



# CAT<sup>®</sup> Institutional Report

Center for Assessment & Improvement of Learning



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# University of Colorado - Pueblo

## October 2009

This institutional report package contains both a general report and data CD. The general report contains demographics, overall mean performance, concept analysis, and comparison to national norms (if available). More in-depth analyses can be performed by the Center for an additional cost, contact Kevin Harris for more information.

The data CD contains a Microsoft® Excel spreadsheet of all of the tests returned to the Center. Incomplete tests are marked in red and not included in the general report. The data CD also contains a copy of the general report and CAT material order forms.

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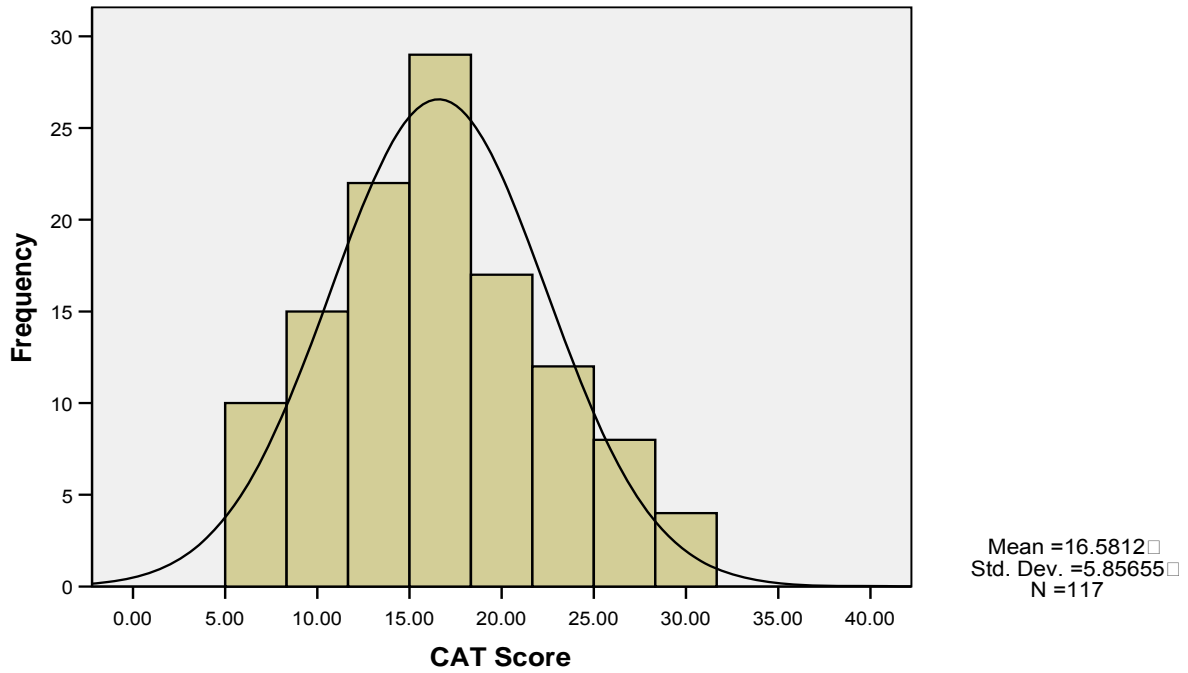
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## All Students



### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAT Score	117	5.00	31.00	16.5812	5.85655
Valid N (listwise)	117				

### Gender

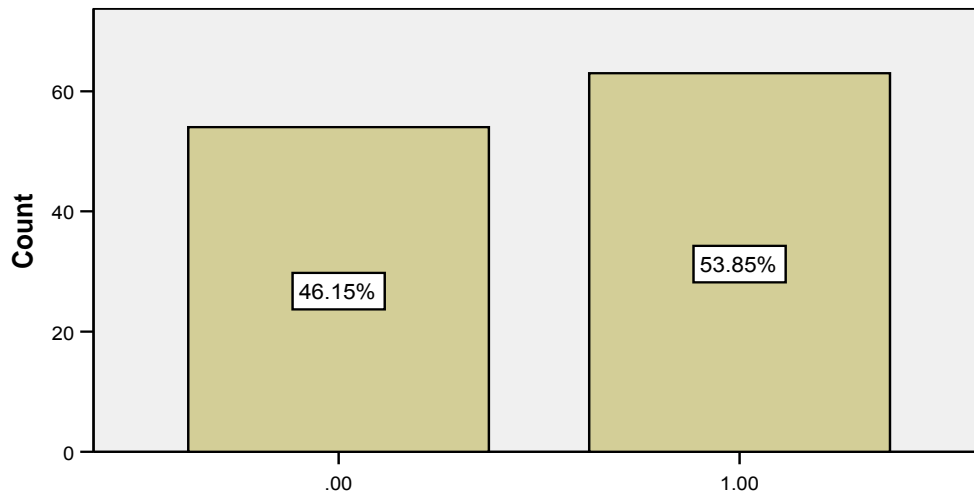
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	51	43.6	44.0	44.0
	Female	65	55.6	56.0	100.0
	Total	116	99.1	100.0	
Missing	System	1	.9		
Total		117	100.0		

### Standing

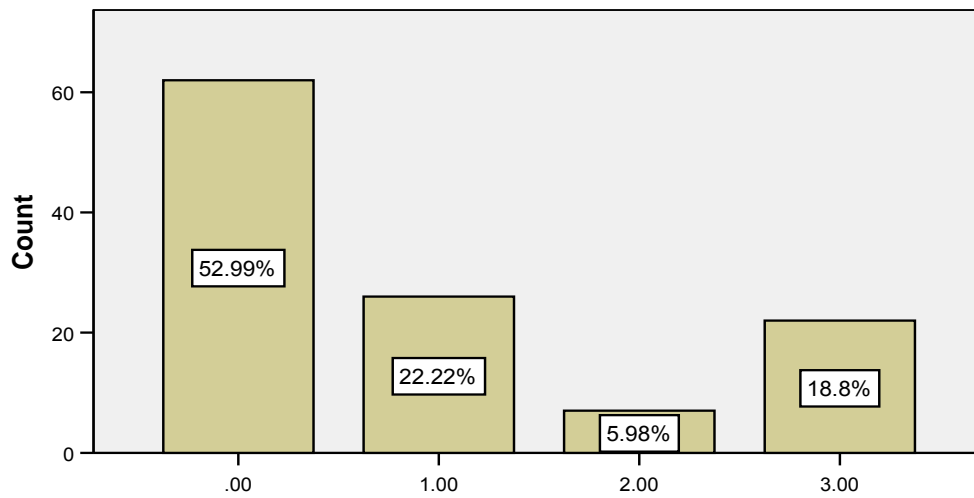
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sophomore	6	5.1	5.2	5.2
	Junior	35	29.9	30.2	35.3
	Senior	75	64.1	64.7	100.0
	Total	116	99.1	100.0	
Missing	System	1	.9		
Total		117	100.0		

