



2018

Utilizing Triangulation Methodology to Analyze Institutional-Level Student Learning Outcomes

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Overview

- Background
- Data Collection and Analysis
- Telling Our Story



Objectives

- Participants will be able to
 - describe the use of triangulation methodology to explore student progress on institutional level learning outcomes
 - discuss the process of identifying the narrative that works best for your stakeholders



Poll Everywhere

- Two methods to submit your answers to the questions on the following slides:
- Join by Web:
 - Go to PollEv.com
 - Enter MITCHELCOTTE340
 - Respond to each activity
- Join by Text
 - Text MITCHELCOTTE340 to 22333
 - Text in your answer to each activity

Have you ever attended the Assessment Institute?

Yes

No

What is your role at your institution?

Faculty Department
Chairperson Dean,
Assistant Assessment
Dean Professional Other

Why did you choose to attend this presentation?

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

UNC Charlotte

- Doctoral research university
- Urban setting in North Carolina
- 30,146 students enrolled
- 3,999 entering freshmen(Fall 2020)
 - Majority are first-generation
 - 70% receive financial aid
 - 24% enter as undeclared/undecided students
- 2,632 entering transfers





The Catalyst For Our Work

Taking stock of what data you already collect

Our Time, Our Future: Strategic Directions

- Gap: No national assessment for student learning outcome
- Goal: To become a national leader in the assessment of student learning
- General Education Council (GEC) charge:
 - complete a comprehensive review of existing general education structures
 - develop a set of learning outcomes for all institutions
 - explore methodologies appropriate for assessing these outcomes
 - recommend operational definitions, tools and research designs for measuring general education competencies



GEC Recommendations

- Critical thinking and written communication were the common learning outcomes
- Use assessment strategies to inform an questions about each institution's specific population and goals;
- Set the cycle and scope of testing to meet the institution's curricular needs;
- As part of the VSA, include a standardized assessment to provide an external benchmark for SLOs;
- Balance administrative costs of assessment against the quality of information derived from assessment, with a focus on assessment data that are sufficiently granular to improve teaching and learning in the classroom.



Mapping measures



What data are we collecting about
GEC recommended outcomes?

Mapping Measures

Reviewed Assessments Involving Critical Thinking and Written Communication

- Authentic Assessments
- Externally-normed exams
- Nationally-normed student surveys
- System-level surveys

