



# Predictive Analytics in Higher Education

Manuela Ekowo

New America

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# Overview

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- 1. Introductions**
- 2. Definitions**
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# Predictive, what?

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***Analytics*** is the analysis of a college or university's data to answer questions about the college and its students.

***Predictive analytics*** is the analysis of a college or university's historical data to make predictions about what may happen in the future.

# Predictive Analytics in Action

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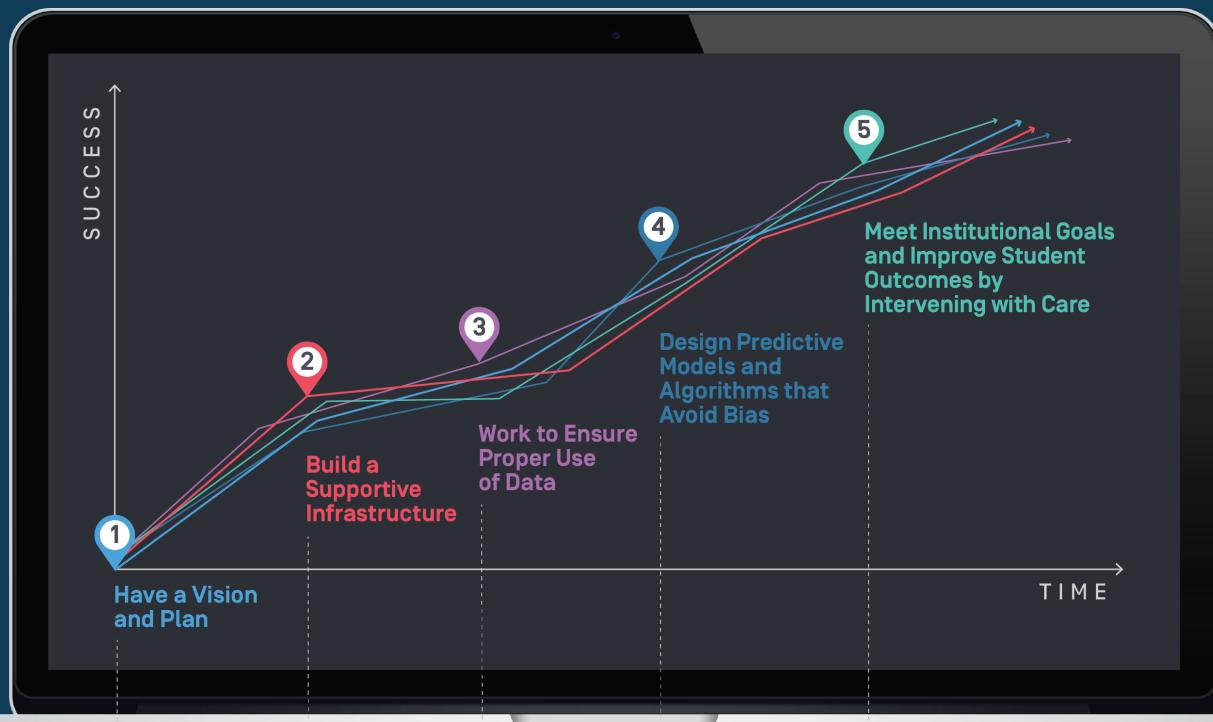
- Recruit, admit, and offer aid to new students (*enrollment*)
- Identify students at-risk of failing (*early alerts*)
- Offer students guidance on course and degree plans (*recommender systems*)
- Help students reach course learning goals (*adaptive technologies*)

# Campus-based Examples

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- Georgia State University
  - Atlanta, Georgia
- University of South Florida
  - Tampa, Florida
- Austin Peay State University
  - Clarksville, Tennessee
- Central Piedmont Community College
  - Charlotte, North Carolina

## Predictive Analytics In Higher Education: **Five Guiding Practices For Ethical Use**



- Convene key staff to make important decisions.
- Consider the purposes, unintended consequences, and outcomes to measure when developing the plan.
- Communicate the benefits of using predictive analytics and create a climate where it can be embraced.
- Develop robust change management processes.
- Assess institutional capacity.
- Ensure data are complete and of high enough quality to answer targeted questions.
- Ensure data are accurately interpreted.
- Guarantee data privacy.
- Monitor data security.
- Design predictive models and algorithms so that they produce desirable outcomes.
- Test and be transparent about predictive models.
- Choose vendors wisely.
- Embed predictive-driven interventions into other student success efforts.
- Communicate to staff and students about the change in intervention practices.
- Recognize that predictive-driven interventions can do harm if not used with care.
- Carefully communicate when deploying interventions.
- Train staff on implicit bias and the limits of data.
- Train students to use their own data.
- Evaluate and test interventions.