General Education Assessment Report – AY 2021-22

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1 INTRODUCTION

The intent of FSW's General Education Program is to foster lifelong learning and establish academic excellence, interdisciplinary dialog, and a social responsibility among students. In that light, the purpose of the program is to: 1) measure against baseline data for the number of students receiving scores of 3 or higher on relevant dimensions of the rubric, 2) measure against baseline data for the number of students receiving scores of 3 or higher on relevant dimensions of the rubric across sites (Online, Dual Enrollment, and Traditional), 3) establish a baseline for the number of student artifacts receiving a score of 3 or higher on relevant aspects of the rubric across credit achievement level (e.g. achievement with respect to number of credits earned), 4) establish a baseline for the number of student artifacts receiving a score of 3 or higher on relevant aspects of the rubric across pre-requisite definition (e.g. achievement with respect to pre-requisite courses), and 5) develop FSW-based rubrics for assignments/assessments administered at FSW.

Before the beginning of AY 2014-2015, the General Education Assessment Subcommittee of the Learning Assessment Committee (LAC) adopted (see June 9, 2014 GEAS Subcommittee Meeting Minutes) the Association of American Colleges & Universities (AAC&U) Value Rubric Model (Rhodes and Finley, 2013) after an extensive review of General Education assessment models employed throughout higher education. During AY 2014-2015, the subsequent assessment during that academic year, each of the five competencies (Communication, Critical Thinking, Technology/Information Management, Global Socio-cultural Responsibility, and Scientific and Quantitative Reasoning) was assessed through assignments identified by faculty as fitting the criteria of the competency (Braselton, 2011; Rhodes and Finley, 2013) by way of a pilot study. As aligned with the AAC&U Value Rubric Model and Value Rubric Case Studies, Florida SouthWestern State College (FSW) faculty from across disciplines voluntarily submitted assignments aligned with the competencies. Assignments do not have to be uniform if outcomes, rating, and the rationale for rating (rubric interpretation) are uniform (Rhodes & Finley, 2013). Outcomes are identified by the competency definition at FSW. Calibration sessions were conducted before scoring in each competency. Inter-rater reliability studies were performed on the results (see AY 2014-2015 General Education Assessment Report). Following the completion of the pilot study, recommendations by the LAC focused on professional development opportunities in the strengthening of assignment guidelines.

Assessment continued in AY 2015-2016 using the same method to begin employing the use of the AAC&U rubrics for a comprehensive review of the Communication (COM) competency, both oral and written. Discussions pertaining to the results of the analysis led to (1) a development of the goal to strengthen dual enrollment (concurrent) participation in general education assessment and (2) professional development opportunities in supporting students' writing (see AY 2015-2016 General Education Assessment Report).

The third year in the evolution, AY 2016-2017, again using the same method, saw the use of AAC&U rubrics for another comprehensive review this time of the Critical Thinking (CT) and the Scientific and Quantitative Reasoning (QR) competencies (see AY 2016-2017 General Education Assessment Report).

Note that the AAC&U Value Rubric was used for the CT competency, but an FSW developed rubric was used for QR. Discussions pertaining to the results of the analysis led to the development of FSW specific rubrics in preparation for the shift from the old competencies (Communication, Critical Thinking, Technology/Information Management, Global Socio-cultural Responsibility, and Scientific and Quantitative Reasoning) to the new competencies (Communicate, Research, Evaluate, Analyze, Think, Investigate, Visualize, and Engage {C-R-E-A-T-I-V-E}) which occurred in the Fall 2016 term.

General Education assessment continues in AY 2017-2018. The change for this year is in response to the newly adopted competencies which are based on faculty-led identification. Instead of asking faculty to volunteer assignments, once the LAC votes on which competencies to study in each assessment, courses are randomly sampled from a list of courses which were identified by faculty as encompassing that competency.

A complete list of the years for analysis of each competency is shown below:

- ➢ AY 2015-16: Communication*
    - o *most closely associated with Communicate in the current competencies
- ➢ AY 2016-17: Critical Thinking*, Quantitative Reasoning*
    - o *most closely associated with Think and Evaluate in the current competencies
- ➢ AY 2017-18: Research, Investigate
- ➢ AY 2018-19: Visualize, Engage
- ➢ AY 2019-20: Analyze, Research
- ➢ AY 2020-21: Communicate, Evaluate
- ➢ AY 2021-22: Think, Investigate

For additional detail on further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Asst. VP, IR, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 THINK

The outcome of the 'Think' competency at FSW is that by completion of the general education requirements, students will be able to think critically about questions to yield meaning and value. The LAC will measure the percentage of artifacts scored a 3 or higher on the individual dimensions of the FSW-specific rubric. The figures associated with Section 2 depict achievement and inter-rater reliability for the 'Think' competency in college-wide, Associate of Arts (AA) cohorts, as well as value-added studies as they relate to outcome goals and objectives, and longitudinal studies. For the study, the LAC utilizes an FSW-specific rubric developed by a selection of faculty representing various areas at the college (Figure 1).

2.1 Overall Achievement, Modality Comparison Study, & Inter-Rater Reliability

THINK	Capstone (4)	Accomplished (3)	Developing (2)	Deficient (1)
Explanation of Issues	Explains and justifies the importance of the issues with clear and relevant evidence.	Describes but does not justify the importance of the issue and/or omits key evidence.	Identifies the issue but leaves some aspects undefined and only mentions importance of the issue.	Does not identify or justify the importance of the issue.
Evidence	Analyzes relevant information and, if required by the assignment, synthesizes the viewpoints of experts from the appropriate discipline(s).	Identifies relevant information and, if required by the assignment, includes the viewpoints of experts from the appropriate discipline(s).	Includes some relevant information but excludes key or important elements, and, if required by the assignment, includes or merely inserts the viewpoints of experts as required within the discipline.	Includes minimal to no relevant information, and, if required by the assignment, does not include or merely inserts the viewpoints of experts as required within the discipline.
Influence of Context and Assumptions	Analyzes assumptions using systematic and methodical approaches, and carefully evaluates the relevance of contexts when presenting a position.	Analyzes assumptions and the relevance of contexts when presenting a position.	Identifies relevant assumptions and contexts when presenting a position.	Identifies minimal to no assumptions and contexts when presenting a position.
Student's Position (perspective)	Amalgamates a position or perspective that takes into account the complexities of the issue.	Establishes a specific position or perspective that takes into account some complexities of the issue.	Develops a specific position or perspective but doesn't acknowledge the complexities of the issue.	States a position or perspective but is simplistic and obvious.
Conclusions and Related Outcomes	Constructs logical conclusions based on consequences and implications drawn from an informed evaluation of evidence and perspectives.	Constructs logical conclusions based on a partial understanding of evidence, consequences, and/or implications.	Includes a conclusion based on a partial understanding of evidence, consequences, and/or implications.	Includes a conclusion based on an incomplete understanding of evidence, consequences, and or implications, or simply restates the introduction or thesis.

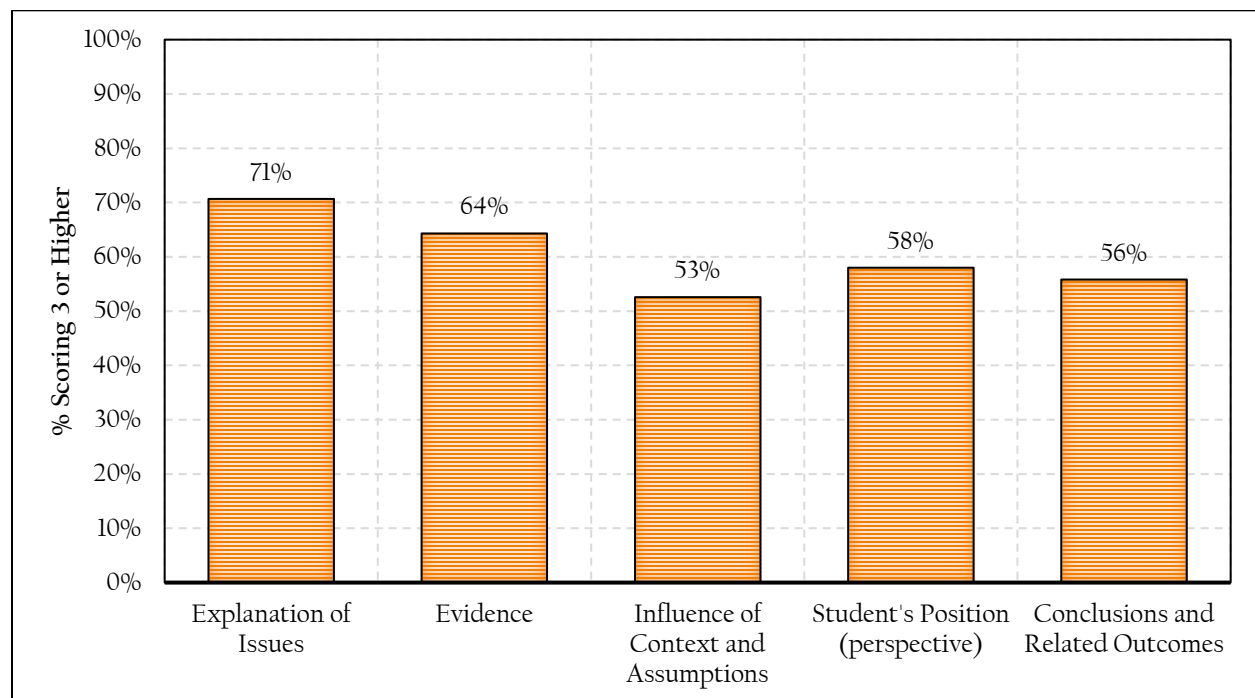Figure 1. FSW-specific 'Think' rubric utilized in the study.

Figure 2. 'Think' achievement at 3 or higher across all rubric dimensions for 179 artifacts from 20 sampled course sections.
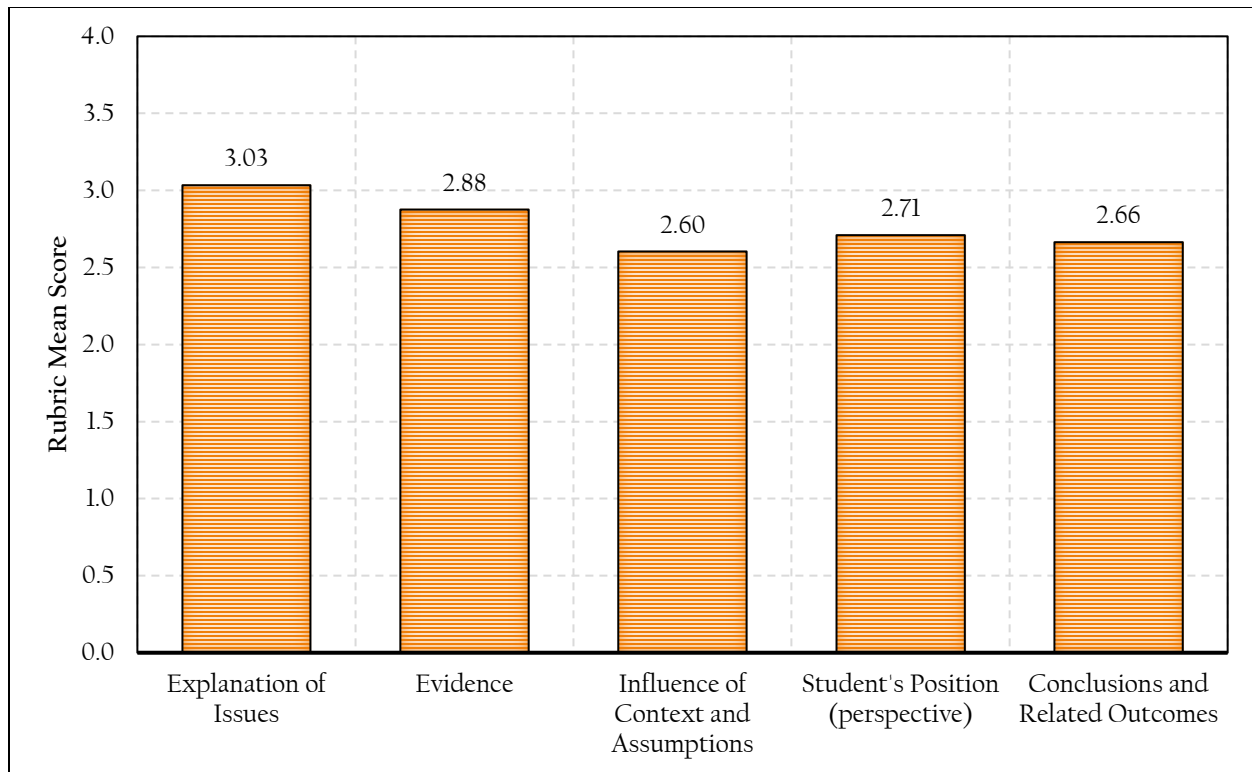
Figure 3. Mean score by rubric dimension for 'Think' for 179 artifacts from 20 sampled course sections.
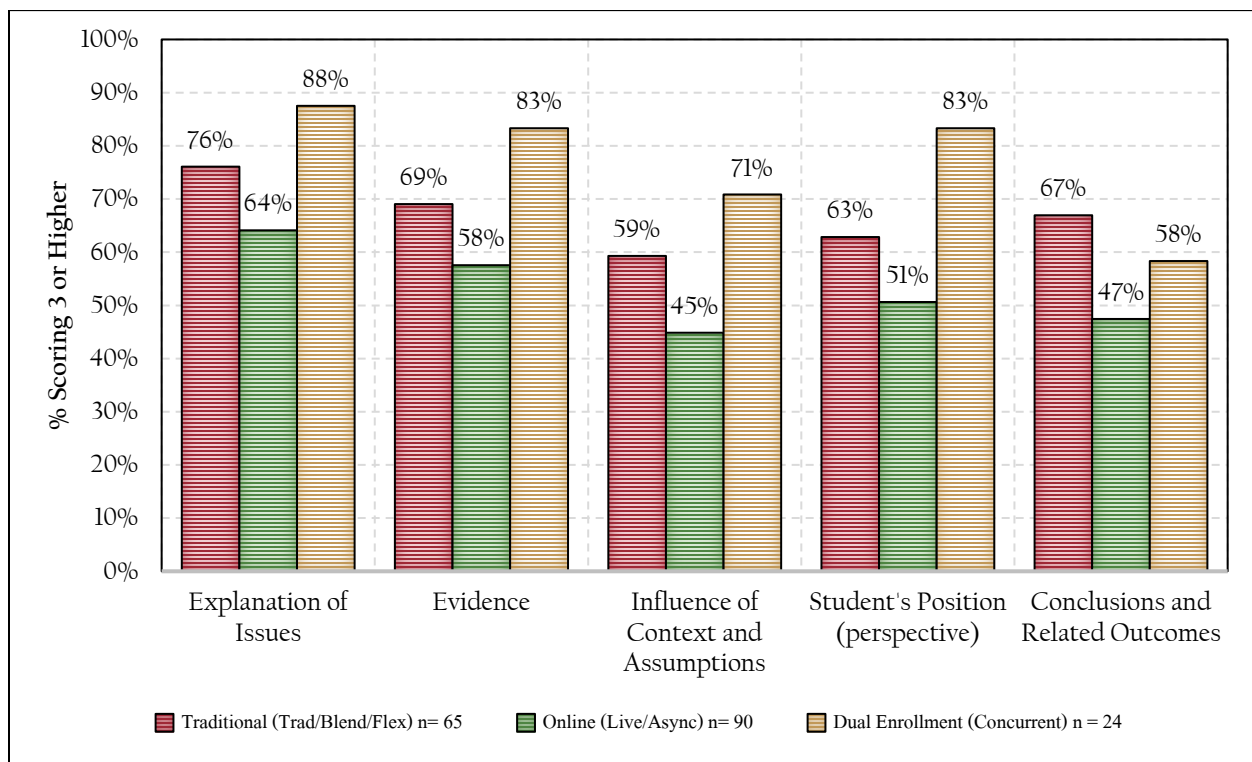