### Age

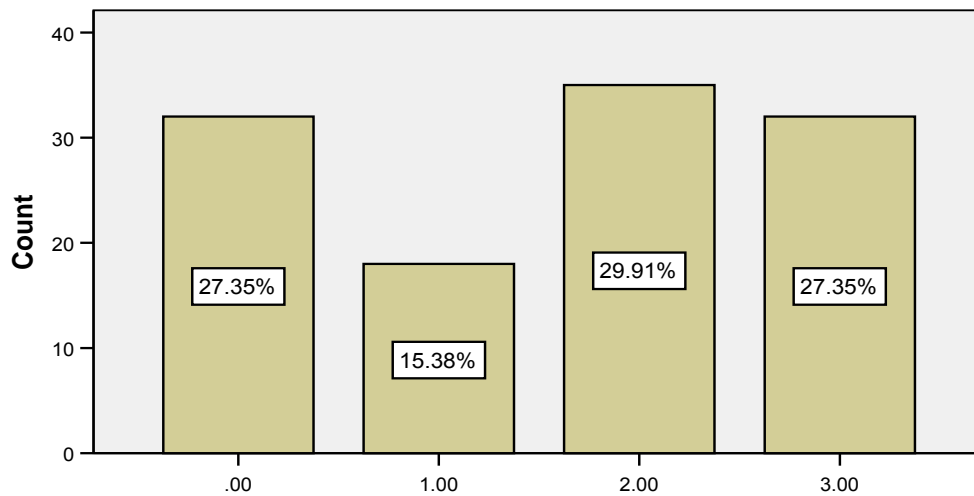
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	1	.9	.9	.9
	19	1	.9	.9	1.7
	20	15	12.8	12.8	14.5
	21	29	24.8	24.8	39.3
	22	20	17.1	17.1	56.4
	23	10	8.5	8.5	65.0
	24	8	6.8	6.8	71.8
	25	4	3.4	3.4	75.2
	26	5	4.3	4.3	79.5
	27	2	1.7	1.7	81.2
	29	4	3.4	3.4	84.6
	30	3	2.6	2.6	87.2
	31	2	1.7	1.7	88.9
	32	3	2.6	2.6	91.5
	42	1	.9	.9	92.3
	43	2	1.7	1.7	94.0
	45	1	.9	.9	94.9
	48	2	1.7	1.7	96.6
	51	1	.9	.9	97.4
	52	1	.9	.9	98.3
60	1	.9	.9	99.1	
61	1	.9	.9	100.0	
Total		117	100.0	100.0	



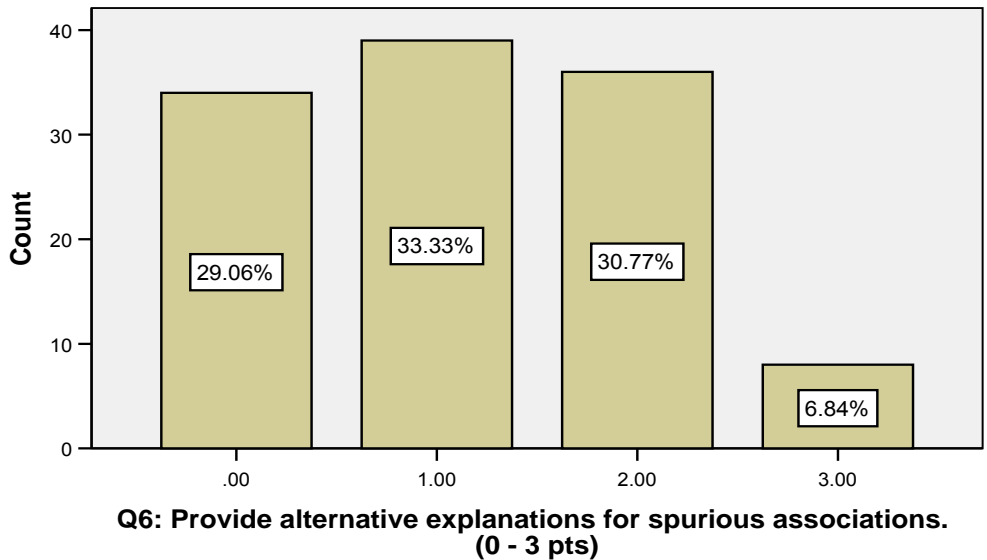
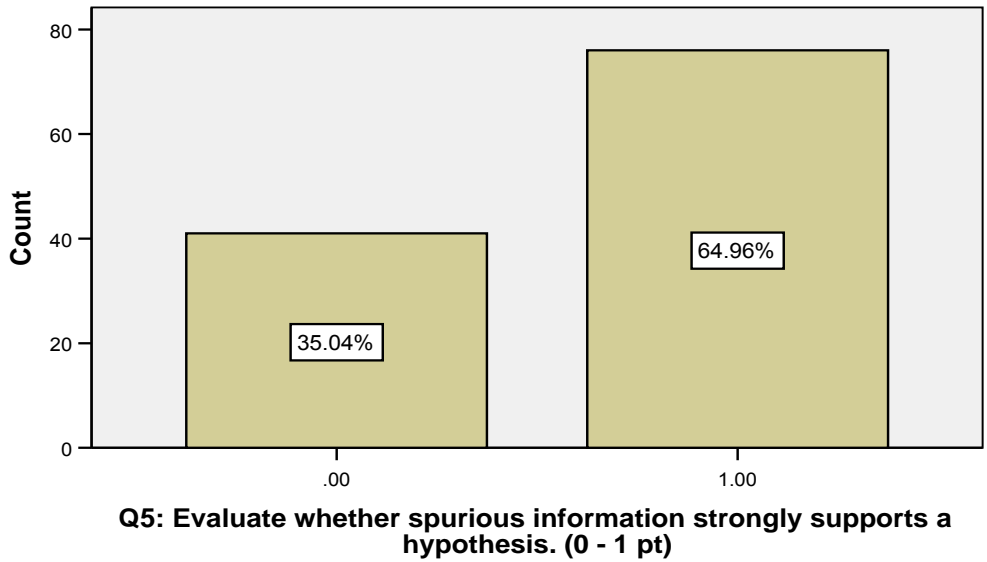
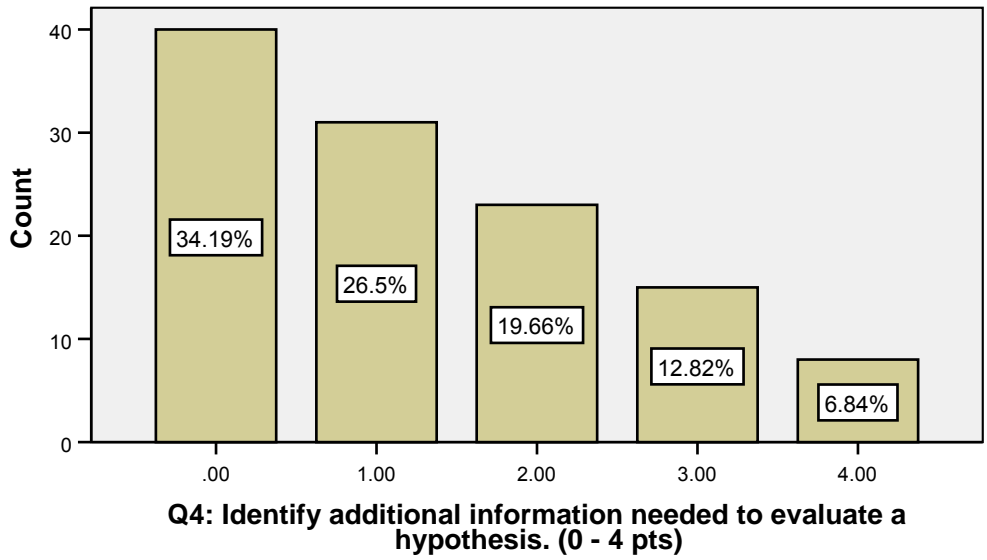
**Q1: Summarize the pattern of results in a graph without making inappropriate inferences. (0 - 1 pt)**

