

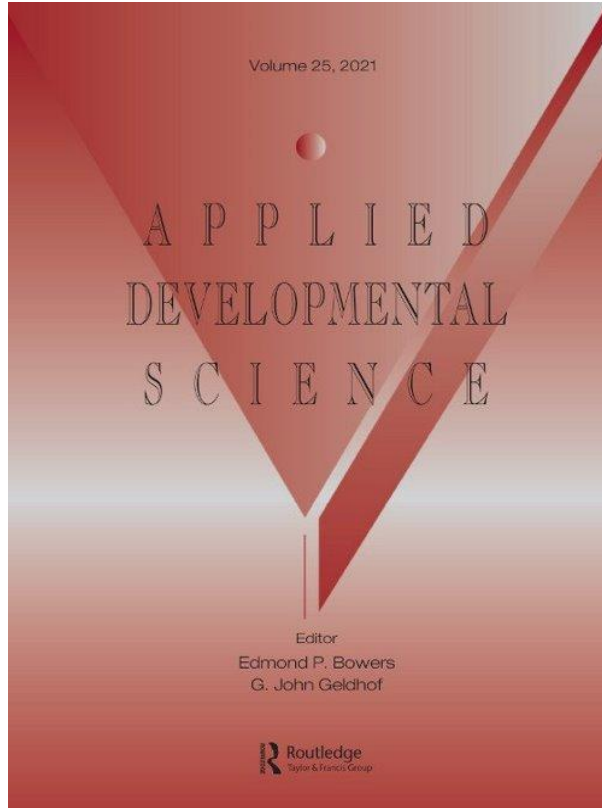


Science of Learning and Development (SoLD)

Learning Cafe

November 2, 2022

The Science of Learning and Development



Malleability, plasticity, and individuality: How children learn and develop in context

Pamela Cantor, David Osher, Juliette Berg, Lily Steyer & Todd Rose

Drivers of human development: How relationships and context shape learning and development

David Osher, Pamela Cantor, Juliette Berg, Lily Steyer & Todd Rose

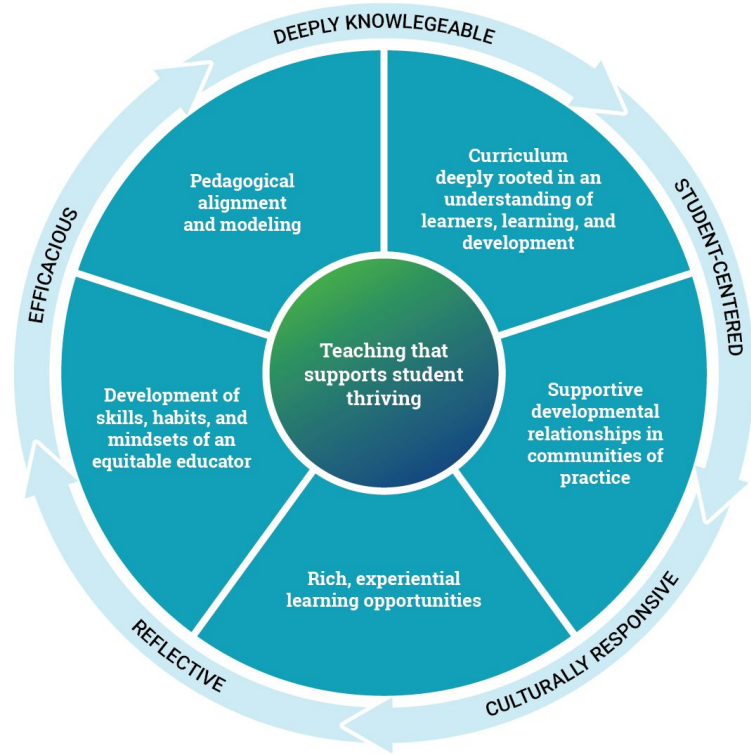
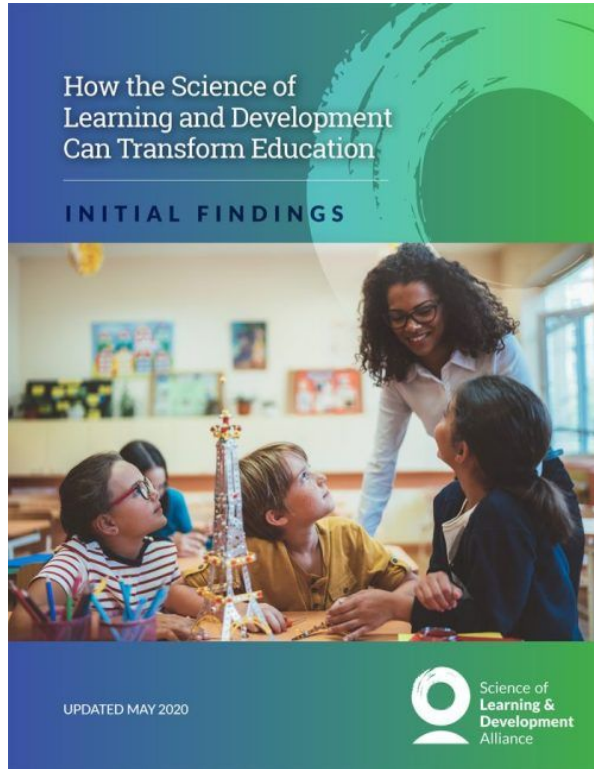
Implications for Practice of the Science of Learning and Development

