

Information Technology's Role in Student Access and Success

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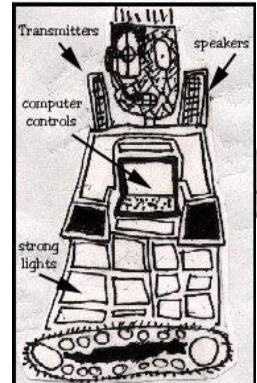
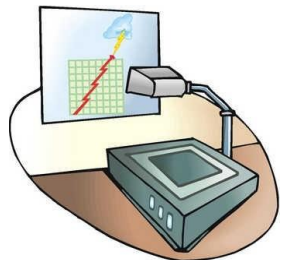
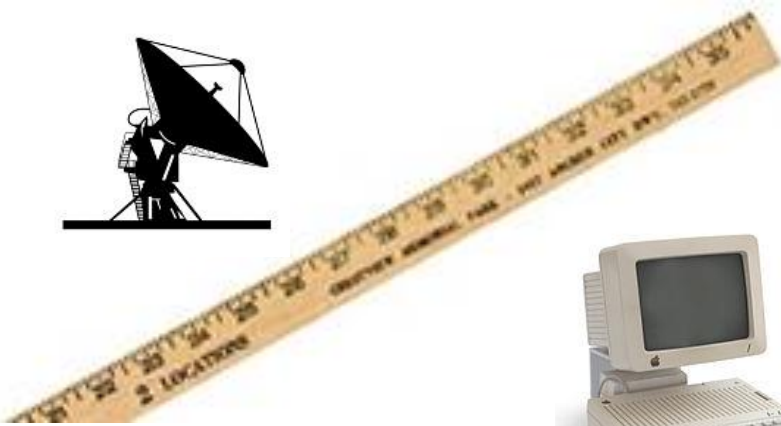
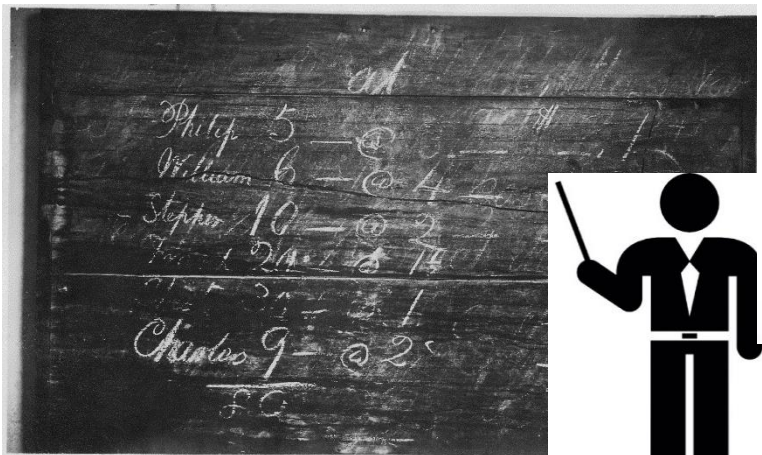
Teaching and Learning: Socratic/Platonic Ideal