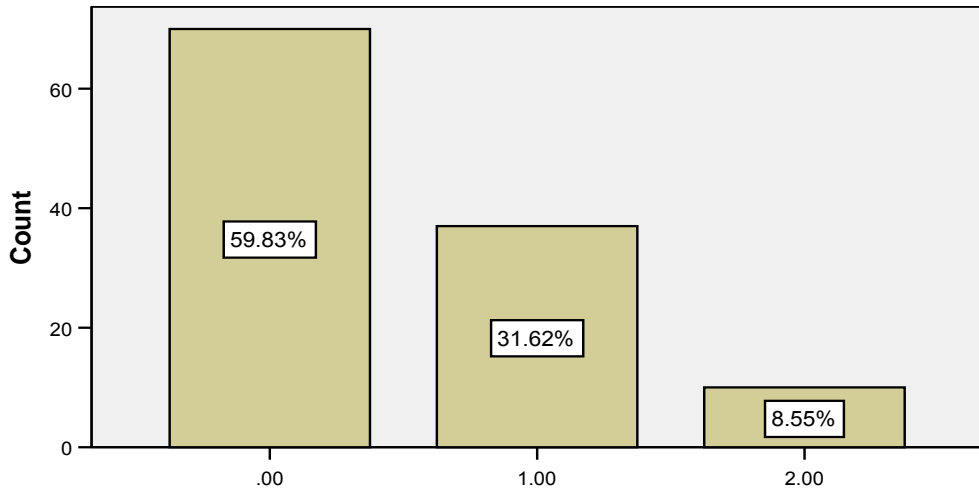


**Q2: Evaluate how strongly correlational-type data supports a hypothesis. (0 - 3 pts)**

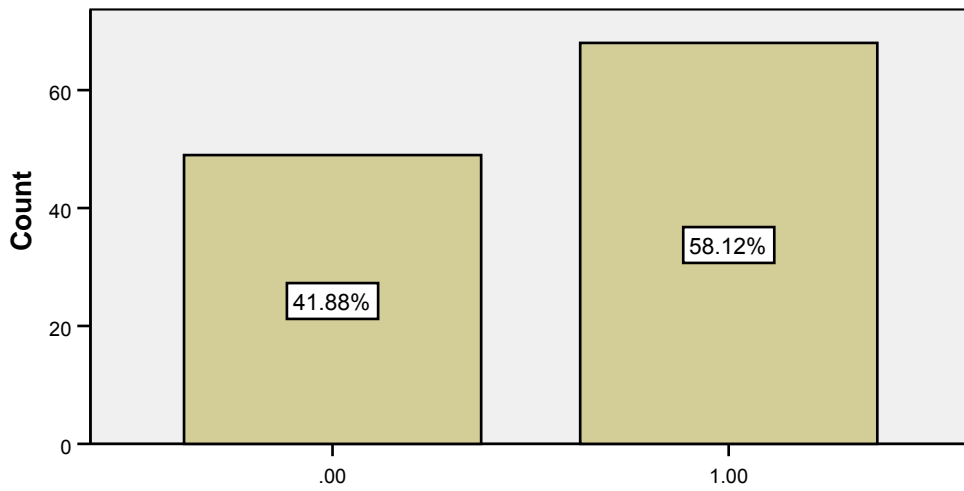


**Q3: Provide alternative explanations for a pattern of results that has many possible causes. (0 - 3 pts)**

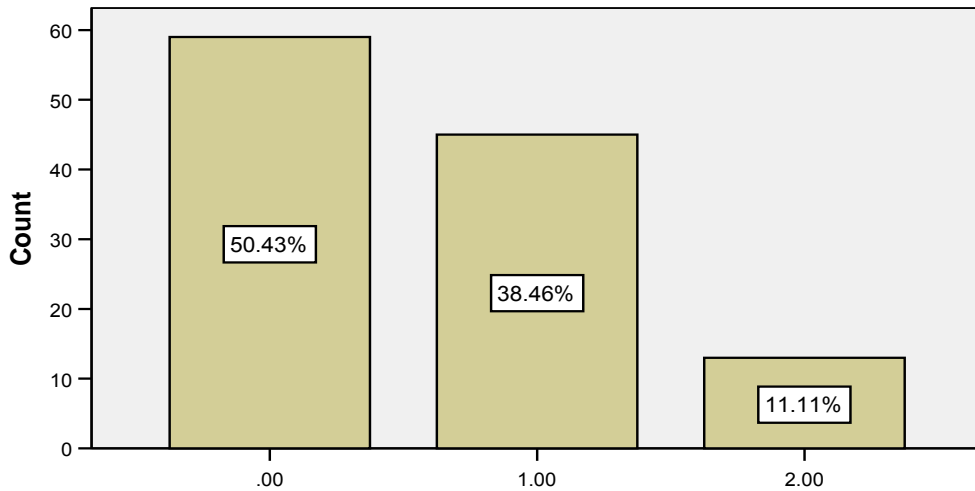




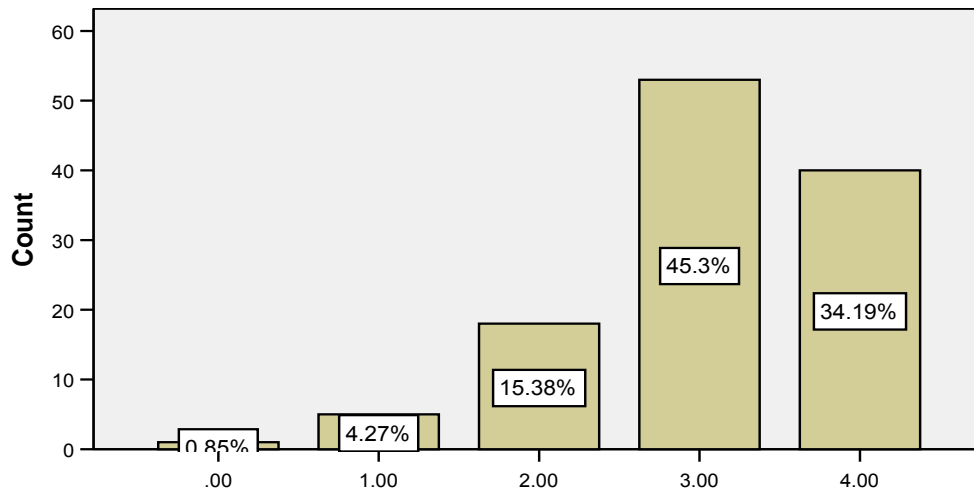
