Many school systems lack the agility, strategies and mindsets to move innovative technology practices from a few classrooms to multiple settings across schools and school systems. Institutionalizing innovation requires a systemic, iterative approach, including ways to identify effective practices to scale and sustain.

Equitable access to broadband connectivity, digital tools and content, and innovative instructional strategies is a growing concern. Socioeconomic status, geography, race, gender or disability limit access to opportunities to learn in a digital world.

Rapid advances in technology are putting pressure on educators to refresh or shift their approaches to teaching and learning. When digital tools are introduced without a continual, dialectical relationship between research and pedagogy, or without timely professional development for teachers, technology implementations can result in wasted time, effort and investments—and lost opportunities to learn for students.

Engaging all teachers in meaningful professional development on innovative teaching practices is key to successful technology integration. Top-down, one-size-fits-all, sit-and-get training shows little to no impact on student achievement. Instead, personalized, job-embedded professional development can support teachers in their journeys as lifelong learners and practitioners who continue developing their professional skills.

Artificial intelligence, robotics and “deep learning” are among the game-changing technologies that are altering how people think, learn, live and work. Now is the time for educators to seriously consider how technologies on the horizon will impact teaching, learning and the world that awaits students in coming years. Digital fluency is rapidly emerging as critical for workforce preparedness. Digital citizenship is important as well, as students must understand how to live ethically and responsibly in the digital world.

* Featured in this Driving K–12 Innovation / 2019 Hurdles report