

SCALES_Lab_Handbook

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2025-04-12

Table of contents

Preface

Absolutely! Here's a warm, compelling introduction you can use on your SCALES Lab website homepage — tailored to appeal to students, faculty, and collaborators:

Welcome to the SCALES Lab

Study of Cognition and Learning in Educational Systems

At the SCALES Lab, we believe that education is more than a set of classrooms and policies — it's a dynamic, interdependent system where cognition, community, resources, and environments interact in complex ways. Our mission is to advance research that helps us better understand this complexity and, ultimately, use that understanding to improve educational outcomes.

We combine cutting-edge tools from cognitive science, ecology, AI and machine learning, and education policy to model how learning unfolds within real-world systems. Whether we're simulating school environments with agent-based models, analyzing national datasets using Bayesian methods, or using AI to discover new causal relationships, our goal is always the same: to build theory-driven, policy-relevant research that reflects the realities of students, educators, and communities.

Who We Are

SCALES is a collaborative research space for graduate students, faculty, and partners who are curious, rigorous, and ready to rethink how we study education. We welcome scholars from diverse disciplines — especially those who care about educational equity, systems-level change, and developing stronger methods for understanding how learning happens.

What We Do • Build ecological models of learning and achievement • Use AI and simulation to test educational theories • Develop new tools for causal inference and data integration • Mentor students in cutting-edge methods and policy-relevant research • Collaborate across institutions, disciplines, and communities

Would you like variations of this message tailored for: • Undergraduate and graduate student recruitment, • Researcher/PI collaboration, or • Public and policy audiences?

I can also help build out full site sections like Projects, Join the Lab, People, or News & Events.

1 Introduction

2 Summary

In summary, this book has no content whatsoever.

3 Conferences

Table 3.1: SCALES Lab Recommended Professional Organizations and Conferences

Organization	Research Alignment	Conference Timing	Submission Deadline	Location	Annual Dues	Primary Journal	Impact Factor
Cognitive Science Society (CogSci)	Cognitive science, computational modeling, theory development	July 30 – Aug 2, 2025	Feb 3, 2025	San Francisco, CA	Regular: \$105; Student: \$55	Cognitive Science	2.3
International Society of the Learning Sciences (ISLS)	Learning sciences, educational technology, collaborative learning	June 10–13, 2025	Nov 27, 2024	Helsinki, Finland	Regular: \$100; Student: \$50	Journal of the Learning Sciences	4.0
International Society for Systems Sciences (ISSS)	Systems thinking, ecological modeling, interdisciplinary research	July 2025	Mar–Apr 2025	Varies annually	Regular: \$150; Student: \$50	Systems Research and Behavioral Science	1.6
International Congress on Agent-Based Modeling (ICABM)	Agent-based modeling, simulation, complex systems	Varies	Varies	Varies	Regular: \$100; Student: \$50	Journal of Artificial Societies and Social Simulation	2.0

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American Educational Research Association (AERA)	Education research, policy, methodology	Apr 23–27, 2025	Jul–Aug 2024	Denver, CO	Regular: \$250; Student: \$75	Educational Researcher	5.0
Association for Education Finance and Policy (AEFP)	Education finance, policy analysis, quantitative methods	March 2025	Oct–Nov 2024	Varies annually	Regular: \$150; Student: \$50	Education Finance and Policy	2.1
Association for the Advancement of Artificial Intelligence (AAAI)	Artificial intelligence, machine learning, AI in education	Feb 25 – Mar 4, 2025	Aug 2024	Philadelphia, PA	Regular: \$125; Student: \$50	AI Magazine	1.7
International Educational Data Mining Society (IEDMS)	Educational data mining, learning analytics, AI applications	July 2025	Jan–Feb 2025	Varies annually	Regular: \$100; Student: \$50	Journal of Educational Data Mining	1.5
Society for the Advancement of Socio-Economics (SASE)	Socio-economic systems, interdisciplinary policy research	June 2025	Jan–Feb 2025	Varies annually	Regular: \$150; Student: \$50	Socio-Economic Review	3.2

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Society for Research on Educational Effectiveness (SREE)	Educational effectiveness, causal inference, policy evaluation	March 2025	Sept–Oct 2024	Varies annually	Regular: \$200; Student: \$75	Journal of Research on Educational Effectiveness	2.9
International Mind, Brain, and Education Society (IMBES)	Cognitive neuroscience, education, interdisciplinary research	2026 (Biennial)	TBD	Varies	Regular: \$100; Student: \$50	Mind, Brain, and Education	2.5