Figure 4. Comparison of 'Think' achievement by modality at 3 or higher across all rubric dimensions for 179 artifacts from 20 sampled course sections. Traditional (red), n=65, Online (green), n=90, Dual Enrollment (concurrent) (beige), n=24.
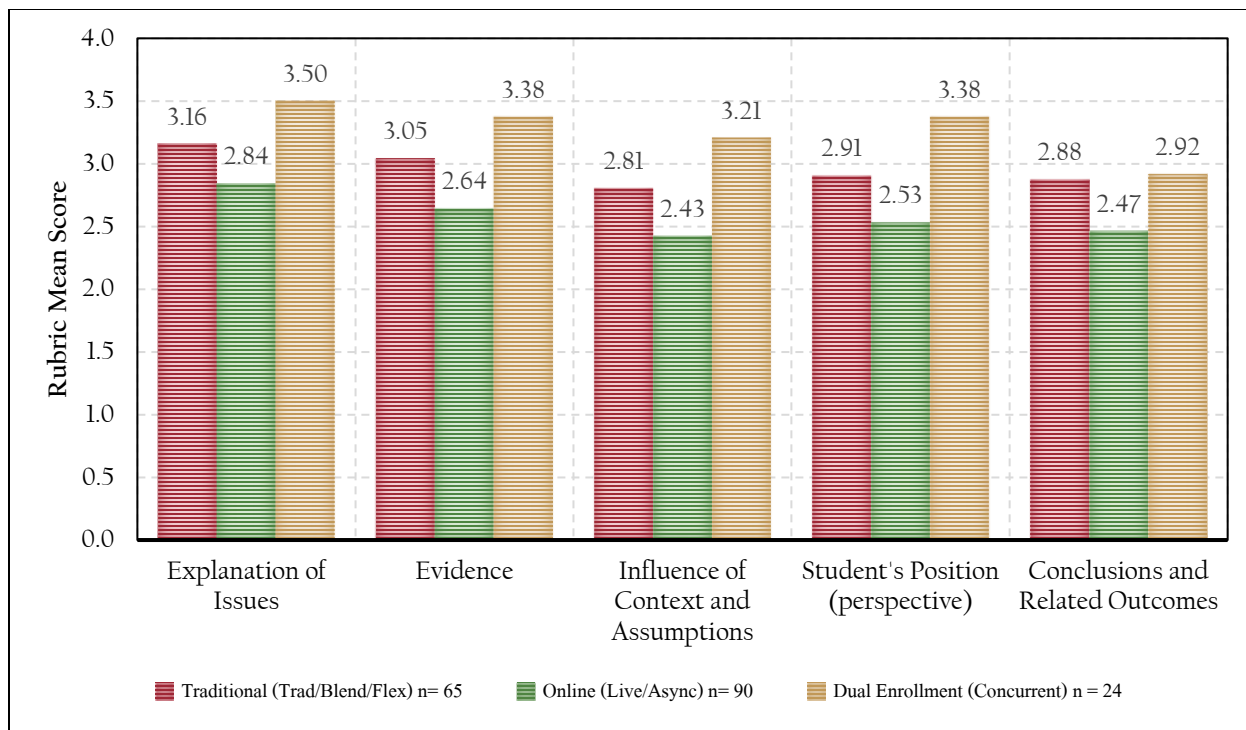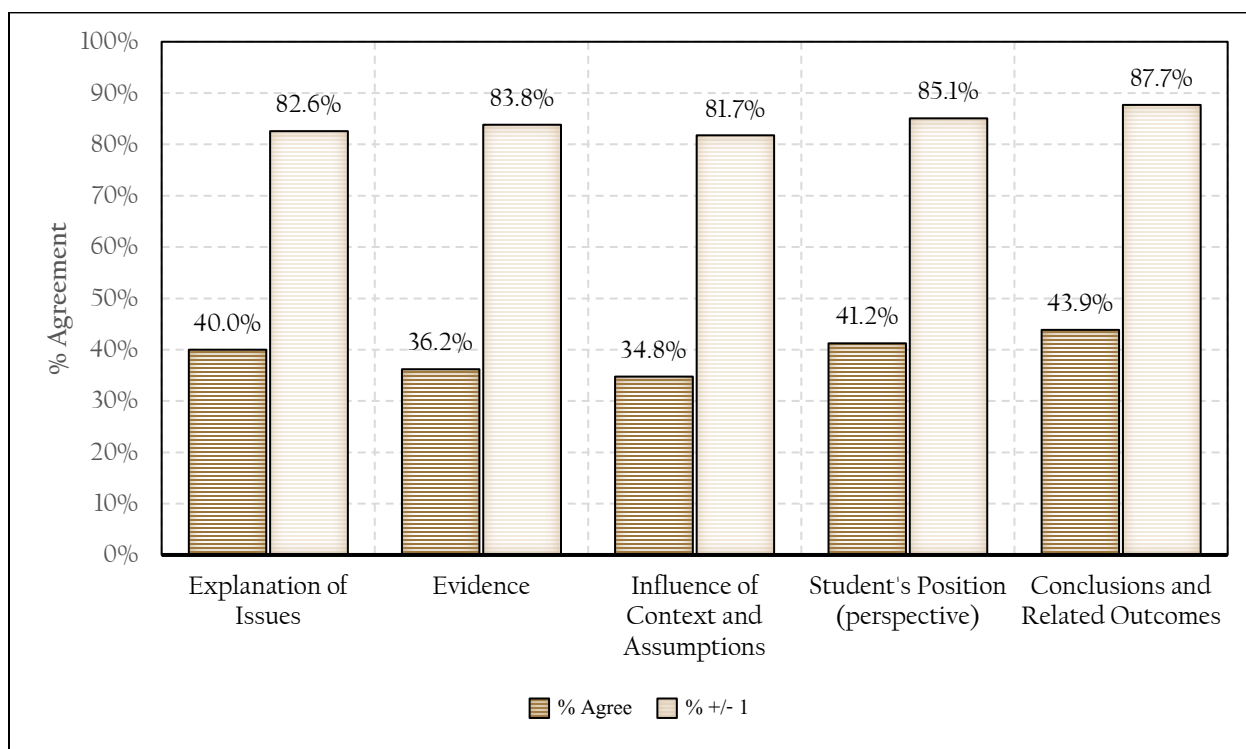
Figure 5. Mean score of 'Think' for each rubric dimension by modality across all rubric dimensions for 179 artifacts from 20 sampled course sections. Traditional (red), n=65, Online (green), n=90, Dual Enrollment (concurrent) (beige), n=24.

Figure 6. Inter-rater reliability (as %) for the 'Think' competency. Each artifact was scored by two scorers. Percentage (%) of agreement (dark beige) is defined as cases where scores by each scorer were identical. Percentage (%) +/- 1 agreement (light beige) is defined as cases where scores by each scorer were within 1 of each other. κ-statistic for the study exhibits similar results. Results are herein presented as percentages for reader convenience.

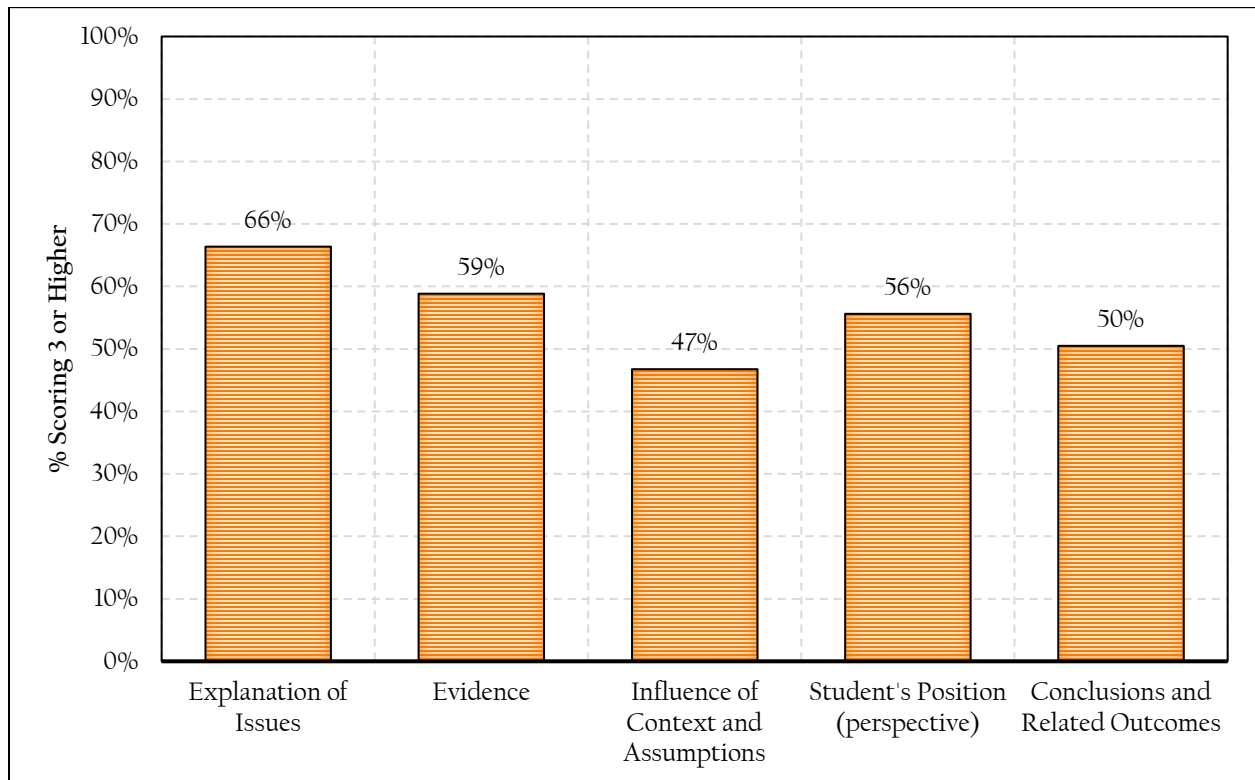## 2.2 Results for A.A. General Studies Only

Figure 7. 'Think' achievement at 3 or higher across all rubric dimensions for AA courses only for 137 artifacts from 15 sampled course sections.
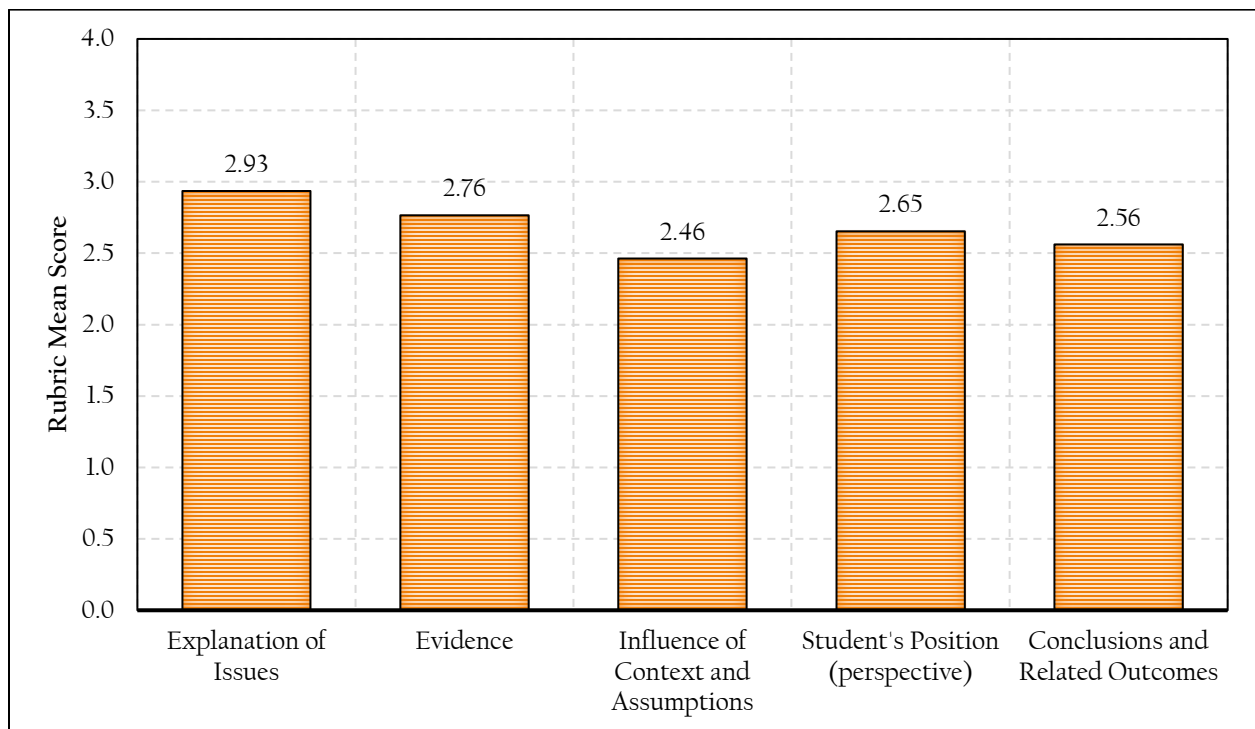

