Assessing Core Competencies: Results of Critical Thinking Skills Testing

2017 Spring Graduating Seniors from the College of Liberal Arts and Social Sciences (CLASS)

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Academic and Student Affairs
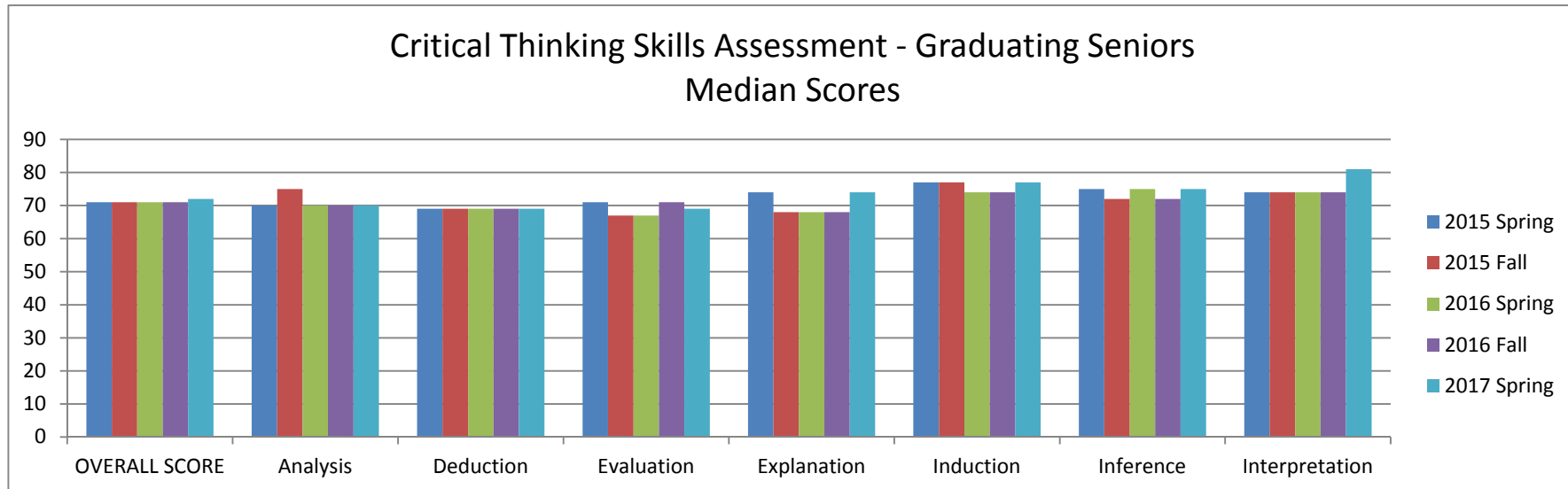University of Guam
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Critical Thinking Skills Assessment - Graduating Seniors

MEDIAN Scores

Skill/Attribute	2015 Spring	2015 Fall	2016 Spring	2016 Fall	2017 Spring	Five-Semester Average
N	251	153	275	172	242	218.6
OVERALL SCORE	71	71	71	71	72	71
Analysis	70	75	70	70	70	71
Deduction	69	69	69	69	69	69
Evaluation	71	67	67	71	69	69
Explanation	74	68	68	68	74	70
Induction	77	77	74	74	77	76
Inference	75	72	75	72	75	74
Interpretation	74	74	74	74	81	75
Aggregate sample of CCTST Four Year College Students, **average percentile score**:	29	32	30	31	30	30

MEAN Scores

Skill/Attribute	2015 Spring	2015 Fall	2016 Spring	2016 Fall	2017 Spring	Five-Semester Average
N	251	153	275	172	242	218.60
OVERALL SCORE	71.4	70.8	70.9	70.8	71.7	71.12
Analysis	73.2	73.0	73.0	72.9	72.5	72.92
Deduction	70.8	70.2	70.7	70.6	71.2	70.70
Evaluation	70.2	69.4	69.8	69.8	70.4	69.92
Explanation	71.1	71.1	71.1	70.8	71.8	71.18
Induction	76.1	75.7	75.3	75.1	76.2	75.68
Inference	74.5	73.4	73.6	73.1	74.5	73.82
Interpretation	76.7	77.2	76.4	76.4	77.9	76.92
Aggregate sample of CCTST Four Year College Students, **average percentile score**:	29	32	30	31	34	31

Critical Thinking Skills Assessment - Graduating Seniors
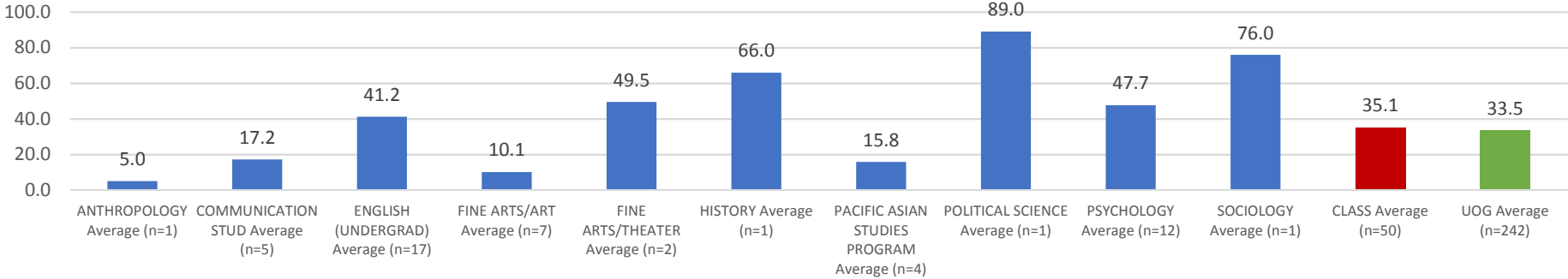Median Scores

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Critical Thinking Skills Test Overall Results - CLASS
Graduating Seniors 2017 Spring

