Report on 2023 General Education Goals

Written Communication & Civic Engagement Assessment

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Methodology

During the spring semester of 2024, the General Education Committee evaluated two general education goals: written communication and civic engagement. Faculty teaching approved general education courses were requested to submit student artifacts from their spring and fall 2023 courses (Figure 1). These artifacts were drawn from three disciplines for written communication (Agricultural Business, English, and History) and one discipline for civic engagement (Political Science).

	Written Communication	Civic Engagement
Agricultural Business	AGBU 2073	
English	ENGL 1013 ENGL 1023	
History	HIST 1093 HIST 2003 HIST 2013 HIST 2042	
Political Science		POLS 2003
Number of artifacts scored	60	10
Number of reviewers	12	2
Figure 1: Courses approved for each goal by program		

To ensure confidentiality, the Academic Assessment Coordinator anonymized all student and instructor identifiers from the artifacts, replacing them with unique codes. A random sample of these anonymized artifacts was then distributed to the reviewers. Each reviewer evaluated five artifacts using rubrics adapted from the AAC&U Values Rubric Project (Appendix A). These rubrics assessed multiple outcomes on a 5-point scale (Figure 2).

(0) Novice: Less than 20%
(1) Advanced Beginner: 21-40%
(2) Competent: 41-60%
(3) Proficient: 61-80%
(4) Mastered: 81-100%

Figure 2: 5-Point Scale (0-4)

Reviewers submitted their completed rubrics to the Blackboard General Education Organization for analysis. The Academic Assessment Coordinator aggregated the rubric data, conducted statistical analyses, and prepared this report.

Summary of Findings

This summary presents key findings for the civic engagement and written communication evaluations. Subsequent sections detail the statistical analyses of the data. The study examines overall and individual learning outcomes, modalities, disciplines, and years of evaluation.

Civic Engagement

The 2022 pilot assessment of Civic Engagement served as a foundation for the 2023 evaluation. Both years' data were collected from various Political Science (POLS) 2003 course sections.

Rubric Scores

- In 2022, twenty artifact samples were selected from campus (in-person) classes. In 2023, ten artifact samples were selected, seven from mixed technology classes and three from online classes.

- The average score in 2022 was 61% and categorized at the Proficient achievement level, while the 2023 average was lower at 49%, categorized as Competent.

- The campus modality (61%, categorized as Proficient) outperformed mixed technology (51%, categorized as Competent) and online (45%, categorized as Competent) modalities in terms of average scores.

- Smaller sample sizes in 2023 limit the generalizability of findings.

- Ensuring adequate and equitable representation across all modalities and years will enhance the reliability and applicability of future study findings.

Learning Outcome Scores

Understanding the nuances of student performance is crucial in educational assessment. While average rubric scores provide a general overview of student achievement, it doesn't reveal the specific areas where students may be struggling or excelling. The Civic Engagement rubric is comprised of three outcomes (LO): LO1 Recognize the Potential for Individual Civic Action to Affect Change, LO2 Construct a Personal Vision of a Civic Pathway, and LO3 Lead Organizations/Projects in Planning and Implementing Public Participation that Address Local Community Needs, Issues, and Problems.

- LO3 consistently underperformed relative to the other learning outcomes, decreasing from Competent to Advanced Beginner from 2022 to 2023, indicating a need for enhanced support to facilitate student achievement.

- The scores for LO1 and LO2 decreased from Proficient to Competent from 2022 to 2023. These differences may be attributed to a smaller sample size and varying instructional modalities.

Summary

The 2023 Civic Engagement evaluation found a decline in student performance compared to 2022. Students struggled with leading community projects (LO3). The smaller sample size and varying modalities may have influenced the results. Future studies should ensure equitable representation across modalities to improve the reliability and applicability of findings.

Written Communication

To assess the Written Communication learning outcome, 60 artifacts were collected from three subjects (Agricultural Business, English, and History) across five instructional modalities (Russellville campus, Ozark campus, concurrent, mixed technology, and online) during the 2023 Spring and Fall semesters. This marks the inaugural assessment of this learning outcome.

Rubric Scores

- Overall Score: The average rubric score was 65%-Proficient. This suggests that most students met the expected standards for written communication.
- Modality:
  - The majority of locations (Campus, Online, and Ozark) achieved a Proficient level.
  - Concurrent and Mixed Tech showed mixed results, with Concurrent being at the Competent level and Mixed Tech at the Advanced Beginner level.
  - Sample size: Campus (10), Concurrent (17), Mixed Tech (3), Online (22), and Ozark (8). Mixed Tech's lowest sample size may not be representative of the larger population, making it difficult to generalize findings.
- Subject
  - Agricultural Business had the lowest average score (39%-Advanced Beginner), followed by History (59%-Competent) and English (76%-Proficient).
  - The sample sizes for English (24) and History (33) are relatively large, suggesting a broader representation of student performance.
  - Agricultural Business (3) has a smaller sample size, which might limit the generalizability of the findings.

Learning Outcome Scores

The Written Communication rubric is comprised of three learning outcomes (LO). LO1 and LO3 are comprised of two fundamental components and LO2 has only one component. These are LO1 Present written thoughts in a cohesive manner, LO1.1 Context of and purpose for writing, LO1.2 Genre and disciplinary conventions; LO2 Synthesize information into a collective argument; LO3 Use formal grammar and mechanics, LO3.1 Control of syntax and mechanics, and LO3.2 Uses of sources.

