DEMONSTRATED

Learners can progress at their own pace based on demonstrated mastery

Learners:

LD1 Begin at a challenging level appropriate to their prior knowledge and learning needs

LD2 Receive feedback on effort, process, and mastery throughout every learning experience

LD3 Advance or go deeper upon demonstration of mastery

LD4 Demonstrate learning in multiple ways

LD5 Receive recognition based on demonstrated mastery, not time

LEARNER CONNECTED

Learning transcends location in relevant and valued ways, connected to learners' families, educators, communities, and networks

Learners:

LC1 Collaborate with peers, family, educators, and others

LC2 Cultivate meaningful relationships

LC3 Advance opportunities through connections

LC4 Engage in real-world experiences to develop:

- Academic skills and knowledge
- Community and civic engagement
- Workplace experience

LC5 Earn valued recognition for all learning, regardless of where and when it happens

ACKNOWLEDGEMENTS

We'd like to thank the following professionals for dedicating their time and expertise to this evaluation process:

Cat Alexander; CEO, CA Group

Tracy Alloway; Cognitive Psychologist, University of North Florida

Wisdom Amouzou; Executive Director, Empower Community High School

Nicole Beechum; Senior Research Analyst, University of Chicago

Scott Benson; Managing Partner - Innovative Schools Team, New Schools Venture Fund

Sujata Bhatt; Managing Partner, Boston Public Schools

Samir Bolar; Vice President - Chief of Impact, Teach For America

Amanda Burke; Managing Director - Strategic Initiatives & Impact, Center for the Future of Arizona

James Campbell; STEAM Interdisciplinary Specialist, Atlanta Girls School

Tyler Chalfin; Deputy Director of Academics, New Classrooms

Rebekah Davis; Digital Learning Graduate Assistant, Doctoral Student, & Instructor, North Carolina State University

Jon Deane; CEO, Great Schools

Pat Deklotz; Superintendent, Kettle Moraine School District

Christine DeLeon; Founder & CEO, Moonshot edVentures

David Dockterman; Lecturer on Education, Harvard Graduate School of Education

Ellen Dorr; Chief Technology Officer, Renton School District

Sharif El-Mekki; CEO, The Center for Black Educator Development

Barry Fishman; Professor of Learning Technologies, University of Michigan School of Information & School of Education

Anpao Duta Flying Earth; Head of School & Mentor Teacher, Native American Community Academy

Julia Freeland-Fisher; Director of Education, Clay Christensen Institute

Rafael Gallardo; Digital Learning Manager, Seattle Public Schools

Linnea Garrett; Associate Principal of Educational Services, Rich East Campus High School

Kate Gerson; CEO, UnBounded

Louis Gomez; Professor of Education & Information Studies, UCLA

Juan Gutierrez; Principal, Patrick Henry Elementary

Virgel Hammonds; Chief Learning Officer, KnowledgeWorks

LeViis Haney; Principal, Rich Township High School District 227

Ulcca Hansen; Vice President of Partnerships & Research, Education Reimagined

Kenneth Haptonstall; Executive Director, Colorado River Board of Cooperative Education Services

Caroline Hill; Chief of School Creation & Transformation, CityBridge

Mimi Ito; Professor in Residence, UC Irvine

Sara Killebrew; Kindergarten Teacher, Springfield Public Schools

Ken Koedinger; Professor of Human-Computer Interaction & Psychology, Carnegie Mellon University

Carol Lee; Professor Emeritus of Learning Sciences, Northwestern University
Dallas Lee; Principal, Prince George County Public Schools
Steve McWade; Fifth Grade Teacher, Lovett Elementary
Barbara Means; Executive Director - Learning Sciences Research, Digital Promise
Leonard Medlock; CEO & Co-Founder, Playback Worldwide
Al Motley, Jr.; Managing Partner & Founder, TECHADEMICS
Esra Murray; Library Media Specialist, Greenwich Public Schools
Nik Namba; Director of 21st Century Learning, Lindsay Unified
Cheryl Niehaus; Program Manager - Data Driven Education, Dell Foundation
Marielle Palombo; Director of Curriculum, Listenwise
Susan Patrick; President & CEO, Aurora Institute
Jim Pellegrino; Co-Director of Learning Sciences Research Institute, University of Illinois Chicago
Anna Perry; Executive Director, Seton Montessori Institute
Matthew Peterson; Co-Founder & Chief Research and Development Officer, MIND Research Institute
Jim Rickabaugh; Senior Advisor, Institute for Personalized Learning
Stacey Roshan; Director of Innovation & Educational Technology, Bullis School
Michelle Russell; Principal, Team Englewood Community Academy
Bror Saxberg; Vice President - Learning Sciences, Chan Zuckerberg Initiative
Gisele Shorter; Program Officer - Education, Raikes Foundation
Joseph South; Chief Learning Officer, International Society for Technology in Education
Daniel Stanhope; Vice President - Research & Analytics, LeaRn Platform
Reed Stevens; Professor of Learning Sciences, Northwestern University
Chris Sturgis; Principal, CompetencyWorks
Shanda Theriot; Principal, St. Rita School - Archdiocese of New Orleans
Jessica Tsang; Manager - Learning Research, Chan Zuckerberg Initiative