An Assessment Story:
The Common Liberal Arts Experience, Debunking a Misconception

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Emerging from Assessment Practice

◦ James Madison University (JMU)

  ◦ Center for Assessment & Research Studies (CARS)

  ◦ Ph.D. in Assessment & Measurement (A&M)

    ◦ M.A. Psychological Science (esp. Quantitative Concentration)

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Session Learning Outcomes

Upon attending this session, participants will be able to:

1. Understand how a culture of assessment lends itself to being able to answer unique questions.
2. Relate how common assessment reports analyzed through meta-assessment ratings can be used to investigate trends across multiple programs at an institution.
3. Leverage assessment into research to form more accurate, empirical-based claims.

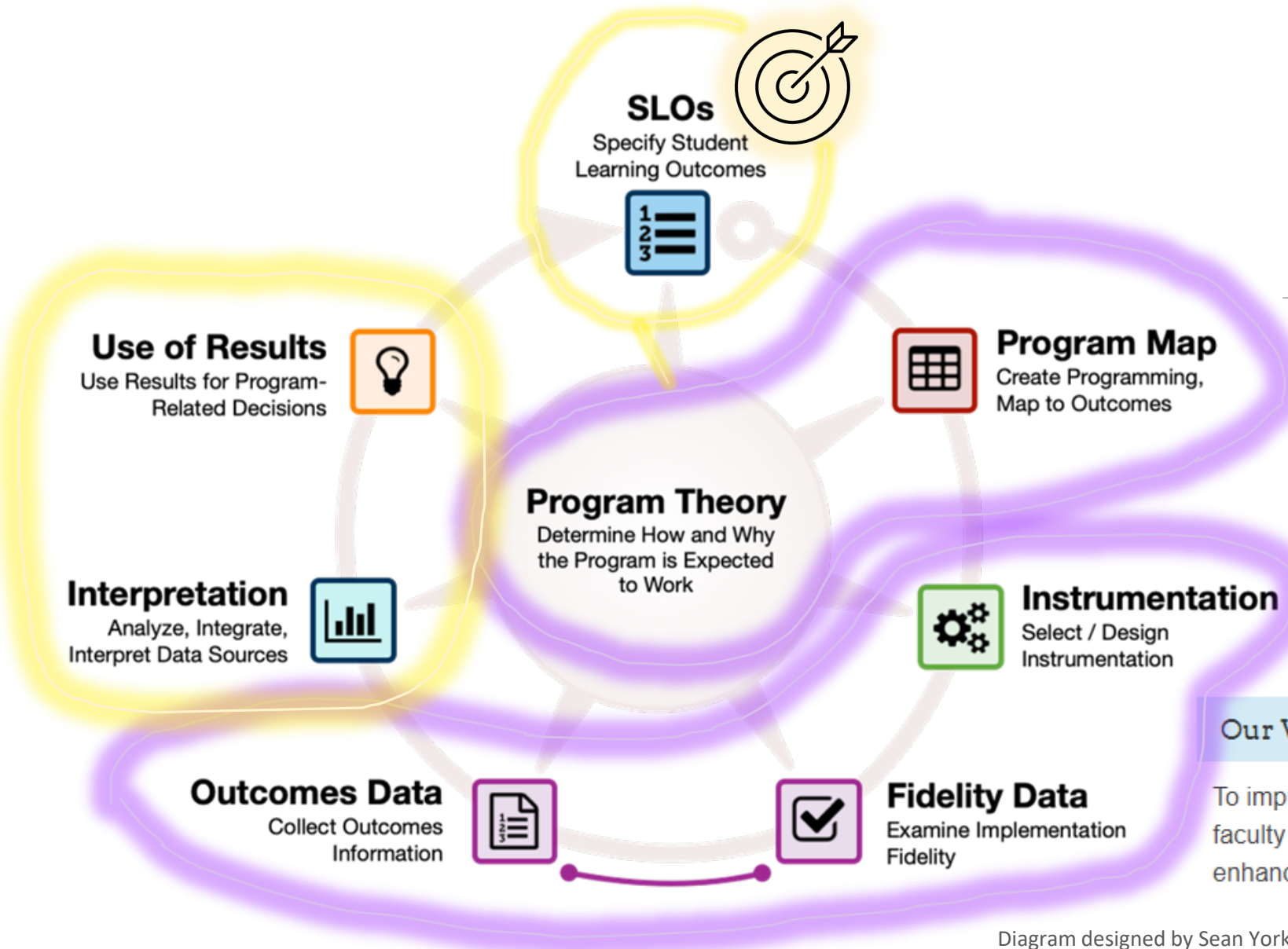Mapping to Session Discussion

General Education Research Question

JMU's Assessment Practice

Research Question Methodology

Research Results & Conclusion

JMU's Assessment Culture

◦ **Aspirational**

   ◦ *Learning Improvement*

◦ **Practical & Specific**

   ◦ Outcomes-based student learning

Our Vision

To improve higher education by inspiring and empowering faculty and staff to make **evidence-based** decisions to enhance student learning and development.