- Achievement Level:
    - All three learning objectives were deemed Proficient based on average scores.
    - LO3.2 Uses of sources scored at the Competent level.
    - All other components scored at the Proficient level.
- Fundamental Components
    - Modality:
        - LO1.1 consistently had higher scores than LO1.2 with Campus and Online performing the best of all modalities.
        - LO2: Ozark and Online modalities had the highest average scores and Mixed Tech had the lowest.
        - LO3.1 consistently had higher scores than LO3.2 across all modalities. Campus and Ozark modalities showed the strongest performance in both components.
    - Subject:
        - LO1.1 consistently had higher scores than LO1.2 across all subjects with English performing the highest and Agricultural Business scoring the lowest.
        - LO2: Students in English courses had the highest scores and Agricultural Business students had the lowest scores.
        - LO3.1 and LO3.2 showed varying levels of mastery across the subjects. Agricultural Business students struggled with both components, while English students excelled in both. History students demonstrated proficiency in LO3.1 but had mixed results in LO3.2.

Summary

The evaluation of the Written Communication found that students generally achieved a Proficient level, but struggled with source usage (LO3.2). English students outperformed others, while Agricultural Business students faced challenges. Modality and sample size differences may have influenced results. Future studies should ensure equitable representation across modalities and subjects to improve the reliability and applicability of findings.

Civic Engagement Analysis

Overall Scores

The 2022 pilot assessment of Civic Engagement provided baseline data for 2023 assessment. 2022 and 2023 artifacts were from multiple Political Science (POLS) 2003 course sections. 2022 artifacts were from one modality (campus) while 2023 artifacts were from two modalities (mixed technology and online).

This analysis examines the performance of student samples across both years. The data table and charts below include information on sample size, points possible, mean, median, mode, standard deviation, range, score, achievement level, and modality.
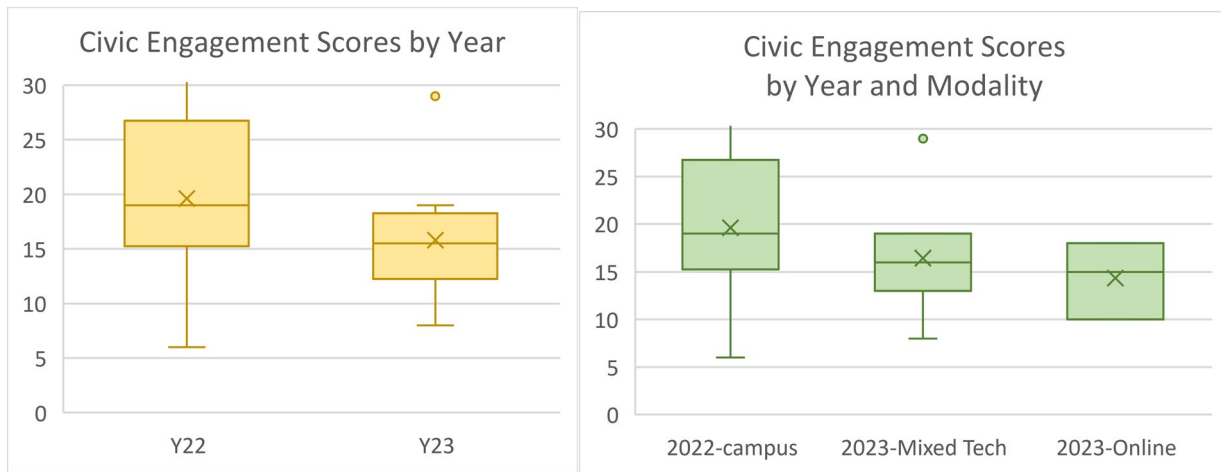
Statistical Analysis	2022	2023		2022-Campus	2023-Mixed Tech	2023-Online
sample size	20	10		20	7	3
points possible	32	32		32	32	32
mean	19.6	15.8		19.6	16.4	14.3
median	19	15.5		19	16	15
mode	18	16		18	16	-
standard deviation	7.69	5.73		7.69	6.5	4.0
range	26	21		26	21	8
average score	61%	49%		61%	51%	45%
achievement level	Prof.	Comp.		Prof.	Comp.	Comp.

Figure 3: Civic Engagement Scores by Year and Modality

Key Observations

Year-by-Year Analysis

- 2022: The campus modality had a relatively large sample size of 20 students. The average score was 61%, indicating proficient achievement. The standard deviation was relatively high (7.69), suggesting a wider range of scores.

- 2023: A smaller sample size of 10 was comprised of mixed technology and online modalities. The average score was lower at 49%, indicating a competent achievement level. The standard deviation was also lower (5.73), suggesting a more consistent performance among students.

Modality-Based Analysis

- Campus: The campus modality has a sample size of 20 and achieved a proficient level of civic engagement, with average scores of 61%. The relatively high standard deviation suggests a diverse range of student performance.

- Mixed Technology: The mixed technology modality had a sample size of 7 students. The average score was 51%, indicating a competent achievement level. The standard deviation remained relatively low, suggesting consistent performance.

- Online: The online modality had limited data with a sample size of 3, but the average score of 45% suggests a competent achievement level. The very low standard deviation indicates a small range of scores, potentially due to the small sample size.

Insights and Recommendations

- The campus modality consistently outperformed the mixed technology and online modalities in terms of average scores.

- The online modality had limited data, but the results suggest that students can achieve competent levels of civic engagement.

- However, smaller sample sizes in 2023 limit the generalizability of the findings.

- Future studies should ensure an adequate and equal sample size for all modalities.

Learning Outcomes Scores

The Civic Engagement rubric is comprised of the following outcomes:

- LO1 – Recognize the Potential for Individual Civic Action to Affect Change.

- LO2 – Construct a Personal Vision of a Civic Pathway.

- LO3 – Lead Organizations/Projects in Planning and Implementing Public Participation that Address Local Community Needs, Issues, and Problems.