Mapped information based on similar categories of knowledge/skills/abilities

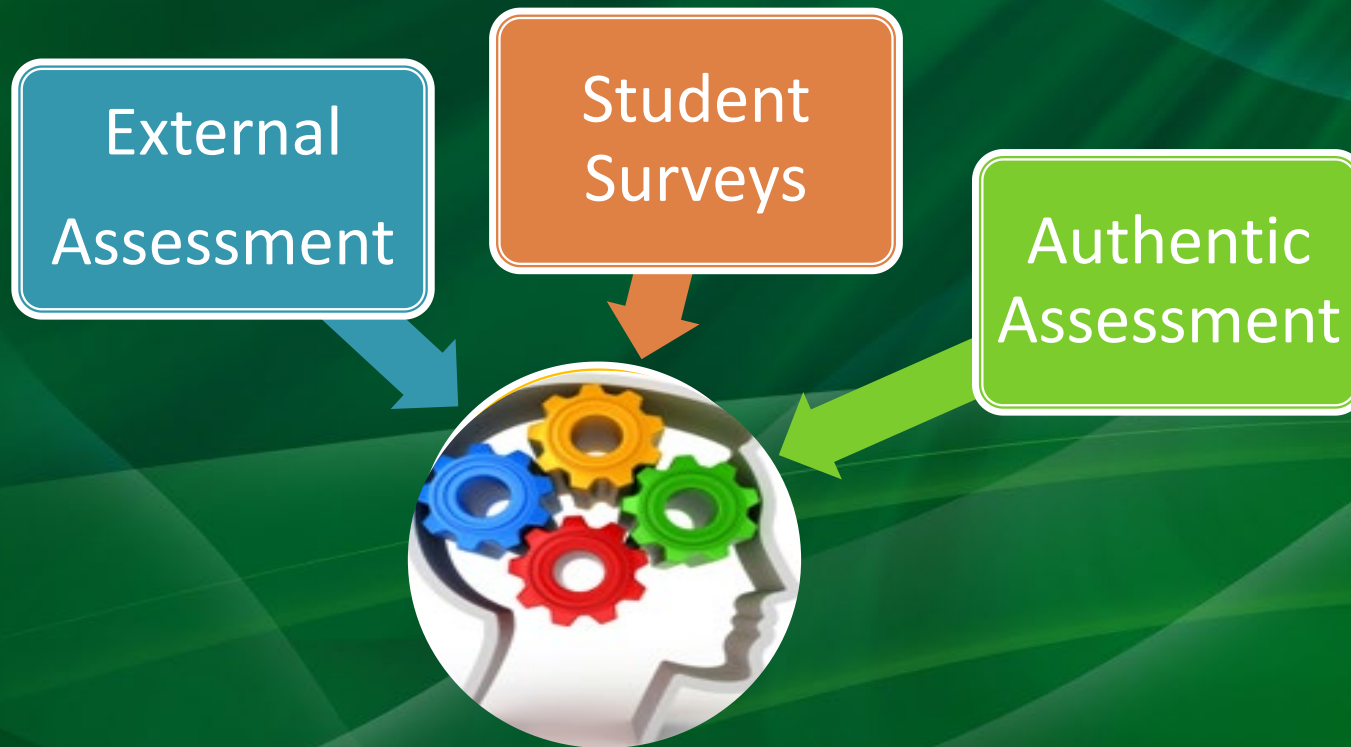




Meaning Making

How do we make meaning of these different instruments of the “same” phenomenon?

Assumption: the instruments are assessing the same construct



A sea of information, but where are the insights?