Diagram designed by Sean York

Assessment Practice

Assessment Progress Template (APT) & Rubric

- yearly report completed by program assessment coordinators
- guidance according to assessment cycle, outcomes-based assessment framework
  - https://www.jmu.edu/assessment/AcademicProgram/AssessmentReporting.shtml
- Evaluating APTs, providing feedback, & follow-up services
  - Time intensive
  - Resource intensive, especially personnel

1 – Beginning	2 – Developing	3 – Good	4 – Exemplary
1. Student-centered learning objectives			
A. Clarity and Specificity			
No objectives stated.	Objectives present, but with imprecise verbs (e.g., know, understand), vague description of content/skill/or attitudinal domain, and non-specificity of whom should be assessed (e.g., "students")	Objectives generally contain precise verbs, rich description of the content/skill/or attitudinal domain, and specification of whom should be assessed (e.g., "graduating seniors in the Biology B.A. program")	All objectives stated with clarity and specificity including precise verbs, rich description of the content/skill/or attitudinal domain, and specification of whom should be assessed (e.g., "graduating seniors in the Biology B.A. program")
B. Orientation			
No objectives stated in student-centered terms.	Some objectives stated in student-centered terms.	Most objectives stated in student-centered terms.	All objectives stated in student-centered terms (i.e., what a student should know, think, or do).

APT Rubric: SLOs

APT Template: SLOs

Student Learning Objectives (APT Element 1A & 1B)

Student learning objectives (SLOs) are statements indicating what students should know, think, or do as a result of participating in an academic degree program. SLOs should be student-centered and be written clearly with precise, measureable verbs. There is no set number of SLOs required for the APT.

Student Learning Objective
As a result of participating in the [academic degree program]curriculum, students graduating with a [degree type] in [academic degree program] will:

1 – Beginning	2 – Developing	3 – Good	4 – Exemplary
3. Systematic method for evaluating progress on objectives			
A. Relationship between measures and objectives			
Seemingly no relationship between objectives and measures.	At a superficial level, it appears the content assessed by the measures matches the objectives, but no explanation is provided.	General detail about how objectives relate to measures is provided. For example, the faculty wrote items to match the objectives, or the instrument was selected "because its general description appeared to match our objectives."	Detail is provided regarding objective-to-measure match. Specific items on the test are linked to objectives. The match is affirmed by faculty subject experts (e.g., through a backwards translation).
B. Types of Measures			
No measures indicated	Objectives are not assessed via direct measures (only with indirect measures).	Most objectives assessed with direct measures.	All objectives assessed using at least one direct measure (e.g., tests, essays).

APT Rubric: Instrumentation

Assessment Measures (APT Element 3A & 3B)

To obtain results that are useful for evaluating whether students met the stated SLOs, instruments must be selected to elicit the desired knowledge, skills, or attitudes from students. All SLOs should be measured by at least one instrument. Moreover, to obtain the strongest evidence of student learning, SLOs should be measured by a direct measure of student learning.