Figure 8. Mean score by rubric dimension for 'Think' for AA courses only for 137 artifacts from 15 sampled course sections.
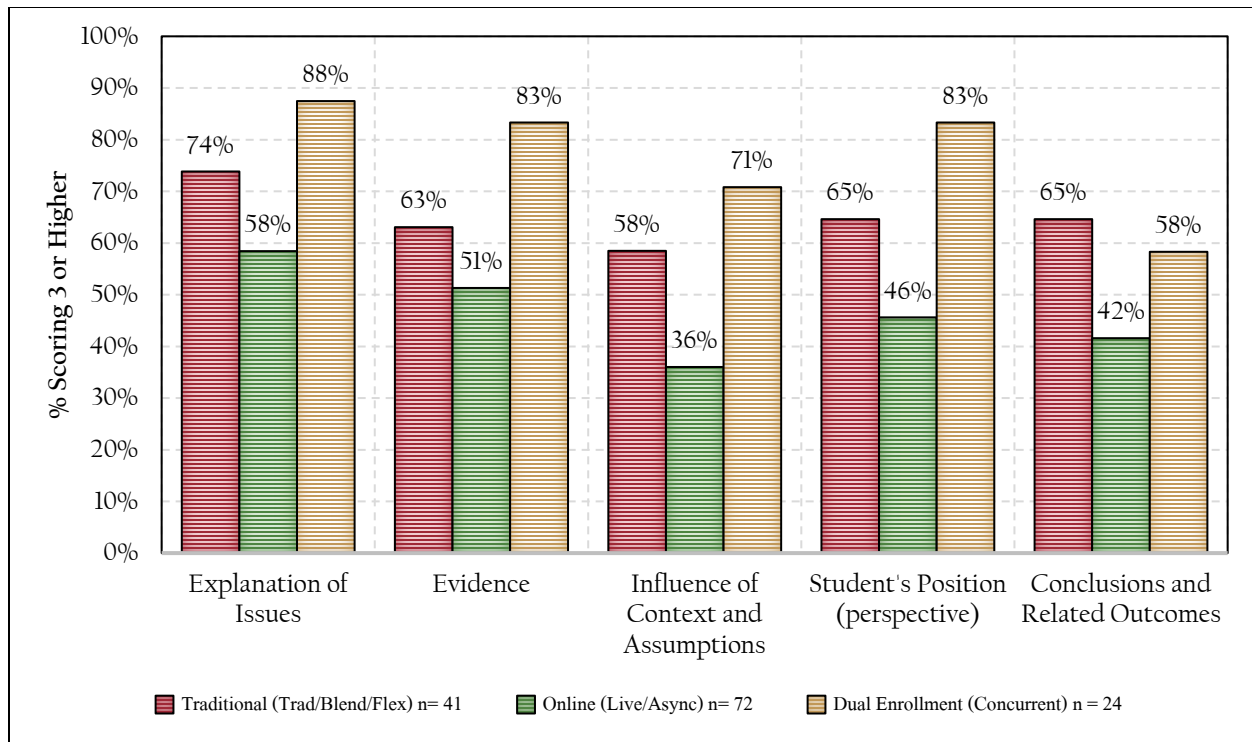
Figure 9. 'Think' achievement at 3 or higher across all rubric dimensions for AA courses only for 137 artifacts from 15 sampled course sections. Traditional (red), n=41, Online (green), n=72, Dual Enrollment (concurrent) (beige), n=24.
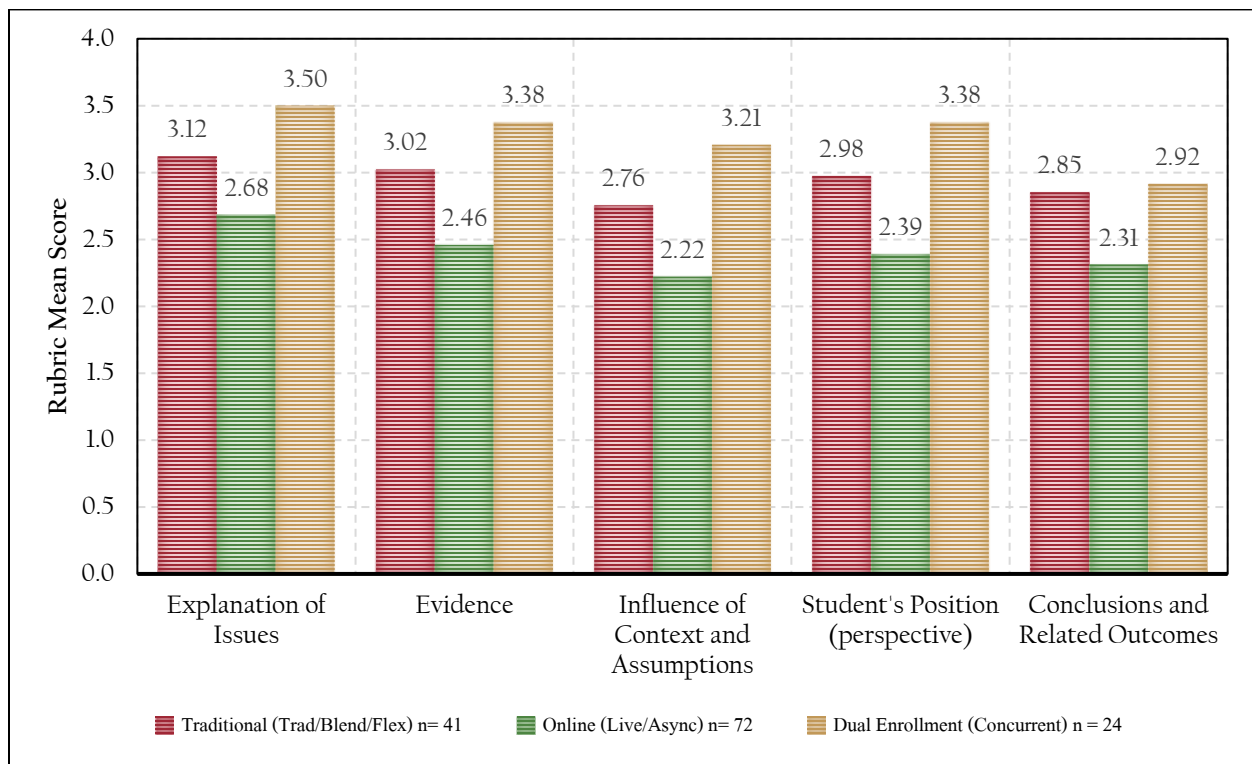

Figure 10. Mean score of 'Think' for each rubric dimension by modality across all rubric dimensions for AA courses only for 137 artifacts from 15 sampled course sections. Traditional (red), n=41, Online (green), n=72, Dual Enrollment (concurrent) (beige), n=24.
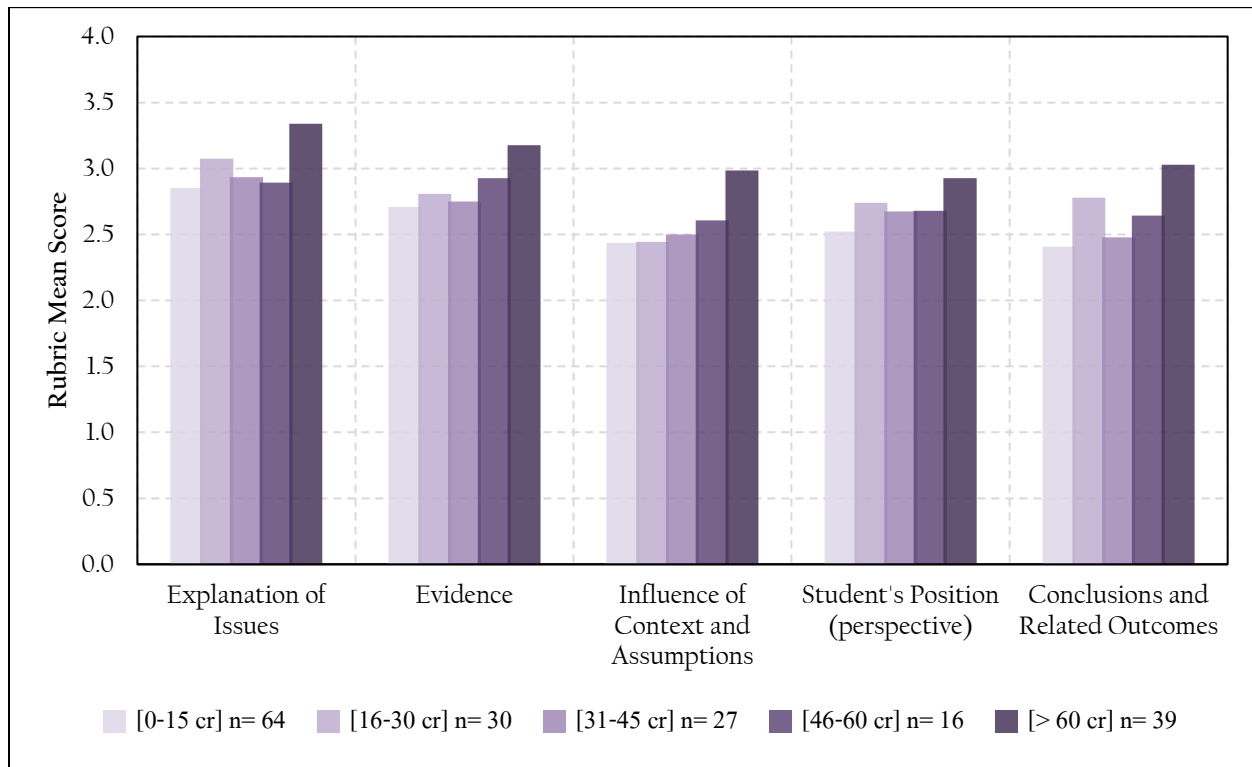
2.3 OVERALL VALUE-ADDED STUDIES

*Figure 11. Comparison of mean score of 'Think' across all rubric dimensions for 179 artifacts in which credit information could be matched to artifact score. From light purple to dark, 0-15 credits earned n=64, 16-30 credits earned n=30, 31-45 credits earned n=27, 46-60 credits earned n=16, and > 60 credits earned n=39. *Credits earned based on number of credits earned entering fall 2021 term.*
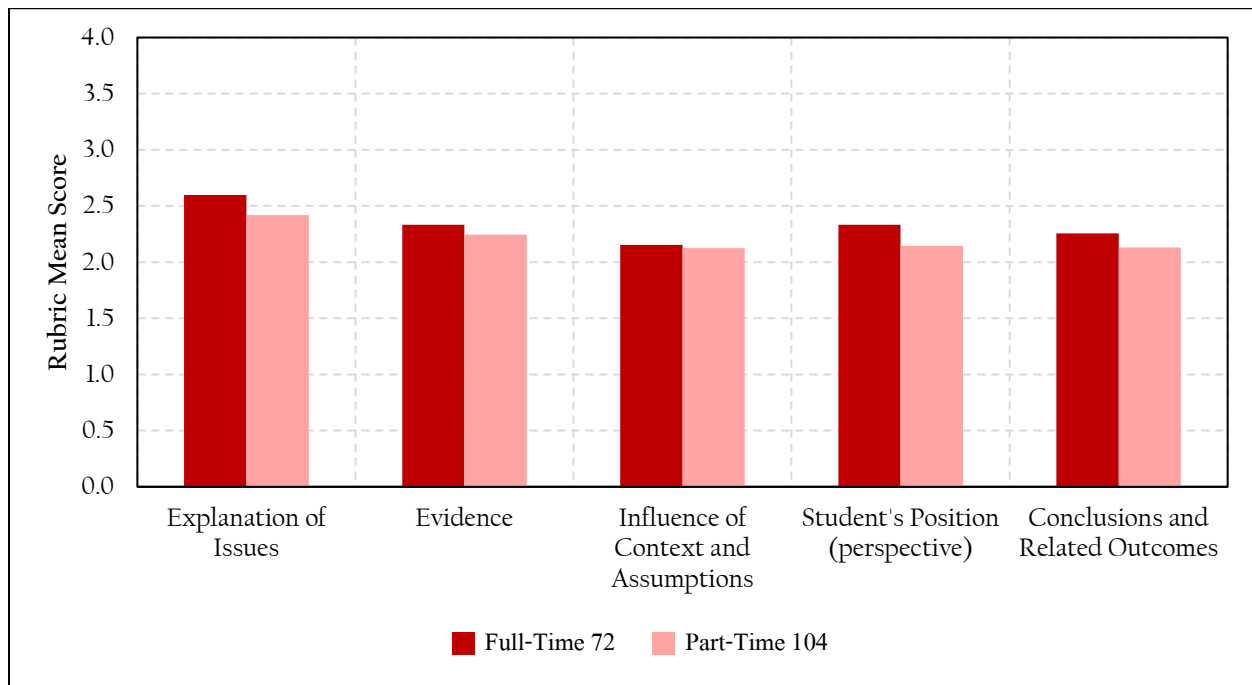

Figure 12. Comparison of mean score of 'Think' across all rubric dimensions based on student status.
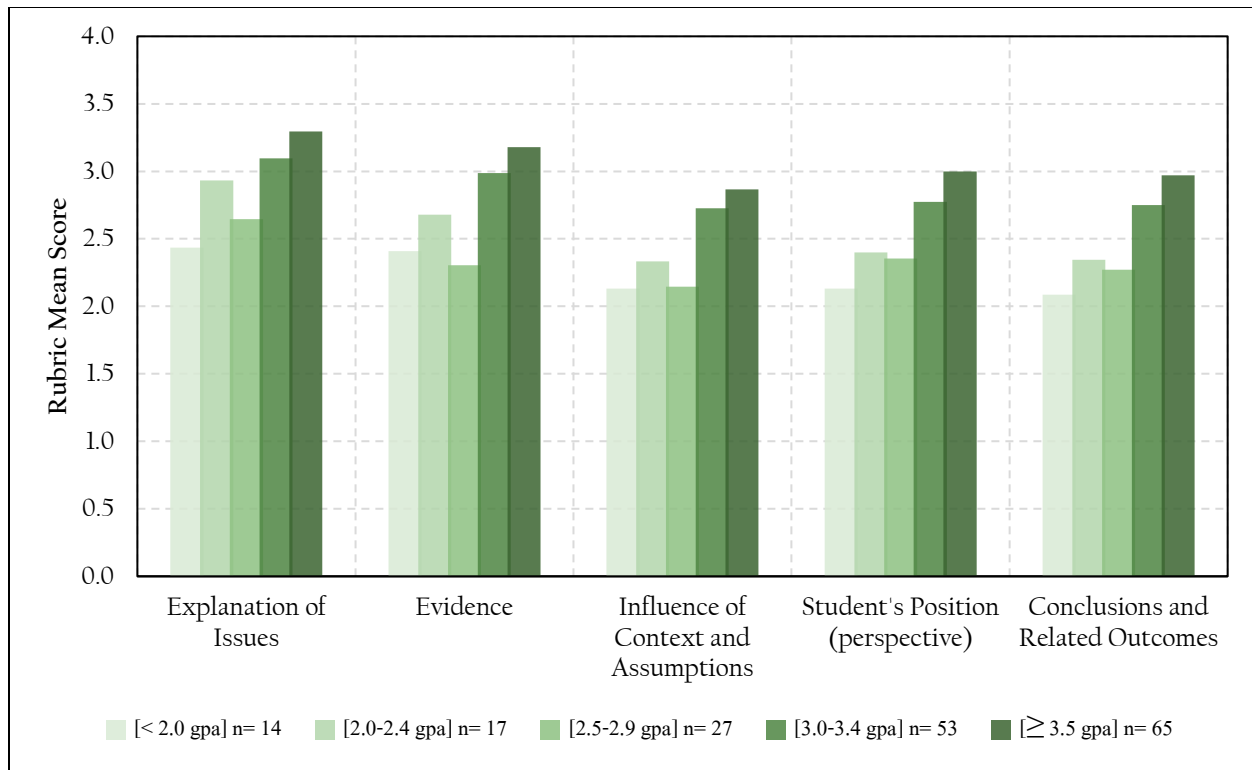
*Figure 13. Comparison of mean score of 'Think' across all rubric dimensions based on GPA. From light green to dark, GPA < 2.0 n=14, GPA 2.0-2.4 n=17, GPA 2.5-2.9 n=27, GPA 3.0-3.4 n=53, GPA ≥ 3.5 n=65. *GPA based on fall inbound GPA; first-time students would therefore not have an inbound FSW GPA, which limits sample size from the overall.*
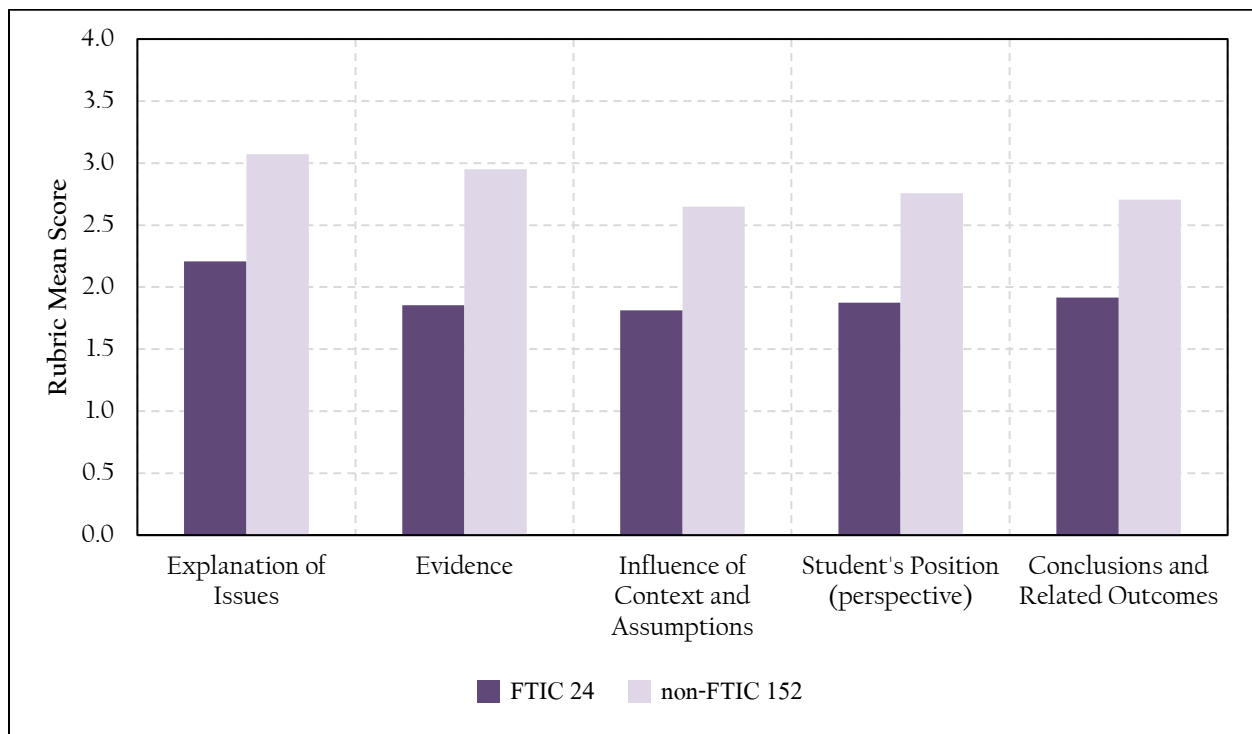