Category	Value
ANTHROPOLOGY Average (n=1)	64.0
COMMUNICATION STUD Average (n=5)	67.2
ENGLISH (UNDERGRAD) Average (n=17)	73.6
FINE ARTS/ART Average (n=7)	65.7
FINE ARTS/THEATER Average (n=2)	76.0
HISTORY Average (n=1)	79.0
PACIFIC ASIAN STUDIES PROGRAM Average (n=4)	67.8
POLITICAL SCIENCE Average (n=1)	86.0
PSYCHOLOGY Average (n=12)	74.9
SOCIOLOGY Average (n=1)	82.0
CLASS Average (n=50)	72.0
UOG Average (n=242)	71.7
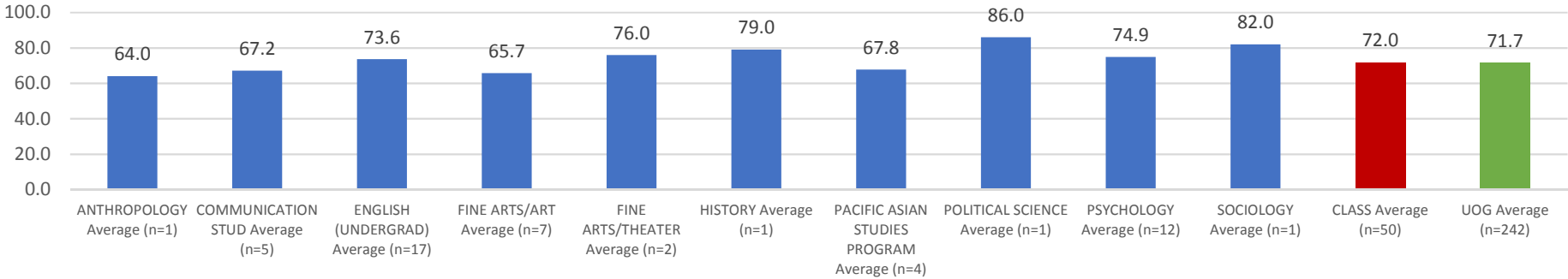
Critical Thinking Skills Test Percentile Results - CLASS
Graduating Seniors 2017 Spring

Category	Value
ANTHROPOLOGY Average (n=1)	5.0
COMMUNICATION STUD Average (n=5)	17.2
ENGLISH (UNDERGRAD) Average (n=17)	41.2
FINE ARTS/ART Average (n=7)	10.1
FINE ARTS/THEATER Average (n=2)	49.5
HISTORY Average (n=1)	66.0
PACIFIC ASIAN STUDIES PROGRAM Average (n=4)	15.8
POLITICAL SCIENCE Average (n=1)	89.0
PSYCHOLOGY Average (n=12)	47.7
SOCIOLOGY Average (n=1)	76.0
CLASS Average (n=50)	35.1
UOG Average (n=242)	33.5

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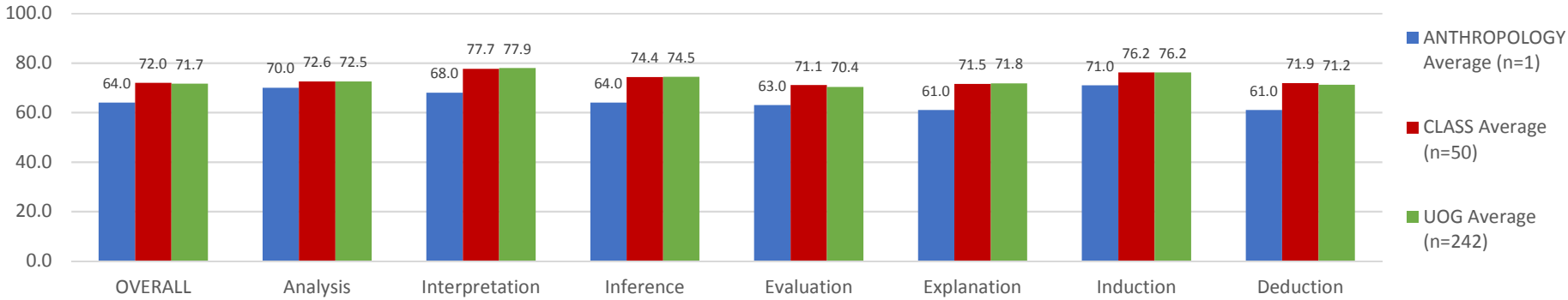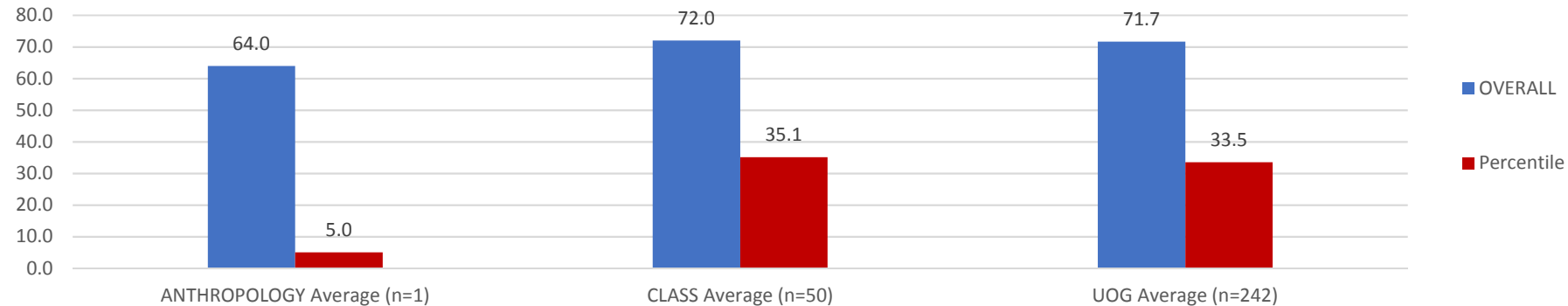## Critical Thinking Skills Test Overall Results - Anthropology Graduating Seniors 2017 Spring
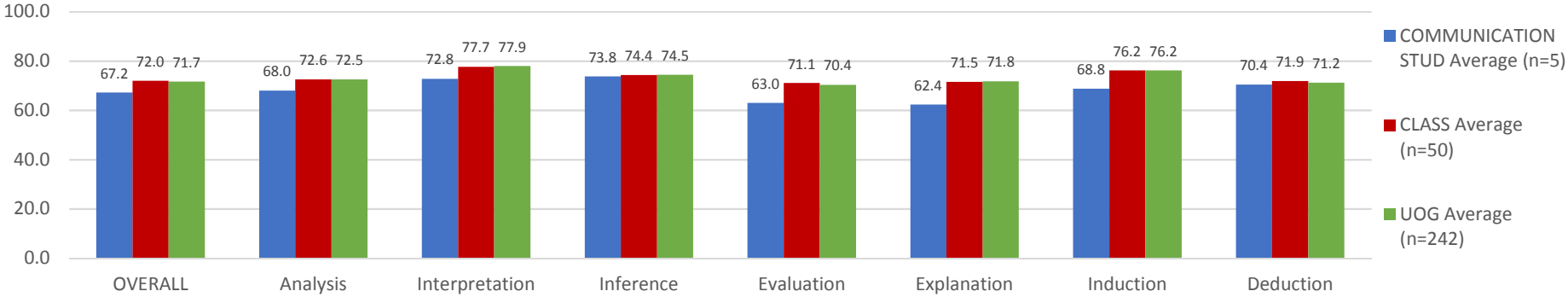