Objective	Description of Instrument used to assess objective	Direct/Indirect

APT Template: Instrumentation

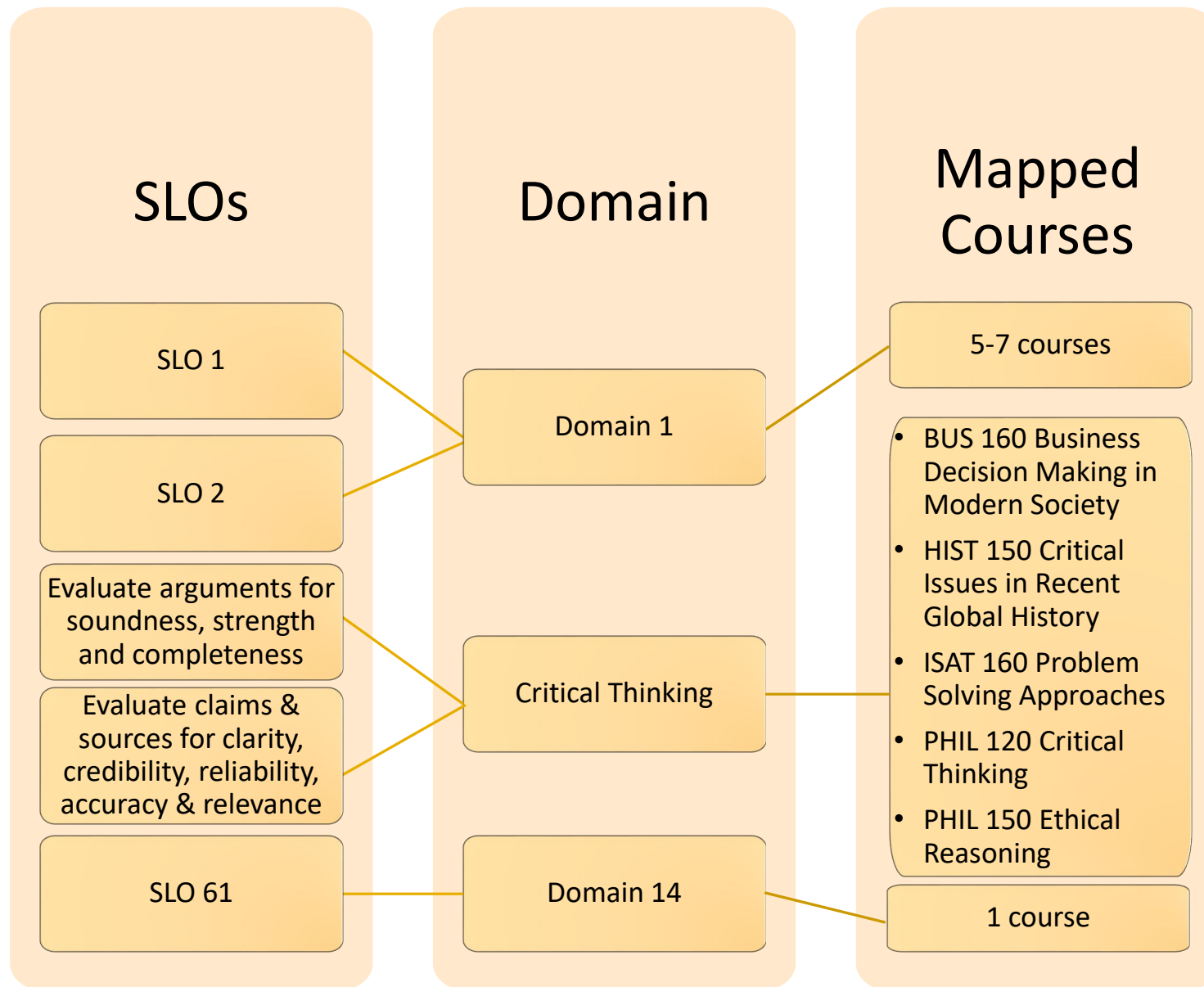| 1 – Beginning	2 – Developing	3 – Good	4 – Exemplary
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APT Rubric: Instrumentation

Outcomes-Based Programing

General Education Exemplar
- ◦ "JMU is nationally recognized for having an outcomes-based general education program"
- ◦ SLOs created and periodically revised by faculty
- ◦ SLOs nested by learning domains
  - ◦ 61 total SLOs
    - ◦ 3-8 SLOs per domain, 14 total domains, 1-8 courses per domain
      - ◦ SLOs within domains are linked to courses from a variety of disciplines

JMU's Outcomes-based Model

SLOs

SLO 1

SLO 2

Evaluate arguments for soundness, strength and completeness

Evaluate claims & sources for clarity, credibility, reliability, accuracy & relevance

SLO 61

Domain

Domain 1

Critical Thinking

Domain 14

Mapped Courses

5-7 courses

- BUS 160 Business Decision Making in Modern Society
- HIST 150 Critical Issues in Recent Global History
- ISAT 160 Problem Solving Approaches
- PHIL 120 Critical Thinking
- PHIL 150 Ethical Reasoning

1 course

Most universities **do not** have an outcomes-based general education model

A Common Gen Ed Design

Distribution Requirement Model
- ◦introductory level courses
- ◦across a range of disciplines
- ◦pre-selected options

Characteristics of such courses
- ◦nonspecialized audiences
- ◦large class size
- ◦breadth > depth
- ◦lecture heavy
- ◦standalone

Purpose of Gen Eds

Less concrete, more abstract

1. develop fuller/broader/more diverse perspective
2. knowledge for life
3. upstanding members of society
4. set up subsequent success

Educator and Student Perspectives

EDUCATORS

Some see value
◦ responsibility, ownership

Some question effectiveness
◦ ineffective, not challenging enough

STUDENTS

Strong theme of negative feedback
◦ Attend for vocational purposes
◦ distraction/interference, waste of resources

Why the negative sentiments?