Figure 14. Comparison of mean score of 'Think' across all rubric dimensions based on First-Time-In-College (FTIC) status.
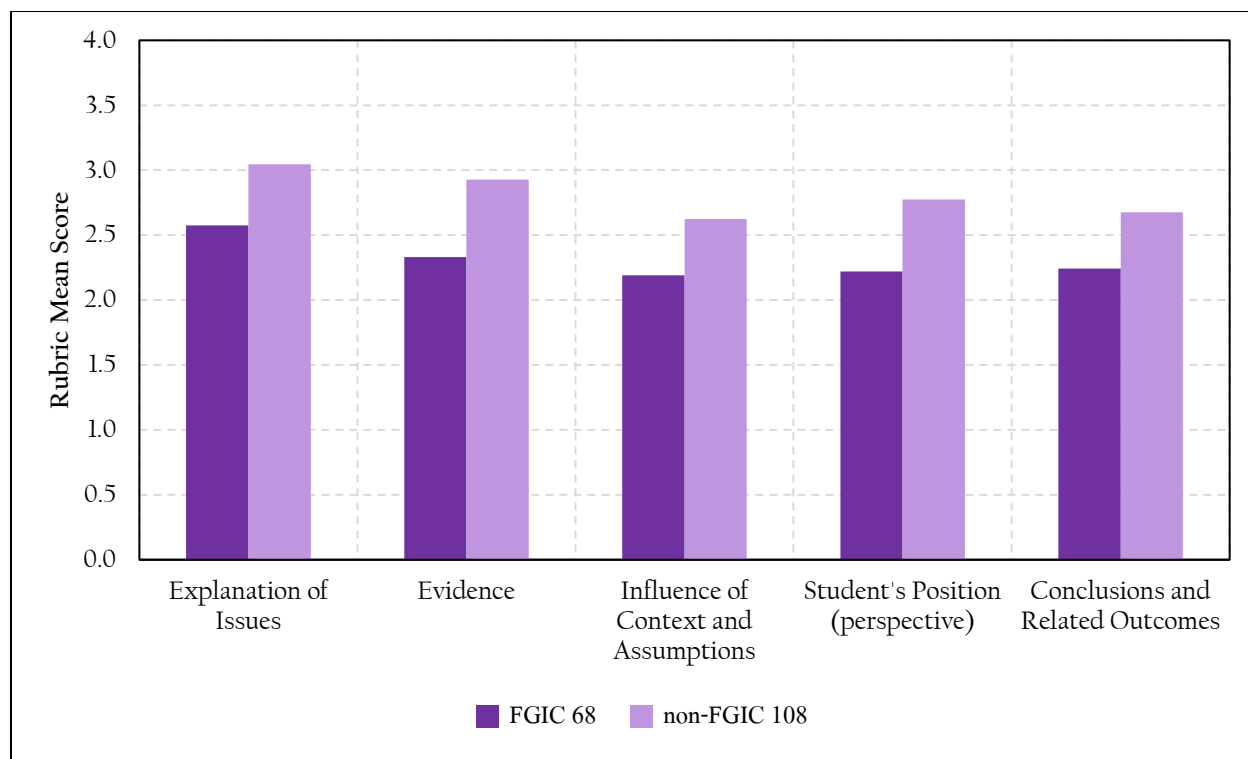
Figure 15. Comparison of mean score of 'Think' across all rubric dimensions based on First-Generation-In-College (FGIC) status.

2.4 LONGITUDINAL STUDY

The AY 2021-22 assessment of the 'Think' competency is the first time this competency is measured using the new FSW-specific rubric. The school representatives used the Association of American Colleges and Universities (AAC & U) Integrated Learning VALUE Rubric as a foundation for development ultimately adopting only the dimensions (in part) and achievement levels (4-3-2-1) with a 0 if no achievement is met. The rubric defines the fundamental criteria for each learning outcome and outline performance required to demonstrate levels of attainment through the use of Bloom's Taxonomic verbiage. Rubric achievement levels, in descending order: Capstone (4), Accomplished (3), Developing (2), and Deficient (1).

The intent of the rubric developers was to frame language such that the rubric is as inclusive as possible to all 'Think' assignments. Careful consideration was paid to providing descriptors detailed enough to score an artifact, yet to remain in general terms as much as possible to allow for application to a wide assortment of assignment types and styles. To increase clarity, action verbs were utilized in each achievement level description. The developers also attempted to place emphasis on dimensions being mutually exclusive, such that users of this rubric can elect to omit any dimension not required of a given assignment. To ensure that non-traditional assignments are scored properly, artifacts representing a variety of modes and media should be utilized during the 'Think' Rubric Calibration Sessions prior to the scoring process.

Because the AAC & U VALUE Rubric was utilized as a foundation for the FSW-specific rubric, the rubric dimensions, while re-worked, are foundationally similar. To exploit this characteristic, this comparison

study compares the results by dimension from the AY 2014-15 initial pilot study to the current AY 2021-2022 study.
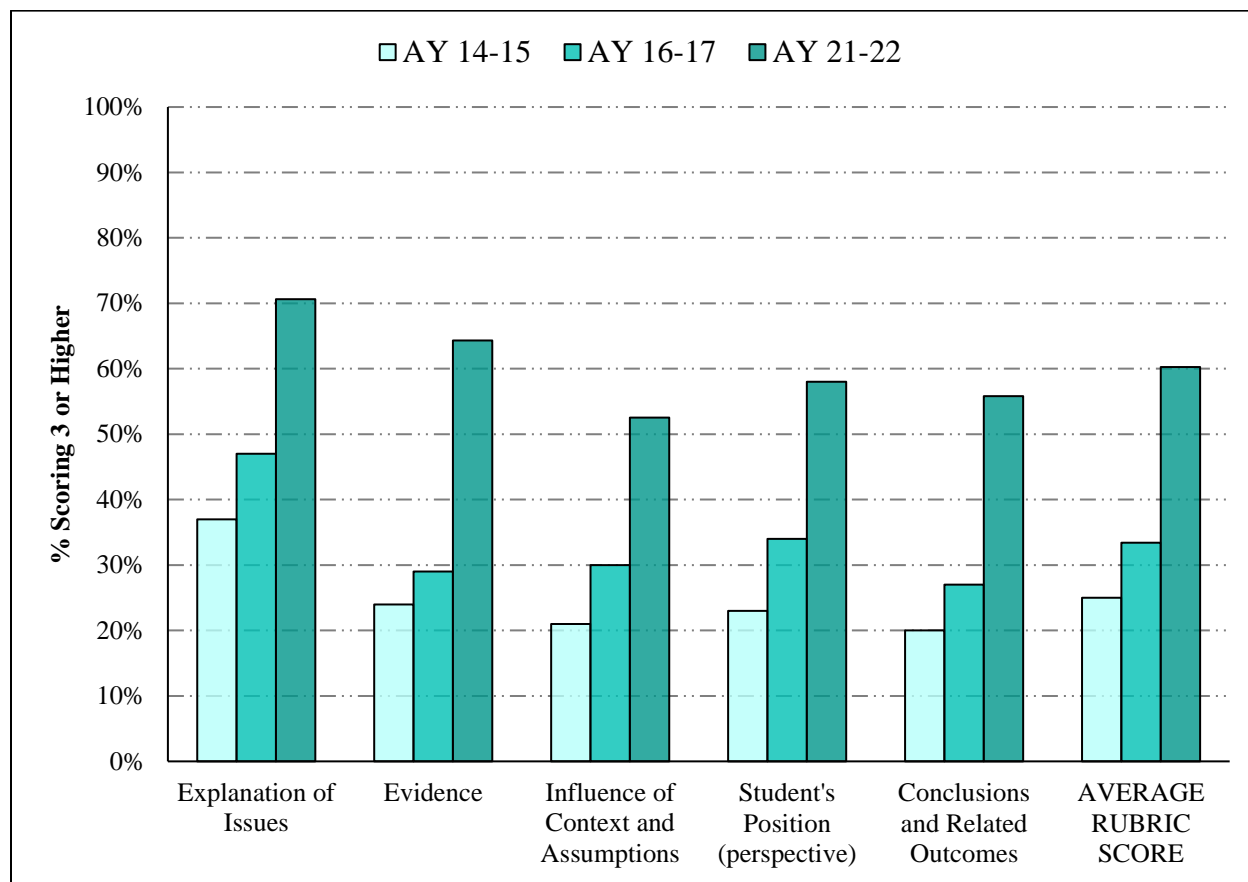

Figure 16. Comparison of assessment of the 'Think' competency over time. The AY 21-22 assessment is the first to utilize the FSW-specific rubric which utilized common dimensions to those in previous studies.

3 INVESTIGATE (I)

The outcome of the 'Investigate' competency at FSW is that by completion of the general education requirements, students will be able to investigate and engage in the transdisciplinary applications of research, learning, and knowledge. The FSW Learning Assessment Committee will measure the number of artifacts scored a 3 or higher on relevant dimensions of the rubric against results from previous studies. The figures associated with Section 3 below depict achievement and inter-rater reliability for the 'Investigate' competency in college-wide, Associate of Arts (AA) cohorts, as well as value-added studies as they relate to outcome goals and objectives, and longitudinal studies.

3.1 OVERALL ACHIEVEMENT, MODALITY COMPARISON STUDY, & INTER-RATER RELIABILITY

INVESTIGATE	Capstone (4)	Accomplished (3)	Developing (2)	Deficient (1)
Connections to Experiences	Evaluates the relevance of connections among life experiences to illuminate concepts / theories / frameworks of fields of study.	Reflects on the relevance of connections among life experiences to illuminate concepts / theories / frameworks of fields of study.	Describes the relevance of connections among life experiences to concepts / theories / frameworks of fields of study.	Identifies limited connections among life experiences to concepts / theories / frameworks of field of study.
Connections to Discipline	Generates conclusions by combining examples, facts, or theories from more than one field of study or perspective.	Connects examples, facts, or theories from more than one field of study or perspective.	Describes examples, facts, or theories from more than one field of study or perspective.	Identifies examples, facts, or theories from a limited range of perspectives or fields of study.
Transfer of Knowledge	Adapts skills, abilities, theories, or methodologies gained in one situation to new situations to solve difficult problems or explore complex issues in original ways.	Applies skills, abilities, theories, or methodologies gained in one situation to new situations to solve difficult problems or explore complex issues.	Summarizes skills, abilities, theories, or methodologies learned from one situation to new situations to contribute to understanding of problems or issues.	Identifies skills, abilities, theories, or methodologies gained in one situation that relate in a minimal or limited way to another.
Transdisciplinary Problem Solving	Devises innovative solutions to systemic problems by drawing on multiple disciplines and/or collaborating with others.	Appraises current solutions to systemic problems by drawing on multiple disciplines and/or collaborating with others.	Summarizes current solutions to systemic problems by drawing on more than one discipline and/or collaborating with others.	Identifies a limited number of solutions to systemic problems by drawing on more than one discipline and/or collaborating with others.

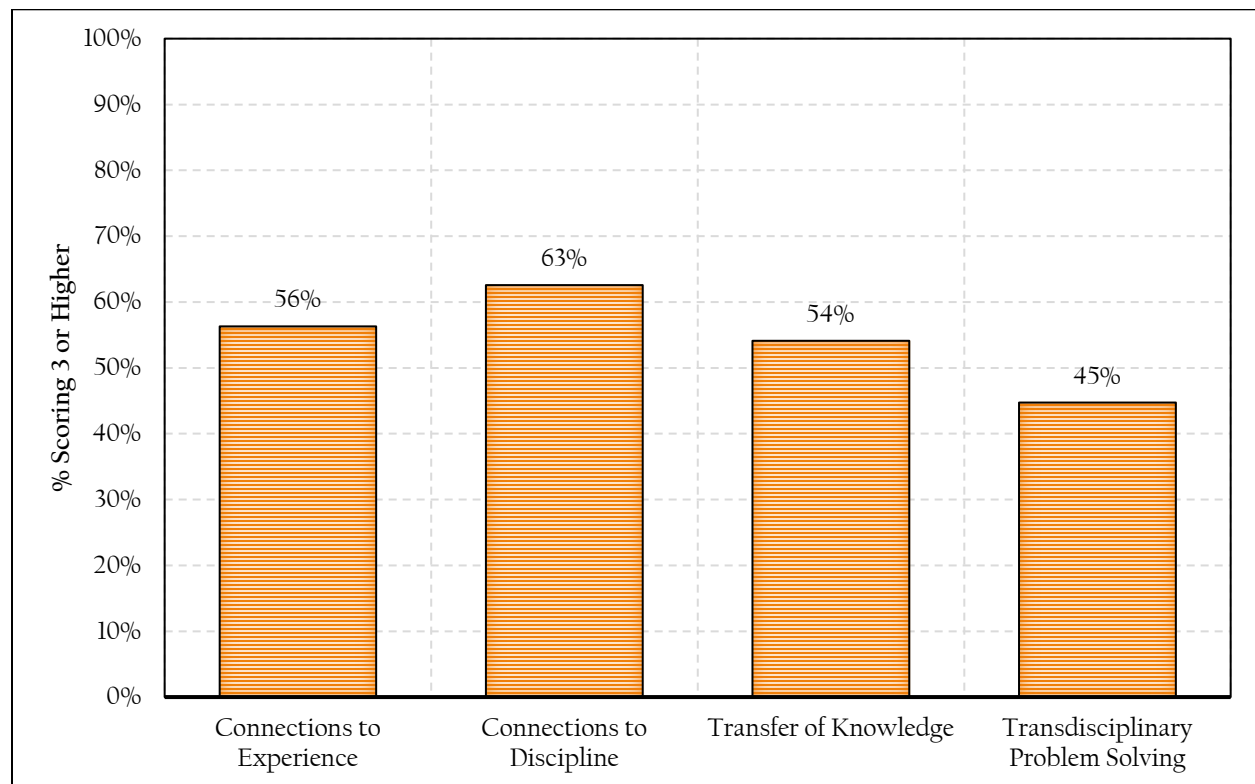*Figure 17. FSW-specific 'Investigate' rubric utilized in the study.*

