White Paper Summary

Interweaving Assessment in the Age of AI: Policy Implications for Advancing Innovation that Centers Learner Variability

Menlo Education Research facilitated the Interweaving Assessment convenings, a series of three convenings designed to examine how artificial intelligence (AI)—specifically generative AI tools—and other emerging technologies are reshaping educational assessment. Convening participants included a curated mix of individuals across the assessment ecosystem. "**Interweaving Assessment in the Age of AI: Policy Implications for Advancing Innovation that Centers Learner Variability**" synthesizes policy-relevant insights and recommendations from across the convenings, with a focus on the first convening's emphasis on AI, accessibility, and designing for learner variability.

R&D Priorities

Participants identified key research and development (R&D) priorities for advancing assessments that are more accessible, equitable, and valid through the lens of learner variability:

- **Develop a New Measurement Paradigm** by using AI-enabled personalization to generate more meaningful, instructionally relevant evidence of student learning while maintaining valid, reliable, and comparable interpretations of results.
- **Prioritize Inclusive Co-Design** by engaging students, educators, families, and communities as partners in the design of assessment systems to improve accessibility, reduce bias, strengthen validity, and build trust.
- **Address Bias in AI-Enabled Assessments** by advancing research and design practices that identify, mitigate, and monitor sources of inequities.
- **Expand Multimodal Assessment** by leveraging AI to support multiple ways for learners to demonstrate knowledge and skills beyond traditional reading and writing formats.
- **Provide Asset-Based and Personalized Feedback** by designing AI-enabled systems that offer timely, individualized insights that build on learners' strengths to support learning and instruction.
- **Establish Best Practices and Standards** by developing shared standards, transparency frameworks, and collaborative infrastructure for the responsible development, evaluation, and implementation of AI-enabled assessments.

Key Considerations & Unresolved Questions

Participants also highlighted important cautions and tensions with regard to AI-enabled assessment that warrant continued attention:

- **Address AI Training Data Gaps** to ensure assessment systems produce accurate and reliable results across learner variability.
- **Identify and Mitigate Algorithmic Bias** to prevent AI-enabled assessments from perpetuating inequities and invalid inferences about student learning.
- **Protect Student Data Ownership and Privacy** by establishing clear safeguards for the collection, use, and sharing of assessment data within and beyond AI-enabled tools.
- **Avoid Overreliance on AI** by building AI literacy and preserving professional judgment to ensure that AI-generated insights enhance, rather than replace, educational decision-making and human-centered instructional practices.

Enabling Conditions & Policy Levers

Drawing from the ideas generated by convening participants, the white paper identifies a set of enabling conditions and associated policy levers to advance innovation at the intersections of assessment, AI, accessibility, and learner variability:

- **Increase Funding for State Assessment Innovation** by expanding sustained investments that support scalable, learner-centered assessment systems.
- **Align Federal R&D to Assessment Approaches that Address Learner Variability** by directing research, development, and innovation efforts toward more responsive and inclusive assessment approaches, including those recommended in the report.
- **Strengthen Coherence and Alignment** by connecting assessment systems, standards, and educational priorities around a shared vision for student success.
- **Build Capacity of State Leaders, Teachers, and District Leaders** by equipping leaders and educators with the knowledge and tools needed to implement innovative assessments effectively.
- **Promote Trust and Responsible Use** by ensuring AI-enabled assessments are transparent, secure, equitable, and community-informed.

The Interweaving Assessment convenings underscored a significant opportunity to reimagine educational assessment. By centering learner and context variability, accessibility, and responsible innovation, the field can design assessment systems that are not only more technologically advanced, but also more inclusive, valid, and responsive to every learner.