**Q7: Identify additional information needed to evaluate a hypothesis. (0 - 2 pts)**



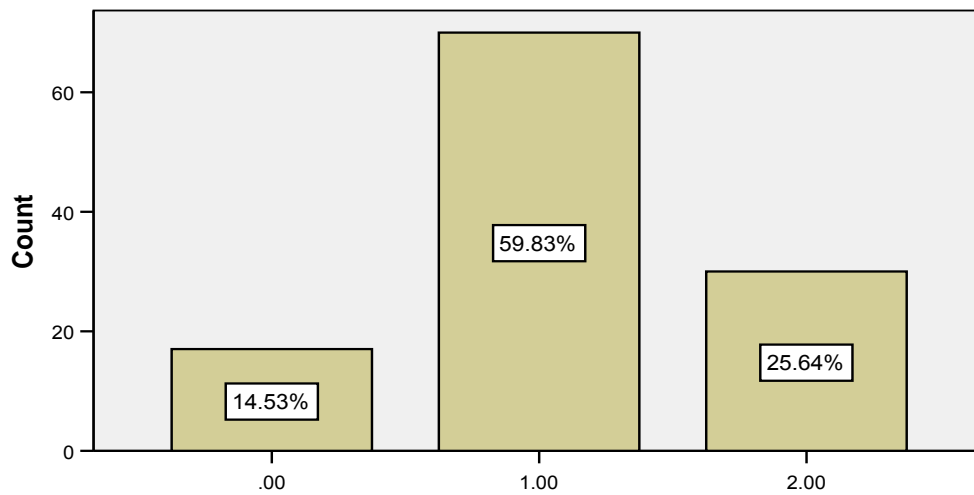
**Q8: Determine whether an invited inference is supported by specific information. (0 - 1 pt)**



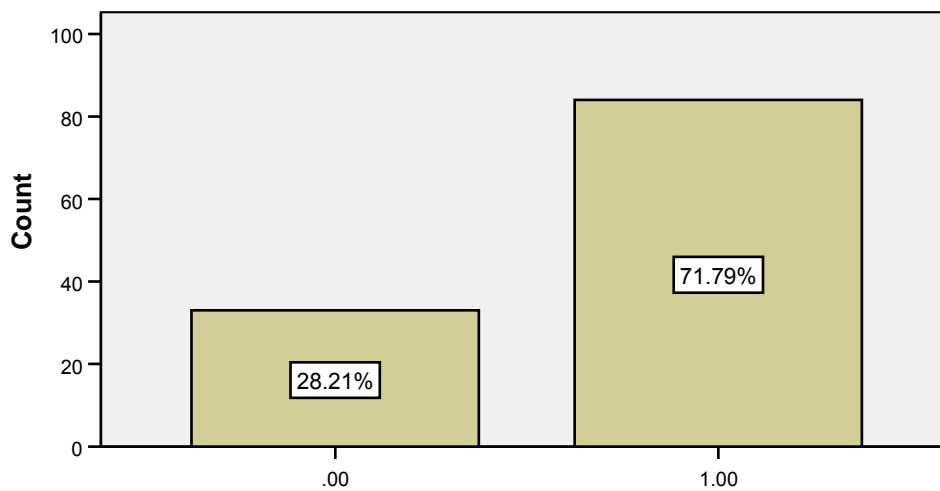
**Q9: Provide relevant alternative interpretations for a specific set of results. (0 - 2 pts)**