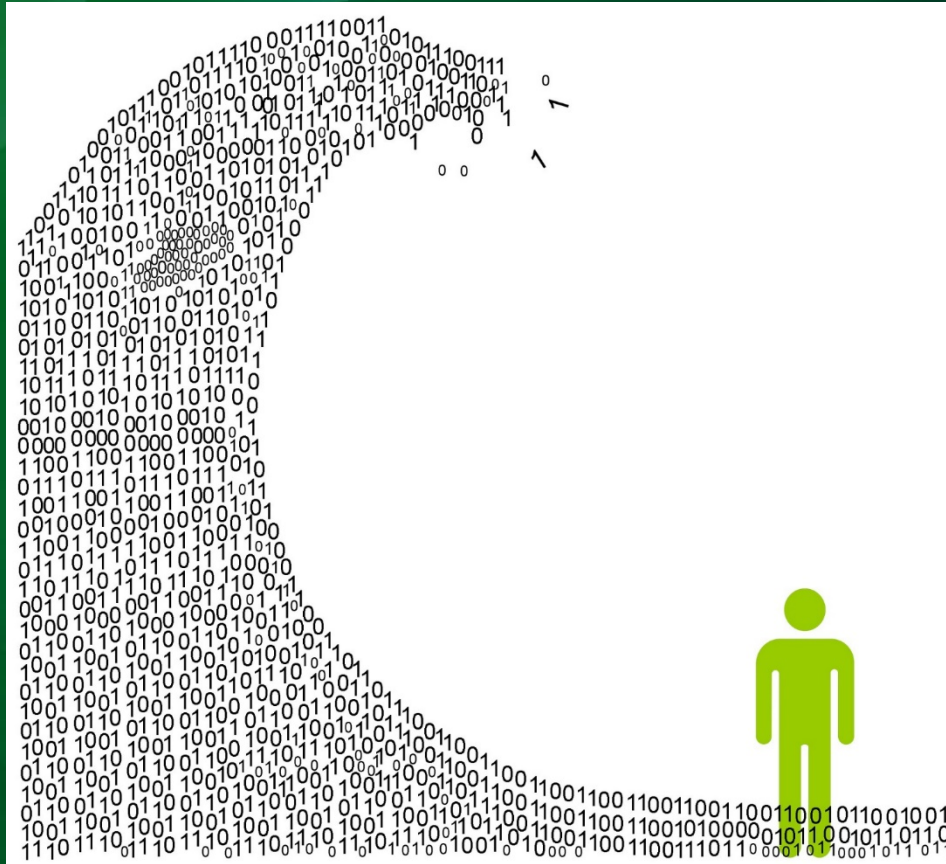


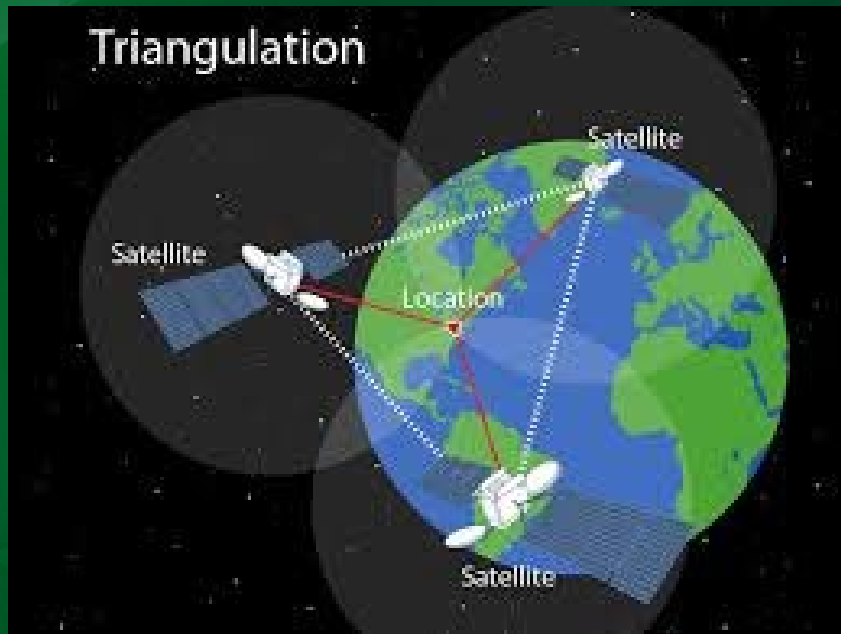
Image: Mark Smiciklas

How do you integrate data from different methods, samples, etc. into a coherent narrative?



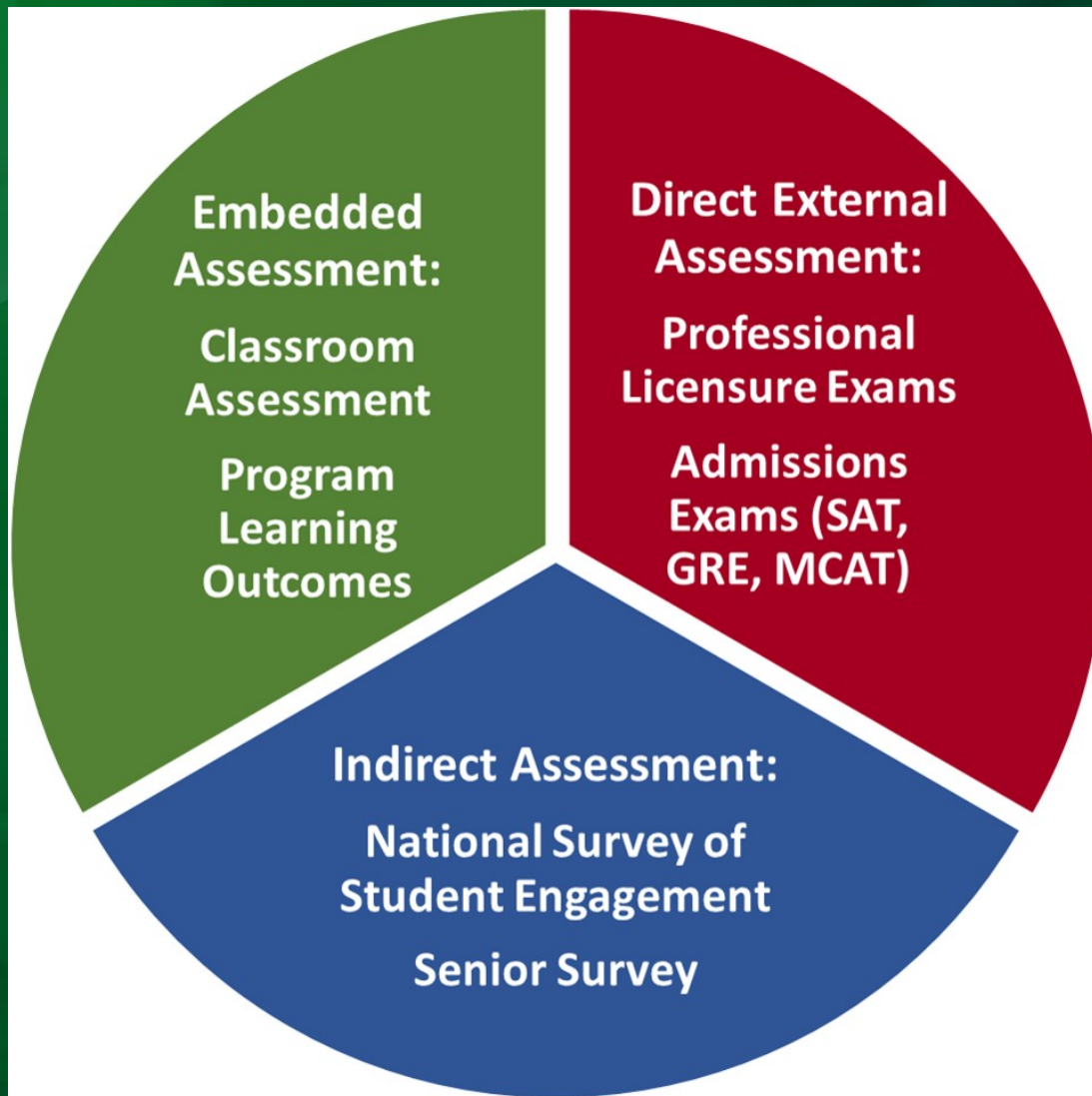
Triangulation Approach

Triangulation: the use of 2 or more methods in the study of the same phenomenon.



