Assessing Core Competencies: Results of Critical Thinking Skills Testing

Graduating Seniors, 2015 Spring

University of Guam Academic and Student Affairs Office of Academic Assessment and Institutional Research



Assignment: 6 - 2015 Spring CCTST Testing

Individual results from the assignments met the following criteria.

Description	Value
What is your class level?	Graduating Senior







Assignment: 6 - 2015 Spring CCTST Testing

CCTST

Skill/Attribute Name	N	Mean	Median	Standard Deviation	SE Mean
OVERALL	251	71.4	71	6.8	0.4
Analysis	251	73.2	70	8.0	0.5
Interpretation	251	76.7	74	9.0	0.6
Inference	251	74.5	75	7.1	0.4
Evaluation	251	70.2	71	7.8	0.5
Explanation	251	71.1	74	9.6	0.6
Induction	251	76.1	77	7.3	0.5
Deduction	251	70.8	69	7.1	0.4

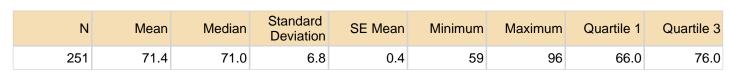
Skill/Attribute Name	Minimum	Maximum	Quartile 1	Quartile 3
OVERALL	59	96	66	76
Analysis	60	100	70	80
Interpretation	55	100	68	81
Inference	58	100	69	78
Evaluation	55	92	63	75
Explanation	55	100	61	74
Induction	58	97	71	82
Deduction	58	95	66	74

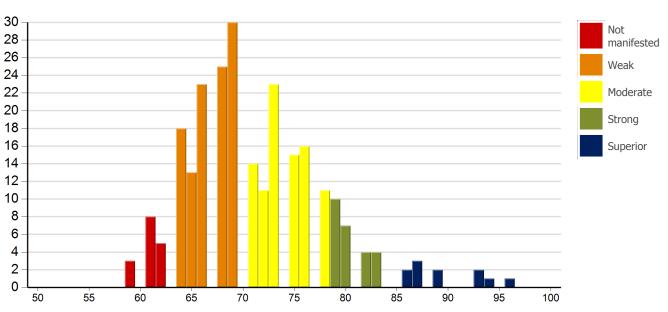
Based on the distribution of the overall score percentiles for the test takers in this group, as compared to an aggregate sample of CCTST Four Year College Students, the average percentile score of this group of test takers is 32.

IN SIGHT

Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: OVERALL





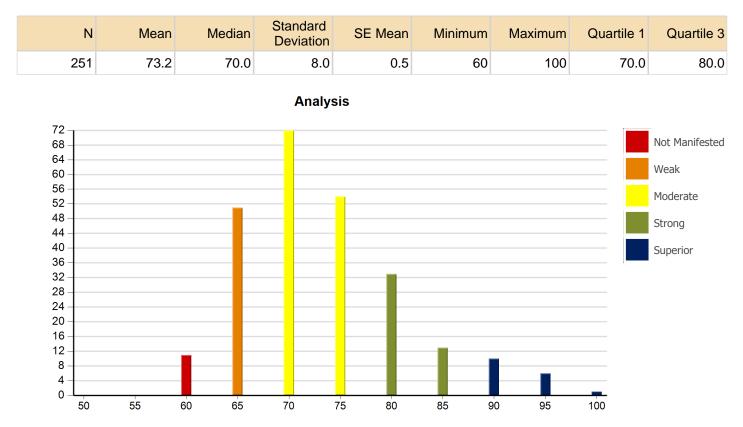
OVERALL

The Reasoning Skills Overall score describes overall strength in using reasoning to form reflective judgments about what to believe or what to do. High Overall scores are attained by test takers who excel in the sustained, focused and integrated application of core thinking skills measured on this test, including analysis, interpretation, inference, evaluation, explanation, induction and deduction. The Overall score predicts the capacity for success in educational or workplace settings which demand reasoned decision making and thoughtful problem solving.

The descriptive information reported below indicates strengths and weaknesses in specific areas. These results are useful for understanding group characteristics, for comparing and contrasting similar groups on specific attributes or skills, and for guiding the development of more targeted educational or training programs.

Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Analysis

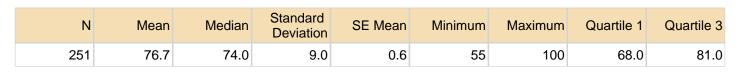


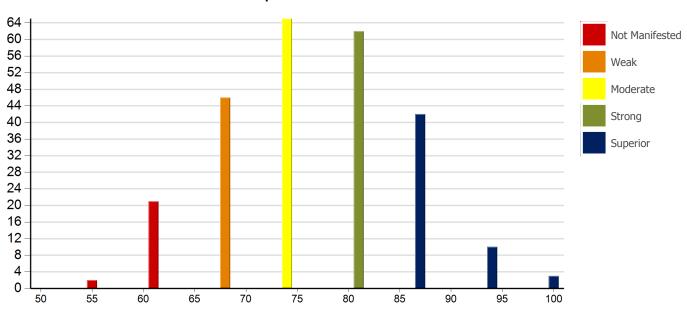
Analytical reasoning skills enable people to identify assumptions, reasons and claims, and to examine how they interact in the formation of arguments. We use analysis to gather information from charts, graphs, diagrams, spoken language and documents. People with strong analytical skills attend to patterns and to details. They identify the elements of a situation and determine how those parts interact. Strong interpretation skills can support high quality analysis by providing insights into the significance of what a person is saying or what something means.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Interpretation





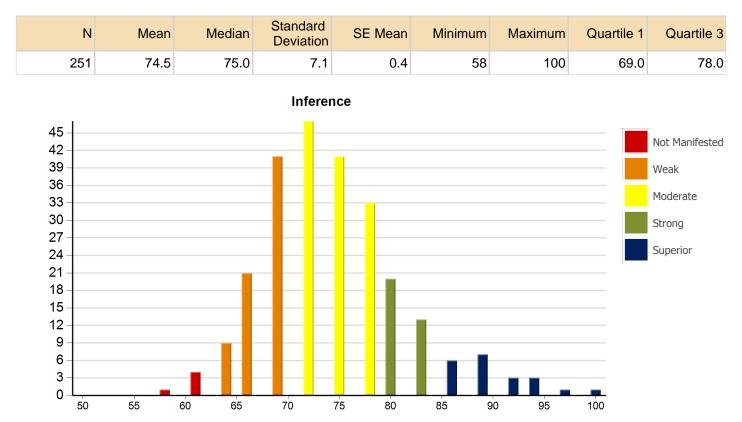
Interpretation

Interpretative skills are used to determine the precise meaning and significance of a message or signal, whether it is a gesture, sign, set of data, written or spoken words, diagram, icon, chart or graph. Correct interpretation depends on understanding the message in its context and in terms of who sent it, and for what purpose. Interpretation includes clarifying what something or someone means, grouping or categorizing information, and determining the significance of a message.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Inference

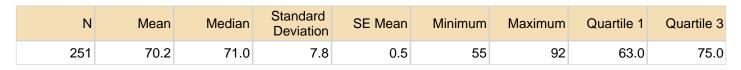


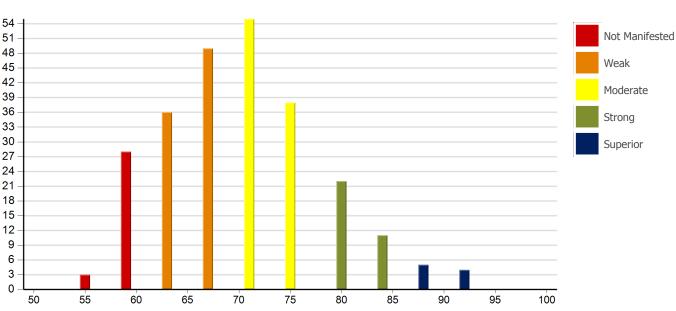
Inference skills enable us to draw conclusions from reasons and evidence. We use inference when we offer thoughtful suggestions and hypotheses. Inference skills indicate the necessary or the very probable consequences of a given set of facts and conditions. Conclusions, hypotheses, recommendations or decisions that are based on faulty analyses, misinformation, bad data or biased evaluations can turn out to be mistaken, even if they have been reached using excellent inference skills.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Evaluation





