

An Introduction to  
**Predictive Analytics**



Texas Higher Education  
Coordinating Board

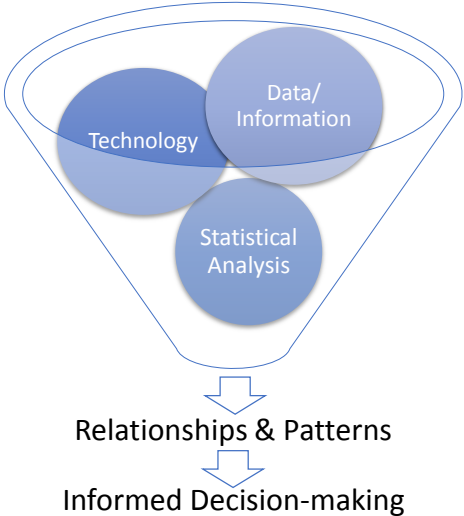


Completion Goal

Tracey M. Armstrong, Ph.D.  
Director of Innovation

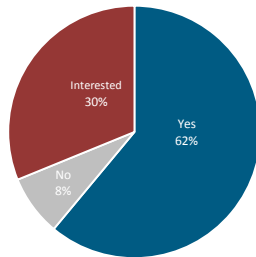


# What is Predictive Analytics?



## Survey of Predictive Analytics at Texas IHEs

**92% Use or Are Interested in Using PA to Improve Completion**



**Top 2 Uses of PA Aim at Success Outcomes and Early-Alerts**

**87%**

Use PA to improve student success outcomes, such as retention, time-to-degree, student progression, and course grades

**81%**

Use PA to identify, at an earlier time, students who may have academic difficulty

## How Do U.S. Colleges Use Predictive Analytics?

- Identify at-risk academic and non-academic behavior and plan interventions
- Match students with courses and majors and make recommendations of sequence of courses
- Accelerate and enhance learning by anticipating content and resources to meet learner's needs
- Use past data to predict type of students who will enroll
- Assist with marketing and recruitment


## With Great Power Comes Great Responsibility

- Ethical use of data
- Limits of data
- Implicit bias
  - Discrimination & labeling
- Training of staff
- Transparency
- Privacy
- Access & cost
  - Home-grown systems
  - Vendors


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## Distinguished Panel

|                             |  |
|-----------------------------|--|
| <b>National Perspective</b> | <p><b>Ellen Wagner, Ph.D.</b><br/>         Co-founder &amp; Chief Research Officer,<br/>         Predictive Analytics Reporting (PAR)<br/>         Framework and Vice President of Research,<br/>         Hobsons</p>  |
| <b>Local Perspective</b>    | <p><b>Michelle Callaway</b><br/>         Lead Research Programmer Analyst, Institutional<br/>         Research &amp; Effectiveness, San Jacinto College</p> <p><b>George González, Jr.</b><br/>         Director, Institutional Research &amp; Effectiveness,<br/>         San Jacinto College</p> |
| <b>Policy Perspective</b>   | <p><b>Iris Palmer</b><br/>         Senior Policy Analyst<br/>         New America</p>  |


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