

Spring 2015 Assessment of Student Work from Across the Core: Scoring & Results

Critical Thinking and Social Responsibility

Report prepared by the Office of Student Learning & Institutional Assessment

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Stephen F. Austin State University

In order to assess the core objectives mandated by the Texas Higher Education Coordinating Board, Stephen F. Austin State University began collecting student work samples in core courses using LiveText in Fall 2014. Faculty members were asked to design a common assignment for all sections of courses designated "core" that the students in that course would complete. Students then upload this assignment into the LiveText system online. In the Spring of 2015, student work samples were gathered using LiveText for the core objectives of critical thinking and social responsibility. From those collections, random samples were selected to be reviewed by Core Curriculum Scoring Teams.

Method

Participants

During the Spring of 2015, all students in a course that had been designated as a core course with the objectives of critical thinking and social responsibility were asked to register for a LiveText account provided by the college and upload their core assignment into the LiveText system. The section enrollments for courses designated to assess these two core objectives was 14,641. Of those section enrollments, 11,716 pieces of work were submitted to LiveText. Overall submission rate for assignments was 80%.

A random sample of work was pulled from the submissions for both critical thinking and social responsibility. Scoring team members were asked to report any artifacts that did not match the assignment, were plagiarized, or were blank documents; these artifacts were eliminated from the reported on sample. In addition, ten students had more than one piece of work in the same sample. In these cases, one piece of work for each student was randomly selected for the sample. The remaining artifacts for critical thinking (n = 224) and social responsibility (n = 211) made up the analyzed sample of student work.

Demographics of the sample. Sixteen students had work in both samples, so for demographic purposes, 419 unique SFA students submitted work for the objectives of critical thinking and social responsibility. Of those students, the majority were 19-21 years old (80.67%), full time freshmen (38.8%) or sophomores (35.1%), Caucasian (66.9%), and female (64.5%). The average cumulative GPA for those in the samples was 2.73. The specific breakdown of demographic data is shown in Table 1 and Figure 1. Demographic data is also shown for the individual samples of critical thinking in Table 2 and Figure 2 (n = 224) and social responsibility in Table 3 and Figure 3 (n = 211). The individual sample data tables both include the students with work in each sample.

Table 1

Demographics of all students in sample (n = 419)

Demographic	Category	n	Percent
Ago	e		
	18 & Under	15	3.58%
	19-21	338	80.67%
	22-24	50	11.93%
	25-30	6	1.43%
	31 & Older	10	2.39%
Class Leve	el		
	Freshmen	109	26.01%
	Sophomores	170	40.57%
	Juniors	103	24.58%
	Seniors	33	7.88%
	Other	4	0.95%
Class Load	d		
	Full time	383	91.41%
	Part time	36	8.59%
Gende	r		-
	Male	137	32.70%
	Female	282	67.30%
College	e		
	Business	52	12.41%
	Education	96	22.91%
	Fine Arts	32	7.64%
	Forestry	19	4.53%
	Liberal & Applied Arts	125	29.83%
	Math & Science	95	22.67%
Rac	e		
	White	231	55.13%
	Black or African American	86	20.53%
	Hispanic	69	16.47%
	Asian	2	0.48%
	American Indian/Alaskan Native	1	0.24%
	Hawaiian Native	1	0.24%
	2 or more	19	4.53%
	Unknown/Unreported	10	2.39%
Transfe	r		
	Never a Transfer	347	82.82%
	Transferred Hours to SFA	72	17.18%

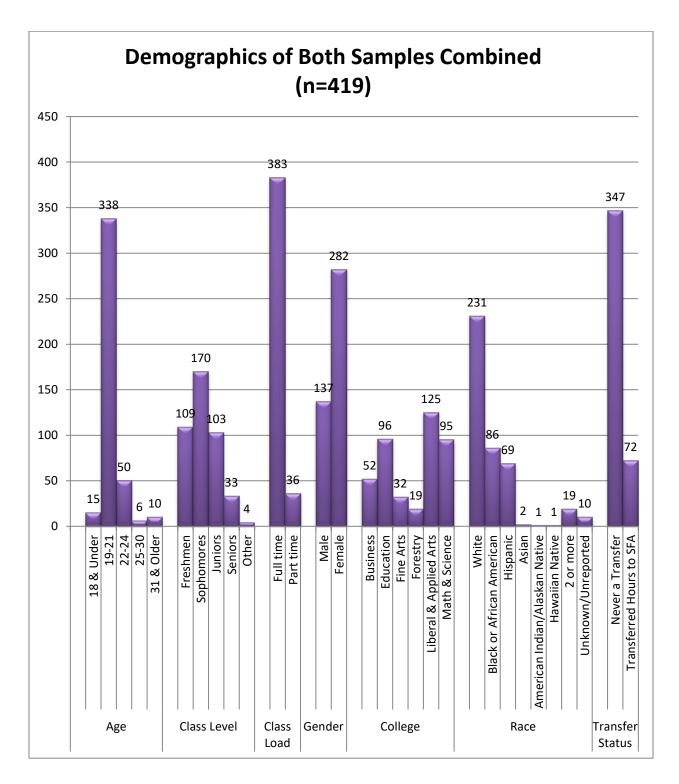


Figure 1. Demographics of students in both samples.

