GENERAL EDUCATION ASSESSMENT RESULTS

ALL FACULTY MEETING

OCTOBER 29, 2024

Presentation of General Education Assessment Goals, Procedures, Data, and Conclusions – Maurina Aranda, Chair of General Education Assessment Committee

Goal of GEAC: Articulate and Assess Objectives for General Education and the Baccalaureate Degree

- Analytic, Problem Solving, and Decision-Making Skills
- Oral and Written Communication
- Foundations in Liberal Arts
- Value of Diversity
- Scientific Literacy
- Ethics

Third Cycle of Gen Ed Assessment

Third Cycle	Analytic Problem Solving	Communication (Written)	Scientific Literacy	Foundations in Liberal Arts	Communication (Oral)	Value of Diversity	Ethics
Collect evidence	'21-'22	'21-'22	'21-'22	'23-'24	'22-'23	'23-'24	'23-'24
Score with rubrics (team of faculty)	'22-'23	'22-'23	'22-'23	'23-'24	'22-'23	'23-'24	'23-'24
Analyze results	'23-'24	'23-'24	'23-'24	'23-'24	'22-'23	'23-'24	'23-'24
Act on findings to improve curricular and cocurricular	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25
Revise assessments	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25	'24-'25

Critical Thinking Assessment Test (CAT)

- 15-item test designed to assess and promote the improvement of critical thinking and real-world problem solving skills
  - Developed by the Center for Assessment and Improvement of Learning at Tennessee Tech University with funding from NSF
  - The test is scored by the faculty at the participating institution.
  - Assesses four broad skills that align with our goals of Analytic Problem Solving, Written Communication, and Scientific Literacy
    - 1. Evaluation and Interpretation of Information (Scientific Literacy)
    - 2. Problem Solving (Analytic Problem Solving)
    - 3. Creative Thinking (Scientific Literacy and Analytic Problem Solving)
    - 4. Effective Communication (Written Communication)

CAT Procedure

- Zenia Agustin and Chad Verbais trained on the CAT process

- Collected data from freshmen in RA 101 course ($n = 38$) in the fall of 2021 and seniors in IS courses ($n = 33$) in the spring of 2022.

- Gen Ed Assessment Committee scored the data during the Fall 2022 semester.

  - At least two raters per item (a third rater settled disagreements)

- Ratings were sent to the Center for Assessment and Improvement of Learning at Tennessee Tech for validation and analysis.

CAT Results
* = Significant Group Difference

Subscales	Freshmen		Seniors	
	Mean	Std dev	Mean	Std dev
Evaluate and Interpret Information	3.65	2.28	5.41***	2.06
Problem Solving	4.51	2.96	5.75	3.24
Creative Thinking	5.38	2.95	6.69	3.40
Effective Communication	8.35	4.44	11.28***	4.69
Total CAT Score	9.03	4.48	12.09***	4.75

Notes: ** and *** indicate 5 and 1 percent level of significance

Oral Communication Procedure

- In the fall 2022 and spring 2023, we collected data from recorded student presentations in ACS 101 ($n = 40$) and various other sources for upper-level students (e.g., senior assignment presentations), ($n = 40$).

- Students' oral presentations were scored by the General Education Assessment Committee using a rubric on a 1-4 scale (higher numbers represented better performance).

- Three subscales:
  - 1. Organization
  - 2. Language
  - 3. Delivery

Oral Communication Results
* = Significant Group Difference

Competency areas	Freshmen		Seniors	
	Mean	Std dev	Mean	Std dev
Understand and clearly state the purpose and thesis of their speech	2.09	0.58	2.68***	0.24***
Analyze audience and select appropriate ethical communication strategies	2.04	0.56	2.70***	0.21***
Identify, access, select, evaluate, and cite supporting information for a speech	1.5	0.62	2.60***	0.40**
Present a clearly organized set of ideas	1.99	0.58	2.65***	0.38**
Use clear and engaging language and delivery	1.76	0.64	2.05***	0.49

Notes: ** and *** indicate 5 and 1 percent level of significance associated with mean and variance equality tests.

Diversity, Ethics, and a Liberal Arts Education

- In spring 2023 the committee conducted 10 semi-structured interviews about Ethics, Diversity, and Liberal Arts and Sciences Foundation in General Education

- To gather more data, we shifted to a Qualtrics survey and received 80 complete responses.

- Data was qualitatively analyzed by 5 members and major themes reported

Summary Results on Diversity, Ethics and Liberal Arts

Question	Summary Responses
To what extent does SIUE place appropriate emphasis on **diversity**?	Strong emphasis (53 mentions) Some emphasis (10 mentions) Little emphasis (11 mentions)
In what ways has **diversity** been emphasized?	Clubs (26 mentions) The Hub (17 mentions) SIUE Events (14 mentions) Classes (13 mentions)
How would your understanding of **diversity** help you in your professional life?	Understand others (30 mentions) Work with others (20 mentions) Understand issues (11 mentions) More Perspectives (10 mentions)
To what extent does SIUE place appropriate emphasis on **ethics**?	SIUE places no emphasis on ethics (14 mentions) SIUE places an appropriate amount of emphasis on ethics (21 mentions) SIUE places a lot of emphasis on ethics (28 mentions)
In what ways has **ethics** been emphasized?	Emphasized in courses, assignments, syllabi, campus emails, etc. (62 mentions)
How would your understanding of **ethics** help you in your professional life?	Empathy (23 mentions) Workplace ethical behavior (18 mentions) Become a better employee (19 mentions)
Has there been an instance where your **liberal arts & sciences** background made a real-world event easier to understand or explain?	No (19 mentions) Yes (41 mentions)

Overall Conclusions

- **Summary**:
  - We showed positive changes comparing lower and upper-level students from CAT and oral communication measures.
  - Not all changes were significant (e.g., Creative Thinking and Problem Solving)
- **Challenges:**
  - Better measures (ethics, diversity, liberal arts) for meaningful evaluation
    - Foundations in Liberal Arts as an objective is the least clear and measurable
  - We need more buy-in for assessment for consistent sources of data and student motivation for assessing
    - Rubrics for Senior Assignment poster presentations to determine whether this could be a source of oral communication data
    - Communicate with freshman communication courses to receive recordings of presentations.