Legend:
- ANTHROPOLOGY Average (n=1)
- CLASS Average (n=50)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
ANTHROPOLOGY Average	64.0	70.0	68.0	64.0	63.0	61.0	71.0	61.0
CLASS Average	72.0	72.6	77.7	74.4	71.1	71.5	76.2	71.9
UOG Average	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Anthropology Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

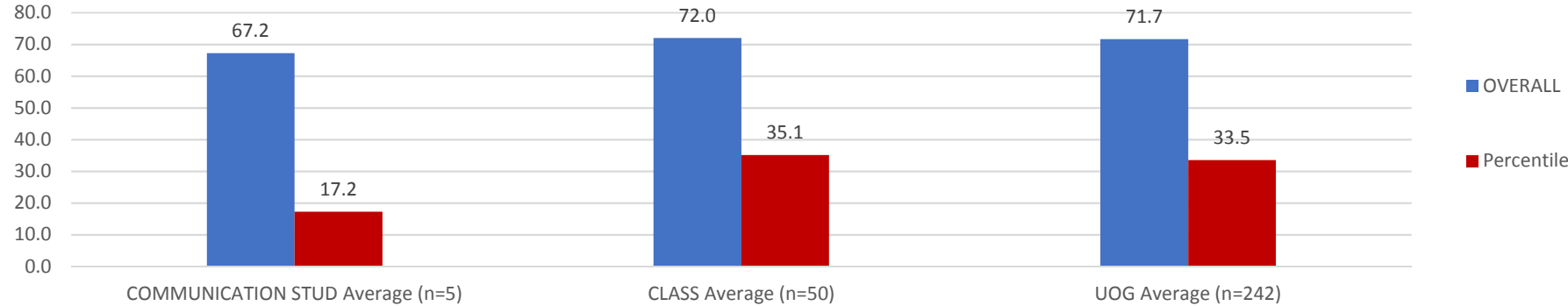|	OVERALL	Percentile
ANTHROPOLOGY Average (n=1)	64.0	5.0
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Communication Studies Graduating Seniors 2017 Spring
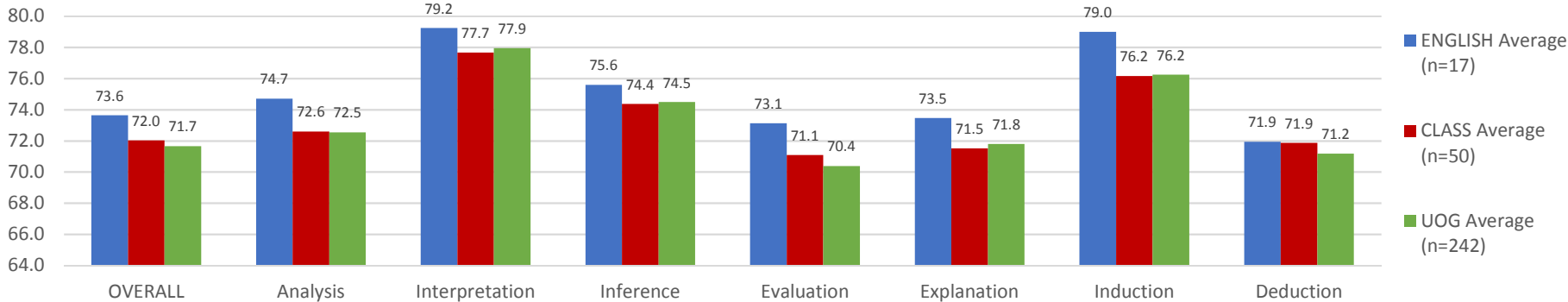

Legend:
- COMMUNICATION STUD Average (n=5)
- CLASS Average (n=50)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
COMMUNICATION STUD Average (n=5)	67.2	68.0	72.8	73.8	63.0	62.4	68.8	70.4
CLASS Average (n=50)	72.0	72.6	77.7	74.4	71.1	71.5	76.2	71.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Communication Studies Graduating Seniors 2017 Spring

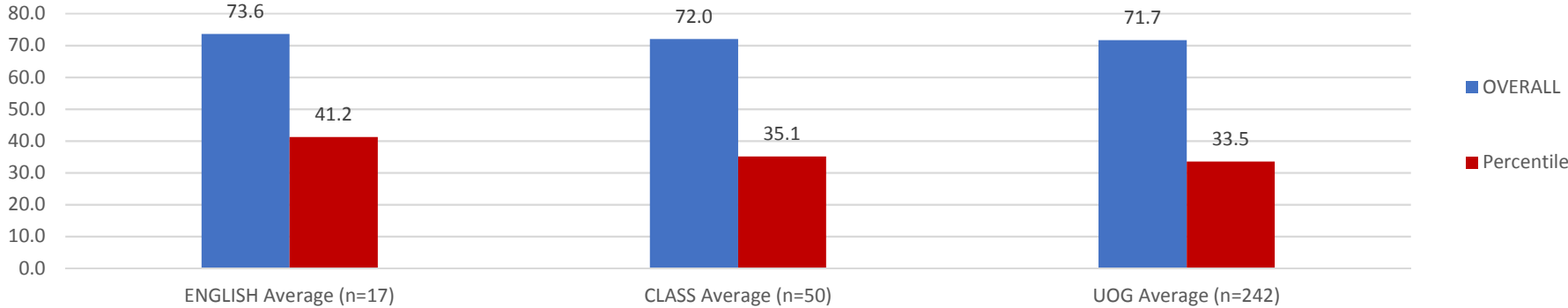|	OVERALL	Percentile
COMMUNICATION STUD Average (n=5)	67.2	17.2
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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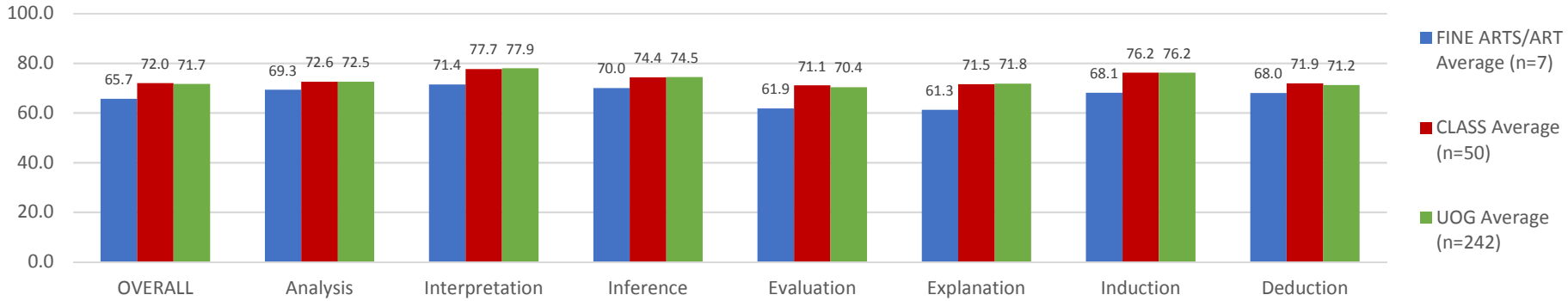## Critical Thinking Skills Test Overall Results - English Graduating Seniors 2017 Spring

