

## **AI-Supported Open Educational Resources for Adaptive and Inclusive Learning Systems**

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### **Abstract**

Artificial intelligence and data-informed approaches are increasingly used to support the development of Open Educational Resources, improving accessibility, adaptability, and equity in learning environments. This presentation describes a grant-funded project that implemented a structured process for developing OER materials aligned with licensure standards. The process included collaborative content development, use of established digital repositories, and application of an equity review rubric to guide inclusive design.

Project outcomes and supporting research highlight how data-informed practices and emerging AI-supported tools can strengthen OER development through improved resource curation, enhanced accessibility features, and ongoing refinement. These approaches support more adaptive learning environments that respond to diverse learner needs. Integration of equity-focused frameworks further ensures that materials are culturally responsive and accessible.

Positioning OER as adaptive, data-informed systems expands their role within digital learning environments and connects to broader applications of intelligent systems and human-centered design. This perspective supports the use of structured, responsive systems to improve access, engagement, and outcomes across diverse learning contexts.