Table 2

Demographics of Students in Critical Thinking Sample (n = 224)

Demographic	Category	n	Percent
Ag	re		
	18 & Under	5	2.23%
	19-21	181	80.80%
	22-24	33	14.73%
	25-30	1	0.45%
	31 & Older	4	1.79%
Class Lev	el		
	Freshmen	54	24.11%
	Sophomores	87	38.84%
	Juniors	61	27.23%
	Seniors	20	8.93%
	Others (PD: seeking 2 nd bachelor's degree)	2	0.89%
Class Loa	d		
	Full time	211	94.20%
	Part time	13	5.80%
Gende	er		
	Male	59	26.34%
	Female	165	73.66%
Colleg	ge .		
	Business	22	9.82%
	Education	58	25.89%
	Fine Arts	15	6.70%
	Forestry	13	5.80%
	Liberal & Applied Arts	63	28.13%
	Math & Science	53	23.66%
Rad	ce		
	White	124	55.36%
	Black or African American	42	18.75%
	Hispanic	37	16.52%
	Asian	2	0.89%
	2 or more	10	4.46%
	Unknown/Unreported	9	4.02%
Transfe	er		
	Never a Transfer	183	81.70%
	Hours Transferred to SFA	41	18.30%

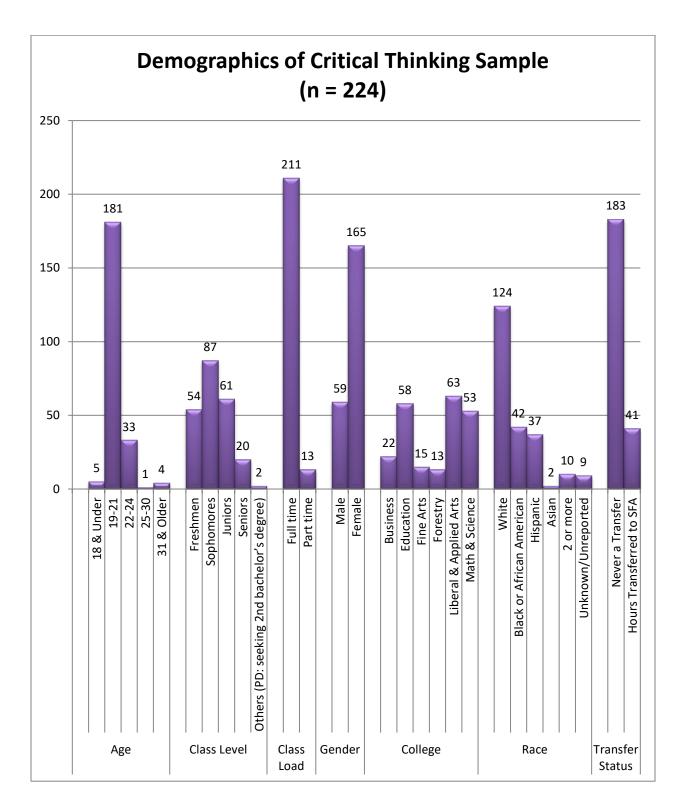


Figure 2. Demographics of Critical Thinking Sample.

Table 3

Demographics of Social Responsibility Sample (n=211)

Demographic	Category	n	Percent
Ag	ee		
	18 & Under	10	4.74%
	19-21	172	81.52%
	22-24	18	8.53%
	25-30	5	2.37%
	31 & Older	6	2.84%
Class Leve	el Transition of the Control of the		
	Freshmen	60	28.44%
	Sophomores	92	43.60%
	Juniors	44	20.85%
	Seniors	13	6.16%
	Other (1 Master's Student, 1 seeking 2 nd bachelors)	2	0.95%
Class Loa	d		
	Full time	188	89.10%
	Part time	23	10.90%
Gende	r		
	Male	83	39.34%
	Female	128	60.66%
Colleg	e		
	Business	30	14.22%
	Education	45	21.33%
	Fine Arts	17	8.06%
	Forestry	7	3.32%
	Liberal & Applied Arts	66	31.28%
	Math & Science	46	21.80%
Rac	e	_	
	White	116	54.98%
	Black or African American	47	22.27%
	Hispanic	34	16.11%
	American Indian/Alaskan Native	1	0.47%
	2 or more	11	5.21%
	Unknown/Unreported	2	0.95%
Transfe	r		
	Never a Transfer	179	84.83%
	Hours Transferred to SFA	32	15.17%