Proposed theory: there a disconnect between general education programs and academic programs
- questionable strength of claim
  - limited student knowledge on gen ed purposes
  - student behavior in taking gen ed courses

Need for empirical research
- As recommended by the literature: compare learning outcomes of general education & academic program
- JMU's extensive assessment records

Research Methodology

Evaluate recent APTs for gen ed & all academic undergraduate programs

1. Two independent reviewers
2. Compared learning outcome overlap and referenced instrumentation information when needed
   a. designated SLOs as either having alignment or misalignment
3. Adjudicated to develop a consensus for all SLOs
   a. agreement between (mis)alignment
   b. disagreement in (mis)alignment
4. Third rater independently resolved disagreement, if they persisted after adjudication deliberations

Methodology Alignment Example

GENERAL EDUCATION OUTCOME

Critical Thinking
◦ Evaluate arguments for soundness, strength and completeness.

ACADEMIC PROGRAM OUTCOME

Art History
◦ Evaluate scholarship in art history thoughtfully and critically, noting strengths or weaknesses in areas such as logical argument and strength of historical evidence.
  ◦ Assessed via a rubric on an essay

Methodology Misalignment Example

GENERAL EDUCATION OUTCOME

Critical Thinking
- Evaluate arguments for soundness, strength and completeness.
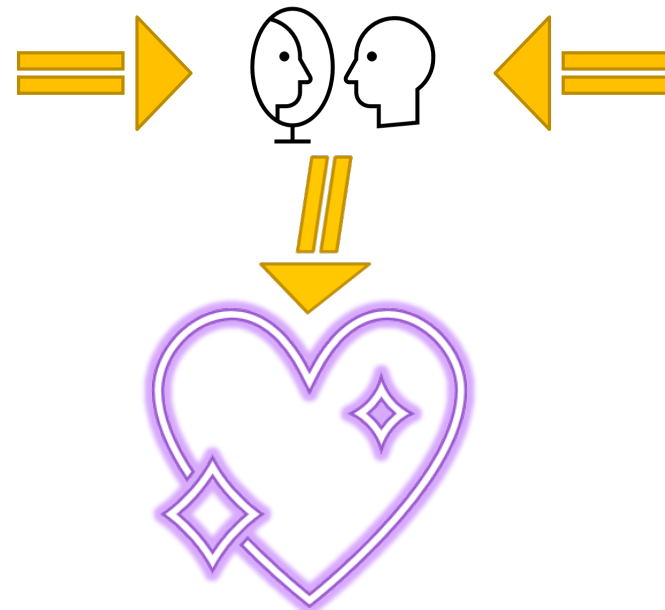
ACADEMIC PROGRAM OUTCOME

Health Sciences
- Differentiate the socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities.
  - Assessed via a pre-post exam