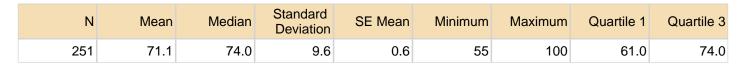
Evaluation

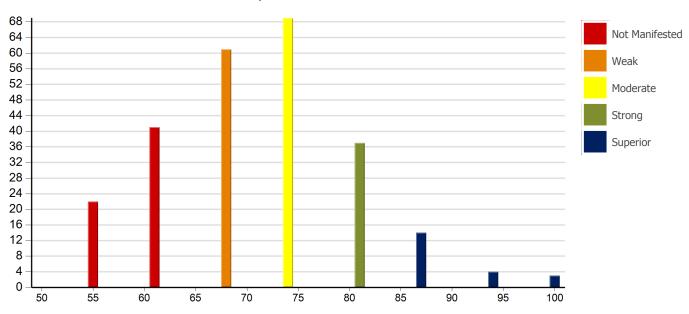
Evaluative reasoning skills enable us to assess the credibility of sources of information and the claims they make. And, we use these skills to determine the strength or weakness of arguments. Applying evaluation skills we can judge the quality of analyses, interpretations, explanations, inferences, options, opinions, beliefs, ideas, proposals, and decisions. Strong explanation skills can support high quality evaluation by providing the evidence, reasons, methods, criteria, or assumptions behind the claims made and the conclusions reached.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Explanation





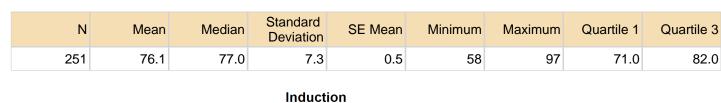
Explanation

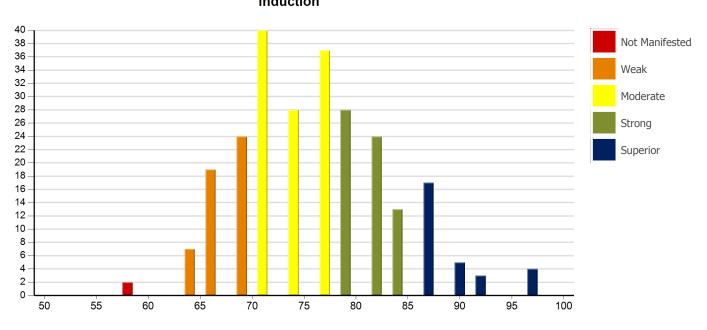
Explanatory reasoning skills, when exercised prior to making a final decision about what to believe or what to do, enable us to describe the evidence, reasons, methods, assumptions, standards or rationale for those decisions, opinions, beliefs and conclusions. Strong explanatory skills enable people to discover, to test and to articulate the reasons for beliefs, events, actions and decisions.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Induction



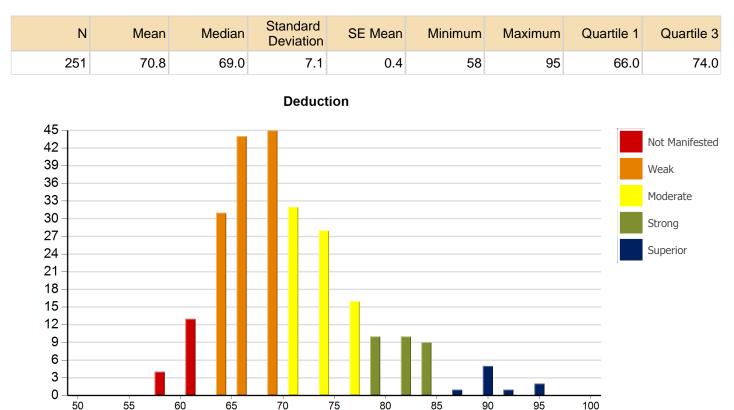


Decision making in contexts of uncertainty relies on inductive reasoning. We use inductive reasoning skills when we draw inferences about what we think is probably true based on analogies, case studies, prior experience, statistical analyses, simulations, hypotheticals, and patterns recognized in familiar objects, events, experiences and behaviors. As long as there is the possibility, however remote, that a highly probable conclusion might be mistaken even though the evidence at hand is unchanged, the reasoning is inductive. Although it does not yield certainty, inductive reasoning can provide a confident basis for solid belief in our conclusions and a reasonable basis for action.



Assignment: 6 - 2015 Spring CCTST Testing

Descriptive Information: Deduction



Decision making in precisely defined contexts where rules, operating conditions, core beliefs, values, policies, principles, procedures and terminology completely determine the outcome depends on strong deductive reasoning skills. Deductive reasoning moves with exacting precision from the assumed truth of a set of beliefs to a conclusion which cannot be false if those beliefs are true. Deductive validity is rigorously logical and clear-cut. Deductive validity leaves no room for uncertainty, unless one alters the meanings of words or the grammar of the language.