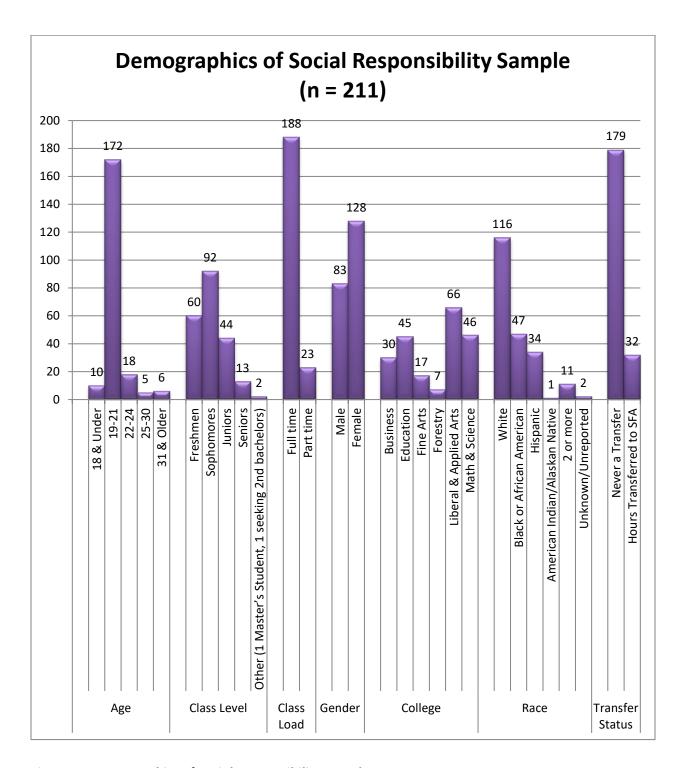


Figure 3. Demographics of Social Responsibility Sample.

Scorers

Student work was scored by teams of faculty who were nominated by their departments and then selected by the Core Curriculum Assessment Committee (CCAC). One member of the CCAC served as a chair of each team. Each team consisted of ten members, including the chair, with members of the scoring teams being drawn from departments teaching core courses in which the objectives were being assessed. For Spring 2015, two teams were created to score student work in core courses; one for scoring work on the Critical Thinking objective and one for scoring work on the Social Responsibility objective.

Rubric

The rubrics to assess both the critical thinking and social responsibility components of the core were developed by faculty teams who modified the Association of American Colleges and Universities (AAC&U) VALUES Rubrics. Teams of SFASU faculty members modified the AAC&U rubrics to adapt them to the objectives of the SFA core. The critical thinking rubric has five specific criteria that are measured using a 5-point Likert scale (Figure 4). The social responsibility rubric has four specific criteria that are measured using a 5-point Likert scale (Figure 5).

CRITICAL THINKING RUBRIC

Critical Thinking Skills (THECB, Elements of the Core Curriculum): to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

Definition: critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

	Capstone	Accomplished	Developing	Beginning	Unacceptable
	4	3	2	1	0
Identification and explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary forfull understanding.	Issue/problem to be considered critically is stated, described, and clarifieds of that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.	Issue/problem to be considered critically is not stated.
Collection of information	Information taken from source(s) is sufficient to develop a comprehensive analysis and synthesis.	Information taken from source(s) is sufficient to develop a coherent analysis and synthesis.	Information taken from source(s) is insufficient to develop coherent analysis and synthesis.	Information taken from source(s) is insufficient to develop any analysis and synthesis.	
Recognition of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts before presenting a point of view.	Identifies own and others' assumptions and several relevant contexts before presenting a point of view	Questions some assumptions. May be more aware of others' assumptions than one's own (or vice versa). Identifies several relevant contexts before presenting a point of view.	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts before presenting a point of view.	Shows no awareness of present assumptions. Does not identify contexts before presenting a point of view.
Evaluation and Synthesis of information	The evaluation of information is thorough, taking into account the complexities of an issue, while acknowledging limits and synthesizing other points of view.	The evaluation of information is sufficient, taking into account some complexities of an issue, while acknowledging some limits and synthesizing other points of view.	The evaluation of information is incomplete, not taking into account the complexities of an issue.	The evaluation of information is simplistic, obvious, or has limited relevance.	No evaluation of information is provided.
Conclusions and related outcomes	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.	No conclusion is provided.

Information includes observations, experts' sources, or empirical data Point of view includes hypothesis, thesis, conditions, or perspectives

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Figure 4. Critical Thinking Rubric.

Social Responsibility Rubric 🔩



Definition: Social Responsibility incorporates intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national or global communities

	Capstone	Accomplished	Developing	Beginning	Unacceptable
	4	3	2	1	0
Cultural Self- Awareness	Recognizes complexity among the elements and biases in one's own culture or subculture.	Recognizes complexity in some of the elements and biases in one's own culture or subculture.	Identifies the basic elements and biases in one's own culture or subculture.	Shows minimal awareness of the elements and biases in one's own culture or subculture.	Shows no awareness of the elements and biases in one's own culture or subculture.
Cultural Worldview Frameworks	Demonstrates a comprehensive understanding of the complexity of other cultures.	Demonstrates an adequate understanding of the complexity of other cultures.	Demonstrates a partial understanding of the complexity of other cultures.	Demonstrates a minimal understanding of the complexity of other cultures.	Demonstrates no understanding of the complexity of other cultures.
Civic Responsibility	Identifies patterns of engagement in civic life, social interaction or politics and recognizes complexity among those patterns.	Identifies patterns of engagement in civic life, social interaction or politics and recognizes complexity in some of those patterns.	Identifies basic patterns of engagement in civic life, social interaction or politics.	Shows minimal awareness of patterns of engagement in civic life, social interaction or politics.	Shows no awareness of patterns of engagement in civic life, social interaction or politics.
Understanding One's Role in Regional, National and/or Global Communities	Demonstrates a comprehensive understanding of the roles of individuals in regional, national, or global communities.	Demonstrates an adequate understanding of the roles of individuals in regional, national, or global communities.	Demonstrates a partial understanding of the roles of individuals in regional, national, or global communities.	Demonstrates a minimal understanding of the roles of individuals in regional, national, or global communities.	Demonstrates no understanding of the roles of individuals in regional, national, or global communities.