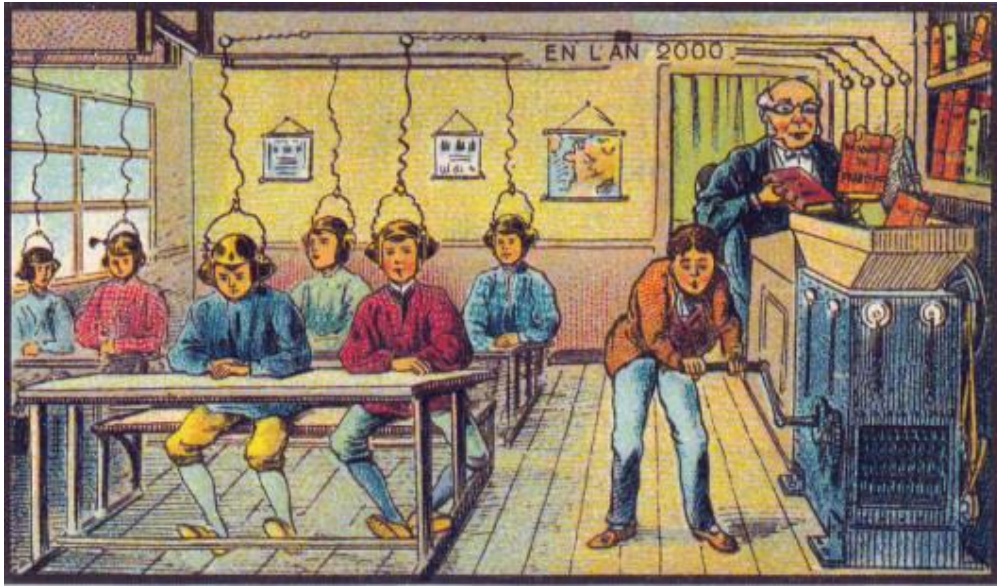
Rafael: Plato's Academy, 1509-1511

- Critical Thinking Orientation
- Socratic Method
- Personalized and Bespoke
- Engaged Students
- Mentored
- Active and Interactive
- Small Scale
- Elite
- Anti-Technology

Technology and Learning: An Illustrious History?



Sponges, Filters and Pumps: Education (and Technology) Models for the Industrial Era