- This approach helps to overcome inherent weaknesses and biases that any one method may have.
- When different methods point in the same direction, we can have greater confidence in the accuracy of the conclusion.

Data Collection



Embedded Assessments:

- Faculty designed course assessments
- Program learning outcomes

Direct External Assessments:

- Standardized exams

Indirect Assessments:

- Student self-reported surveys



Data Collection

Are undergraduates developing the critical thinking, oral, & written communication skills we want to see students graduate with?

Evidence-based evaluation using multiple data sources:

Direct sources:

Embedded assessments & program level outcomes assessment

ETS Heighen exam

Indirect sources:

Senior Survey

NSSE



ETS HEIghten Exams

ETS HEIghten Critical Thinking exam is a test of logical & deductive reasoning

ETS HEIghten Written Communication exam tests students' knowledge about the writing process and the ability to write persuasively



National Survey of Student Engagement



Survey instrument used at institutions nation-wide to assess student engagement in college:

1. Time & effort students spend on studies & educationally-purposeful activities.
2. Institutional deployment of resources, curriculum & learning opportunities to get students to participate in high-impact practices linked to student learning.



Data Analysis

- Typically target analysis at a college or program-level, building up institutional picture over time.
- ETS testing & NSSE results for seniors compared to results for freshmen
 - Senior survey results and embedded assessment data examined for support of findings
- Example: If seniors show higher ETS critical thinking scores than freshmen, we would also hope to see:
 - Seniors self-reporting gains in these skills on surveys



Telling Our Story



- Identify your target audience
- Think outside the box
- Don't be afraid to try something different



Telling Our Story

Writing Intensive
Courses

NSSE

UWRT 1103

ETS Written
Communications

LBST 2301

Senior Survey



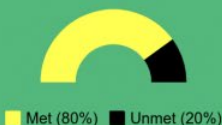
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Institutional Student Learning Outcomes - Written Communications

Written Communications

Upon graduation, students will be able to demonstrate the ability to adapt and apply a variety of writing strategies (invention, research, analyses, organization and revision) to communicate effectively with a target audience.

- 80% of first-year writing students in fall 2017 met the course written communications outcome targets



2018 National Survey of Student Engagement

- Students at UNC Charlotte report longer written assignments as they progress through their college experience

74% of seniors reported their experience @ UNC Charlotte contributed "Very much" or "Quite a bit" to their development of writing effectively.



ETS HEIghten Written Communications exam

Seniors @ UNC Charlotte scored statistically significantly higher than freshmen on the ETS exam.

Academic Progress

- 82% of LBST 2301 students in fall 2018 met the course written communications outcome targets

96%

Undergraduate programs met their written communications targets in 2018



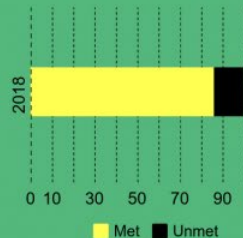
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Institutional Student Learning Outcomes - Critical Thinking

Critical Thinking

Upon graduation, students will be able to demonstrate **critical thinking skills** through a process of inquiry that explores evidence for developing innovative and creative solutions to make informed decisions and evaluations.

- 86% of LBST 2301 students in fall 2018 met the course critical thinking outcome targets



2018 National Survey of Student Engagement

- Students at UNC Charlotte report greater exposure to higher order learning and reflective & integrative learning as they progress through their college experience

84% of seniors

reported their experience @ UNC Charlotte contributed "Very much" or "Quite a bit" to their development of thinking critically and analytically.



ETS HEIghten Critical Thinking exam

Seniors @ UNC Charlotte score slightly higher than the national average on the ETS exam.

Programs and Alumni

93%

Undergraduate programs met their critical thinking targets in 2018

- 91% of alumni reported critical thinking was emphasized in their coursework (Gallup Alumni Survey)



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Institutional Student Learning Outcomes - Oral Communications


Oral Communications

Upon graduation, students will be able to demonstrate the ability to create oral messages appropriate to the audience, purpose and context

93%

Undergraduate programs met their oral communications targets in 2018

2018 National Survey of Student Engagement

 Students at UNC Charlotte report more opportunities to give course presentations as they progress through their college experience

73% of seniors
reported their experience
@ UNC Charlotte
contributed "Very much"
or "Quite a bit" to their
development of speaking
clearly and effectively.



Lessons learned

- Patience is key
- Discussion with colleagues is very helpful
- Utilize the resources available on your campus
- Reach out to people you trust prior to releasing the information





References

- Demeter, E., Robinson, C., Frederick, J.G. (2019). Holistically assessing critical thinking and written communication learning outcomes with direct and indirect measures. *Research Practices in Assessment*, 14, 41-51.
- [Pictochart.com](https://pictochart.com)



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We would like your feedback

Session Feedback Survey



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