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Figure 5. Social Responsibility Rubric.

Rubric Norming. In early Fall 2015, each scoring team met for two rubric norming sessions facilitated by the Office of Student Learning and Institutional Assessment. During these sessions, the team discussed the rubric extensively and developed rules that would be followed for scoring student work. The norming sessions were used to familiarize the faculty with the rubric that they would be using for scoring, allowing them to develop shared understanding of the language used on the rubric, and to become familiar with the process of scoring using LiveText. During the norming session, practice papers were scored and discussed by the team. Further scoring rules were developed if needed following the scoring of each practice paper. These scoring rules were put into a document that was sent to all members of both teams to be a reference when scoring the papers.

Scoring. The LiveText sampling tool was used to draw a random sample of student work from both the written and visual communication objective and the written communication objective. Each artifact of student work in the sample was sent to two raters. Raters evaluated the paper in LiveText using an online copy of the rubric and following the rules developed in the norming sessions. If the two raters had disagreement on a criterion, the artifact was then sent to a third rater to score only the criteria for which there was disagreement. A complete list of the rules for agreement/disagreement can be found in Appendix A. Faculty on the scoring teams were given two weeks to complete their first scoring round and then an additional week to finish their second round of scoring.

Results

In order to test the reliability of the scores after the norming sessions, intra-class correlation coefficients were used to determine the amount of non-chance agreement the raters had when scoring the artifacts. Results are given in detail below for each sample.

Inter-rater agreement.

In order to validate the results of the scoring, inter-rater reliability (IRR) analysis was conducted. According to Kevin Hallgren (2012), "The assessment of IRR provides a way of quantifying the degree of agreement between two or more coders who make independent ratings about the features of a set of subjects" (p. 23). In other words, we wanted to know how likely the two raters were to give the artifact the same score without chance agreement. In order to do this, intra-class correlation coefficient (ICC) analysis was conducted on the data.

According to Cicchetti (1994) guidelines for ICC scores are as follows: scores below .40 are considered "poor", scores between .40 and .59 are considered "fair", scores between .60 and .74 are considered "good", and scores between .75 and 1.00 are considered "excellent" (p. 286). ICC scores were calculated for each of the criteria from the rubric along with an overall ICC score for the rubric consisting of the scores for all the criteria (see Table 4).

Critical Thinking. The overall ICC score for the critical thinking objective was .82. According to the guidelines outlined by Cicchetti (1994) this indicates an excellent level of overall agreement between raters. The ratings for each criterion were between .68 and .84, again indicating that the raters had a good to excellent level of agreement when scoring the rubric components.

Social Responsibility. The overall ICC score for the social responsibility objective was .77 indicating there was excellent agreement between the raters. ICC scores for the individual criteria were between .74 to .78, indicating that the raters had a good to excellent level of agreement when scoring the social responsibility rubric elements.

Table 4

ICC scores for samples overall and by criteria

Critical Thinking		Social Responsibility		
(n=224)	(n=224)			
Overall ICC: All Criteria	.82	Overall ICC: All Elements	.77	
Identification & explanation of issues	.84	Cultural Self-Awareness	.78	
Collection of information	.80	Cultural Worldview Frameworks	.78	
Recognition of context & assumptions	.75	Civic Responsibility	.76	
Evaluation & synthesis of information	.80	Understanding One's Role in Regional, National, and/or Global Communities	.75	
Conclusions & related outcomes	.82			

Assessment Results

Scores by element. Mean and mode are reported for each rubric criteria as well as the overall composite rubric scores. These scores were then charted to show the ratings by both element and score for all student work in the sample. Charts are shown for the Critical Thinking sample and the Social Responsibility Sample in Appendix B. Mean scores and mode from the rubrics are shown in Table 5.

Table 5

Mean and Mode rubrics and criteria

	Critical	Thinking		Social Res	ponsibility
	(n =	224)		(n=211)	
	Mean	Mode		Mean	Mode
Overall Average Score: All Elements	1.84	2	Overall Average Score: All Elements	1.66	2
Identification & explanation of issues	1.77	2	Cultural Self-Awareness	1.77	2
Collection of information	2.24	3	Cultural Worldview Frameworks	1.51	2
Recognition of context & assumptions	1.54	1	Civic Responsibility	1.79	2
Evaluation & synthesis of information	1.96	2	Understanding One's Role in Regional, National, and/or Global Communities	1.59	2
Conclusions & related outcomes	1.68	2			

Average score by classification. Results were also tabulated by classification in order to get an overall score of each element for students classified by their year in school: freshmen, sophomores, juniors, and seniors. Results are shown for the Critical Thinking sample (Table 6 & Figure 6) and the Social Responsibility sample (Table 7 & Figure 7).