Introducing academic programs & Results

51 undergraduate academic degree program APTs

- 633 student learning outcomes
- ~12 SLOs per program
  - standard deviation of 11
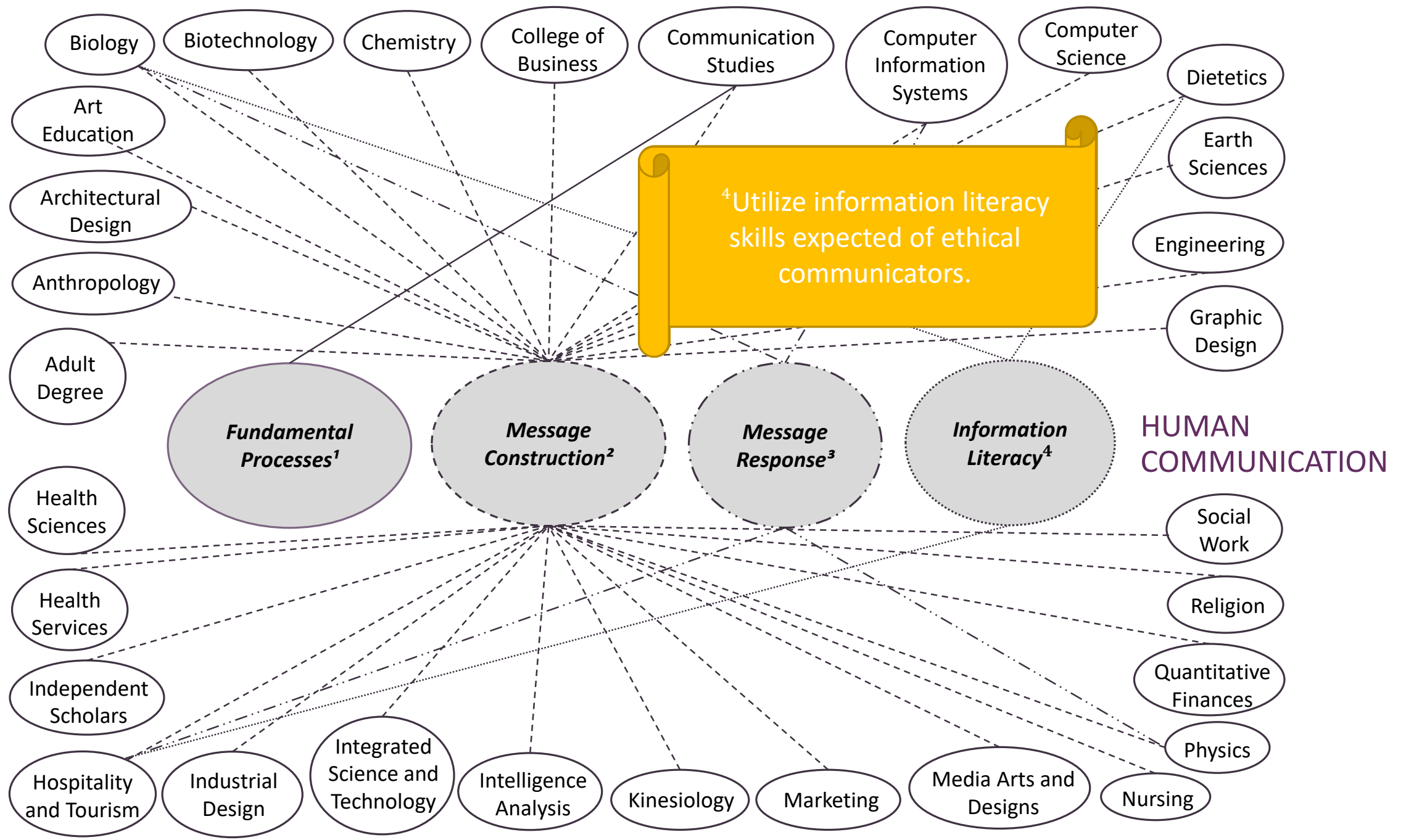 - max = 64, min = 1

61 general education SLOs

293 (46%) matched

Distribution of academic degree programs with linked outcomes by general education domain

Gen Ed SLOs with most matches

1. Human Communication
   - Construct messages consistent with the diversity of communication purpose, audience, context, and ethics.

2. Quantitative Reasoning
   - Describe the methods of inquiry that lead to mathematical truth and scientific knowledge and be able to distinguish science from pseudoscience.

| GENERAL EDUCATION DOMAIN	NUMBER OF LINKED OUTCOMES ACROSS ACADEMIC PROGRAMS	NUMBER OF ACADEMIC PROGRAMS WITH LINKED OUTCOMES (% OUT OF ALL 51 POTENTIAL PROGRAMS)
Human Communication	57	30 (58.8)
Writing	42	22 (43.1)
Quantitative Reasoning	40	20 (39.2)
Information Literacy	26	16 (31.4)
Global Experience	22	9 (17.6)
American Experience	20	4 (7.8)
Physical Principles	17	9 (17.6)
Natural Principles	15	6 (11.8)
Critical Thinking	14	9 (17.6)
Visual and Performing Arts	12	4 (7.8)
Human Questions and Context	10	7 (13.7)
Sociocultural Domain	8	7 (13.7)
Literature	4	2 (3.9)
Lab Experience	3	3 (5.9)
Wellness	3	2 (3.9)
Total	293	150

A Misconception Debunking

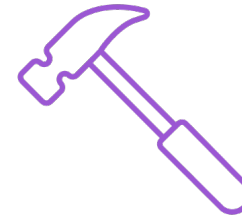**Breadth & Depth of overlap**

at least one link

many had numerous link
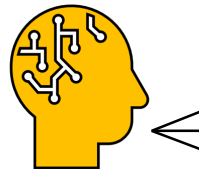
Robust assessment practice

empirical support

outcomes-based programming

Thank you for your attention!

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