Assessing Core Competencies: Results of Critical Thinking Skills Testing

Graduating Seniors, 2014 Spring Graduating Seniors, 2014 Fall

University of Guam Academic and Student Affairs Office of Academic Assessment and Institutional Research



Insight Assessment Measuring Thinking Worldwide

Customer: Univ Guam - Assessment Test/Survey: California Critical Thinking Skills Test - 10.1.10 Report Date: 12/8/2014 10:58:33 PM



Assignment: 5 - #5 2014 Fall Freshmen and Seniors Critical Thinking Skills

CCTST

Skill/Attribute Name	N	Mean	Median	Standard Deviation	SE Mean
OVERALL	153	70.4	69	6.1	0.5
Analysis	153	71.9	70	8.0	0.6
Interpretation	153	75.8	74	8.8	0.7
Inference	153	72.9	72	6.7	0.5
Evaluation	153	69.9	71	7.5	0.6
Explanation	153	71.0	74	9.4	0.8
Induction	153	75.3	74	6.7	0.5
Deduction	153	69.8	69	6.4	0.5

Skill/Attribute Name	Minimum	Maximum	Quartile 1	Quartile 3
OVERALL	58	90	66	75
Analysis	55	95	65	75
Interpretation	61	100	68	81
Inference	58	94	69	78
Evaluation	55	96	63	75
Explanation	55	94	61	81
Induction	58	90	71	79
Deduction	56	97	64	74

Based on the distribution of the overall score percentiles for the test takers in this group, as compared to an aggregate sample of CCTST Four Year College Students, the average percentile score of this group of test takers is 29.

Insight Assessment Measuring Thinking Worldwide



Customer: Univ Guam - Assessment Test/Survey: California Critical Thinking Skills Test - 10.1.10 Report Date: 4/17/2014 3:28:25 AM Assignment: 2 - 2014 Spring Graduating Seniors

CCTST

Skill/Attribute Name	N	Mean	Median	Standard Deviation	SE Mean
OVERALL	226	70.7	71	5.4	0.4
Analysis	226	72.8	70	7.2	0.5
Interpretation	226	75.9	74	7.7	0.5
Inference	226	73.1	72	6.4	0.4
Evaluation	226	70.3	71	6.8	0.5
Explanation	226	71.7	74	8.4	0.6
Induction	226	74.8	74	6.0	0.4
Deduction	226	70.7	69	6.4	0.4

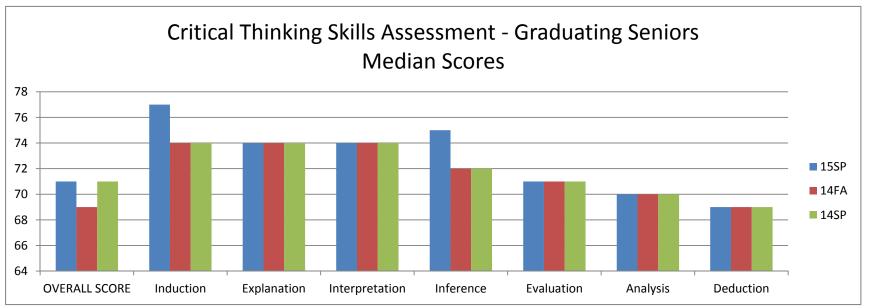
Skill/Attribute Name	Minimum	Maximum	Quartile 1	Quartile 3
OVERALL	58	85	66	73
Analysis	55	95	70	75
Interpretation	55	100	68	81
Inference	58	89	69	78
Evaluation	55	88	67	75
Explanation	55	94	68	74
Induction	61	90	71	79
Deduction	58	90	66	74

Based on the distribution of the overall score percentiles for the test takers in this group, as compared to an aggregate sample of CCTST Four Year College Students, the average percentile score of this group of test takers is 25.



Critical Thinking Skills Assessment - Graduating Seniors

		Media	n Scores	
			Т	hree- Semester
Skill/Attribute	15SP	14FA	14SP	Average
Ν	251	153	226	210
OVERALL SCORE	71	69	71	70
Induction	77	74	74	75
Explanation	74	74	74	74
Interpretation	74	74	74	74
Inference	75	72	72	73
<u>Evaluation</u>	71	71	71	71
Analysis	70	70	70	70
Deduction	69	69	69	69
Aggregate sample of CCTST Four Year College Students, average percentile				
score of this group of test takers:	32	29	25	29



Assessment instrument: California Critical Thinking Skills Test (CCTST); Insight Assessment