MACHINE LEARNING TECHNOLOGY COULD CHANGE K-12 EDUCATION AS WE KNOW IT

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Machine learning can dramatically improve K-12 education

ML-powered personalized learning enables...

- Traditional classroom to become a thing of the past
- Changes to how teachers and students interact
- Redefined school days and grades to be more fluid
- Students become even stronger advocates for their own learning

★ Lack of clarity on how to get from here to "there"

Ideas from an article written in May 2018
by Illuminate Education
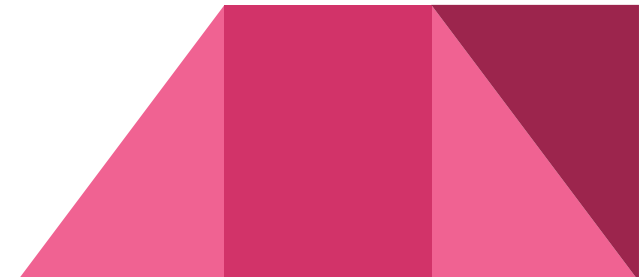
Must close data and analysis gap to support the four pillars of personalized learning

1. Learner Profiles

2. Personal Learning Paths

3. Competency-Based Progression

4. Flexible Learning Environments
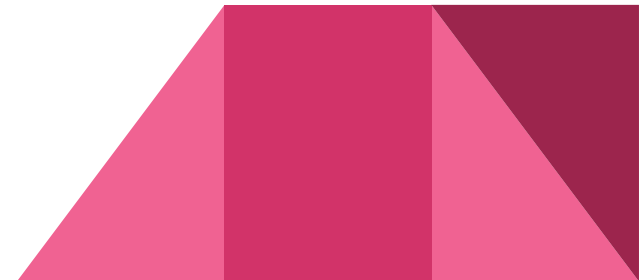
Filling the Gaps

Step 1: Capture data about what works when and for whom
- Move to a 1:1 classroom model
- Develop learning modules and evaluation tools
- Deploy platforms that integrate 1:1 learning, group learning and teacher-directed learning

Step 2: Leverage data to drive ML-powered instruction
- Power online instruction
- Assist with teacher-directed instruction
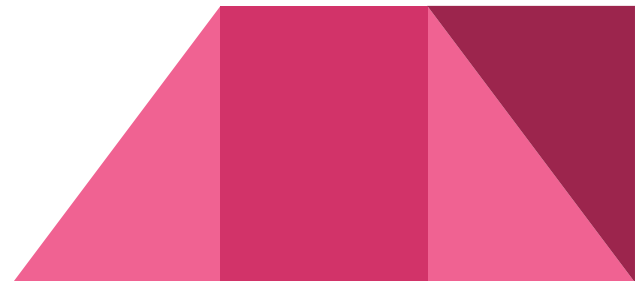
Who is motivated?

- State Departments of Education and Council of Chief State School Officers (CCSSO.org)
- Foundations
- Higher Education Institutions
- EdTech Businesses
- Forward-thinking K-12 School Districts
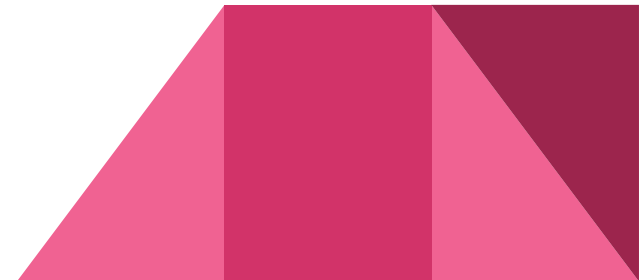
Many obstacles to implementing this vision

- Lack of content
- Data collection
- Agreement of how to measure efficacy
- Tools to support implementation
- Leadership & teacher training
- Language in teacher contracts
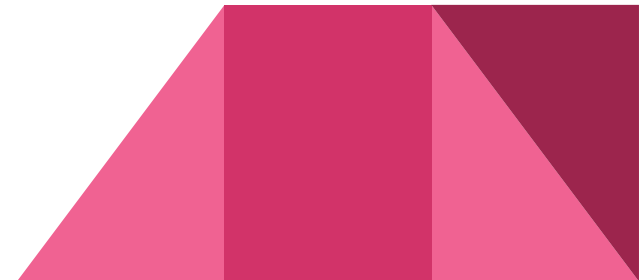
Bibliography

Ebook: "Will Machine Learning Change the Path of K-12 Education?" by Dr. Abram Jimenez and Chris Walker (May 2018)

Article: "Technology is transforming what happens when a child goes to school" (Economist, July 2017)
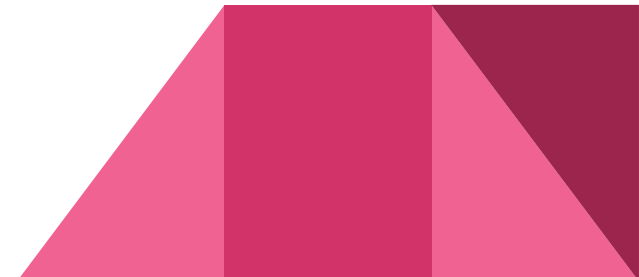
Questions?

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