This analysis examines the performance of student samples by learning outcomes (LO1, LO2, and LO3) across two years (2022 and 2023). Statistical data is provided.
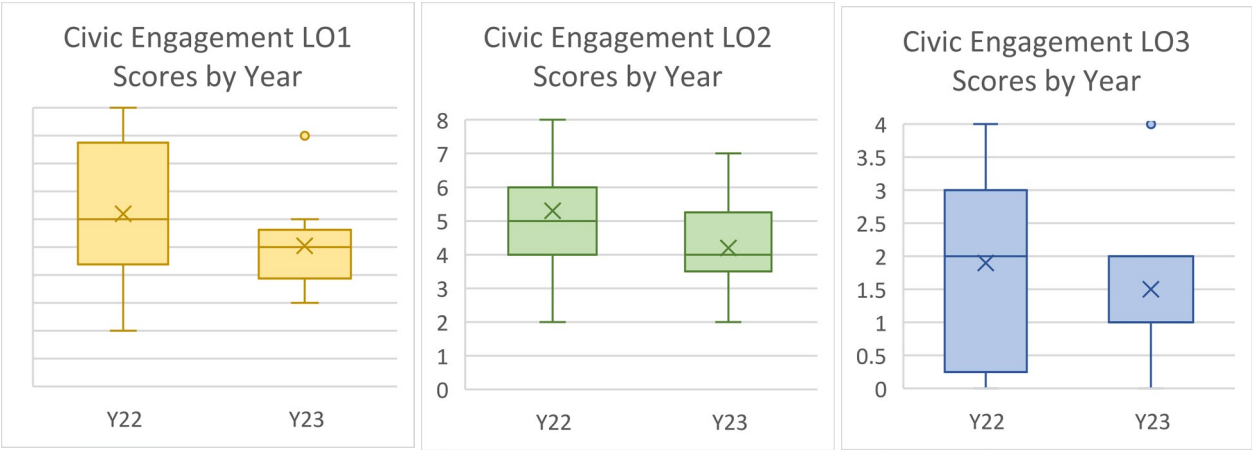
Figure 4: Civic Engagement Learning Outcomes by Year

Statistical Analysis	LO1		LO2		LO3	
year	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**
sample size	20	10	20	10	20	10
points possible	20	20	8	8	4	4
mean	12.40	10.10	5.30	4.20	1.90	1.50
median	12	10	5	4	2	1
mode	12	10	4	4	2	1
standard deviation	5.15	3.31	1.72	1.55	1.41	1.08
range	16	12	6	5	4	4
score	62%	51%	66%	53%	48%	38%
achievement level	Prof.	Comp.	Prof.	Comp.	Comp.	Adv.B.
modality	Campus	Mixed Tech & Online	Campus	Mixed Tech & Online	Campus	Mixed Tech & Online

Figure 5: Civic Engagement Statistical Analysis by Learning Outcome and Year

Key Observations

LO1 – Recognize the Potential for Individual Civic Action to Affect Change.

- 2022: Student samples were scored at the Proficient level (62%). The sample size was 20.

- 2023: Student samples were scored at the Competent level (51%). The sample size decreased to 10.

Overall, LO1 scores decreased from 2022 to 2023. This could be attributed to factors such as a smaller sample size and differing modalities.

LO2 – Construct a Personal Vision of a Civic Pathway.

- 2022: Student samples were scored at the Proficient level (66%). The sample size was 20 students.

- 2023: Student samples were scored at the Competent level (51%). The sample size decreased to 10.

While the mean for LO2 decreased slightly from 2022 to 2023, the median and mode remained relatively constant. This suggests that the overall performance on LO2 was similar in both years, although the variability among individual scores decreased in 2023.

LO3 – Lead Organizations/Projects in Planning and Implementing Public Participation that Address Local Community Needs, Issues, and Problems.

- 2022: Student samples were scored at the Competent level (48%). The sample size was 20 students.

- 2023: Student samples were scored at the Advanced Beginner level (38%). The sample size decreased to 10.

LO3 scores decreased from 2022 to 2023. Similar to LO1, this could be attributed to factors such as a smaller sample size and differing modalities.

Insights and Recommendations

- LO3 consistently underperformed relative to other learning outcomes, indicating a need for enhanced support to facilitate student achievement.

- The observed decrease in learning outcome scores in 2023 may be partially explained by a smaller sample size and variations in instructional modalities.

- Ensuring adequate and equitable representation across all modalities will enhance the reliability and applicability of future study findings.

Written Communication Analysis

Overall Scores

60 artifacts from three subjects (Agricultural Business, English, History) across five modalities (Russellville, Ozark, concurrent, mixed technology, online) were collected in Spring/Fall 2023 to assess Written Communication. This is the first year of assessment. On a 5-point scale, the average rubric score was 65%, falling within the lower range of the Proficient achievement level (61-80%).

Statistical Analysis	
sample size	60
points possible	12
mean	7.8
median	8
mode	12
standard deviation	3.02
range	10
average score	65%
achievement level	Proficient
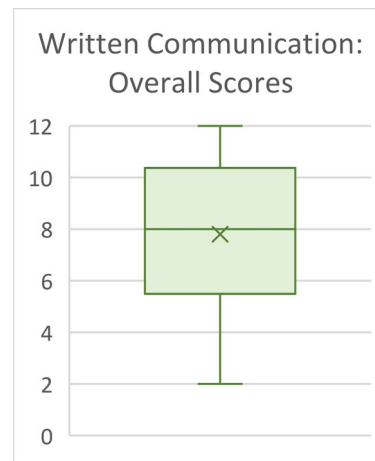
Figure 6: Written Communication Average Scores

Key Observations

- Sample Size: The sample size of 60 provides a solid foundation for analysis.
- Mean and Median:
  - The mean of 7.8 indicates a generally positive performance in written communication.
  - The median of 8 suggests that half of the students scored above this value, further supporting the overall positive performance.
- Mode: The mode of 12 suggests that a significant number of students achieved the maximum possible score, which is a positive indicator of performance.
- Standard Deviation: The standard deviation of 3.02 indicates a moderate spread of scores, suggesting some variation in student performance.
- Range: The range of 10 indicates a reasonable spread of scores, with a difference of 10 points between the highest and lowest scores.