Legend:
- ENGLISH Average (n=17)
- CLASS Average (n=50)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
ENGLISH Average (n=17)	73.6	74.7	79.2	75.6	73.1	73.5	79.0	71.9
CLASS Average (n=50)	72.0	72.6	77.7	74.4	71.1	71.5	76.2	71.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - English Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

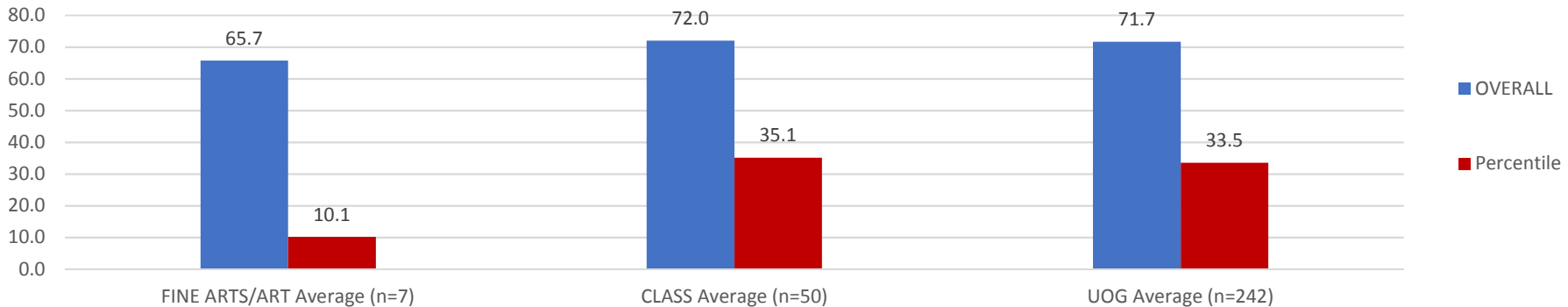|	OVERALL	Percentile
ENGLISH Average (n=17)	73.6	41.2
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Fine Arts/Art Graduating Seniors 2017 Spring
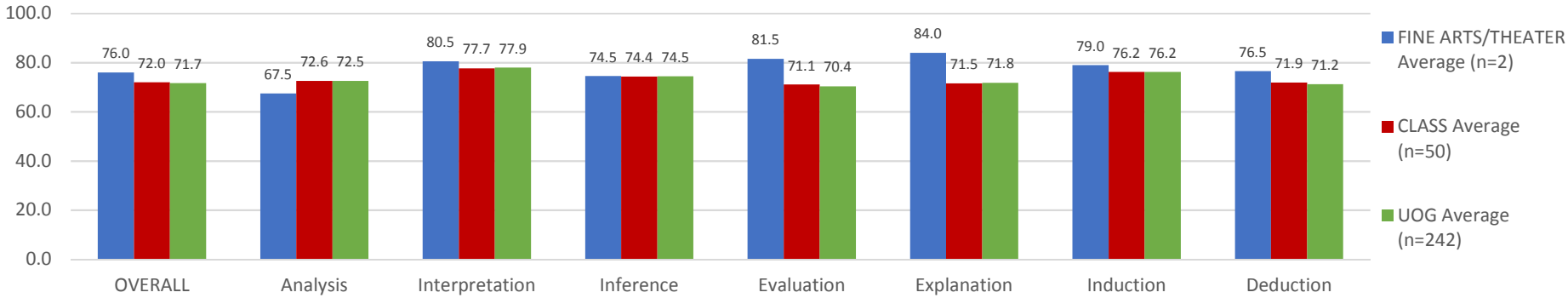

Legend:
- FINE ARTS/ART Average (n=7) (blue)
- CLASS Average (n=50) (red)
- UOG Average (n=242) (green)

Category	FINE ARTS/ART	CLASS	UOG
OVERALL	65.7	72.0	71.7
Analysis	69.3	72.6	72.5
Interpretation	71.4	77.7	77.9
Inference	70.0	74.4	74.5
Evaluation	61.9	71.1	70.4
Explanation	61.3	71.5	71.8
Induction	68.1	76.2	76.2
Deduction	68.0	71.9	71.2

Critical Thinking Skills Test Percentile Results - Fine Arts/Art Graduating Seniors 2017 Spring

Legend:
- OVERALL (blue)
- Percentile (red)

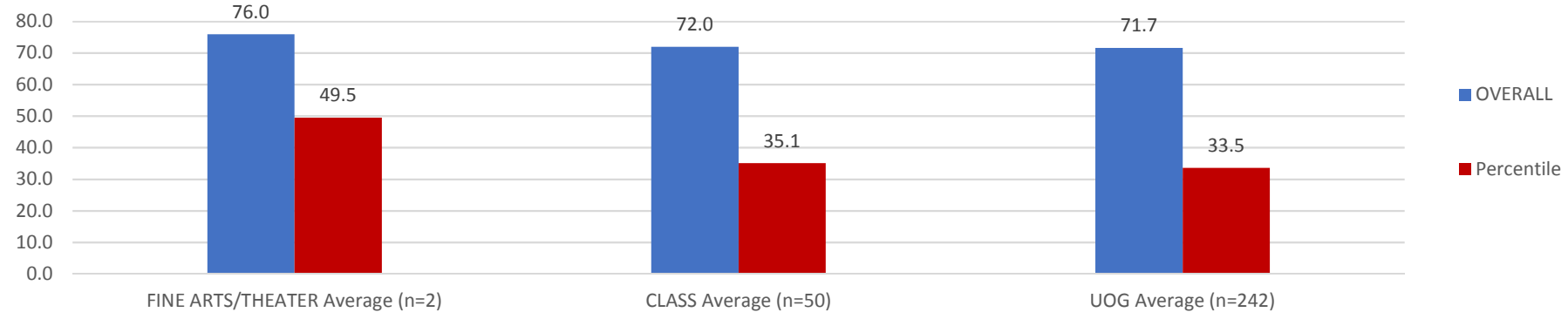|	OVERALL	Percentile
FINE ARTS/ART Average (n=7)	65.7	10.1
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Fine Arts/Theater Graduating Seniors 2017 Spring
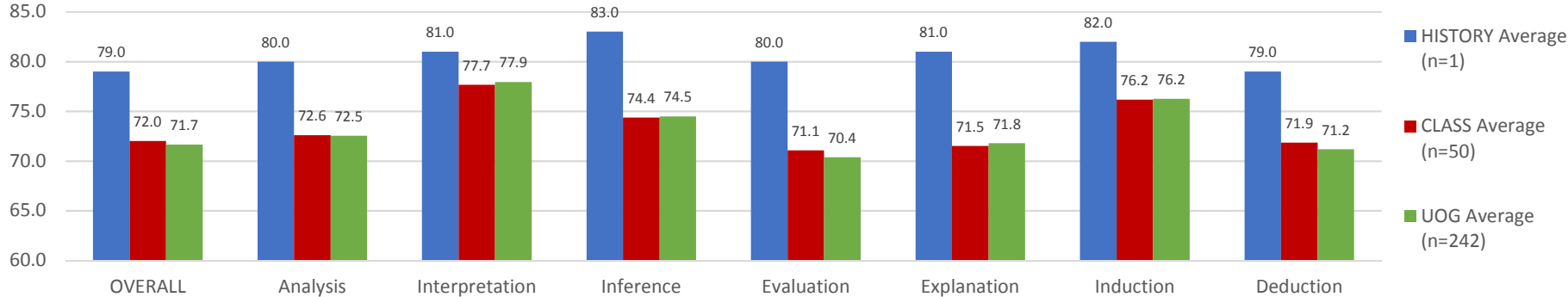
Category	FINE ARTS/THEATER Average (n=2)	CLASS Average (n=50)	UOG Average (n=242)
OVERALL	76.0	72.0	71.7
Analysis	67.5	72.6	72.5
Interpretation	80.5	77.7	77.9
Inference	74.5	74.4	74.5
Evaluation	81.5	71.1	70.4
Explanation	84.0	71.5	71.8
Induction	79.0	76.2	76.2
Deduction	76.5	71.9	71.2

