

**EDISON STATE COLLEGE  
ASSESSMENT AND ANALYSIS REPORTING FORM**

**Name of Course:** General Education Assessment of Critical Thinking

**Name of Program Leader (s):** Professor Marty Ambrose

**Date:** May 22, 2010

**Report Completed by:** Professor Marty Ambrose

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**LEARNING OUTCOME(S):** Critical Thinking (General Education Assessment for the Institutional Portfolio)

**ASSESSMENT PLAN:**

1. At the beginning of the 2009 fall session, the Department of Institutional Research, Planning & Effectiveness (IRPE) completed a random, district-wide selection of courses to participate in the General Education Assessment of Critical Thinking. They then notified each faculty member that his or her course was selected and for which general education outcome.
2. Faculty then filled out a form that was sent to IRPE indicating the description of the assignment, the date the assignment was due, and the target submission date of the artifacts to IRPE. Faculty were also instructed to send the artifacts electronically before any grading process took place.
3. IRPE prepared the artifacts for scoring by randomly selecting 100 artifacts from students who have achieved at least 30 hours.
4. A team of faculty (Prof. Don Warren, Dr. Roz Jester, Dr. Russell Swanson, Prof. Scott Van Selow, Prof. Marty Ambrose, and Dr. Bob Beeson[dean]) trained in the holistic scoring of essays were paid to score the artifacts at the beginning of Spring, 2010. The team scored the essays according to the General Education Rubric in Critical Thinking. The scored artifacts were then returned to IRPE for analysis of the data.

**Edison State College**

**Data Analysis for Critical Thinking Assessment**

Fall 2009

**Performance**

*36 students were matched to Banner data on ID*

Hours Earned	N	%	Identifies relevant data, argument, or problem	Draws warranted conclusions	Justifies the warranted conclusions	Comments
< 45	17	47.2%	2.70	2.70	2.40	The average scores increased by hours earned but not significantly across the group. All groups were lower in the "Justifies the warranted conclusions" section.
45-60	8	22.2%	2.60	2.40	2.10	
61-75	3	8.3%	2.70	2.80	2.70	
76-90	4	11.1%	3.30	3.50	3.10	
91+	4	11.1%	2.80	2.60	2.40	
	36	100.0%				

GPA	N	%	Identifies relevant data, argument, or problem	Draws warranted conclusions	Justifies the warranted conclusions	Comments
< 2.00	4	11.1%	2.50	2.60	2.50	The average scores increased by GPA but not significantly across the group.
2.01-2.50	3	8.3%	2.80	2.30	2.20	
2.51-3.00	13	36.1%	2.50	2.70	2.30	
3.01-3.50	5	13.9%	3.30	3.30	3.10	
3.51-4.00	11	30.6%	2.80	2.70	2.30	
	36	88.9%				

Degree Program	N	%	Identifies relevant data, argument, or problem	Draws warranted conclusions	Justifies the warranted conclusions	Comments
AA Degree	20	55.6%	2.70	2.40	2.30	The average score for students enrolled in the AS program was higher than those in the AA program.
AS Degrees	16	44.4%	2.80	3.10	2.60	
BAS/BS Degrees		0.0%				
Certificates		0.0%				
	36	100.0%				

100 artifacts were collected, of these 64 (64%) were not graded.

**Edison State College**  
**Reliabilities of Paired Scorers for Critical Thinking Assessment**  
**Fall 2009 Performance**

Scorers	Reliability	Number
<b>A &amp; B</b>		
Identifies relevant data, argument, or problem	<b>0.77</b> ( <i>Reliable</i> )	
Draws warranted conclusions	<b>0.00</b> ( <i>No Correlation</i> )	
Justifies the warranted conclusions	<b>-0.32</b> ( <i>Not Reliable</i> )	6
<b>C &amp; D</b>		
Identifies relevant data, argument, or problem	<b>0.52</b> ( <i>Reliable</i> )	
Draws warranted conclusions	<b>0.72</b> ( <i>Reliable</i> )	
Justifies the warranted conclusions	<b>0.73</b> ( <i>Reliable</i> )	18
<b>E &amp; B</b>		
Identifies relevant data, argument, or problem	<b>0.60</b> ( <i>Reliable</i> )	
Draws warranted conclusions	<b>0.77</b> ( <i>Reliable</i> )	
Justifies the warranted conclusions	<b>0.69</b> ( <i>Reliable</i> )	12
<b>Number Analyzed for Reliability</b>		<b>36</b>

- The scoring session took three-four attempts because the Critical Thinking rubric did not work well. The rubric was then revised, and the team attempted to score the artifacts. Only 36 out of the 100 artifacts actually measured Critical Thinking.
- In the three traits of the revised Critical Thinking rubric, students scores generally declined as the thinking skill being assessed increased in measure of difficulty. Students could “identify relevant data, argument, or problem” at a higher score than they could “justify the warranted conclusions.”
- The paired scorers were generally reliable, once the rubric had been revised.

**USE OF ASSESSMENT FINDINGS TO IMPROVE STUDENT LEARNING:**

The scoring team had the following recommendations for general education assessment in Critical Thinking:

- Critical Thinking workshops were held in the TLC, and faculty were sent to the International Critical Thinking Conference.
- The revised Critical Thinking rubric was reviewed with faculty during duty days.
- The revised rubric was suggested as an addition to any faculty member’s Critical Thinking assignment.

**OTHER RECOMMENDATIONS:**

- During the syllabus review process, faculty were given suggestions on what assignments should be listed as meeting the Critical Thinking general education competency to improve.
- The online and upper-level artifacts should be stratified for more effective analysis.

**DESCRIBE HOW DATA AND RECOMMENDATIONS WILL BE SHARED WITH FACULTY:**

This data will be shared with the SAC committee; the chairs and associate deans will then disseminate to faculty at departmental meetings. The data will also be posted on the Edison State College Assessment Website.