- Average Score and Achievement Level:
  - The average score of 65% is categorized at the "Proficient" achievement level (5-point scale) and suggests that the majority of students have met the expected standards for written communication.

Overall Scores by Modality

The sample of artifacts for Written Communication was spread over the following five modalities, denoted by course code suffixes defined by the ATU Registrar's Office:

- 00_ classes which meet on the Tech campus.
- P0_ Concurrent high school enrollment.
- M_ Mixed technology classes – online classes that require students to physically meet for part of the class.
- TC_ Online classes that do not require students to meet physically.
- A0_ Outreach classes – Russellville campus courses taught in a location other than Russellville campus (generally, Ozark campus).
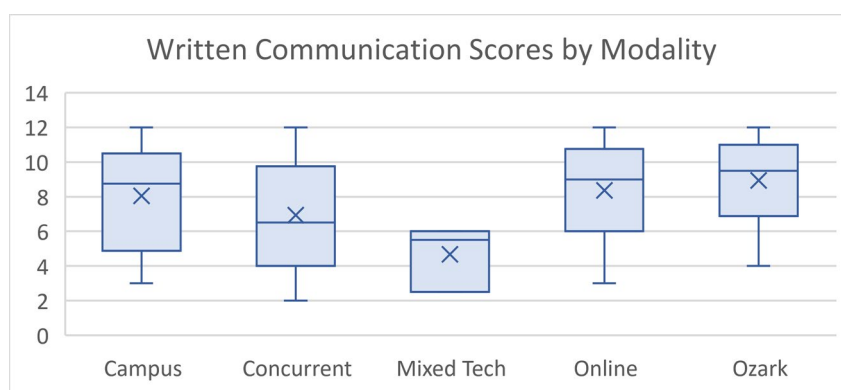
Statistical Analysis	Campus	Concurrent	Mixed Tech	Online	Ozark
sample size	10	17	3	22	8
Subjects (n=)	English (6), History (4)	History (17)	Agricultural Business (3)	English (10), History (12)	English (8)
points possible	12	12	12	12	12
mean	7.80	6.94	4.67	8.36	8.94
median	7	6.5	5.5	9	9.5
mode	12	12	-	10.5	11
standard deviation	3.16	3.25	1.89	2.77	2.72

range	10	10	3.5	9	8
average score	65%	58%	39%	70%	74%
achievement level	Proficient	Competent	Advanced Beginner	Proficient	Proficient

Figure 7: Written Communication Scores by Modality

Key Observations

- Overall Performance:
  - Proficient: The majority of locations (Campus, Online, and Ozark) achieved a "Proficient" level, indicating that students generally met the expected standards for written communication.
  - Mixed Results: Concurrent and Mixed Tech locations showed mixed results, with Concurrent being "Competent" and Mixed Tech being "Advanced Beginner."
  - Sample size: Mixed Tech had the lowest sample size which may not be representative of the larger population, making it difficult to generalize findings.
- Mean:
  - Highest Mean: Ozark had the highest mean (8.94), followed by Online (8.36).
  - Lowest Mean: Mixed Tech had the lowest mean (4.67).
  - Campus and Concurrent: Campus and Concurrent had similar means (7.80 and 6.94, respectively).
- Standard Deviation and Range:
  - Variability: The standard deviation and range for each location varied, indicating different levels of dispersion in scores.
  - Highest Variability: Concurrent had the highest standard deviation and range, suggesting a wider spread of scores.
- Mode:
  - Frequent Scores: The mode varied across locations, indicating different patterns of score distribution.
  - No Mode: Mixed Tech had no mode due to a small sample size and lack of repeated scores.

Overall Scores by Subject

Written communication artifacts were sampled from the following courses in three subjects and courses:

Agricultural Business	English	History
AGBU 2073	ENGL 1013 ENGL 1023	HIST 1093 HIST 2003 HIST 2013 HIST 2042

Figure 8: Written Comm Subjects and Courses Sampled

Written Communication Scores by Subject
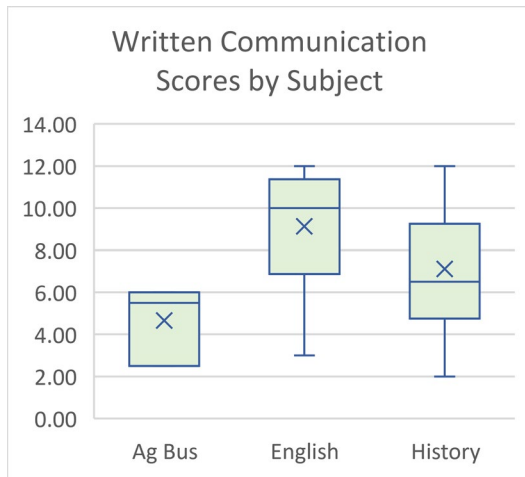
Statistical Analysis	Agricultural Business	English	History
sample size	3	24	33
Modalities (n=)	Mixed Tech (3)	Campus (6), Online (10), Ozark (8)	Campus (5), Concurrent (16), Online (12)
points possible	12	12	12
mean	4.67	9.13	7.12
median	5.5	10.0	6.5
mode	-	12.0	12.0
standard deviation	1.89	2.69	2.94
range	3.5	6.0	10.0
average score	39%	76%	59%
achievement level	Advanced Beginner	Proficient	Competent

Figure 9: Written Communication Scores by Subject

Key Observations

- Overall Performance:
  - Agricultural Business had the lowest average score (39%), followed by History (59%) and English (76%).
  - The achievement levels varied across subjects: Agricultural Business was classified as "Advanced Beginner," History as "Competent," and English as "Proficient".
- Sample Size and Modalities:
  - The sample sizes for English and History are relatively large, suggesting a broader representation of student performance.
  - Agricultural Business has a smaller sample size, which might limit the generalizability of the findings.
  - The subject samples are from varying modalities.