Table 6

Mean scores for Critical Thinking sample by student classification

	Identification & Explanation of Issues	Collection of Information	Recognition of context and assumptions	Evaluation & Synthesis of Information	Conclusions & Related Outcomes	Overall Rubric Score
Freshmen	1.64	2.23	1.39	1.80	1.64	1.74
Sophomores	1.82	2.22	1.57	1.98	1.60	1.84
Juniors	1.85	2.30	1.58	2.03	1.78	1.91
Seniors	1.70	2.15	1.65	2.08	1.78	1.87
Other	1.75	2.50	2.25	2.25	1.75	2.10

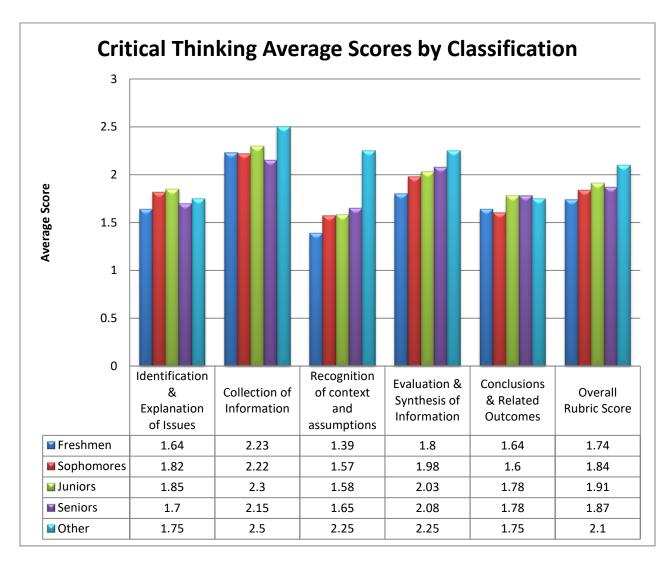


Figure 6. Mean scores for Critical Thinking sample by student classification.

Table 7

Mean scores for Social Responsibility sample by student classification

	Cultural Self- Awareness	Cultural Worldview Frameworks	Civic Responsibility	Understanding One's Role in Regional, National, and/or Global Communities	Overall Rubric Score
Freshmen	1.76	1.56	1.83	1.63	1.69
Sophomores	1.74	1.46	1.75	1.54	1.62
Juniors	1.76	1.44	1.84	1.63	1.67
Seniors	1.92	1.96	1.69	1.69	1.82
Other	2.00	1.25	1.50	1.50	1.56

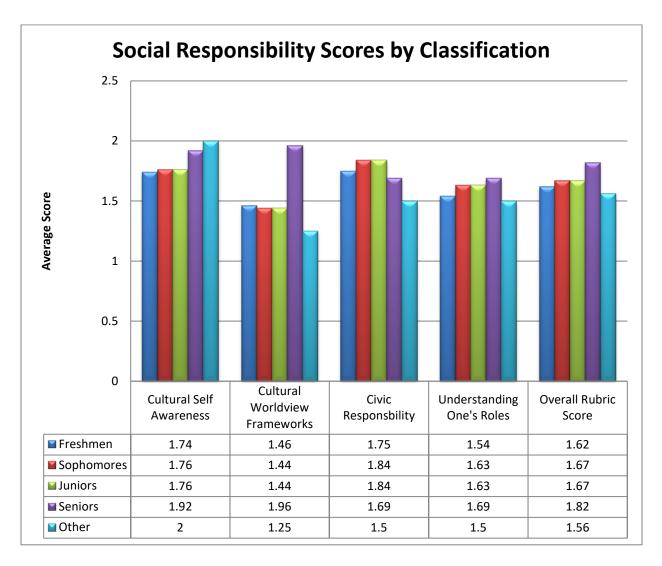


Figure 7. Mean scores for Social Responsibility sample by student classification.

Average score by transfer status. Results were also tabulated by transfer status in order to get an overall score of each element for students classified by their transfer status. Students who had any transfer hours to SFA were grouped into the "Transfer Hours" group. Results are shown for the Critical Thinking Sample (Table 9 & Figure 9) and the Social Responsibility sample (Table 10 & Figure 10).

Table 9. Mean scores for Critical Thinking rubric elements by student transfer status.