Critical Thinking Skills Test Percentile Results - Fine Arts/Theater Graduating Seniors 2017 Spring

Group	OVERALL	Percentile
FINE ARTS/THEATER Average (n=2)	76.0	49.5
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

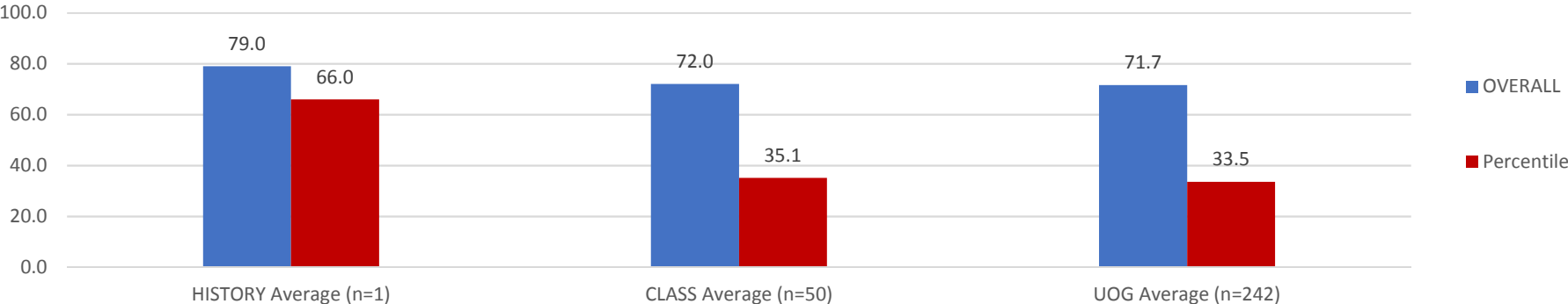Source: Califonia Critical Thinking Skills Test Results

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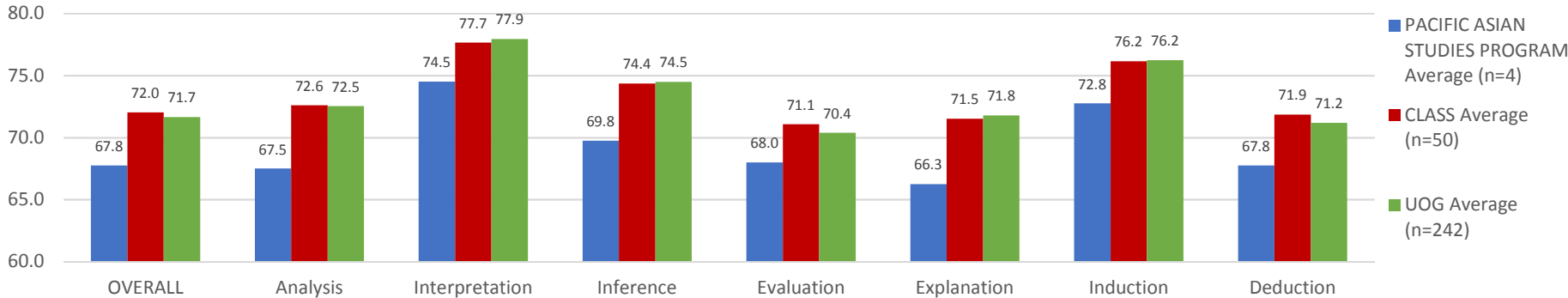## Critical Thinking Skills Test Overall Results - History Graduating Seniors 2017 Spring

Category	HISTORY Average (n=1)	CLASS Average (n=50)	UOG Average (n=242)
OVERALL	79.0	72.0	71.7
Analysis	80.0	72.6	72.5
Interpretation	81.0	77.7	77.9
Inference	83.0	74.4	74.5
Evaluation	80.0	71.1	70.4
Explanation	81.0	71.5	71.8
Induction	82.0	76.2	76.2
Deduction	79.0	71.9	71.2

Critical Thinking Skills Test Percentile Results - History Graduating Seniors 2017 Spring

