SCOTT BESS

PRESIDENT & CEO,
INDIANA CHARTER
INNOVATION CENTER

"Students move forward once they demonstrate mastery, whether that happens in a traditional class, an internship, or an online module."

DESIGNING HIGH SCHOOLS FOR MASTERY, NOT MINUTES

AI offers a transformative alternative to the familiar structure of high school, one that enables personalized mastery of essential skills, individualized career readiness, and learning that extends far beyond classroom walls.

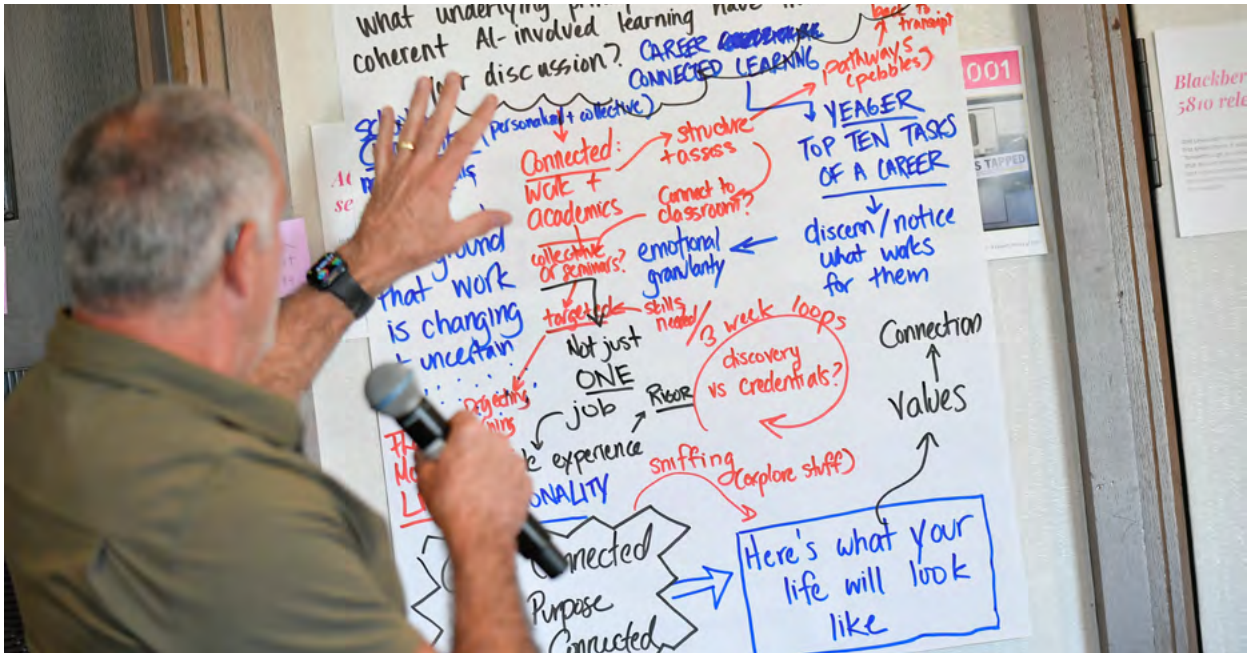
This shift makes it possible to move beyond siloed courses and rigid master schedules. Instead, we can move toward a competency-based system, in which whether a student has mastered the skills required for graduation and for their chosen post-high-school pathway matters more than where or when learning occurs.

In several Indiana schools supported by the Indiana Charter Innovation Center, leaders are already experimenting with competency-based models. Students move forward once they demonstrate mastery, whether that happens in a traditional class, an internship, or an online module. AI can make this easier to manage at scale.

For example, instead of a teacher manually tracking dozens of standards across spreadsheets, an AI system could flag that a student has mastered linear equations but is still struggling to explain their reasoning in writing. When an AI system identifies that a student needs to learn a specific concept or skill, teachers can offer rigorous "just-in-time" seminars focused precisely on that competency. Instruction would become more targeted, efficient, and impactful. Teachers

would support only the students who need that skill at that moment, rather than delivering full-course curricula to an entire group regardless of readiness.

Several Indiana schools are pairing coursework with internships in healthcare, advanced manufacturing, and IT. The challenge has been documenting what students are actually learning on the job. For example, a student interning in a hospital setting may demonstrate communication, data analysis, and problem-solving skills daily. Still, unless those skills are tied to specific state standards or course competencies, schools struggle to determine how they translate into credit. AI tools could help analyze supervisor feedback, student reflections, and project artifacts to determine whether students are meeting academic standards through those experiences. Instead of pausing workplace learning to return to a traditional classroom for a missing requirement, schools can embed academic skill development within authentic experiences. Teaching and learning would become more relevant, integrated, and responsive to student pathways.



One issue that is prevalent today regarding internships and apprenticeships for high school students is the lack of awareness of students about potential career paths. In fact, career counseling and coaching are some of the most powerful applications of AI. In many high schools, counselors manage caseloads of 300 or more students. Personal career guidance is limited by time. AI tools could help counselors quickly see patterns in a student's interests, coursework, attendance, and local workforce needs, giving them a stronger starting point for conversation. Virtual mentoring, resume support, skill-based matching for internships, and access to industry-recognized credentials could be integrated seamlessly into the student experience.

The goal is not to replace counselors, but to give them better information and more time to focus on relationship-building. In this way, AI becomes a partnership tool—elevating support and opening doors that students may not have known existed.

By eliminating the constraints of a master schedule and expanding how and where learning can happen, AI redefines the role of schools. Teachers would spend less time delivering the same lesson to 25 students and more time coaching small groups, reviewing projects, and designing experiences. Schools could coordinate internships, dual credit, and project-based learning without losing track of graduation requirements. AI insights help leaders identify systemic gaps and design new internships, seminars, or collaborative projects to ensure equity and complete access to essential competencies.

"The shift from discrete courses and rigid schedules to a mastery-based, experience-rich system...is a fundamental reimagining of what it means to be educated in the 21st century."

In a world where industries evolve rapidly and careers emerge unpredictably, students need agility, agency, and real-world readiness. AI provides a dynamic foundation for schools to prepare graduates who are adaptable, skilled, and connected to meaningful futures. The shift from discrete courses and rigid schedules to a mastery-based, experience-rich system is not just an instructional evolution—it is a fundamental reimagining of what it means to be educated in the 21st century. When used thoughtfully, AI empowers education to become more relevant, equitable, and deeply aligned with each student's potential and purpose.