- Mean and Median:
    - English students achieved the highest mean (9.13), followed by History (7.12) and Agricultural Business (4.67).
    - The medians align with the means, suggesting a relatively symmetrical distribution of scores within each subject.

- Mode:
    - Agricultural Business had no mode, indicating a lack of a frequently occurring score due to sample size.
    - English and History both had a mode of 12, suggesting that a significant number of students achieved the maximum score.

- Standard Deviation and Range:
    - The standard deviation for Agricultural Business was the lowest (1.89), indicating a relatively narrow spread of scores.
    - English and History had higher standard deviations (2.69 and 2.94, respectively), suggesting a wider range of scores.
    - The range of scores was widest for History (10.0), indicating a greater difference between the highest and lowest scores.

Learning Outcomes Scores

Understanding the nuances of student performance is crucial in educational assessment. While the average score of the Written Communication goal provides a general overview of student achievement, it doesn't reveal the specific areas where students may be struggling or excelling. The Written Communication rubric is comprised of three learning outcomes (LO):

- LO 1: Present written thoughts in a cohesive manner.
    - LO 1.1: Context of and purpose for writing.
    - LO 1.2: Genre and disciplinary conventions.
- LO 2: Synthesize information into a collective argument.
- LO 3: Use formal grammar and mechanics.
    - LO 3.1: Control of syntax and mechanics.
    - LO 3.2: Uses of sources.

LO1 and LO3 are comprised of two fundamental components and the scores for these outcomes are averaged for overall scores. LO2 has only one component.

Written Communication:
Learning Outcomes Results
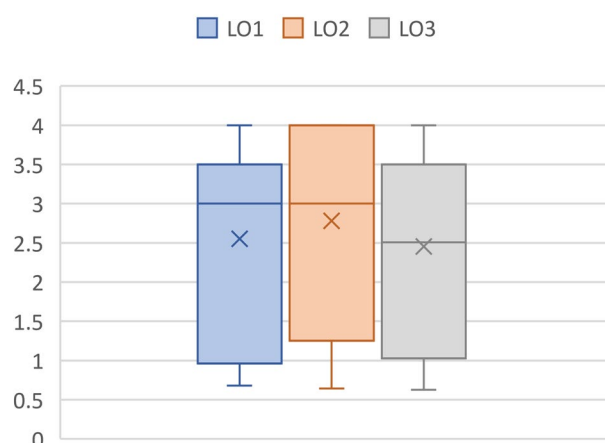
LO1 LO2 LO3

Statistical Analysis	LO1	LO2	LO3
Sample size	*N=60*	*N=60*	*N=60*
Points possible	4	4	4
Mean	2.73	2.57	2.51
Median	3	3	2.5
Mode	3	4	3
Standard deviation	0.96	1.25	1.03
Range	3.5	4	3.5
Score	68%	64%	63%
Achievement level	Proficient	Proficient	Proficient

Figure 10: Written Communication Average Scores by Learning Outcome

Key Observations

- Mean: The mean for all three learning objectives are relatively high, ranging from 2.51 to 2.73 out of 4. This indicates that the students generally performed well.

- Median: The median for LO1 and LO2 are both 3, suggesting that 50% of the students achieved at least a score of 3 on these objectives. The median for LO3 is slightly lower at 2.5.

- Mode: The mode for LO1 and LO3 is 3, indicating that this was the most frequently achieved score. The mode for LO2 is 4, suggesting that more students achieved the maximum score on this objective.

- Standard Deviation: The standard deviation for all three objectives is relatively low, ranging from 0.96 to 1.25. This suggests that the scores were fairly consistent within each assessment, with a smaller spread of scores compared to a higher standard deviation.

- Achievement Level: All three learning objectives were deemed "Proficient" based on the scores (5-point scale).

Learning Outcome Average Component Scores

To gain a deeper understanding of the data, it would be helpful to consider the fundamental components of the learning outcomes. This information is provided in the charts and table below.
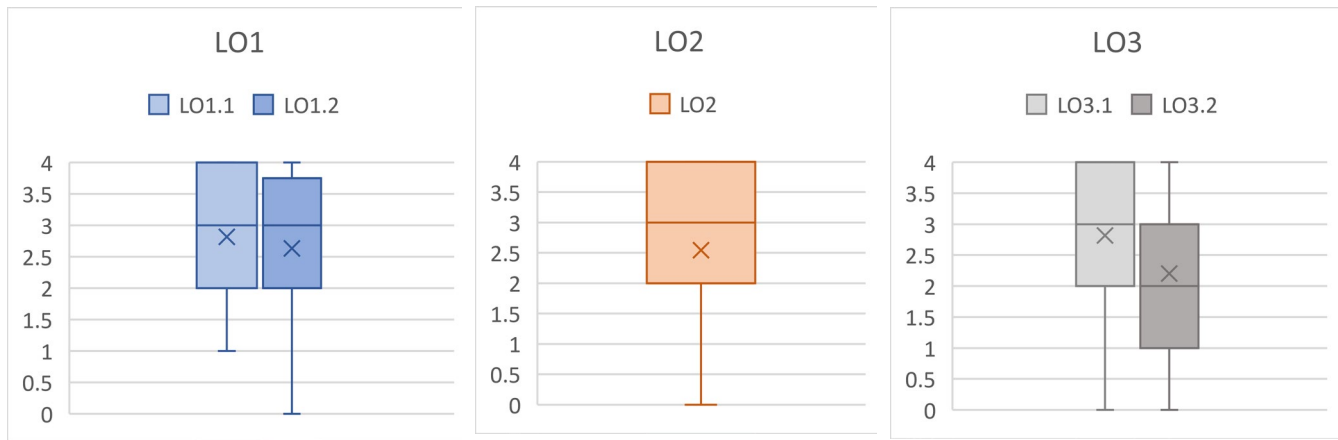
Statistical Analysis					
Learning Outcome	**LO1**		**LO2**	**LO3**	
LO Average Score	**68%**		**64%**	**63%**	
Fundamental components	**LO1.1**	**LO1.2**	**LO2**	**LO3.1**	**LO3.2**
points possible	4	4	4	4	4
mean	2.82	2.63	2.57	2.82	2.20
median	3	3	3	3	2
mode	3	2.5	4	4	2.5
standard deviation	0.97	1.06	1.25	1.07	1.36
range	3	4	4	4	4
component score	70%	66%	64%	70%	55%
achievement level	Proficient	Proficient	Proficient	Proficient	Competent