	Identification & Explanation of Issues	Collection of Information	Recognition of Context & Assumptions	Evaluation & Synthesis of Information	Conclusions & Outcomes	Overall Rubric Score
No Transfer Hours	1.77	2.23	1.49	1.92	1.63	1.81
Transfer Hours	1.79	2.27	1.77	2.15	1.88	1.97

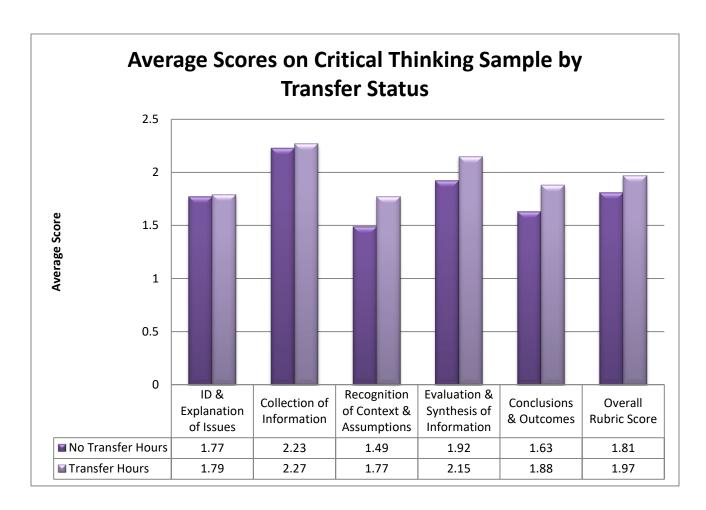


Figure 9. Mean scores for Critical Thinking sample by transfer status.

Table 10. Mean scores for Social Responsibility rubric elements by student transfer status.

	Cultural Self- Awareness	Cultural Worldview Frameworks	Understanding Civic Responsibility Responsibility Communities		Overall Rubric Score
No Transfer Hours	1.77	1.53	1.78	1.61	1.68
Transfer Hours	1.72	1.42	1.80	1.47	1.60



Figure 10. Mean scores for Social Responsibility sample by transfer status.

References

- Cicchetti, D.V. (1994). Guidelines, Criteria, and Rules of Thumb for Evaluating Normed and Standardized

 Assessment Instruments in Psychology. *Psyhcological Assessment*, 6(4): 284-290.
- Hallgren, K.A. (2012). Computing Inter-Rater Reliability for Observational Data: An Overview and Tutorial. *The Quantitative Methods for Psychology*, 8(1): 23-34.

Appendix A

Rules for Scoring Student Work

Procedures for assessment of student work:

- 1. Each piece of student work will be initially assessed by two raters.
- 2. If the two raters agree on their rating on any element/criterion of a rubric then there is no need for a third rater on that element/criterion.
- 3. If the first two raters are no more than one integer apart on their ratings on an element/criterion of a rubric, then the two ratings are averaged together and there is no need for a third rater on that element/criterion.

For example, if Rater A gives a piece of student work a 2 on element/criterion of Audience, Context, and Purpose, and Rater B gives the piece of student work a 3 on Audience, Context, and Purpose, then the two ratings are averaged together to give a 2.5 on the Audience, Context, and Purpose element/criterion.

WRITTEN COMMUNICATION RUBRIC

Definition: Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

	Capstone 4	Accomplished 3	Developing 2	Beginning 1	Unacceptable 0
Audience, Context, and Purpose	Demonstrates a thorough understanding of context, audience, and purpose that is wholly responsive to the assigned task(s) and applied consistently through all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s).		Demonstrates minimal attention to context, audience, purpose, and to the assigned task(s).	Fails to meet minimum criteria in addressing the audience, context, and purpose for writing.
Content Development	Uses appropriate, relevant, and compelling content and ideas that illustrate the writer's command and deep understanding of the subject, skillfully shaping the whole work.	Uses appropriate, relevant, and compelling content to accurately explore ideas within the subject and shape the whole work.	Uses appropriate and relevant content to develop and accurately explore ideas through most of the work.	relevant content to accurately develop	Fails to meet minimum criteria in addressing content development.
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the assignment.	Demonstrates consistent use of credible, relevant sources to support ideas that are appropriate for the assignment.	Demonstrates an attempt to use credible and relevant sources to support ideas that are appropriate for the assignment.	Demonstrates an attempt to use sources to support ideas in the assignment.	Fails to meet minimum criteria in demonstrating the use of sources to support ideas in the assignment.
Organization And Presentation	Demonstrates consistent, skillful, and thoroughly detailed attention to organization, presentation, and stylistic choices as appropriate to the assignment.	Demonstrates consistent and skillful organization and presentation as appropriate to the assignment.		basic organization and presentation as	Fails to meet minimum criteria in organization and presentation.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is nearly error-free.	Uses straightforward language that conveys meaning to readers with clarity. The language in the work has few errors.	Uses language that generally conveys meaning to readers, although writing may include some errors.	sometimes impedes meaning because of	Fails to use language that demonstrates control of syntax and mechanics.

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If the two raters are more than one integer apart on their ratings on any element/criterion of a rubric, a third rater is asked to rate only the element(s)/criteria where there was disagreement.

For example, if Rater A gives a piece of student work a 1 on the element/criterion Audience, Context, and Purpose, and Rater B gives the piece of student work a 3 on Audience, Context, and Purpose. Also, rater A also gives the same piece of student work a 4 on Sources and Evidence, and Rater B gives that same piece of student work a 2. Then a third rater (Rater C) is asked to rate the student work only on the elements/criteria of Audience, Context, and Purpose and Sources and Evidence.