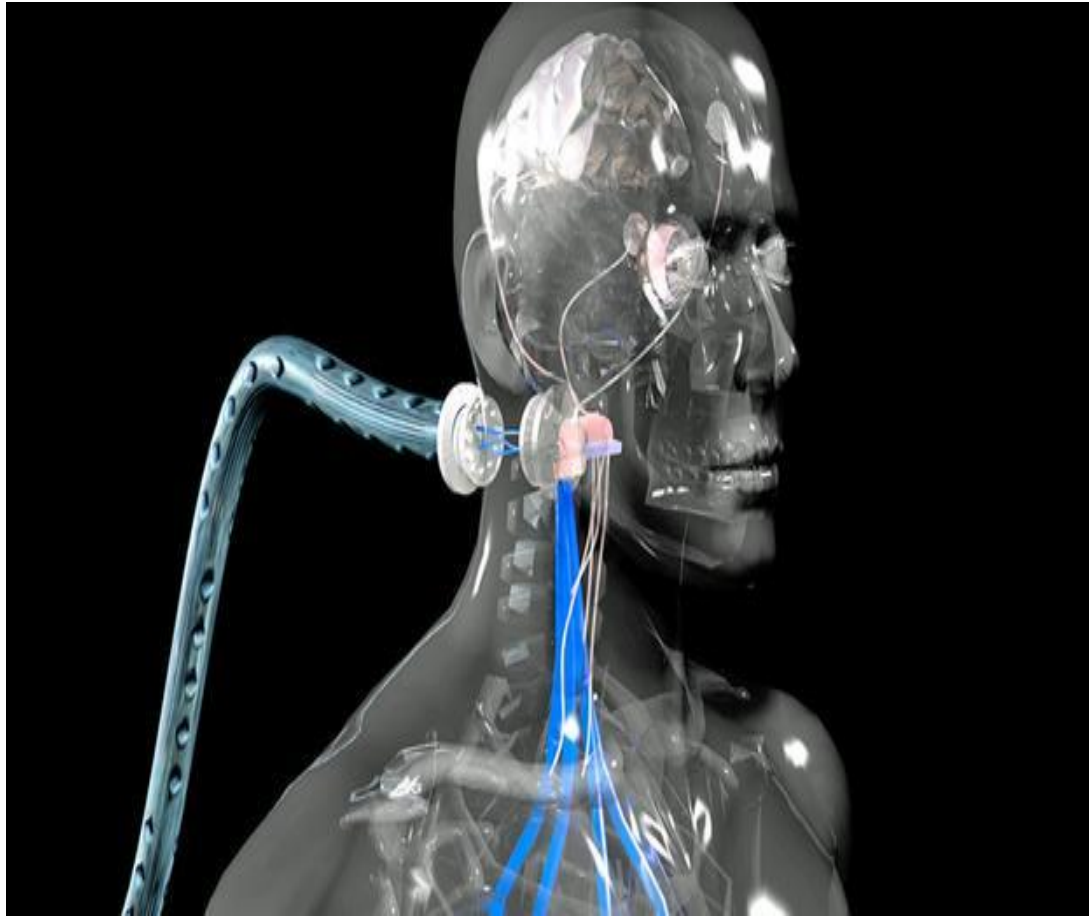


- Standardization via Textbooks
- Scale Economics via Lecture Halls
- Imparted Wisdom via Sages on Stages, Repetition, and Rote Learning
- Measurement via Student Testing
- Focus on Throughput by Lowered Standards and Remediation



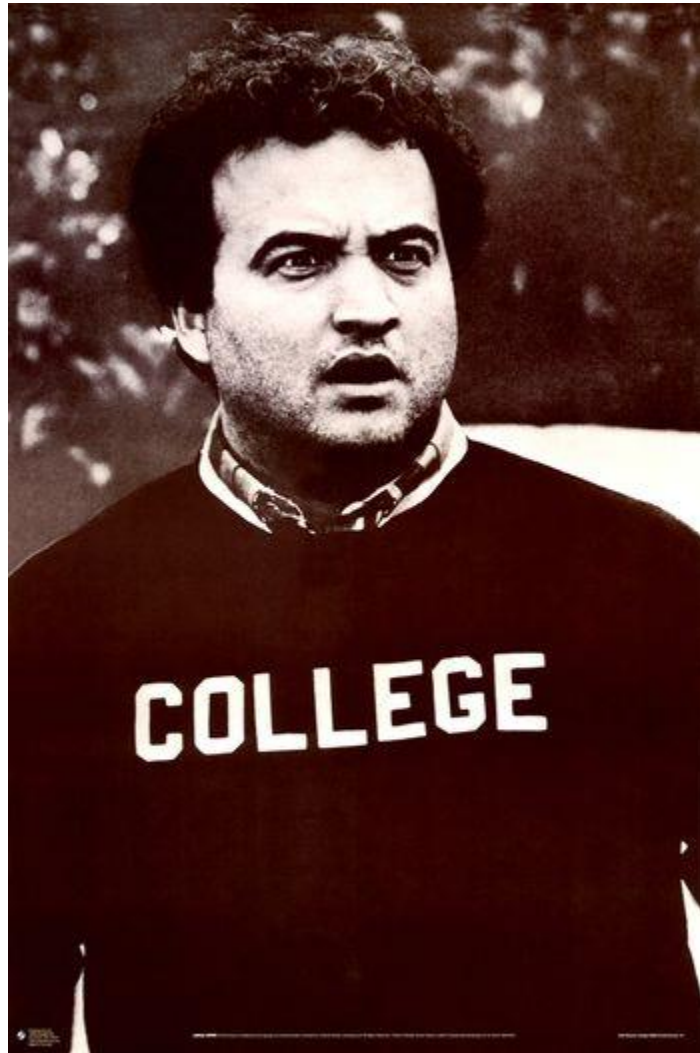
- Standardization and Measurement
- Scale Economics
- Focus on Efficiency, Throughput and Speed
- Focus on Inputs
 - Prospecting for the Most Promising Students
 - Student-Teacher Ratios
 - Endowment per Student
 - Number of Computer Labs

Post-Industrial Progress?