Figure 11: Written Communication Components Average Scores

Key Observations

- LO 1: Cohesive Writing.
  - Students demonstrated proficiency in understanding the context and purpose of writing (LO 1.1) and applying appropriate genre and disciplinary conventions (LO 1.2).
- LO 2: Argument Synthesis.
  - Students proficiently synthesized information into a collective argument, indicating their ability to organize and analyze information effectively.
- LO 3: Grammar and Mechanics.
  - While students generally performed at a proficient level in controlling syntax and mechanics (LO 3.1), there was a slightly higher in their ability to effectively use sources (LO 3.2), scoring at the competent achievement level.

To further analyze the learning outcome component data, each component is considered by modality and subject individually. LO1-LO3 data tables are available after LO3 key observations.

Cohesive Writing
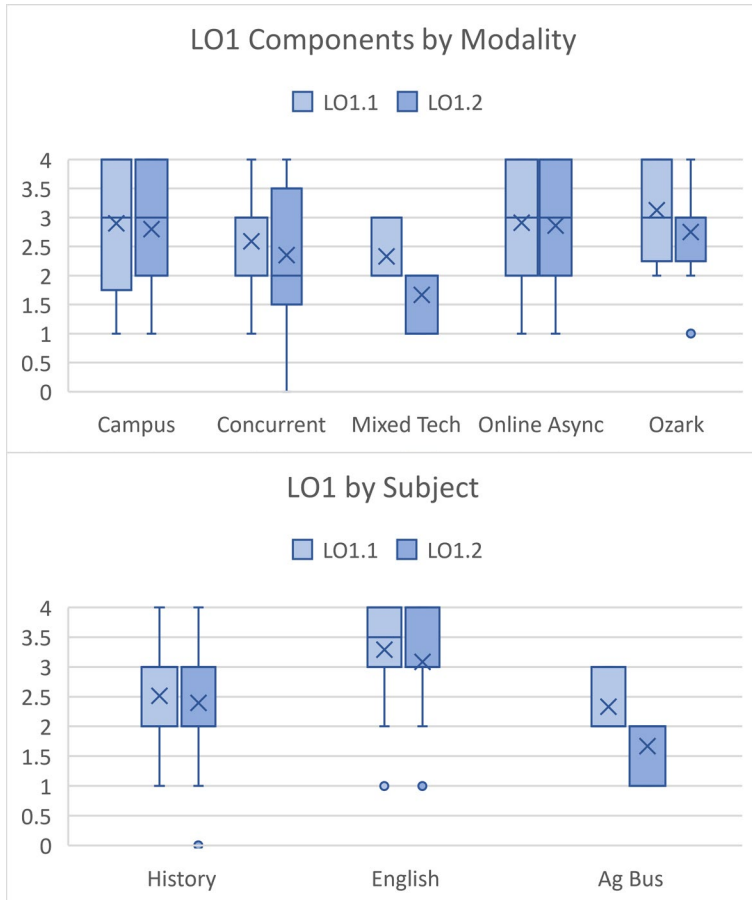
LO1 Key Observations

- LO1.1 consistently had higher scores than LO1.2 across all modalities and subjects, suggesting that students generally performed better in the first component.
- Campus and Online modalities showed the strongest performance in both components.
- Agricultural Business students struggled with both components, while English students excelled in both. History students demonstrated proficiency in both components.
- Agricultural Business, a Mixed Tech course, had the lowest average score and sample size (3)