WRITTEN COMMUNICATION RUBRIC

Definition: Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

	Capstone 4	Accomplished 3	Developing 2	Beginning 1	Unacceptable 0
Audience, Context, and Purpose	Demonstrates a thorough understanding of context, audience, and purpose that is wholly responsive to the assigned task(s) and applied consistently through all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s).	audience, purpose, and	attention to context, audience, purpose, and to the assigned task(s).	Fails to meet minimum criteria in addressing the audience, context, and purpose for writing.
Content Development	Uses appropriate, relevant, and compelling content and ideas that illustrate the writer's command and deep understanding of the subject, skillfully shaping the whole work.	Uses appropriate, relevant, and compelling content to accurately explore ideas within the subject and shape the whole work.		relevant content to accurately develop	Fails to meet minimum criteria in addressing content development.
Sources and Evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the assignment.	Demonstrates consistent use of credible, relevant sources to support ideas that are appropriate for the assignment.	Demonstrates an attempt to use credible and relevant sources to support ideas that are appropriate for the assignment.	Demonstrates an attempt to use sources to support ideas in the assignment.	Fails to meet minimum criteria in demonstrating the use of sources to support ideas in the assignment.
Organization And Presentation	Demonstrates consistent, skillful, and thoroughly detailed attention to organization, presentation, and stylistic choices as appropriate to the assignment.	Demonstrates consistent and skillful organization and presentation as appropriate to the assignment.	Follows expectations for a consistent system of basic organization and presentation as appropriate to the assignment.	basic organization and presentation as	Fails to meet minimum criteria in organization and presentation.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is nearly error-free.	Uses straightforward language that conveys meaning to readers with clarity. The language in the work has few errors.	Uses language that generally conveys meaning to readers, although writing may include some errors.	meaning because of	Fails to use language that demonstrates control of syntax and mechanics.

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- 4. If Rater C's rating agrees with one of the other two ratings, then that rating is used and the rating that is not in agreement is discarded.
 - For example, if Rater C and Rater A each rate a piece of student work a 2 on Content Development, but Rater B rates the work a 4, then Rater B's rating is discarded and the student work received a rating of 2 on Content Development.
- 5. If Rater C's rating does not agree with one of the other two ratings, and is no more than one integer from only one of the other ratings, then the rating that is more than one integer from

the other ratings is discarded, and the two ratings that are no more than one integer apart are averaged.

For example, if Rater C rates a piece of student work 2, Rater A rated the work a 1, and Rater B rated the work 4 on Content Development. Rater B's rating of 4 is discarded and the ratings of Rater C and Rater A are averaged to get a rating of 1.5.

- 6. If Rater C's rating is no more than one integer from the other two ratings, then all of the ratings are averaged.
 - For example, if Rater C rates a piece of student work 3, Rater A rated the work a 2, and Rater B rated the work 4 on Content Development. All of the ratings are averaged for a rating of 3.
- 7. If Rater C's rating does not agree with one of the other two ratings and is more than one integer apart from the other two ratings, then Rater C's rating is discarded, and the other two ratings are averaged.

For example, if Rater C rates a piece of student work 4, Rater A rated the work a 0, and Rater B rated the work a 2 on Content Development. Rater C's rating of 4 is discarded, and the other two ratings are averaged to get a rating of 1.

Appendix B

Charts of Scores

Critical Thinking:

Below are charts for the critical thinking sample (n=224). Both charts show the number of student work samples and the score they were assigned (0-4). Figure 1 shows the number of work samples for each element and Figure 2 shows the number of work samples for each score. Figure 3 shows the breakdown of the overall rubric score (composite of all elements) assigned to each piece of student work.