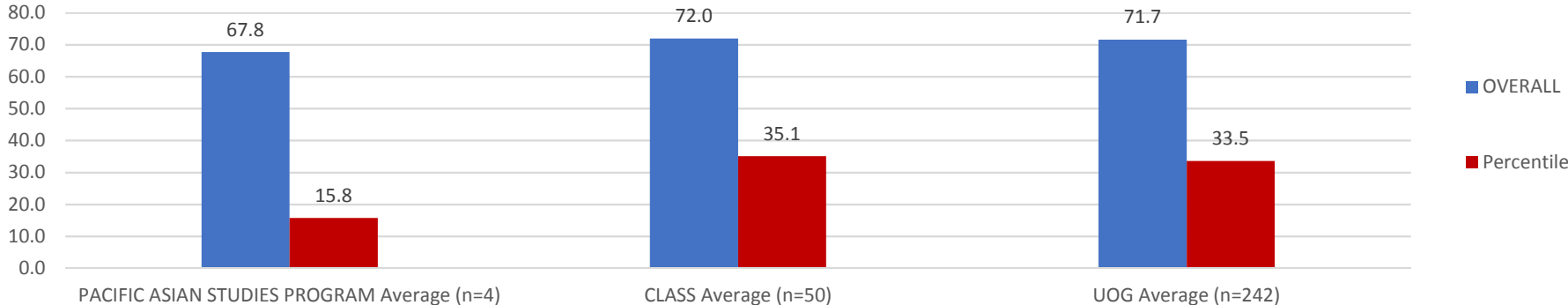|	OVERALL	Percentile
HISTORY Average (n=1)	79.0	66.0
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Pacific Asian Studies Graduating Seniors 2017 Spring
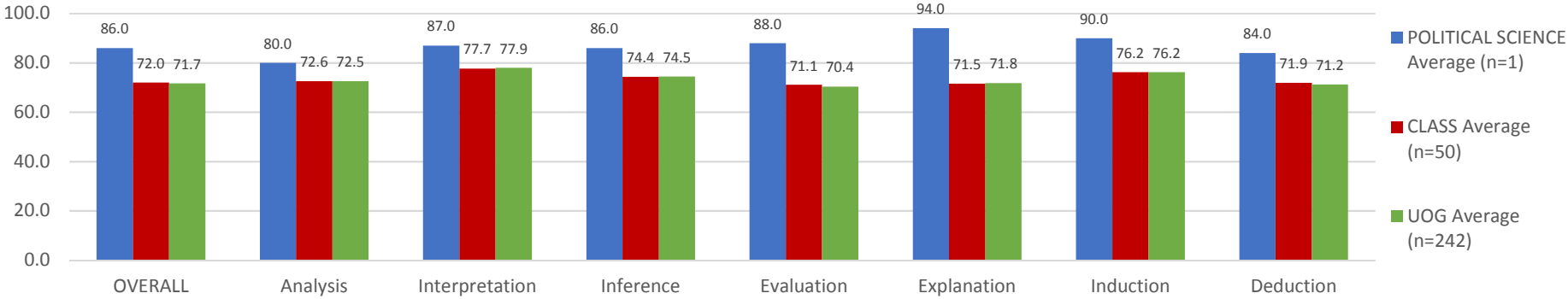
Legend:
- PACIFIC ASIAN STUDIES PROGRAM Average (n=4)
- CLASS Average (n=50)
- UOG Average (n=242)

Category	PACIFIC ASIAN STUDIES PROGRAM Average (n=4)	CLASS Average (n=50)	UOG Average (n=242)
OVERALL	67.8	72.0	71.7
Analysis	67.5	72.6	72.5
Interpretation	74.5	77.7	77.9
Inference	69.8	74.4	74.5
Evaluation	68.0	71.1	70.4
Explanation	66.3	71.5	71.8
Induction	72.8	76.2	76.2
Deduction	67.8	71.9	71.2

Critical Thinking Skills Test Percentile Results - Pacific Asian Studies Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

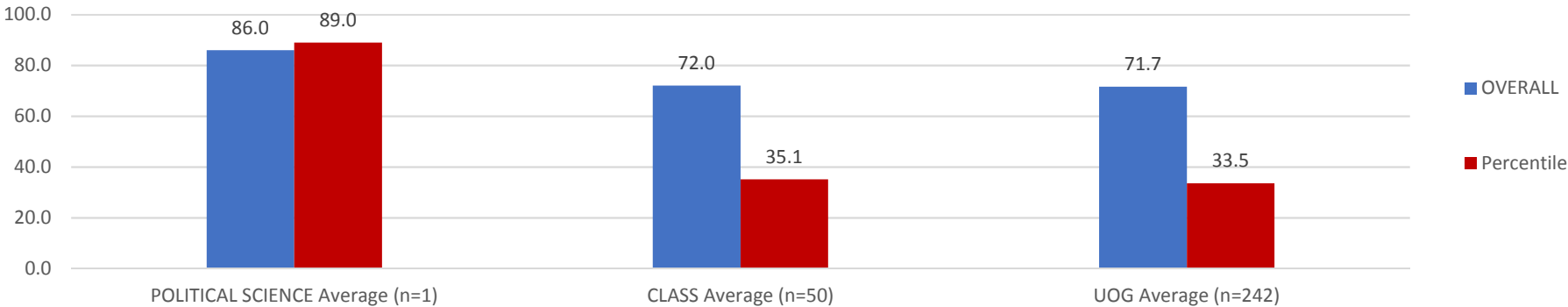|	OVERALL	Percentile
PACIFIC ASIAN STUDIES PROGRAM Average (n=4)	67.8	15.8
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Political Science
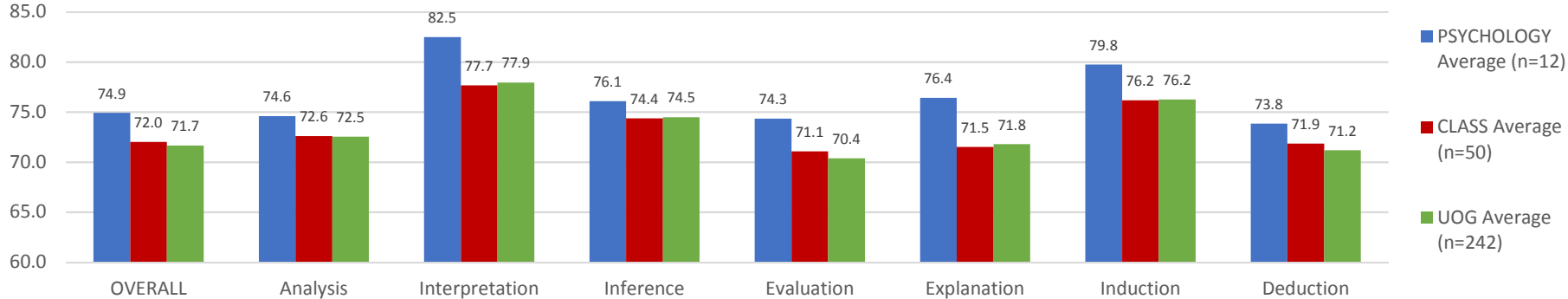## Graduating Seniors 2017 Spring

Legend:
- POLITICAL SCIENCE Average (n=1) — blue
- CLASS Average (n=50) — red
- UOG Average (n=242) — green

Category	POLITICAL SCIENCE Average (n=1)	CLASS Average (n=50)	UOG Average (n=242)
OVERALL	86.0	72.0	71.7
Analysis	80.0	72.6	72.5
Interpretation	87.0	77.7	77.9
Inference	86.0	74.4	74.5
Evaluation	88.0	71.1	70.4
Explanation	94.0	71.5	71.8
Induction	90.0	76.2	76.2
Deduction	84.0	71.9	71.2