Figure 18. 'Investigate' achievement at 3 or higher across all rubric dimensions for 176 artifacts from 20 sampled course sections.
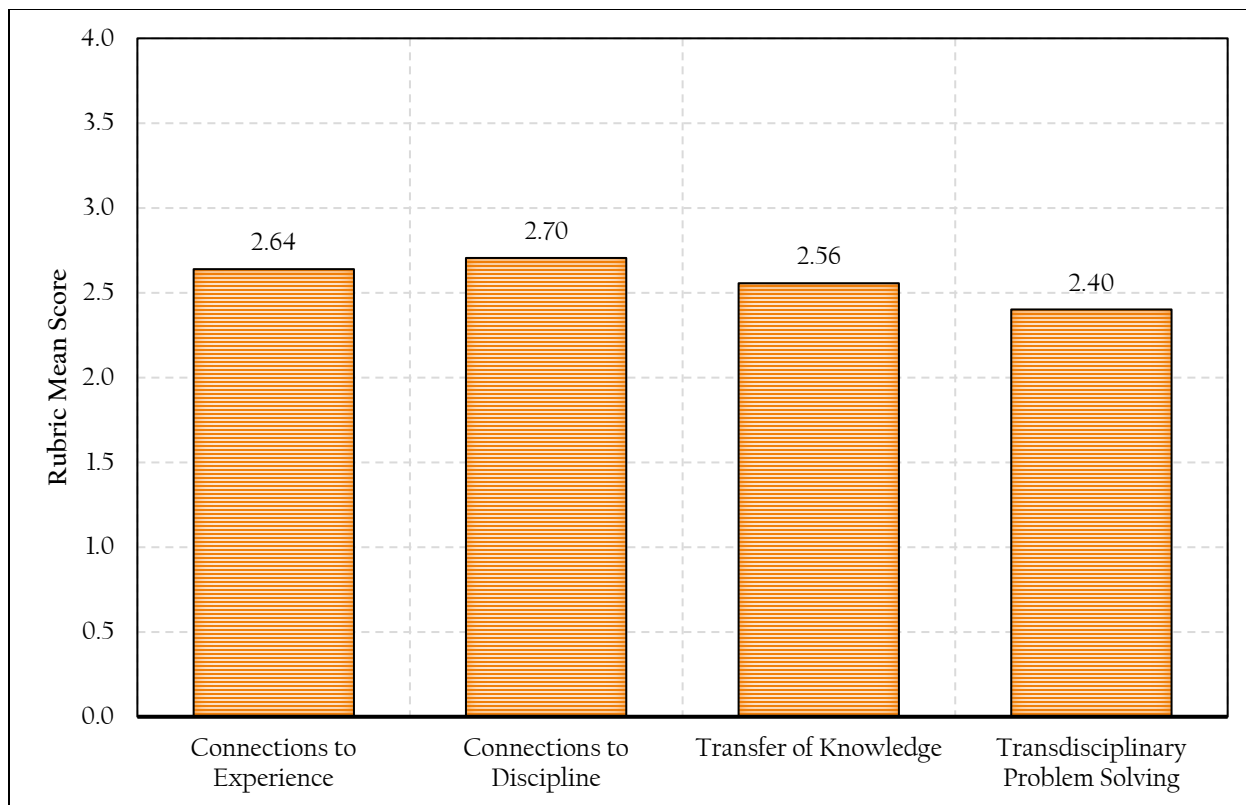
Figure 19. Mean score by rubric dimension for 'Investigate' for 176 artifacts from 20 sampled course sections.
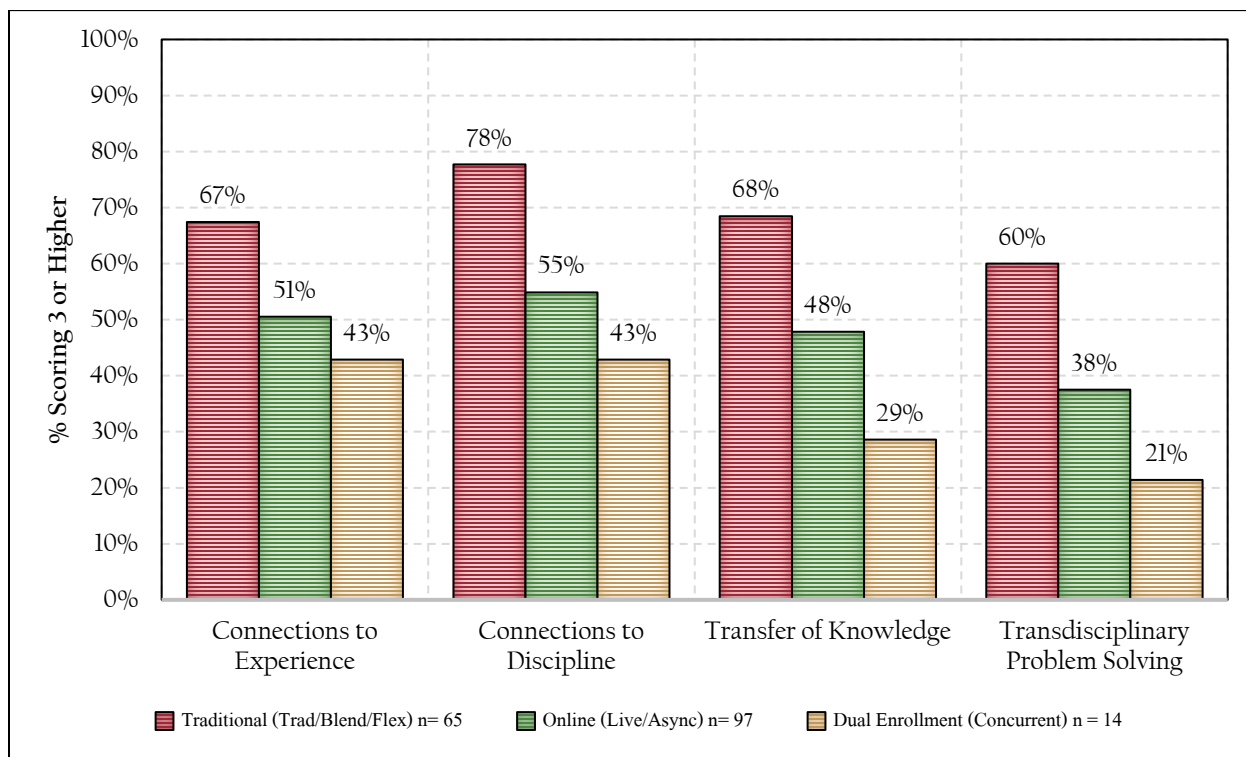

Figure 20. Comparison of 'Investigate' achievement by modality at 3 or higher across all rubric dimensions for 176 artifacts from 20 sampled course sections. Traditional (red), n=65, Online (green), n=97, Dual Enrollment (concurrent) (beige), n=14.
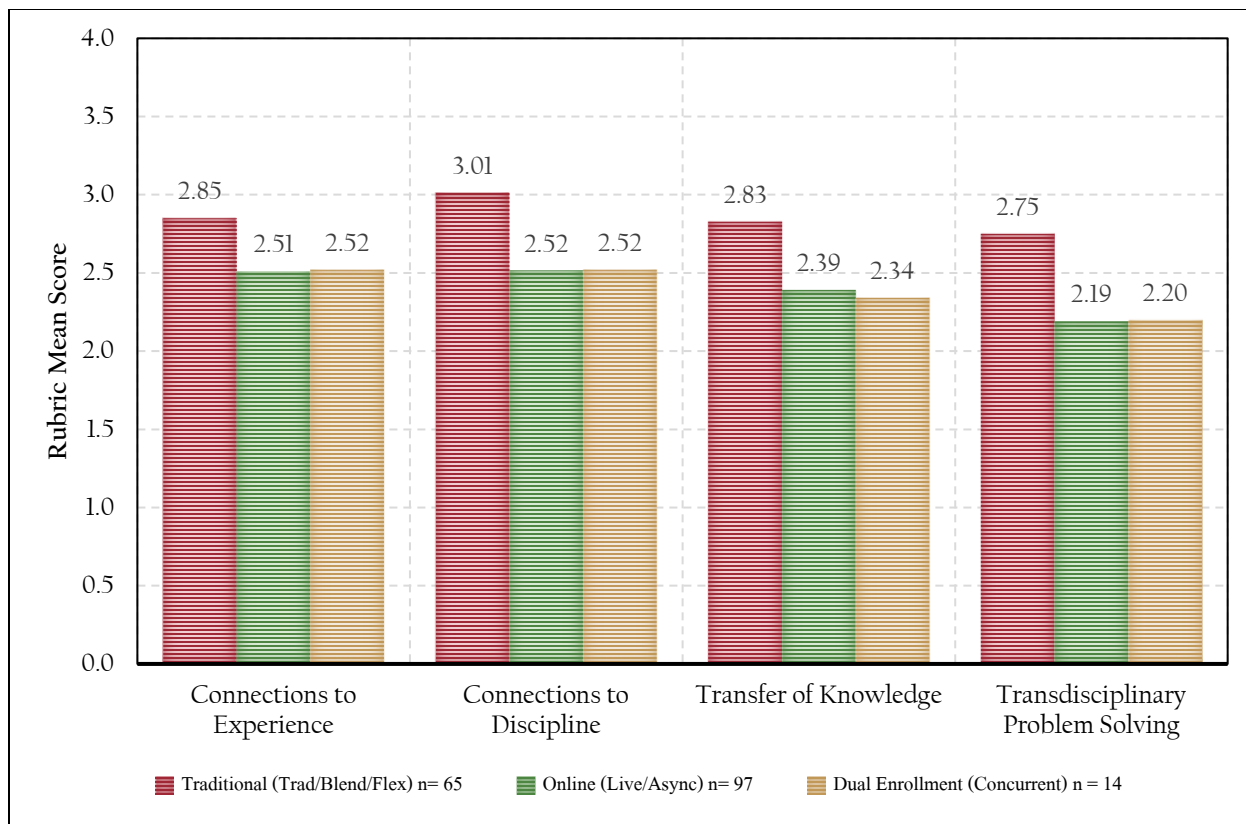
Figure 21. Mean score of 'Investigate' for each rubric dimension by modality at 3 or higher across all rubric dimensions for 176 artifacts from 20 sampled course sections. Traditional (red), n=65, Online (green), n=97, Dual Enrollment (concurrent) (beige), n=14.
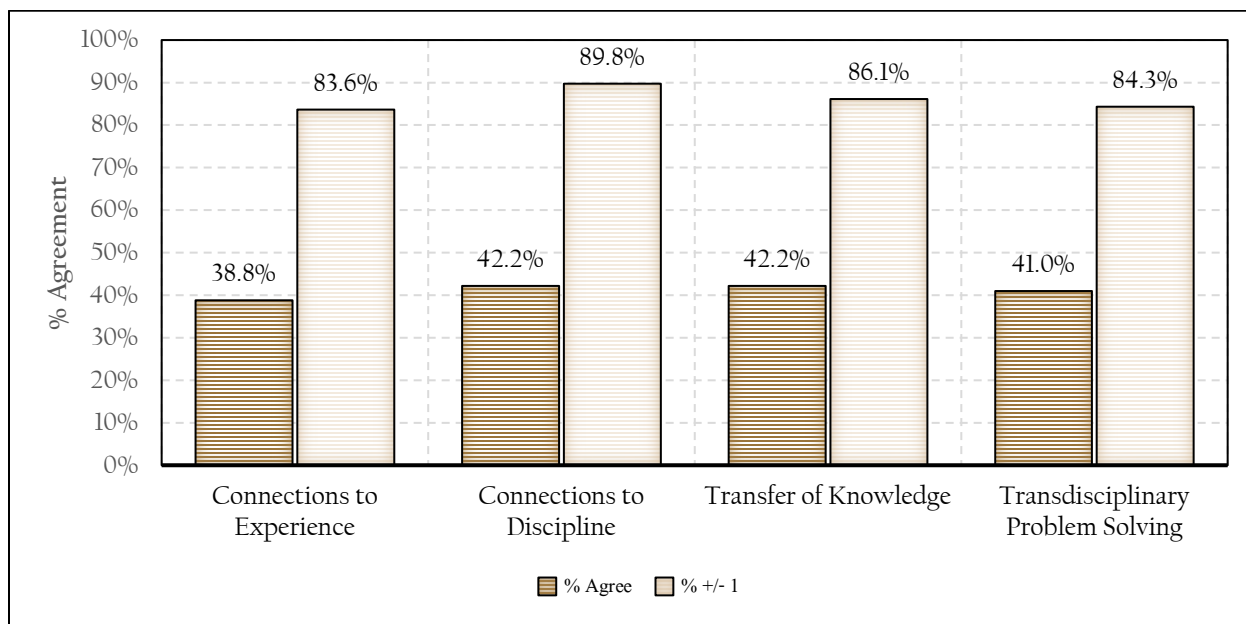

Figure 22. Inter-rater reliability (as %) for the 'Investigate' competency. Each artifact was scored by two scorers. Percentage (%) of agreement (dark beige) is defined as cases where scores by each scorer were identical. Percentage (%) +/- 1 agreement (light beige) is defined as cases where scores by each scorer were within 1 of each other. κ-statistic for the study exhibits similar results. Results are herein presented as percentages for reader convenience.