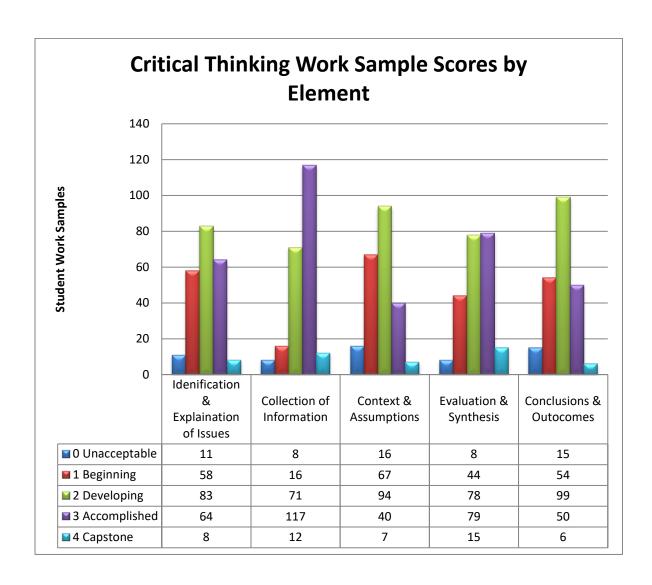


Figure 1

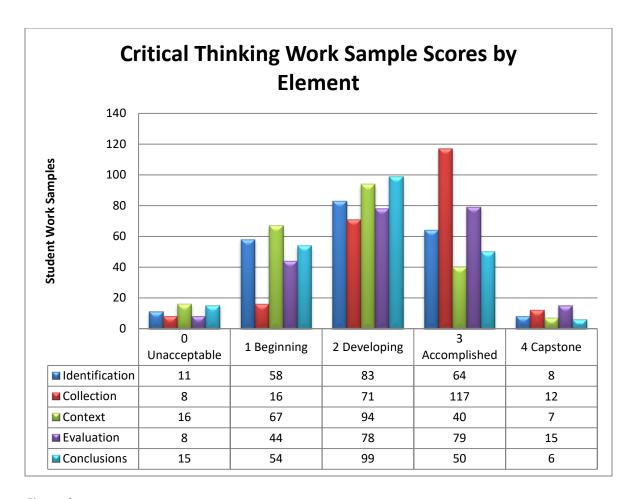


Figure 2

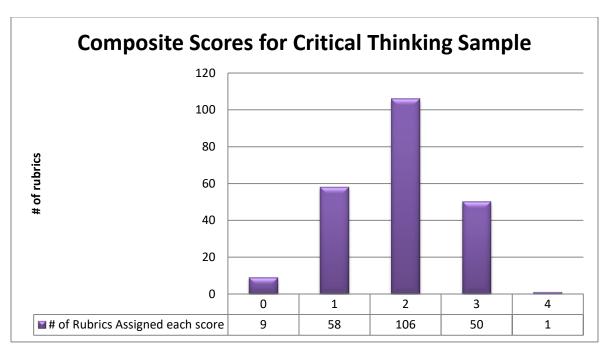


Figure 3

Social Responsibility:

Below are charts for the social responsibility sample (n=211). Both charts show the number of student work samples and the score they were assigned (0-4). Figure 4 shows the number of work samples for each element and Figure 5 shows the number of work samples for each score. Figure 6 shows the breakdown of the overall rubric score (composite of all elements) assigned to each piece of student work

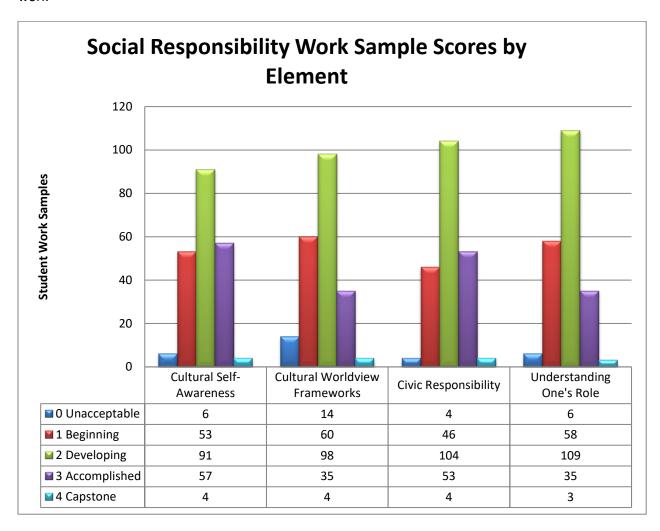


Figure 4

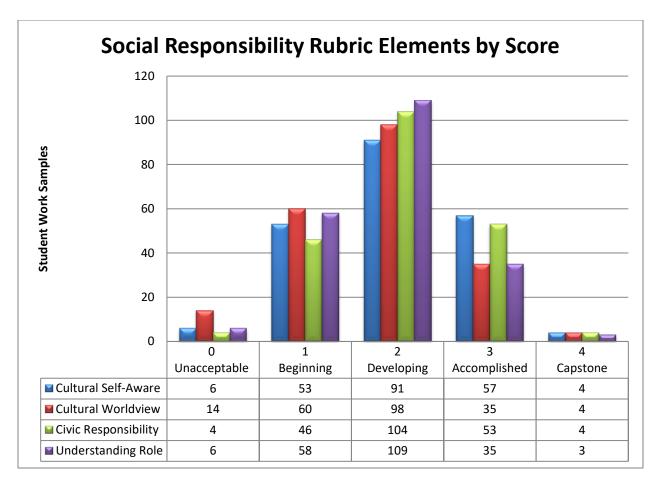


Figure 5

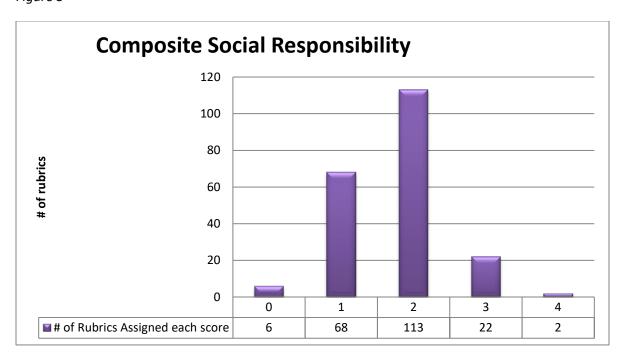


Figure 6