Critical Thinking Skills Test Percentile Results - Political Science
Graduating Seniors 2017 Spring

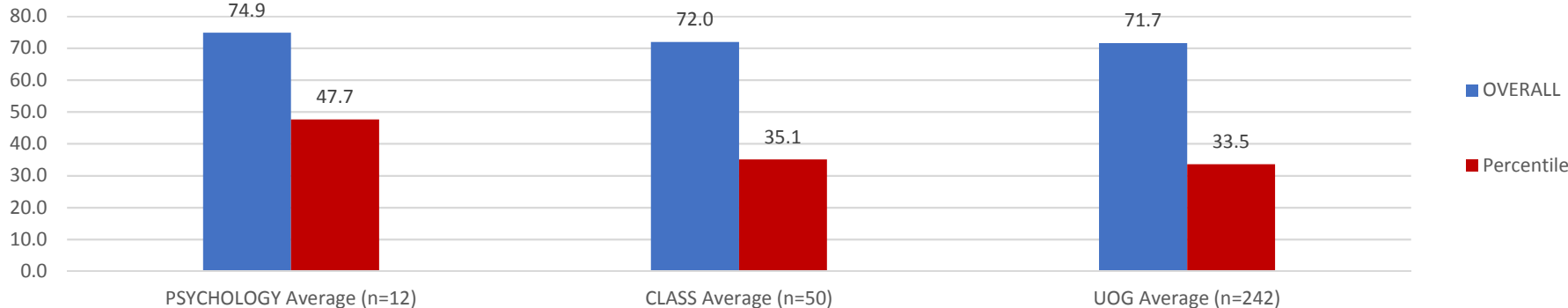|	OVERALL	Percentile
POLITICAL SCIENCE Average (n=1)	86.0	89.0
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Psychology Graduating Seniors 2017 Spring
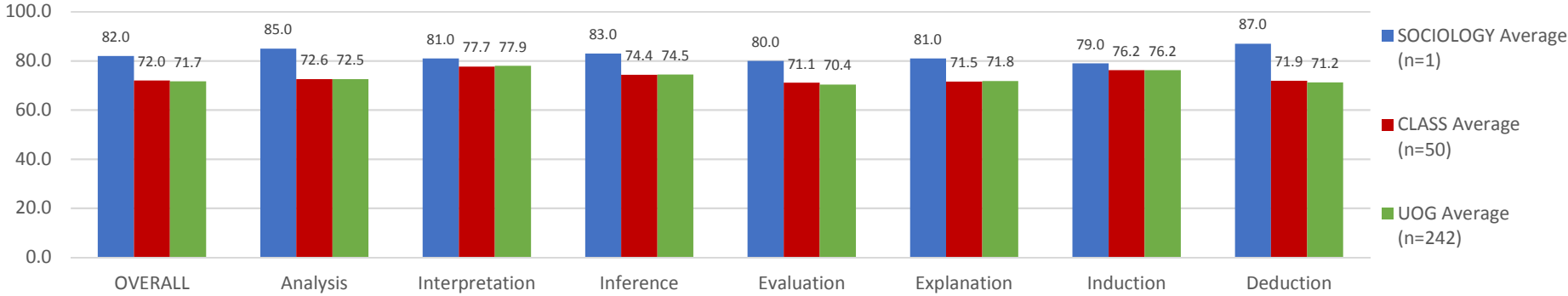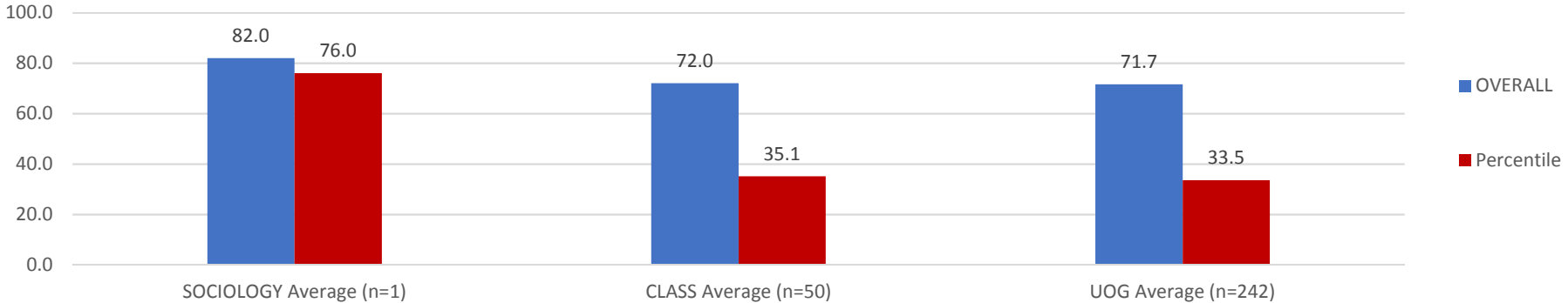

Legend:
- ■ PSYCHOLOGY Average (n=12)
- ■ CLASS Average (n=50)
- ■ UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
PSYCHOLOGY Average (n=12)	74.9	74.6	82.5	76.1	74.3	76.4	79.8	73.8
CLASS Average (n=50)	72.0	72.6	77.7	74.4	71.1	71.5	76.2	71.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Psychology Graduating Seniors 2017 Sprin

Legend:
- ■ OVERALL
- ■ Percentile

	PSYCHOLOGY Average (n=12)	CLASS Average (n=50)	UOG Average (n=242)
OVERALL	74.9	72.0	71.7
Percentile	47.7	35.1	33.5

Source: Califonia Critical Thinking Skills Test Results

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Critical Thinking Skills Test Overall Results - Sociology
Graduating Seniors 2017 Spring

Legend:
- SOCIOLOGY Average (n=1) — blue
- CLASS Average (n=50) — red
- UOG Average (n=242) — green

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
SOCIOLOGY Average (n=1)	82.0	85.0	81.0	83.0	80.0	81.0	79.0	87.0
CLASS Average (n=50)	72.0	72.6	77.7	74.4	71.1	71.5	76.2	71.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Sociology
Graduating Seniors 2017 Spring

	OVERALL	Percentile
SOCIOLOGY Average (n=1)	82.0	76.0
CLASS Average (n=50)	72.0	35.1
UOG Average (n=242)	71.7	33.5