Linda Darling-Hammond, Lisa Flook, Channa Cook-Harvey, Brigid Barron, & David Osher

SoLD Findings

- The brain is **malleable** and always developing
- **Variability** in development is the norm.
- Learning is **social**, **emotional**, and **academic**
- Relationships **catalyze** development and learning.
- **Adversity** affects development and learning.
- Children **construct knowledge** based on their experiences, relationships, and social contexts.

SoLD Alliance



Pause: Time to Think and Talk

Consider what was just presented about SoLD and the knowledge you bring about SoLD-aligned learning environments.

- What stands out to you as important?
- What questions emerge for you?
- Where have you seen these ideas in practice in pre-k-12 learning environments?

The Design Principles Advisory Committee

Travis Bristol, Associate Professor of Teacher Education and Education Policy, UC Berkeley

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Rebecca Cheung, Assistant Dean, Leadership Programs, UC Berkeley (leadership preparation liaison)

Steve Tozer, Senior Research Fellow, LPI (leadership preparation liaison)

Teacher Preparation SoLD Design Principles



Curriculum Rooted in a Deep Understanding of Learners, Learning, and Development

- Prepares educators who can effectively address the complex ways in which children learn and develop
- Models learning that is rooted in culture, experience, and relationships
- Equips educators with the understanding of the conditions necessary for optimal brain development in children and adolescents
- Connects subject matter with an asset-based approach to learning about students' backgrounds, families, and community
- Creates curriculum and assessments that allow students to learn deeply and authentically, engaging in inquiry that is relevant to their lives

Development of Skills, Habits, and Mindsets of an Equitable Educator

- **Develops educators with mindsets that support all students well and equitably**
- **Models empathy, approaches to social and emotional learning and cultural competence, and restorative practices**
- **Builds partnerships with families, community members, and other educators while focusing on children's learning needs**
- **Understands how contextual realities impact the experiences of their students, their understanding of themselves, their perceptions of social identities**
- **Understands how to negotiate school policies towards equitable ends**

Pause: Time to Think and Talk

Consider the first two teacher preparation design principles.

- What stands out to you as important?
- What questions emerge for you?
- In which ways does this principle guide teacher preparation at your institution? What could you do better?

Rich, Experiential Learning Opportunities

- Includes authentic and performance-based assessments
- Models a full range of learning experiences, including practice, feedback, skill development, growth in understanding, and expansion of capacity for adaptive expertise
- Uses pedagogical activities that promote inquiry and cycles of reflection
- Purposeful analysis of teaching, learning, and reasoning through complex practice situations

Pedagogical Alignment and Modeling

- Programs should be designed around a coherent vision of whole child development, learning, and teaching
- Instructors, supervisors, and cooperating teachers enact and unpack approaches they expect teacher candidates to use in practice
- Integration of theory and practice around a SoLD-aligned vision
 - Shapes preparation programs and clinical experience
 - Results in close partnerships between programs, schools, and districts

Supportive Developmental Relationships in Communities of Practice

- Give time and space to the development of professional communities of practice that promote active, interactive, constructive, and iterative learning
- Develop strong, reciprocal relationships with PK-12 schools
- Model how to create authentic, trusting learning communities that are expansive and inclusive
- Create opportunities where educators observe one another, share practices, develop plans together, and solve problems collectively
 - Ex: teacher residencies, cohorts, and clinical teaching teams

Pause: Time to Think and Talk

Consider the last three teacher preparation design principles.

- What stands out to you as important?
- What questions emerge for you?
- In which ways do these principles guide teacher preparation at your institution? What could you do better?
- Considering all of the principles together, what should be a priority for your institution to work on this year? What is the first step?

Whole Group Synthesis

- What stood out to you across your three discussions?
- What feels pressing for your own work?
- What will you bring back to your colleagues?
- What can EdPrepLab do to share our best SoLD-aligned teacher preparation practices with the field?
- Other thoughts?

Next Learning Cafes

Wednesday November 30th & Friday December 2nd

Travis Bristol, University of California, Berkeley

Jacquelyn Ollison, University of California, Berkeley

California Residency Lab

Thank you!
For more information visit:
[Edpreplab.org](https://edpreplab.org)