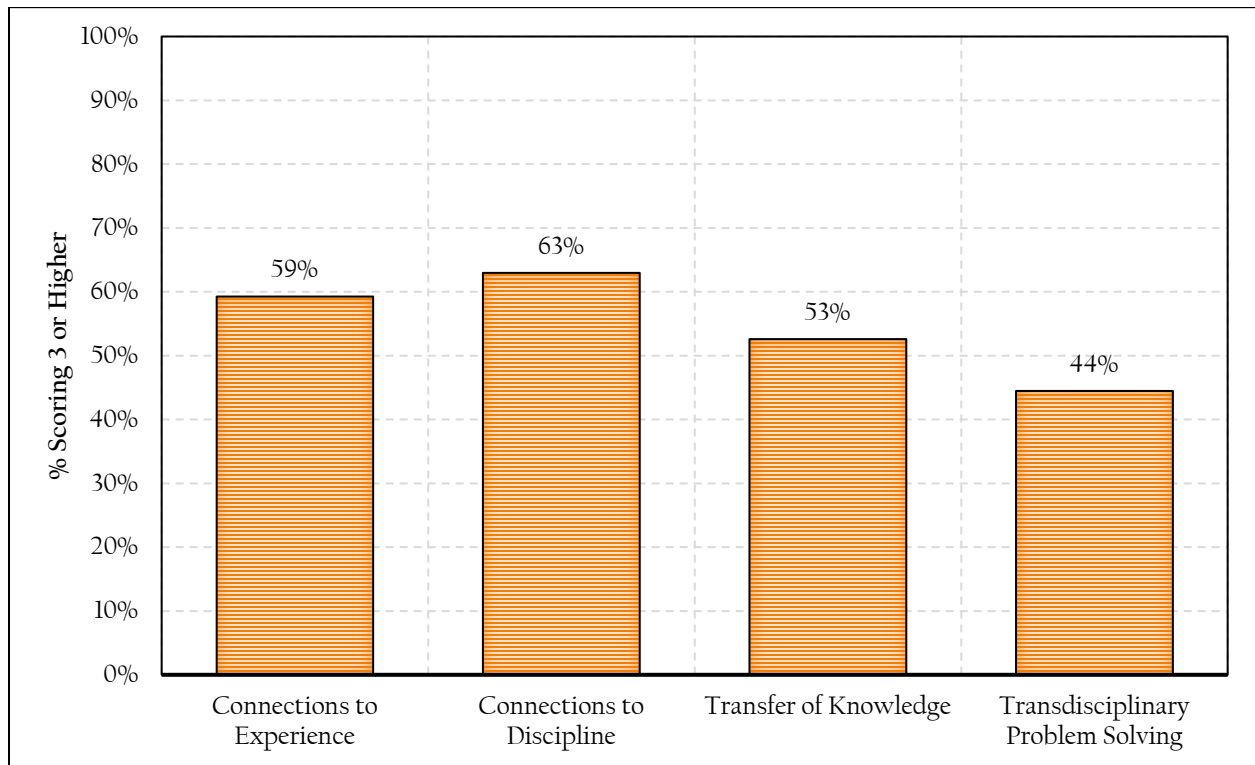## 3.2 RESULTS FOR A.A. GENERAL STUDIES ONLY

Figure 23. 'Investigate' achievement at 3 or higher across all rubric dimensions for AA courses only for 159 artifacts from 17 sampled course sections.
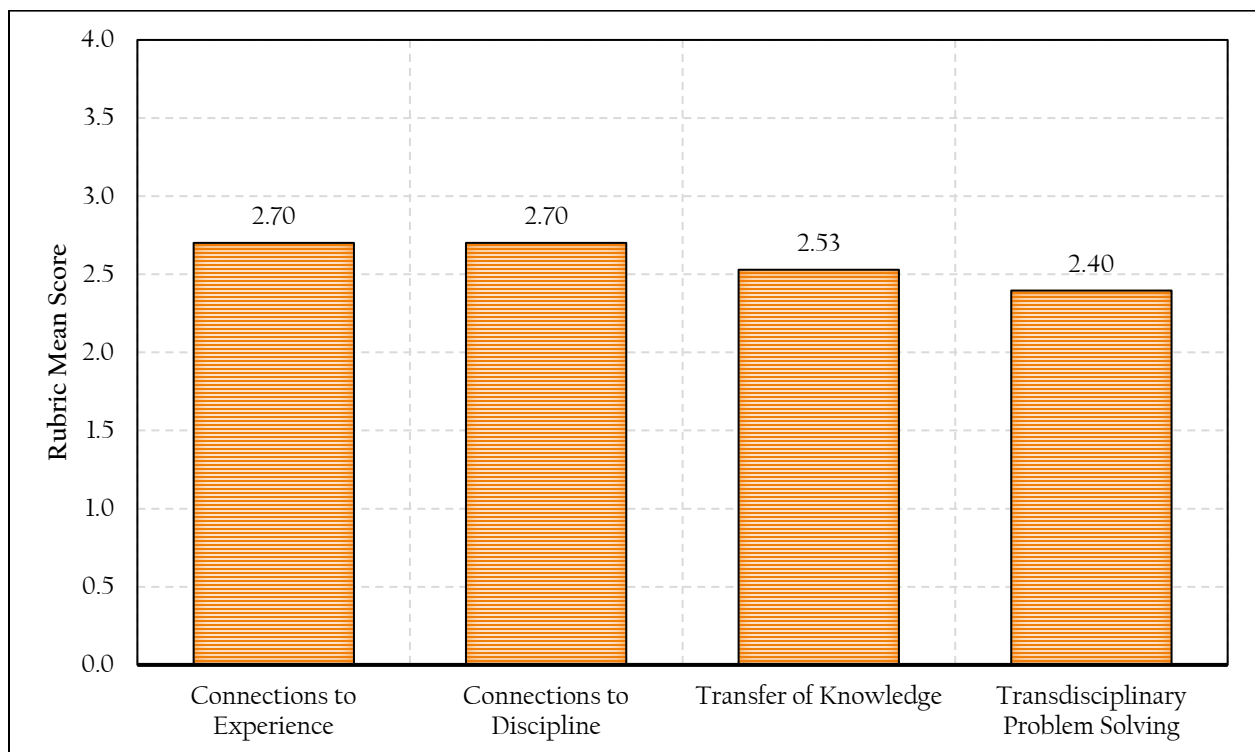

Figure 24. Mean score by rubric dimension for 'Investigate' for AA courses only for 159 artifacts from 17 sampled course sections.
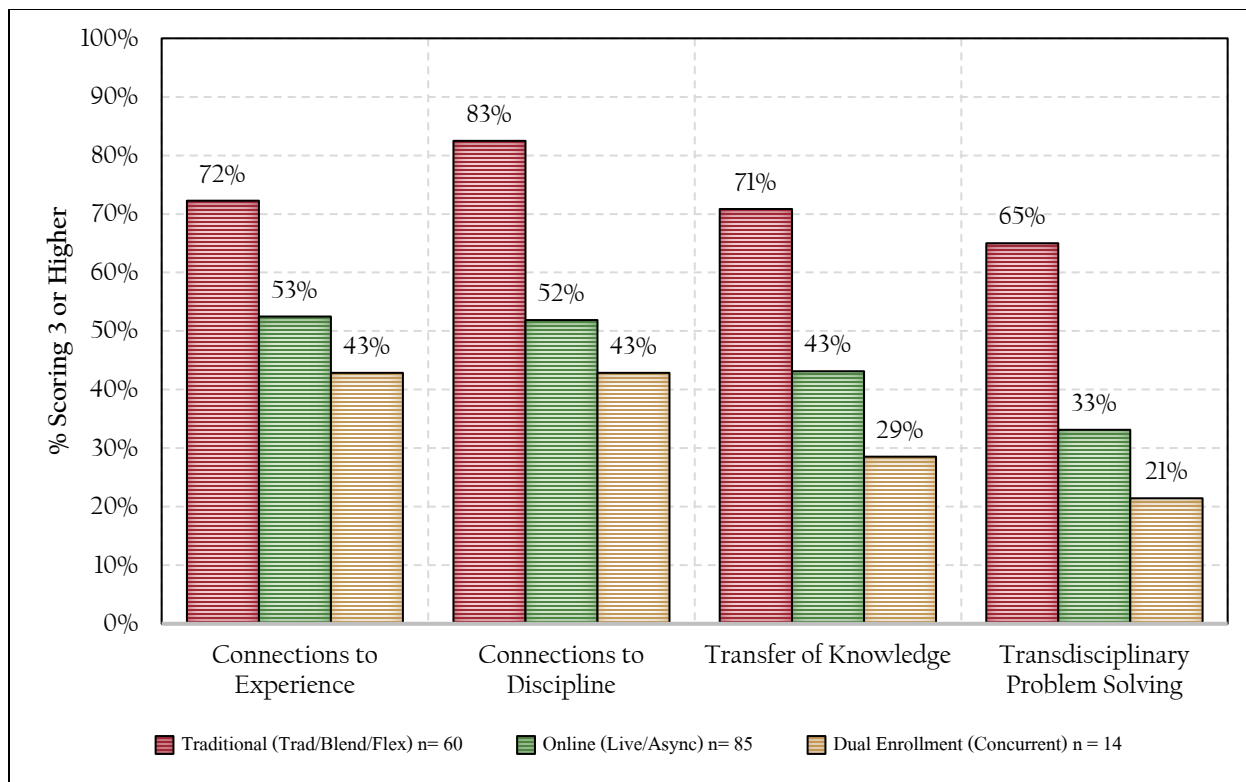
Figure 25. 'Evaluate' achievement at 3 or higher across all rubric dimensions for AA courses only for 159 artifacts from 17 sampled course sections. Traditional (red), n=60, Online (green), n=85, Dual Enrollment (concurrent) (beige), n=14.

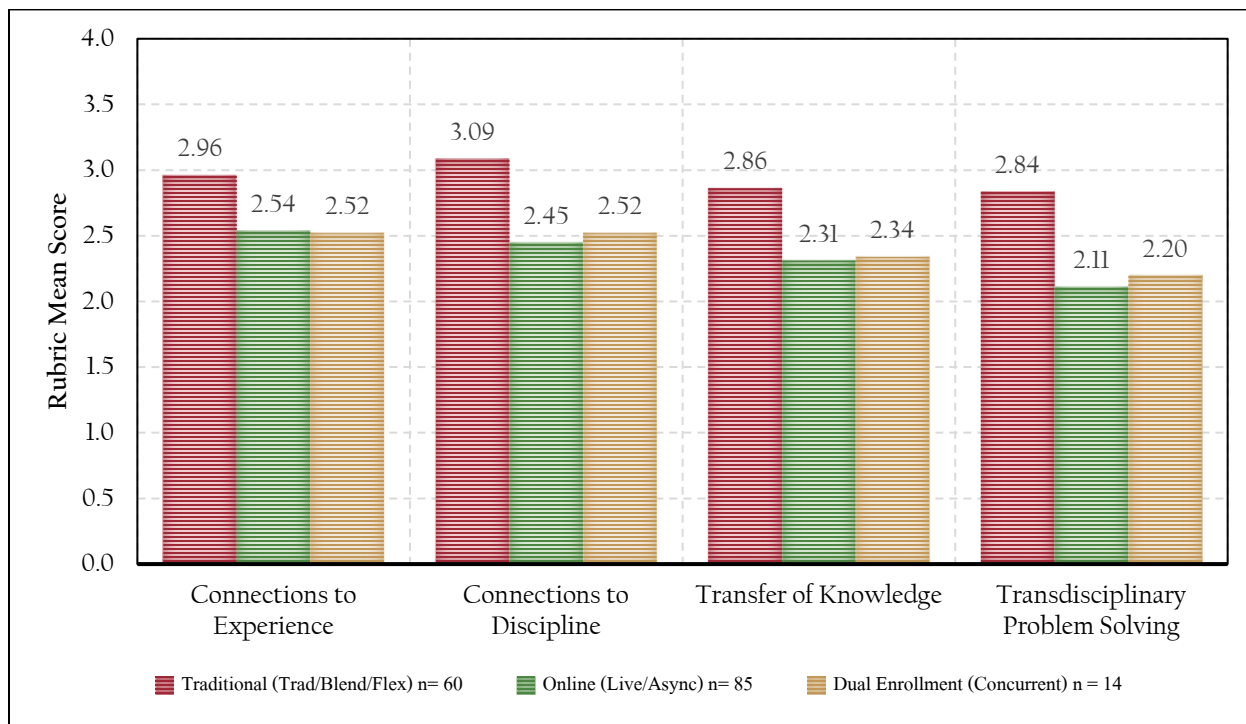*Figure 26. Mean score of 'Investigate' for each rubric dimension by modality across all rubric dimensions for AA courses only for 159 artifacts from 17 sampled course sections. Traditional (red), n=60, Online (green), n=85, Dual Enrollment (concurrent) (beige), n=14.*

