Feel Your Pain

I understand your need not just to collect data, but to make meaning in actionable ways from the data.

- Ph.D. in Higher Education Leadership, Auburn University, 1995
- Served as a Dean at two regionally accredited universities
- Served as a data analyst in and institutional effectiveness office for three years
Touching the Elephant

It's a fan!

It's a wall!

It's a rope!

It's a snake!

It's a spear!
Types of Data Used To Predict Learner Success

**WHO**
- Academic Success – GPA, Standardized Tests
- Demographic – Income level, first generation college student
- PAR Variables

**WHAT**
- Learning Pathways – Blackboard
- Engagement – Starfish

**WHY**
- SmarterMeasure Learning Readiness Indicator

Data about “WHY” a student does something is actionable.
SmarterMeasure
Learning Readiness Indicator

• A 124-item online skills test and attributes inventory that measures a student’s level of readiness for studying online
• Used by over 500 Colleges and Universities
• Since 2002 taken by over 2,225,000 students
What Does The Assessment Measure?

**INTERNAL**

**INDIVIDUAL ATTRIBUTES**
- Motivation
- Procrastination
- Time Management
- Help Seeking
- Locus of Control

**LEARNING STYLES**
- Visual / Verbal
- Social / Solitary
- Physical / Aural
- Logical

**EXTERNAL**

**LIFE FACTORS**
- Availability of Time
- Dedicated Place
- Reason
- Support from Family

**SKILLS**

**TECHNICAL**
- Technology Usage
- Life Application
- Tech Vocabulary
- Computing Access

**TYPING**
- Rate
- Accuracy

**ON-SCREEN READING**
- Rate
- Recall
1. What are the most important personal characteristics required to succeed as an online student?

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Noncognitive Data is a Valid Indicator of Student Success & Retention

Middlesex Community College

- Before SmarterMeasure™ was implemented, 6% to 13% more students failed online courses than students taking on-ground courses. After the implementation, the gaps were narrowed: 1.3% to 5.8% more online students failed than on-ground students.
Academic Success Rates

Less than 10% of students with low scores experienced academic success.
## Statistically Significant Relationships

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Using Discriminant Analysis a composite using the scales of Life Factors, Individual Attributes, Technical Competency, Technical Knowledge, and Learning Styles was created to predict levels of engagement and satisfaction with 93% classification accuracy.
Statistically significant correlations were found between SmarterMeasure scores and student satisfaction, retention and academic success.
Readiness and Satisfaction

Individual attributes:
- Academic
- Help seeking
- Persistence
- Procrastination
- Time management
- Locus of control

Life factors:
- Time
- Place
- Reason
- Resources
- Skills

Satisfaction:
- Met expectations
- Overall satisfaction
- Enroll again
### Comparison to Compass Scores

X indicates statistically significant correlation between scores

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Satisfaction Data

- SETE – University of North Texas
  - Algorithm for reducing student bias
    - Time of day of course
    - Academic department
    - Delivery system
    - 24 variables

SmarterSurveys™
Data that makes sense
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