- Major strides in neuroscience, but
 - Continued quest for silver bullets, magic wands, painless learning, diet pills, mind transplants
- Accent today is on personalization and connectivity
- Growing realization that student experience and success have a huge co-curricular dimension

IT in the Student Experience



- Use Technology to Squeeze Out Administrivia
- Use Social Networks To Enlarge the Institution's Footprint + Eliminate Boundaries for Students
- Use Predictive Analytics, Alerts, Interventions to Create a More Personalized Learning Experience
- Online May be Biggest Enabler of Access in the Past Decade
 - Online quality shows 'No Significant Difference,' but online outcomes lag on-ground counterparts
 - Rate of investment in online > than that on-ground

Change is Hard

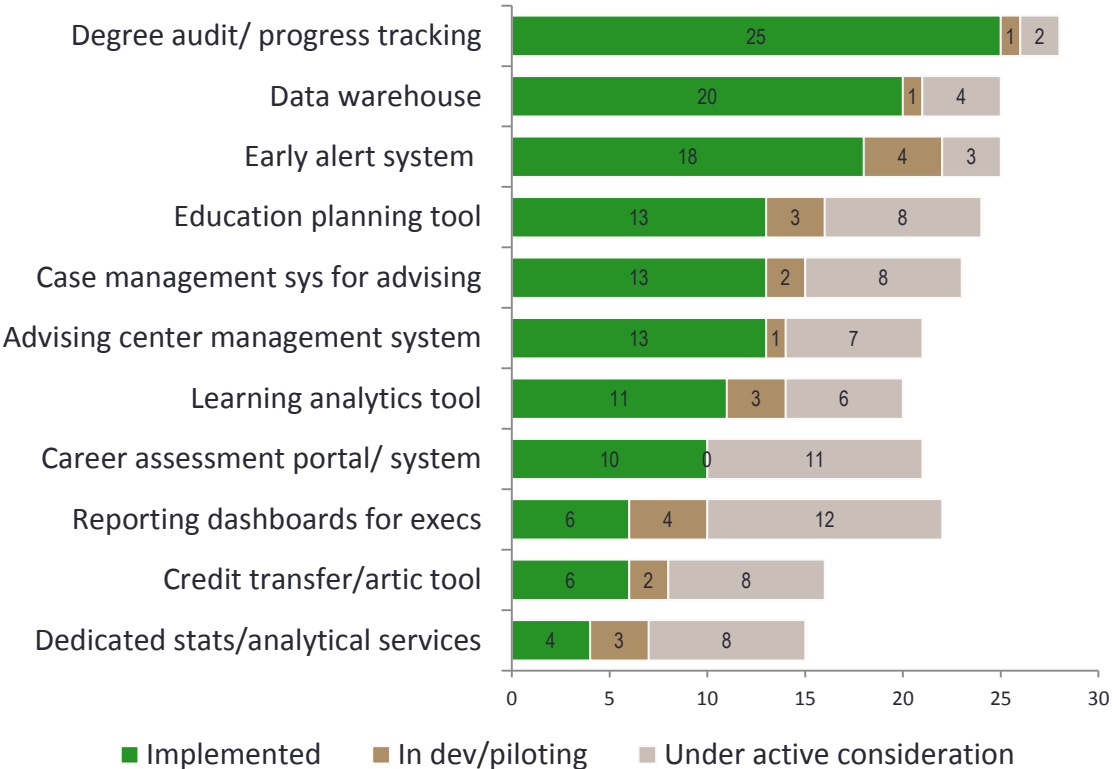


Source: Washington Monthly

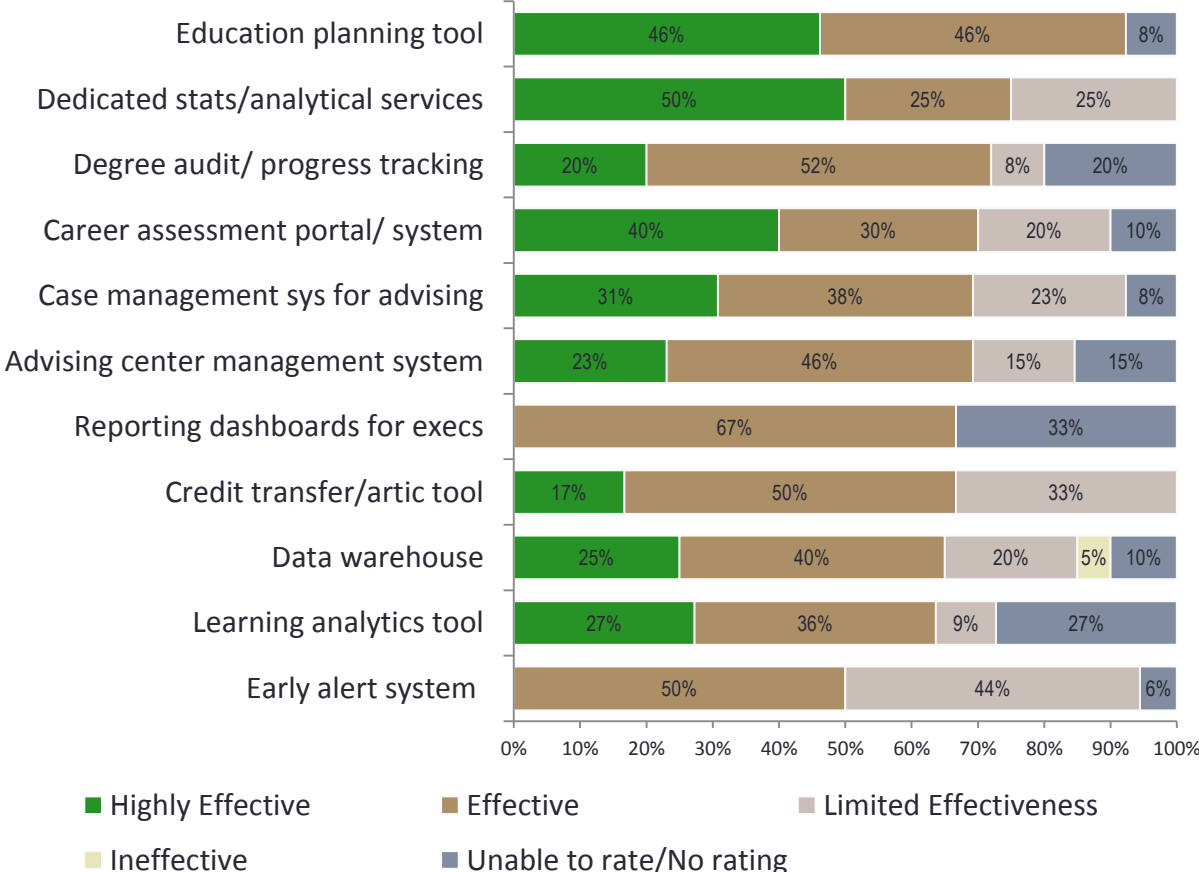
- Technology is an Enabler
 - Data environment must be right
 - Culture of Evidence + Action
 - Experimentation + Risk Tolerance
 - Widespread training
 - Sensible Incentives
 - Rigor
 - Experimentation
 - Innovation
 - Successful Outcomes
- Specter of Disruption is Real
- Early Days = Cautious Optimism

Mobilization Underway, Outcomes Uncertain

Student Success Technologies Deployed in Colorado



Student Success Technologies Perceived Effectiveness in Colorado



Advice for Trustees and Regents?

- Increase and broaden environmental scanning
- Support pilots, experiments, prototypes
 - Monitor progress
 - Tolerate noble failures
- Consider legacy projects or “moonshots”
- Invest in culture change
- Encourage evaluation of experiments
- Recognize the equivalency (in students’ minds) of the F2F and the virtual
- Build a network of strategic partnerships
- Bolster organizational capacity
 - Remember, Change is Hard + the Journey is Long