Figure 12: Written Comm. LO1 Cohesive Writing Components by Modality and Subject

Argument Synthesis

LO2 Components by Modality

LO2 by Subject
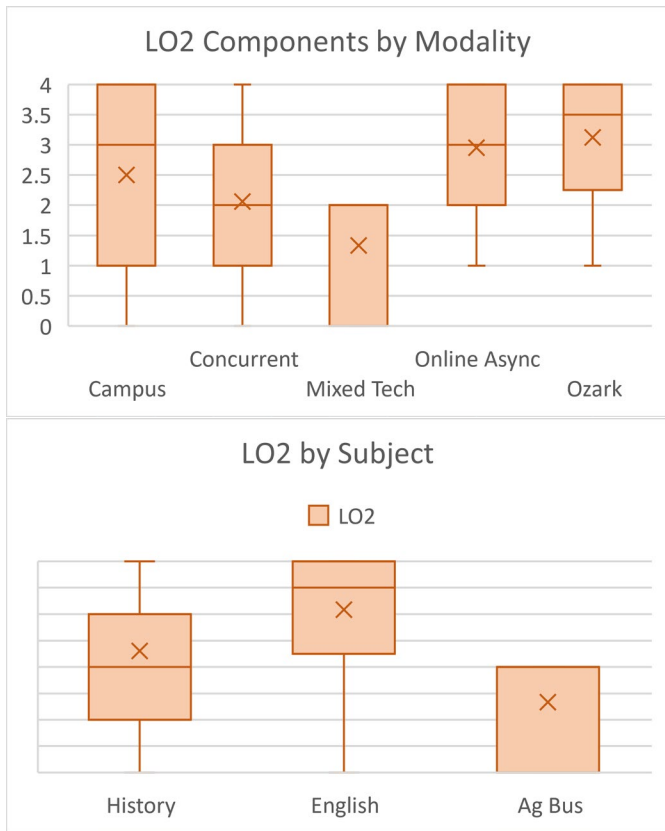
Figure 13: Written Comm. LO2 Argument Synthesis by Modality and Subject

LO2 Key Observations

- Ozark and Online modalities had the highest average scores, indicating strong performance in written communication.
- Mixed modality had the lowest average score, possibly due to small sample size.
- Campus and Concurrent modalities had scores in the middle range, indicating moderate performance.

- Students in English courses had the highest average scores.
- Achievement levels were "Advanced Beginner" for Agricultural Business, "Competent" for History, and "Proficient" for English.

Grammar and Mechanics

LO3 Components by Modality
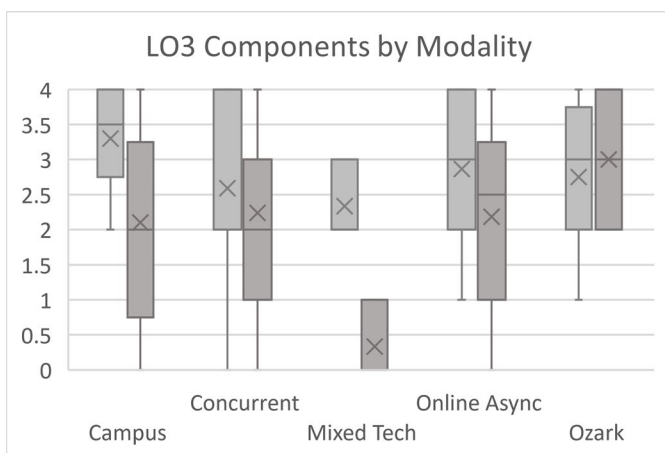
LO3 Key Observations

- LO3.1 consistently had higher scores than LO3.2 across all modalities, suggesting that while students generally performed well in controlling syntax and mechanics (LO 3.1), they had more difficulty in effectively using sources (LO 3.2).
- Campus and Ozark modalities showed the strongest performance in both components.

LO3 by Subject

- LO3.1 and LO3.2 showed varying levels of mastery across the subjects. Agricultural Business students struggled with both components, while English students excelled in both. History students demonstrated proficiency in LO3.1 but had mixed results in LO3.2.

Figure 14: Written Comm. LO3 Grammar and Mechanics Components by Modality and Subject

Written Communication Statistics by Course Modality and Learning Outcome Components

LO1	Campus		Concurrent		Mixed		Online		Ozark	
Average Score	71%		62%		50%		72%		73%	
Fundamental components	LO1.1	LO1.2	LO1.1	LO1.2	LO1.1	LO1.2	LO1.1	LO1.2	LO1.1	LO1.2
Sample size	10	10	17	17	3	3	22	22	8	8
mean	2.90	2.80	2.59	2.35	2.33	1.67	2.91	2.86	3.13	2.75
median	3	3	3	2	2	2	3	3	3	3
mode	4	2	2	2	2	2	3	3	3	3
standard deviation	1.20	1.03	0.94	1.22	0.58	0.58	0.97	0.99	0.83	0.89
range	3	3	3	4	2	3	3	3	2	3
component score	73%	70%	65%	59%	58%	42%	73%	72%	78%	69%
achievement level	Prof.	Prof.	Prof.	Prof.	Comp.	Comp.	Prof.	Prof.	Prof.	Prof.
LO2	Campus		Concurrent		Mixed		Online		Ozark	
Average Score	63%		51%		33%		74%		78%	
Fundamental component	LO2		LO2		LO2		LO2		LO2	
Sample size	10		17		3		22		8	
mean	2.50		2.06		1.33		2.95		3.13	
median	3		2		2		3		3.5	
mode	3		2		2		4		4	
standard deviation	1.43		1.30		1.15		1.00		1.13	
range	4		4		4		3		3	
component score	63%		52%		33%		74%		78%	
achievement level	Prof.		Comp.		Adv.B.		Prof.		Prof.	

LO3	Campus		Concurrent		Mixed		Online		Ozark	
Average Score	68%		60%		33%		63%		72%	
Fundamental components	LO3.1	LO3.2	LO3.1	LO3.2	LO3.1	LO3.2	LO3.1	LO3.2	LO3.1	LO3.2
Sample size	10	10	17	17	3	3	22	22	8	8
mean	3.30	2.10	2.59	2.24	2.33	0.33	2.86	2.18	2.75	3.00
median	3.5	2	2	2	2	0	3	2.5	3	3
mode	5	2	2	2	2	0	3	3	3	2
standard deviation	.82	1.45	1.28	1.20	0.58	0.58	1.04	1.47	1.04	0.93
range	2	4	4	4	2	4	3	4	3	2
component score	83%	53%	65%	56%	58%	8%	72%	55%	69%	75%
achievement level	Mast.	Comp.	Prof.	Comp.	Comp.	Nov.	Prof.	Comp.	Prof.	Prof.