**Q10: Separate relevant from irrelevant information when solving a real-world problem. (0 - 4 pts)**

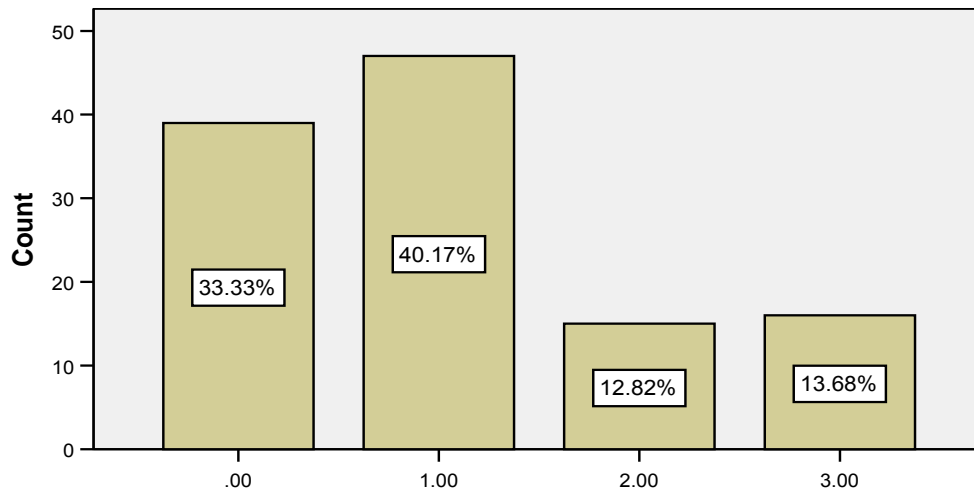


**Q11: Use and apply relevant information to evaluate a problem. (0 - 2 pts)**

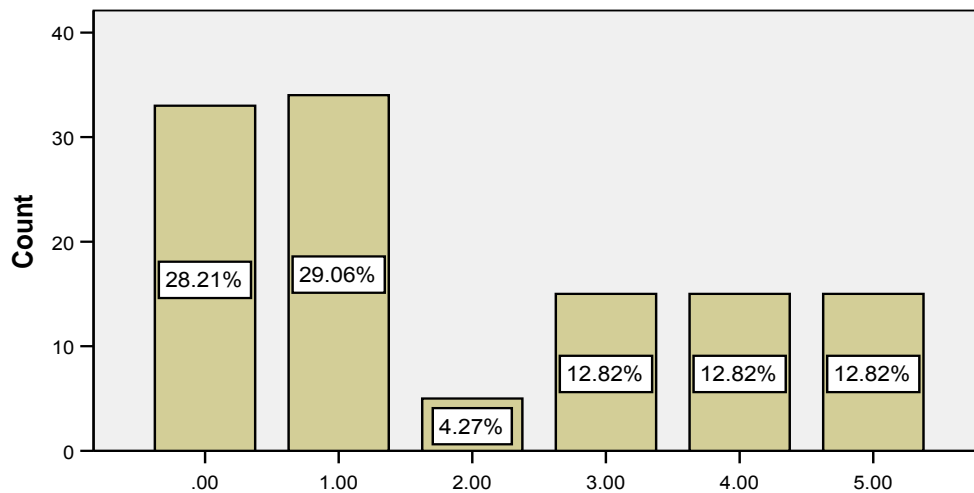


**Q12: Use basic mathematical skills to help solve a real-world problem. (0 - 1 pt)**

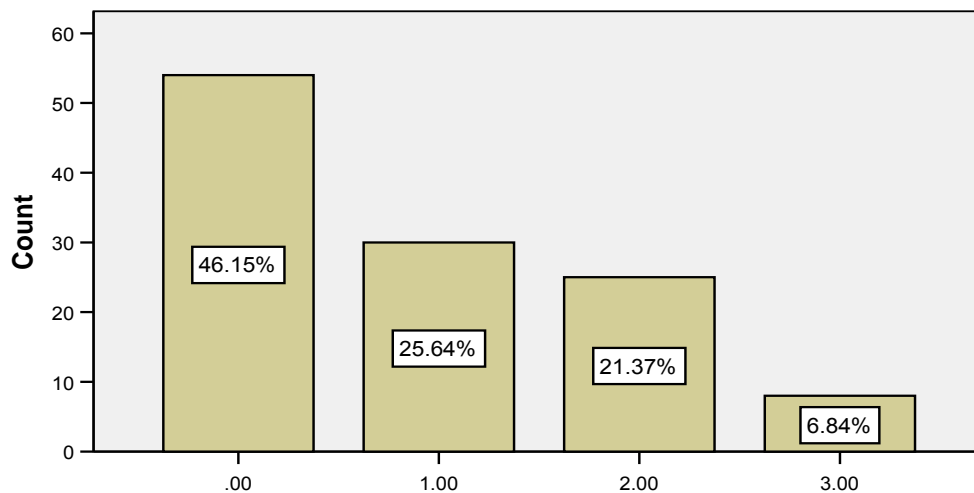




**Q13: Identify suitable solutions for a real-world problem using relevant information. (0 - 3 pts)**



**Q14: Identify and explain the best solution for a real-world problem using relevant information. (0 - 5 pts)**



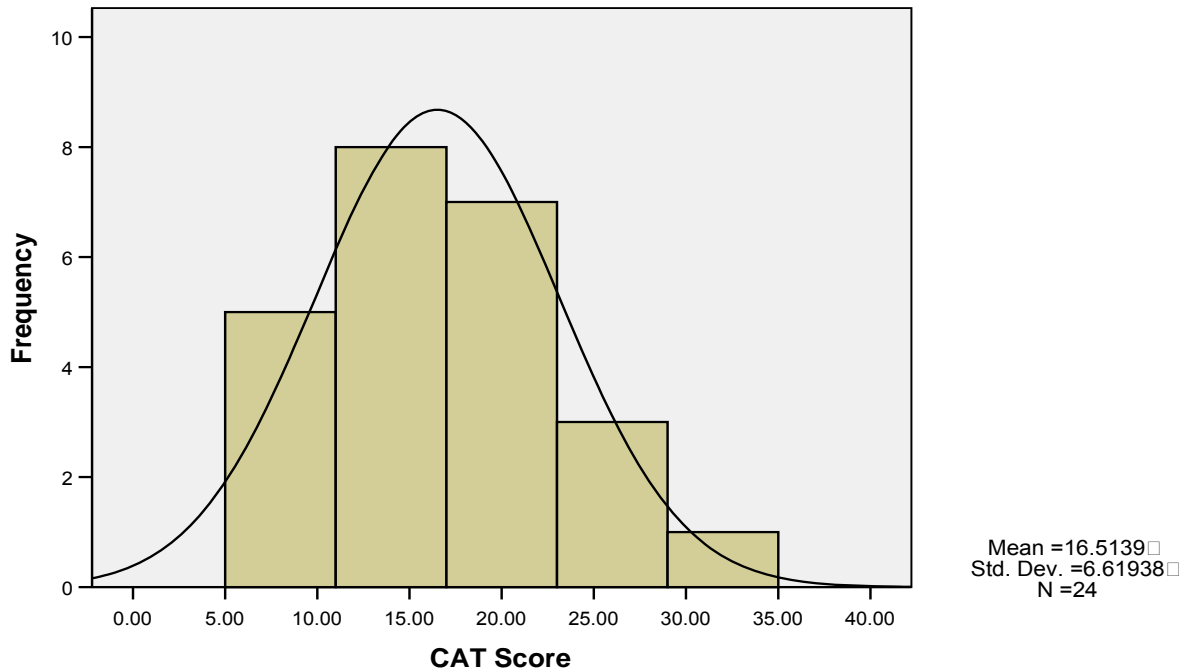
**Q15: Explain how changes in a real-world problem situation might affect the solution. (0 - 3 pts)**

**University of Colorado – Pueblo  
Institutional Profile (n=117)**

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Obtainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	.54	54%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	.91	30%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	1.57	52%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	1.32	33%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	.65	65%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.15	38%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	.49	24%