3.3 OVERALL VALUE-ADDED STUDIES
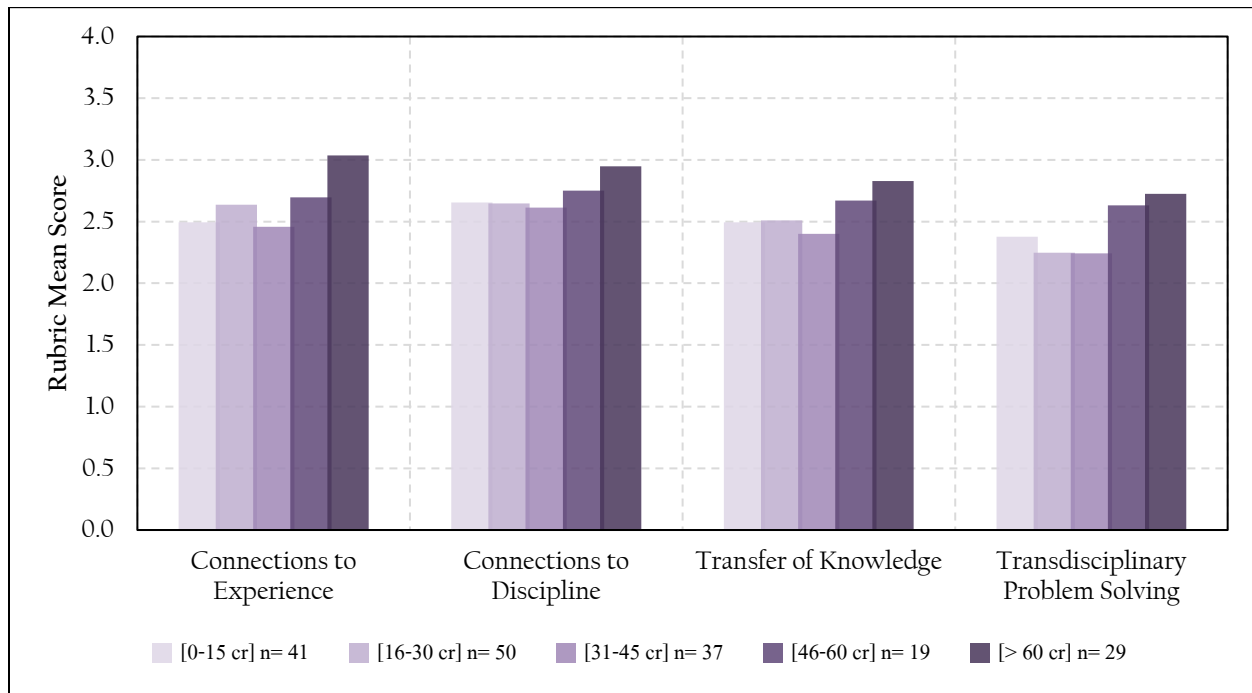
*Figure 27. Comparison of mean score of 'Investigate' across all rubric dimensions for 176 artifacts in which credit information could be matched to at least one of the two artifact scorer's scores. From light purple to dark, 0-15 credits earned n=41, 16-30 credits earned n=50, 31-45 credits earned n=37, 46-60 credits earned n=19, and > 60 credits earned n=29. *Credits earned based on number of credits earned entering fall term.*
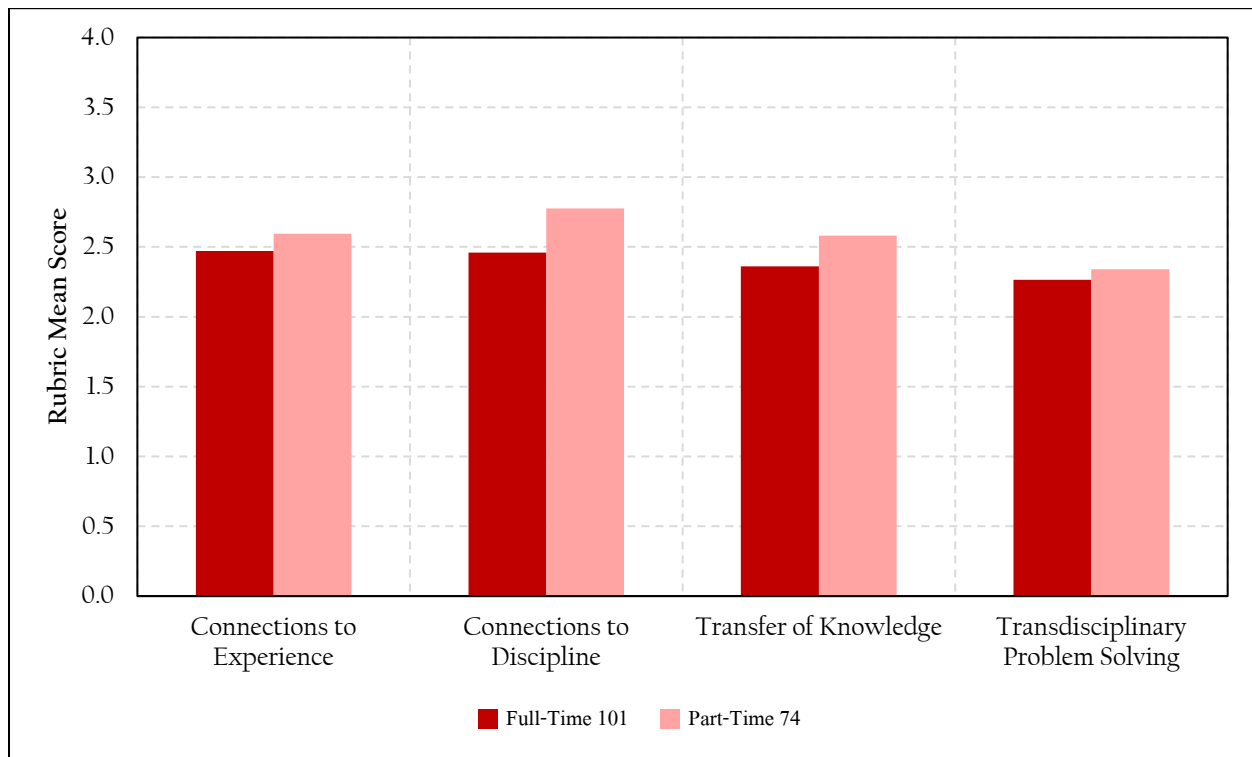
Figure 28. Comparison of mean score of 'Investigate' across all rubric dimensions based on student status.
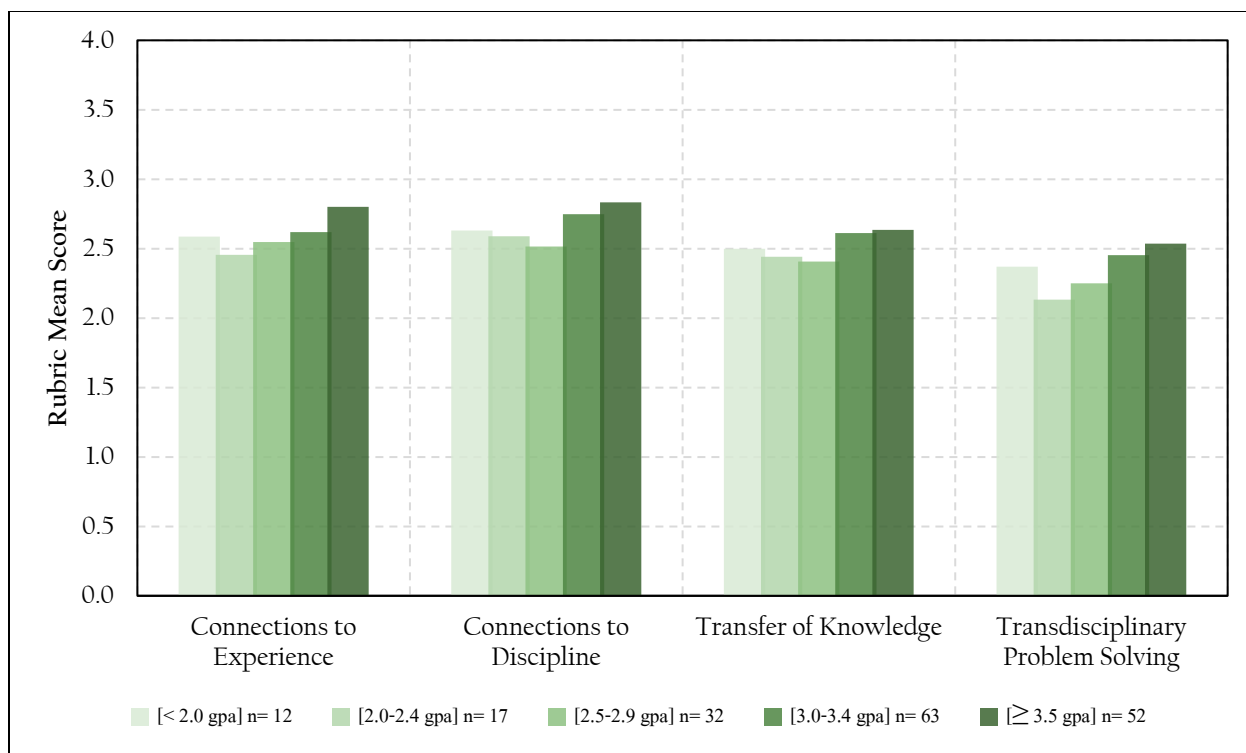
*Figure 29. Comparison of mean score of 'Investigate' achievement across all rubric dimensions based on GPA. From light green to dark, GPA < 2.0 n=12, GPA 2.0-2.4 n=17, GPA 2.5-2.9 n=32, GPA 3.0-3.4 n=63, GPA ≥ 3.5 n=52. *GPA based on fall inbound GPA; first-time students would therefore not have an inbound FSW GPA, which limits sample size from the overall.*

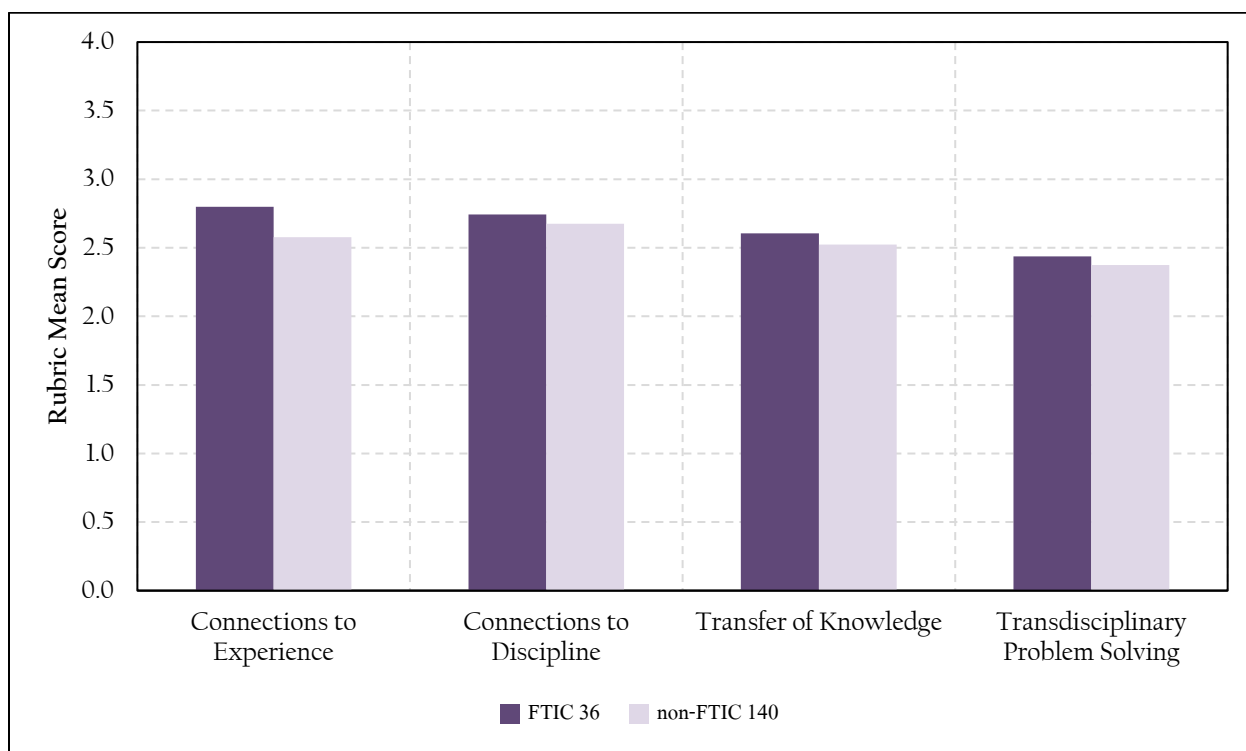*Figure 30. Comparison of mean score of 'Investigate' across all rubric dimensions based on First-Time-In-College (FTIC) status.*
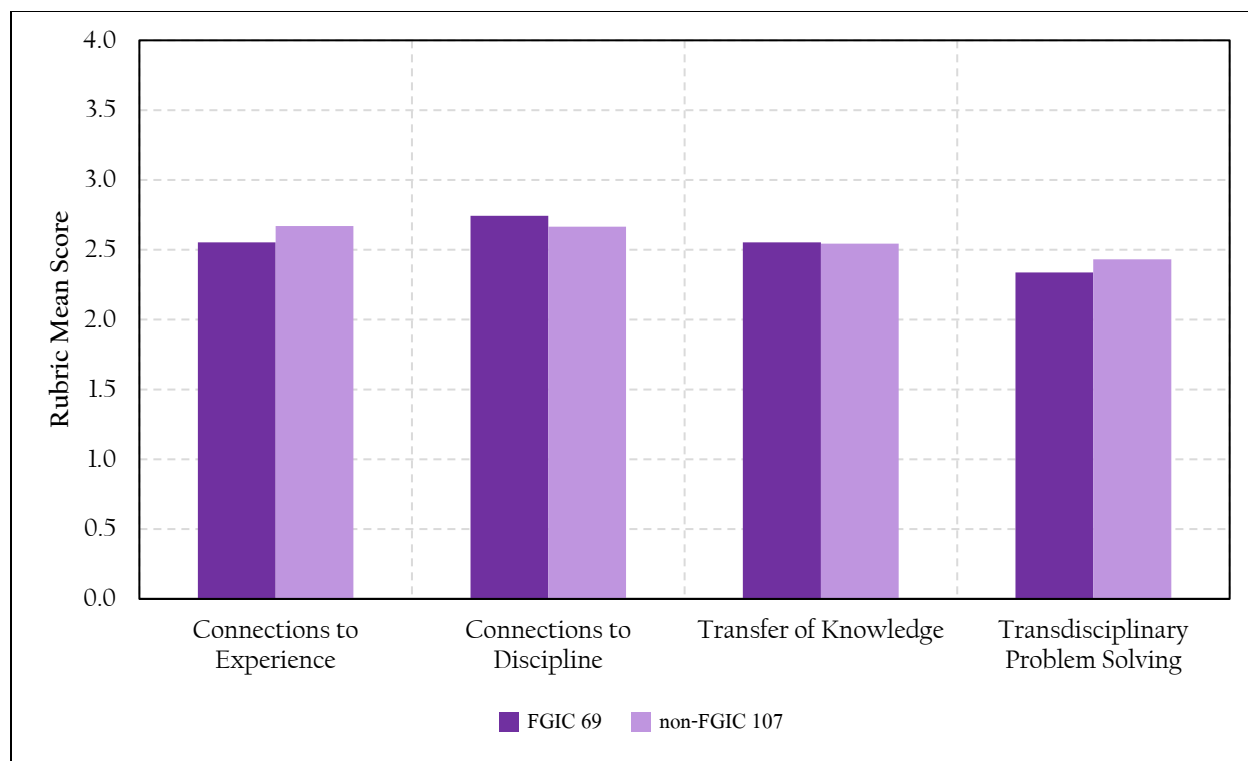
Figure 31. Comparison of mean score of 'Investigate' across all rubric dimensions based on First-Generation-In-College (FGIC) status.

3.4 LONGITUDINAL STUDY

The AY 2021-22 assessment of the 'Investigate' competency is the first time this competency is measured using the new FSW-specific rubric. The school representatives used a previous FSW-specific rubric as a foundation for development ultimately adopting only the dimensions (in part) and achievement levels (4-3-2-1) with a 0 if no achievement is met.

The intent of the rubric developers was to frame language such that the rubric is as inclusive as possible to all 'Evaluate' assignments. Careful consideration was paid to providing descriptors detailed enough to score an artifact, yet to remain in general terms as much as possible to allow for application to a wide assortment of assignment types and styles. To increase clarity, action verbs were utilized in each achievement level description. The developers also attempted to place emphasis on dimensions being mutually exclusive, such that users of this rubric can elect to omit any dimension not required of a given assignment. To ensure that non-traditional assignments are scored properly, artifacts representing a variety of modes and media should be utilized during the 'Investigate' Rubric Calibration Sessions prior to the scoring process.

Because the former FSW-specific rubric was utilized as a foundation for the FSW-specific rubric, the rubric dimensions, while re-worked, are foundationally similar. To exploit this characteristic, this comparison study compares the results by dimension to studies from previous years.
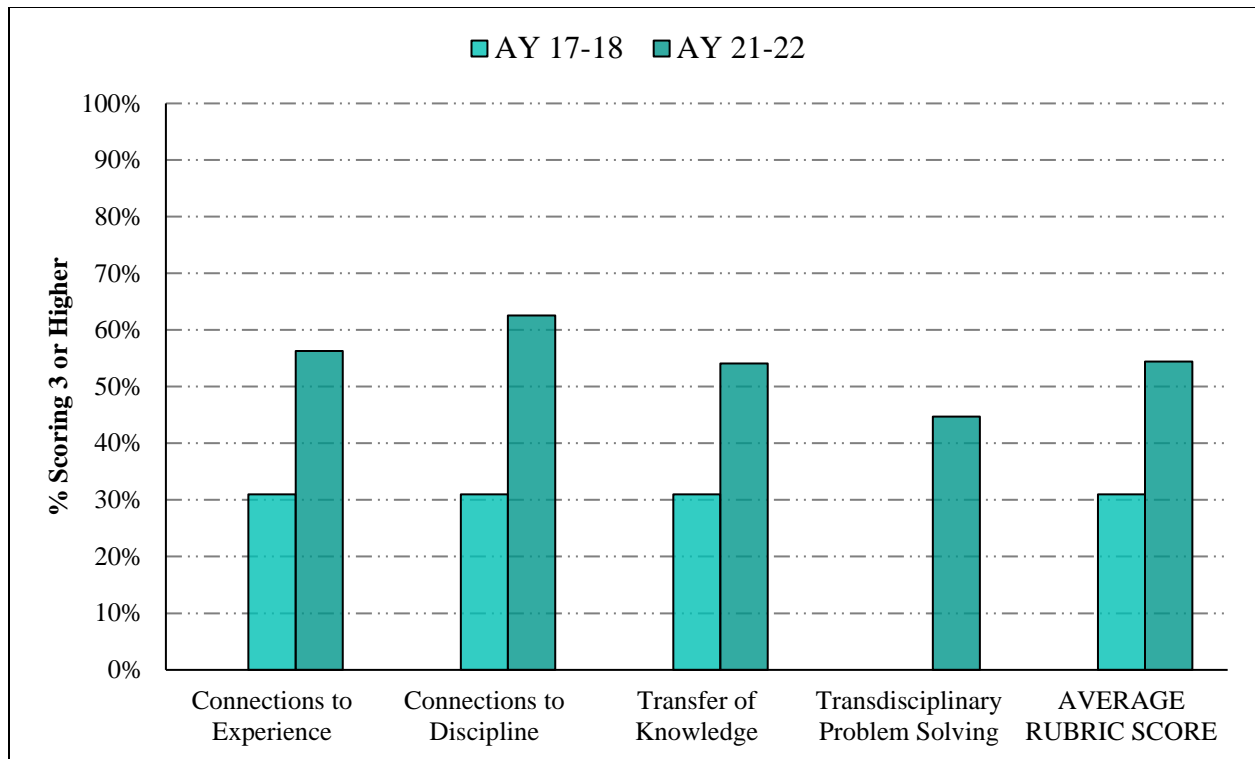
Figure 32. Comparison of assessment of the 'Investigate' competency over time. The AY 21-22 assessment is the first to utilize the new FSW-specific rubric which utilized most common dimensions to those in previous studies.