Figure 15: Data Table for Written Communication Statistics by Course Modality and LO Components

Written Communication Statistics by Subject and Learning Outcome Components

LO1	Agricultural Business		English		History	
Average Score	50%		80%		61%	
Fundamental components	LO1.1	LO1.2	LO1.1	LO1.2	LO1.1	LO1.2
Sample size	3	3	24	24	33	33
mean	2.33	1.67	3.29	3.08	2.52	2.39
median	2	2	3.5	3	3	2
mode	2	2	4	3	3	2
standard deviation	0.58	0.58	0.86	0.93	0.94	1.06
range	2	3	3	3	3	4
component score	58%	42%	82%	77%	63%	60%
achievement level	Comp.	Comp.	Mast.	Prof.	Prof.	Comp.
LO2	**Agricultural Business**		**English**		**History**	
Average Score	33%		77%		58%	
Fundamental component	LO2		LO2		LO2	
Sample size	3		24		33	
mean	1.33		3.08		2.30	
median	2		3.5		2	
mode	2		4		2	
standard deviation	1.15		1.18		1.19	
range	4		4		4	
component score	33%		77%		58%	
achievement level	Adv.B.		Prof.		Comp.	

LO3	Agricultural Business		English		History	
Average Score	33%		71%		59%	
Fundamental components	**LO3.1**	**LO3.2**	**LO3.1**	**LO3.2**	**LO3.1**	**LO3.2**
Sample size	3	3	24	24	33	33
mean	2.33	0.33	3.08	2.63	2.67	2.06
median	2	0	3	3	3	2
mode	2	0	3	4	4	2
standard deviation	0.58	0.58	0.88	1.31	1.19	1.30
range	2	4	3	4	4	4
component score	58%	8%	77%	66%	67%	52%
achievement level	Comp.	Nov.	Prof.	Prof.	Prof.	Comp.

Figure 16: Data Table for Written Communication Statistics by Subject and LO Components

Appendix A – Rubrics

Rubrics are provided on the following pages.

Practice Civic Engagement Scoring Rubric

Instructions: Place an X in the yellow box under the description that most closely aligns with the accomplishment of the artifact.

	Mastered	Proficient	Developing	Advanced Beginner	Novice
	4	3	2	1	0
Diversity of Communities and Cultures	Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures.	Reflects on how own attitudes and beliefs are different from those of other cultures and communities.	Has awareness that own attitudes and beliefs are different from those of other cultures and communities.	Expresses attitudes and beliefs as an individual, from a one-sided view.	Is resistant to, or disengaged from, conversations about learning from diversity of communities and cultures.
	Engages and promotes others' engagement with diversity.	Exhibits curiosity about what can be learned from diversity of communities and cultures.	Exhibits little curiosity about what can be learned from diversity of communities and cultures.	Is indifferent to what can be learned from diversity of communities and cultures.	Is resistant or hostile to what can be learned from diversity of communities and cultures.
Analysis of Knowledge: *Degree of connection between facts, theories, etc. from one's own academic study/ field/ discipline to civic engagement and to one's own participation in civic life, politics, and government.*	Connects and extends knowledge	Analyzes knowledge	Begins to connect knowledge	Begins to identify knowledge	Does not identify knowledge.
Civic Identity and Commitment *Evidence of experience in civic-engagement activities and its impact on personal commitment*	Provides evidence and describes what they learned about themself as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.	Provides evidence and describes what they learned about themself as it relates to a growing sense of civic identity and commitment.	Evidence is generated from expectations or course requirements rather than from a sense of civic identity.	Provides little evidence and does not connect experiences to civic identity.	Does not participate or show evidence of participation.
Civic Communication *Ability to express, listen, and adapt ideas and messages based on others' perspectives to establish relationships to further civic action*	Tailors civic communication strategies to effectively express, listen, and adapt	Effectively communicates in civic context.	Communicates in civic context with more than one, but not all, of the following: express, listen, and adapt	Communicates in civic context with one of the following: express, listen, and adapt	Does not communicate in civic context

Civic Action and Reflection	Demonstrates independent experience and *shows initiative in team leadership* of complex or multiple civic engagement activities.	Demonstrates independent experience and *team leadership of* civic action, with	Has clearly *participated* in civically focused actions.	Has *experimented* with some civic activities	Has not participated in civic activities
	Reflective insights or analysis about the aims and accomplishments of one's actions.	Somewhat reflective insights or analysis about the aims and accomplishments of one's actions.	Begins to reflect or describe how their actions may benefit individual(s) or communities.	Shows little internalized understanding of their aims or effects and little commitment to future action.	Does not show understanding of aims or effects of personal commitment to civic activities.
Civic Contexts/Structures	Demonstrates ability and commitment to *collaboratively work across and within* community contexts and structures *to achieve a civic aim* .	Demonstrates ability and commitment to work actively *within* community contexts and structures *to achieve a civic aim* .	Demonstrates experience identifying intentional ways to *participate in* civic contexts and structures.	Experiments with civic contexts and structures, *tries out a few to see what fits.*	Does not demonstrate ability to participate in any civic contexts and structures.

Written Communication Scoring Rubric

	Mastered 4	Proficient 3	Competent 2	Advanced Beginner 1	Novice 0
1. Present written thoughts in a cohesive manner *Context of and Purpose for Writing*	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).	No evidence of context, audience, or purpose.
Genre and disciplinary conventions	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.	No evidence of basic organization and presentation.
2. Synthesize information into a collective argument *Content development*	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work	Uses appropriate and relevant content to develop simple ideas in some parts of the work.	No developed ideas and content does not relate to subject.
3. Use formal grammar and mechanics *Control of syntax and Mechanics*	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.	Use of language clearly impedes understanding. Mulitible errors in usage.
Uses of sources	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.	No sources included.