X				Q8	Determine whether an invited inference is supported by specific information.	.58	58%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	.61	30%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.08	77%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	1.11	56%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	.72	72%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	1.07	36%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.91	38%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	.89	30%
CAT Total Score						16.58	44%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

# College of Education, Engineering & Professional Studies



## Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAT Score	24	8.00	31.00	16.5139	6.61938
Valid N (listwise)	24				

## Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	11	45.8	45.8	45.8
	Female	13	54.2	54.2	100.0
	Total	24	100.0	100.0	

**Standing**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior	9	37.5	37.5	37.5
	Senior	15	62.5	62.5	100.0
	Total	24	100.0	100.0	

**Age**

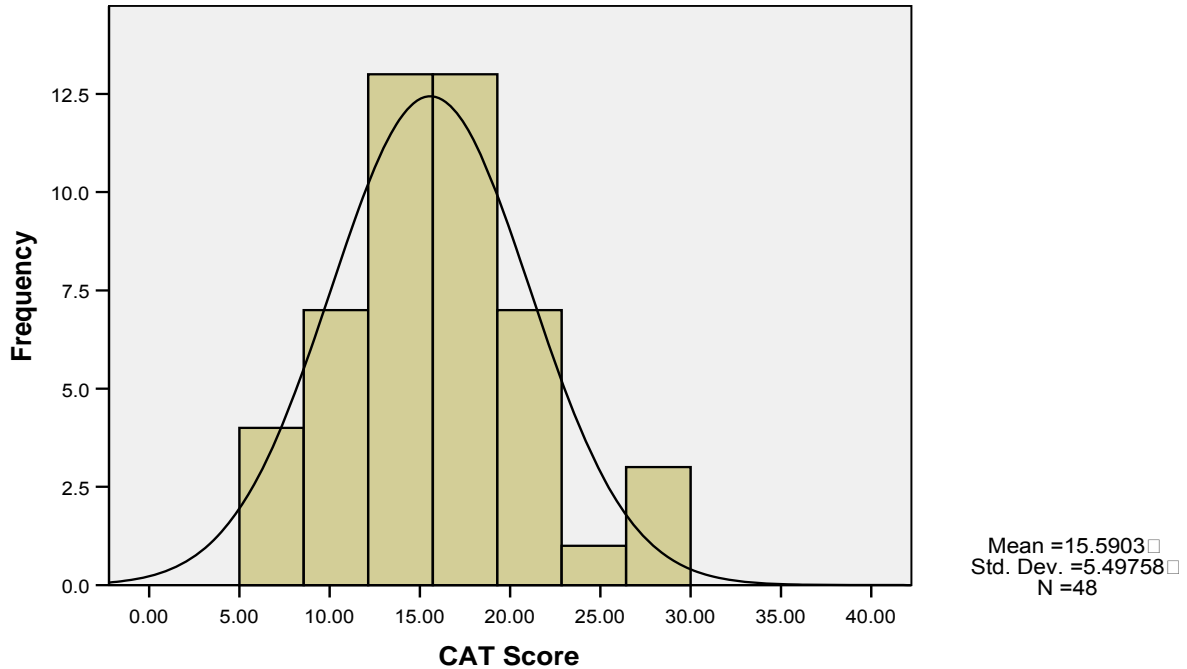
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	2	8.3	8.3	8.3
	21	7	29.2	29.2	37.5
	22	7	29.2	29.2	66.7
	23	1	4.2	4.2	70.8
	24	2	8.3	8.3	79.2
	30	3	12.5	12.5	91.7
	42	1	4.2	4.2	95.8
	52	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