4   COMPETENCY OVERVIEW: GENERAL LONGITUDINAL STUDY

To gain perspective into the results shared above, it can be valuable to look at generalized results from previous general education assessment studies at FSW. Because a true longitudinal study is limited due to a transition in both competencies and rubrics utilized, instead of looking at a dimension-by-dimension comparison, it may be helpful to look at overall scores (combined average of rubric dimensions) from previous general education assessment studies with respect to the current results. The following figures in Section 4 provide these comparisons.

Figure 33. Comparison of inter-rater reliability (percentage (%) +/- 1 agreement) averaged across dimensions by each competency in FSW General Education Assessment cycle.

Figure 34. Comparison of achievement at 3 or higher averaged across dimensions by each competency in FSW General Education Assessment cycle.
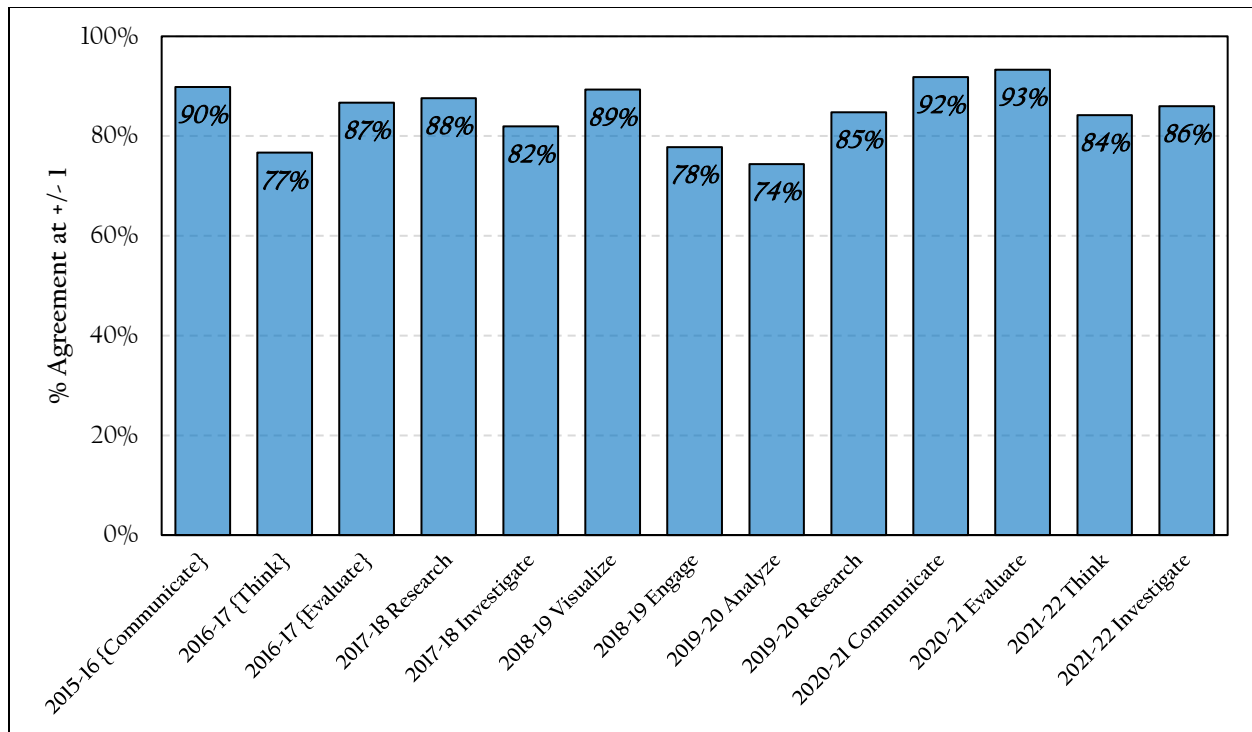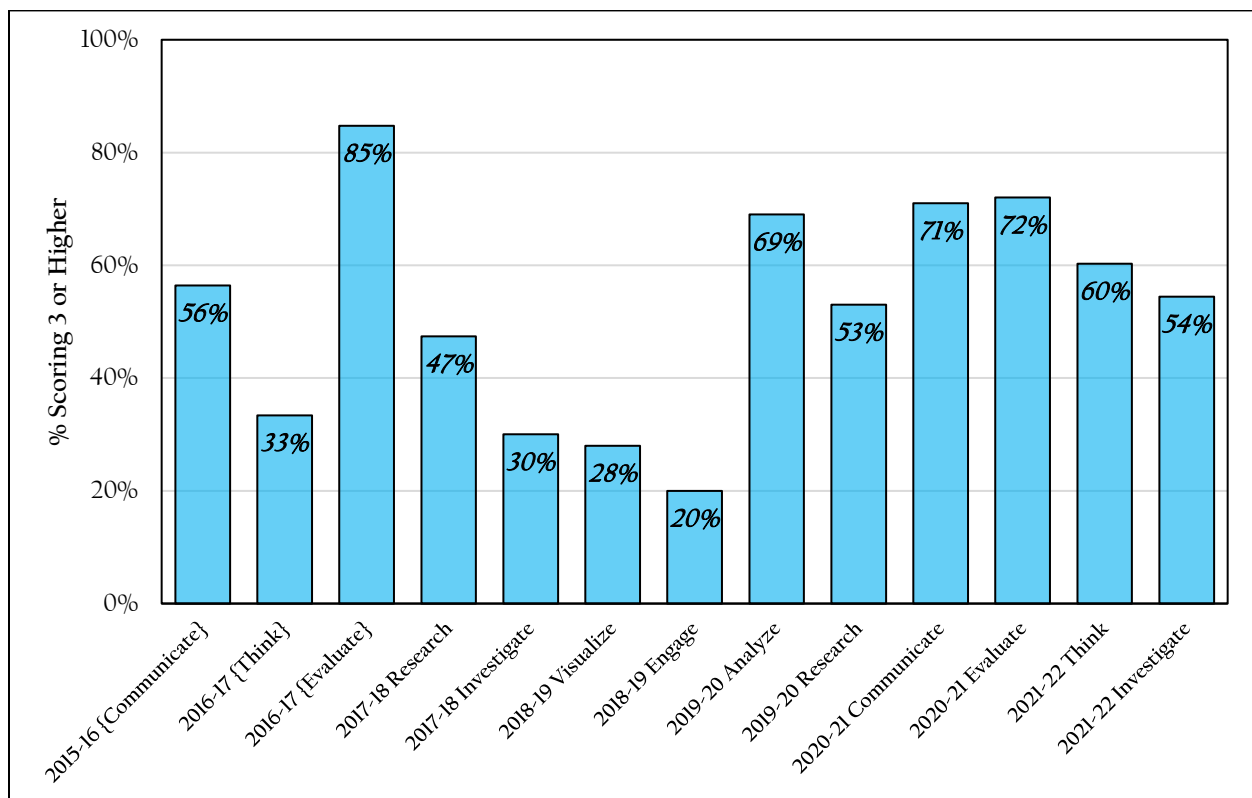
5 PROFESSIONAL DEVELOPMENT PLANS & ASSESSMENT DISCUSSION

When reviewing general education assessment results, it is important to review assignments that are being assessed with respect to the rubric and the competency. Without a strong alignment between the task (competency) and the rubric/assignment, assessment measurements will always yield results more telling of the process and alignment rather than true achievement. This concept can be supported in the work of Reeves (2006) in which the critical factors of learning are highlighted, and assessment is one of eight major components.

In a review of this year's assessment and the professional development associated with it, several highlights are notable.

First, comparison of achievement by student characteristics is drastically different between the 'Think' competency and the 'Investigate' competency. For example, the average achievement difference between FTIC and non-FTIC in 'Think' is 29%-points, where FTIC student-based artifacts achieve 3 or higher 34% of the time, compared with the 63% of non-FTIC. By comparison, that gap is reversed in the 'Investigate' competency, where FTIC student-based artifacts achieve 3 or higher 63% of the time, compared with 52% for non-FTIC. This same reversal is present when reviewing achievement by FGIC, and by Full-Time/Part-Time status.

Second, comparison of achievement by modality also varies by competency. In the 'Think' competency, the average percentage of artifacts scored 3 or higher for traditional, online, and dual enrollment, is 67%, 53%, and 77%, respectively. By comparison, that same baseline for the 'Investigate' competency is 68%, 48%, and 34%, respectively. In other words, the traditional modality is consistent across competencies, but online is somewhat different, and dual enrollment is wildly different.

Third, I should be noted that all rubrics are now available on the Assessment webpage (https://www.fsw.edu/facultystaff/assessment/genedcompetencies) and also in Canvas for any faculty to easily embend in their ow course pages for use with their assignments.

And finally, in general, feedback on the rubrics during use was very positive. During a Learning Assessment Committee meeting on May 2, 2022, it was determined for the 'Think' competency that (1) the best assignments hit more than one item on rubric and demonstrated the variety of intellectual activities necessary to engage in critical thinking, (2) The rubric does a very good job of parsing some of the essential aspects of critical thinking, including self-awareness, logic/coherence, evaluation/use of expert sources, etc., (3) Provides a structure to assess assignments, and (4) Discussion assignments are often the most difficult to assess. At this meeting it was suggested that workshops and writing skills development may be an important focal item in the future.

6 CONCLUSIONS

FSW's General Education Program was assessed through randomly sampled from a list of courses which were identified by faculty as encompassing that competency. The study details the results of FSW's General Education assessment for AY 2021-2022 which included the analysis of 'Think' and 'Investigate' from the C-R-E-A-T-I-V-E General Education competencies. Results also included these same outcomes

with respect to courses included in the AA program and value-added studies, as well as longitudinal studies.

A drilldown of 'Think' (T) results are as follows:
1. Two of five rubric dimensions exhibit greater than 60% achievement at level '3'. The highest scored dimension is "Explanation of Issues" at 71% scoring '3' or higher.
2. Mean achievement levels for each of the five rubric dimensions range from 2.60 to 3.03 on a 4-point scale.
3. In a study comparing online, dual enrollment (concurrent), and traditional artifacts, the dual enrollment cohort exhibits the highest in 4 of 5 dimensions. Online is statistically significantly lower in all rubric dimensions when compared with Dual Enrollment (Concurrent) and Traditional. Dual Enrollment (Concurrent) exhibits a statistically significantly higher achievement than both Traditional and Online in the first four dimensions.
4. An inter-rater reliability study exhibits rubric scoring agreement ranging from 35% to 44% with a +/- 1 agreement ranging from 82% to 88%.
5. With respect to AA courses, one of five rubric dimensions exhibit greater than 60% achievement at level '3'. The highest scored dimension is "Explanation of Issues" at 66% scoring '3' or higher.
6. In a study comparing AA courses with online, dual enrollment, and traditional artifacts, the dual enrollment cohort exhibits the highest in 4 of 5 dimensions. Online is statistically significantly lower in all rubric dimensions when compared with Dual Enrollment (Concurrent) and Traditional. Dual Enrollment (Concurrent) exhibits a statistically significantly higher achievement than both Traditional and Online in the first four dimensions.
7. In a study comparing achievement across rubric dimensions based on credits earned, there is a correlation between credits and achievement. The average achievement for 0-30 credits is 55% while at > 60 credits achievement is 75%.
8. In a study comparing achievement by student status (FT/PT), there is no correlation between credits and achievement. The average achievement for Full-Time students is 49%, which is the same for Part-Time students.
9. In a study comparing achievement by GPA, there is a correlation between GPA and achievement. The average achievement for GPA < 2.5 is 43% compared with 72% for > 3.4 GPA.
10. In a study comparing achievement by student type (FTIC), there is a strong correlation between student type and achievement. The average achievement for FTIC is 35%, compared with 63% for non-FTIC.
11. In a study comparing achievement by student type (FGIC), there is a correlation between student type and achievement. The average achievement for FGIC is 51%, compared with 60% for non-FGIC.
12. In a longitudinal study, improvement is exhibited in 5 of 5 dimensions from the previous study of the competency.

A drilldown of 'Investigate' (I) results are as follows:
1. One of four rubric dimensions exhibit greater than 60% achievement at level '3' with percentages ranging from 45% to 63%.
2. Mean achievement levels for each of the four rubric dimensions range from 2.40 to 2.70 on a 4-point scale.

3. In a study comparing online, dual enrollment (concurrent), and traditional artifacts, the traditional artifacts exhibit the highest in 4 of 4 dimensions. All rubric dimensions are statistically significantly different.
4. An inter-rater reliability study exhibits rubric scoring agreement ranging from 39% to 42% with a +/- 1 agreement ranging from 84% to 90%.
5. With respect to AA courses, one of four rubric dimensions exhibit greater than 60% achievement at level '3' with percentages ranging from 45% to 63%.
6. In a study comparing AA courses with online, dual enrollment, and traditional artifacts, the traditional artifacts exhibit the highest in 4 of 4 dimensions. All rubric dimensions are statistically significantly different.
7. In a study comparing achievement across rubric dimensions based on credits earned, there is a correlation between credits and achievement. The average achievement for 0-30 credits is 50% while at > 60 credits achievement is 71%.
8. In a study comparing achievement by student status (FT/PT), there is a correlation between credits and achievement. The average achievement for Full-Time students is 47%, compared with 59% for Part-Time students.
9. In a study comparing achievement by GPA, there is a correlation between GPA and achievement. The average achievement for GPA < 2.5 is 51% compared with 58% for > 3.4 GPA.
10. In a study comparing achievement by student type (FTIC), there is a strong correlation between student type and achievement. The average achievement for FTIC is 63%, compared with 52% for non-FTIC.
11. In a study comparing achievement by student type (FGIC), there is no correlation between student type and achievement. The average achievement for FGIC is 55%, compared with 54% for non-FGIC.
12. In a longitudinal study, improvement is exhibited in 3 of 3 dimensions from the previous study of the competency which had common rubric dimensions.

A drilldown of longitudinal studies are as follows:
1. In a comparison of inter-rater reliability (percentage (%) +/- 1 agreement) averaged across dimensions by each competency in FSW General Education Assessment cycle, both 'Think' and 'Investigate' exhibit results similar to those of past studies (84% and 86% compared with a range of 74% to 93% in past studies).
2. In a comparison of achievement at 3 or higher averaged across dimensions by each competency in FSW General Education Assessment cycle, the 'Think' and 'Investigate' studies of AY 2021-22 exhibit the 4th and 5th highest achievement percentages of the past 13 assessments, respectively.

A drilldown of professional development plans:
1. To develop a repository of ideal assignments that line up well with rubrics that would be available to FSW faculty may be a good way of alleviating some of the problems noted by scorers. The plan began in AY 2018-2019 and continues in AY 2021-2022.
2. To development assignment building workshops specific to the competency and bring them to departments that are rich in that competency as opposed to housing them at FSW's Teaching and Learning Center (TLC).

3. In general, feedback on the rubrics during use was very positive. During a Learning Assessment Committee meeting on May 2, 2022, it was determined for the 'Think' competency that (1) the best assignments hit more than one item on rubric and demonstrated the variety of intellectual activities necessary to engage in critical thinking, (2) The rubric does a very good job of parsing some of the essential aspects of critical thinking, including self-awareness, logic/coherence, evaluation/use of expert sources, etc., (3) Provides a structure to assess assignments, and (4) Discussion assignments are often the most difficult to assess. At this meeting it was suggested that workshops and writing skills development may be an important focal item in the future.

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