**University of Colorado – Pueblo**  
**College of Education, Engineering & Professional Studies (n=24)**

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Obtainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	.54	54%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	.83	28%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	1.69	56%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	1.33	33%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	.75	75%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.04	35%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	.46	23%
X				Q8	Determine whether an invited inference is supported by specific information.	.54	54%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	.63	31%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.88	72%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	1.08	54%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	.63	63%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	1.13	38%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.17	43%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	.82	27%
<b>CAT Total Score</b>						<b>16.51</b>	<b>43%</b>

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

## College of Humanities & Social Sciences



### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAT Score	48	5.00	30.00	15.5903	5.49758
Valid N (listwise)	48				

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	14	29.2	29.8	29.8
	Female	33	68.8	70.2	100.0
	Total	47	97.9	100.0	
Missing	System	1	2.1		
Total		48	100.0		

### Standing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sophomore	6	12.5	12.8	12.8
	Junior	11	22.9	23.4	36.2
	Senior	30	62.5	63.8	100.0
	Total	47	97.9	100.0	
Missing	System	1	2.1		
Total		48	100.0		

### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	1	2.1	2.1	2.1
	20	4	8.3	8.3	10.4
	21	11	22.9	22.9	33.3
	22	9	18.8	18.8	52.1
	23	2	4.2	4.2	56.3
	24	4	8.3	8.3	64.6
	25	2	4.2	4.2	68.8
	26	2	4.2	4.2	72.9
	27	2	4.2	4.2	77.1
	31	1	2.1	2.1	79.2
	32	3	6.3	6.3	85.4
	43	2	4.2	4.2	89.6
	45	1	2.1	2.1	91.7
	48	1	2.1	2.1	93.8
	51	1	2.1	2.1	95.8
	60	1	2.1	2.1	97.9
	61	1	2.1	2.1	100.0
	Total		48	100.0	100.0

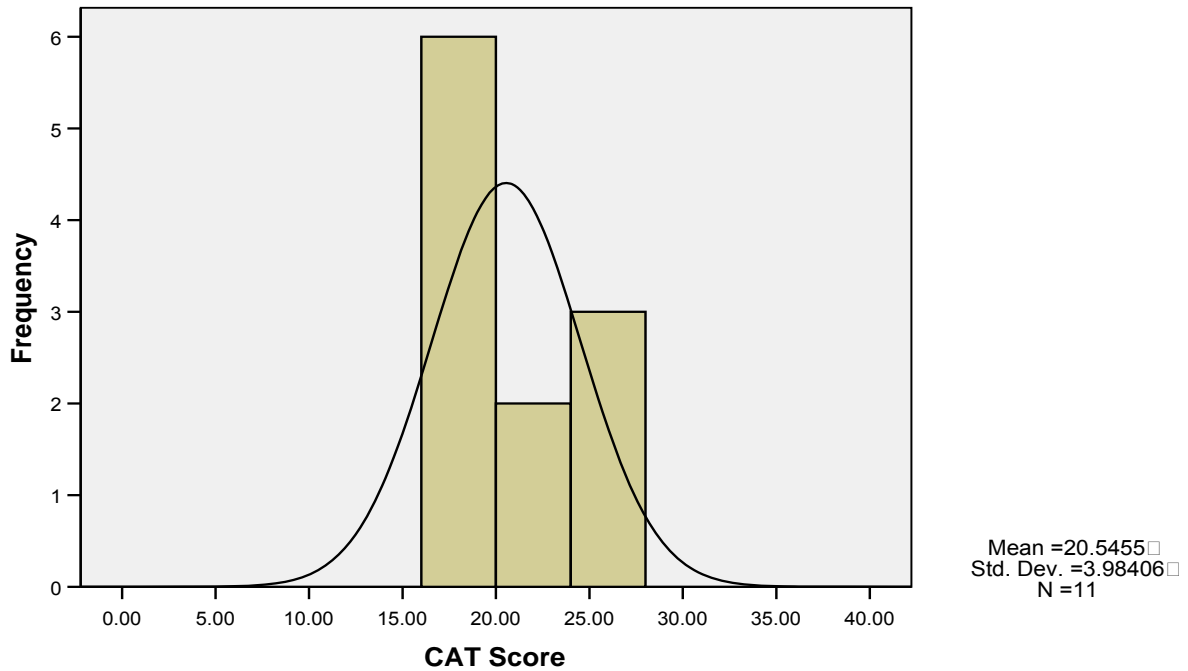
**University of Colorado – Pueblo**  
**College of Humanities & Social Sciences (n=48)**

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Obtainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	.54	54%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	1.06	35%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	1.41	47%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	1.34	34%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	.56	56%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.17	39%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	.35	18%
X				Q8	Determine whether an invited inference is supported by specific information.	.56	56%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	.63	31%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.04	76%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	1.04	52%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	.75	75%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	.92	31%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.48	30%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	.74	25%
<b>CAT Total Score</b>						<b>15.59</b>	<b>41%</b>

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.



## College of Science & Mathematics



### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAT Score	11	16.00	27.00	20.5455	3.98406
Valid N (listwise)	11				

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	6	54.5	54.5	54.5
	Female	5	45.5	45.5	100.0
	Total	11	100.0	100.0	

**Standing**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior	4	36.4	36.4	36.4
	Senior	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

**Age**

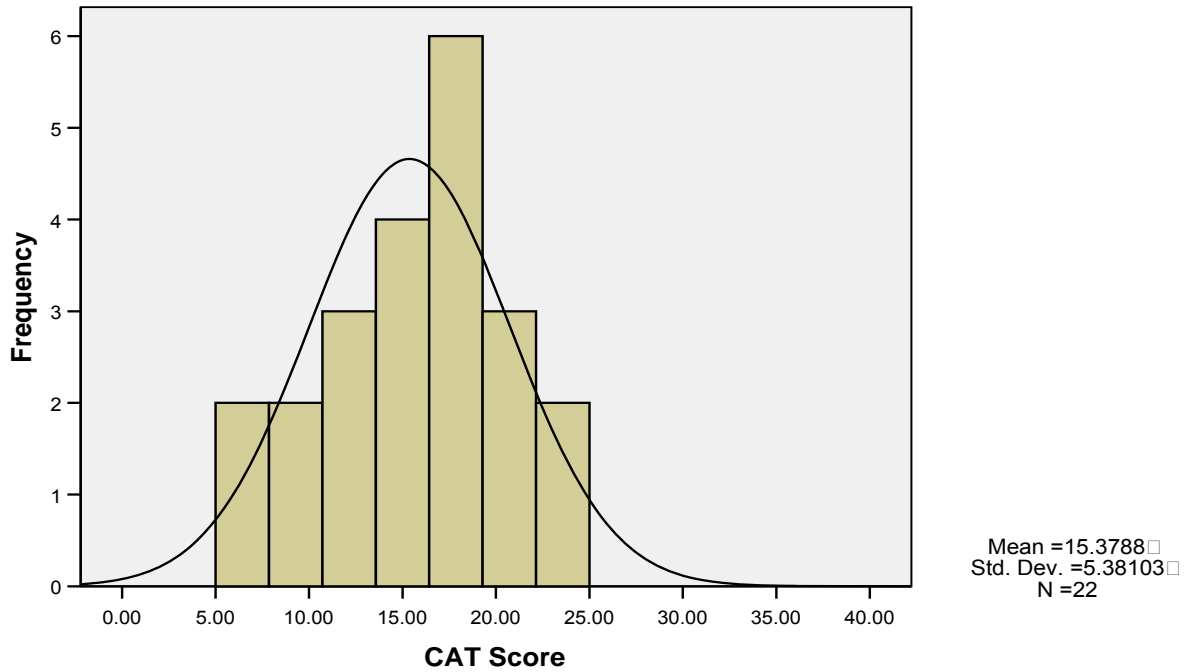
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	2	18.2	18.2	18.2
	21	2	18.2	18.2	36.4
	22	1	9.1	9.1	45.5
	23	2	18.2	18.2	63.6
	25	1	9.1	9.1	72.7
	29	1	9.1	9.1	81.8
	31	1	9.1	9.1	90.9
	48	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

**University of Colorado – Pueblo  
College of Science & Mathematics (n=11)**

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Obtainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	.36	36%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	.82	27%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	2.36	79%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	1.91	48%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	.82	82%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.36	45%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	.73	36%
X				Q8	Determine whether an invited inference is supported by specific information.	.73	73%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	.73	36%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.27	82%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	1.09	55%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	.73	73%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	1.18	39%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.64	53%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	1.82	61%
CAT Total Score						20.55	54%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

## Hasan School of Business



### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAT Score	22	5.00	24.00	15.3788	5.38103
Valid N (listwise)	22				

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	13	59.1	59.1	59.1
	Female	9	40.9	40.9	100.0
	Total	22	100.0	100.0	

**Standing**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior	6	27.3	27.3	27.3
	Senior	16	72.7	72.7	100.0
	Total	22	100.0	100.0	

**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	3	13.6	13.6	13.6
	21	7	31.8	31.8	45.5
	22	3	13.6	13.6	59.1
	23	2	9.1	9.1	68.2
	24	2	9.1	9.1	77.3
	26	2	9.1	9.1	86.4
	29	3	13.6	13.6	100.0
	Total	22	100.0	100.0	

**University of Colorado – Pueblo  
Hasan School of Business (n=22)**

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Obtainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	.55	55%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	.59	20%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	1.41	47%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	1.08	27%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	.59	59%
		X	X	Q6	Provide alternative explanations for spurious associations.	.82	27%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	.55	27%
X				Q8	Determine whether an invited inference is supported by specific information.	.55	55%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	.45	23%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.09	77%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	1.22	61%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	.73	73%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	1.14	38%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.85	37%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	.77	26%
CAT Total Score						15.38	54%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

## Comparison to National Norms by College

College	N	ACT	CAT Score	National Norm*
Education, Engineering & Professional Studies	18	20.22	16.51	16.75
Humanities & Social Sciences	20	20.20	16.15	16.76
Science & Mathematics	18	23.44	19.87	18.95
Hasan School of Business	16	21.31	15.38	17.50

\* Upper division, 4-year university students.

### CAT National User Norms (Upper division undergraduate, 4-year institutions)

Average Freshman Entrance Score		Average Senior
ACT (composite)	SAT (Verbal & Quantitative)	CAT Score
14	680	<b>12.02</b>
15	740	<b>13.04</b>
16	780	<b>13.72</b>
17	830	<b>14.57</b>
18	870	<b>15.25</b>
19	910	<b>15.93</b>
20	950	<b>16.61</b>
21	990	<b>17.29</b>
22	1030	<b>17.97</b>
23	1070	<b>18.65</b>
24	1110	<b>19.33</b>
25	1140	<b>19.84</b>
26	1180	<b>20.52</b>
27	1220	<b>21.20</b>
28	1260	<b>21.88</b>
29	1300	<b>22.56</b>
30	1340	<b>23.24</b>
31	1380	<b>23.92</b>
32	1420	<b>24.60</b>

## Datafile Information

<b>Variable Name</b>	<b>Type</b>	<b>Description</b>
std_s1	Scale	Entrance Exam Score as entered by the institution
qpa	Scale	QPA as entered by the institution
stude1	Nominal	Student ID Number
loc-code	Nominal	Local Code as entered by institution
age	Nominal	Age
gender	Nominal	Gender (1=Male; 2=Female)
spanish	Nominal	Spanish/Hispanic/Latino (0=No; 1=Yes)
primary	Nominal	English is primary language (0=No; 1=Yes)
profi1	Nominal	Proficiency with English Language (1=Excellent; 2=Very Good; 3=Good; 4=Fair; 5=Poor)
standing	Nominal	Class Standing (1=Freshman; 2=Sophomore; 3= Junior; 4=Senior)
white	Nominal	Race: White (0=No; 1=Yes)
black	Nominal	Race: Black or African American (0=No; 1=Yes)
amer1	Nominal	Race: American Indian or Alaska Native (0=No; 1=Yes)
asian	Nominal	Race: Asian (0=No; 1=Yes)
nativ1	Nominal	Race: Native Hawaiian or Other Pacific Islander (0=No; 1=Yes)
other1	Nominal	Race: Other (0=No; 1=Yes)
q1f – q15f	Scale	Computed Score for each question.
total	Scale	CAT total score