Assessing Core Competencies: Results of Critical Thinking Skills Testing

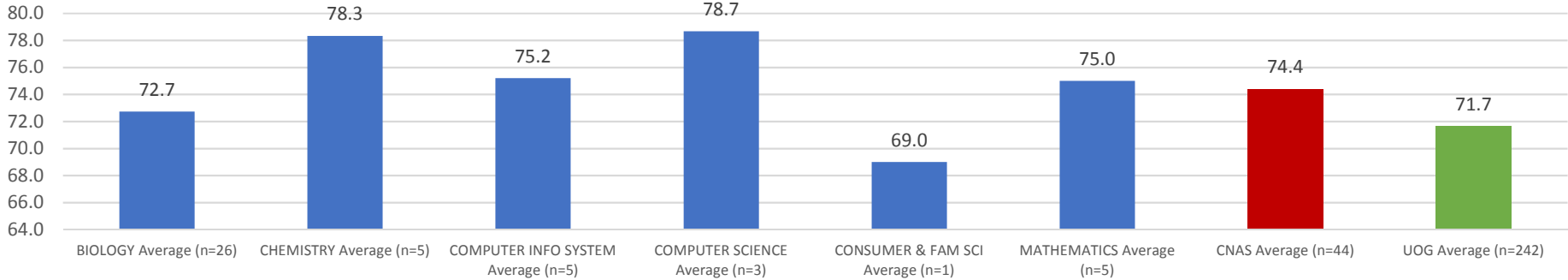2017 Spring Graduating Seniors from the College of Natural and Applied Sciences (CNAS)

Office of Institutional Effectiveness
Academic and Student Affairs
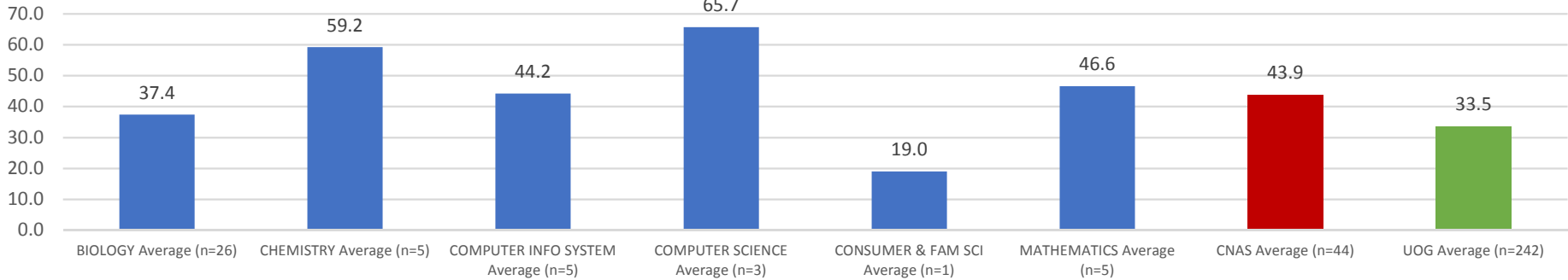University of Guam
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Critical Thinking Skills Test Overall Results - CNAS
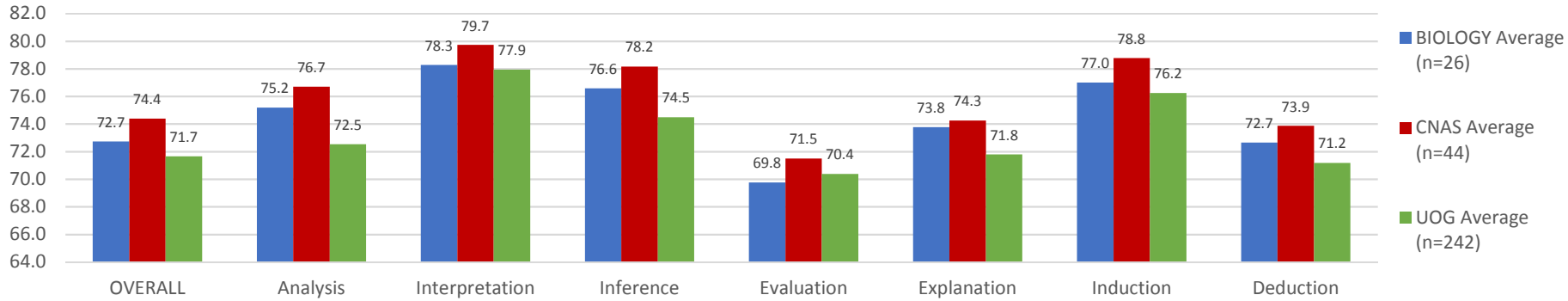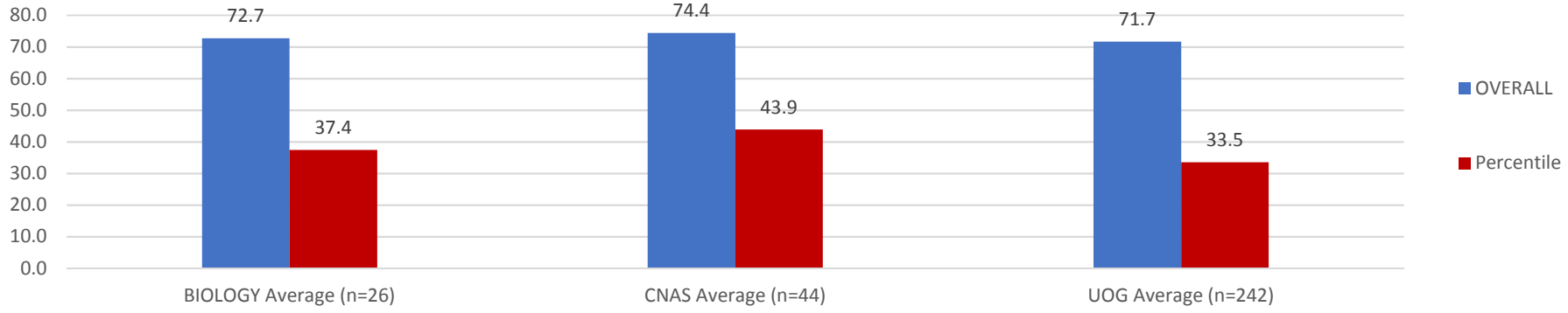## Graduating Seniors 2017 Spring

72.7	78.3	75.2	78.7	69.0	75.0	74.4	71.7

BIOLOGY Average (n=26), CHEMISTRY Average (n=5), COMPUTER INFO SYSTEM Average (n=5), COMPUTER SCIENCE Average (n=3), CONSUMER & FAM SCI Average (n=1), MATHEMATICS Average (n=5), CNAS Average (n=44), UOG Average (n=242)

Critical Thinking Skills Test Overall Results - CNAS
Graduating Seniors 2017 Spring

37.4	59.2	44.2	65.7	19.0	46.6	43.9	33.5

BIOLOGY Average (n=26), CHEMISTRY Average (n=5), COMPUTER INFO SYSTEM Average (n=5), COMPUTER SCIENCE Average (n=3), CONSUMER & FAM SCI Average (n=1), MATHEMATICS Average (n=5), CNAS Average (n=44), UOG Average (n=242)

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Critical Thinking Skills Test Overall Results - Biology
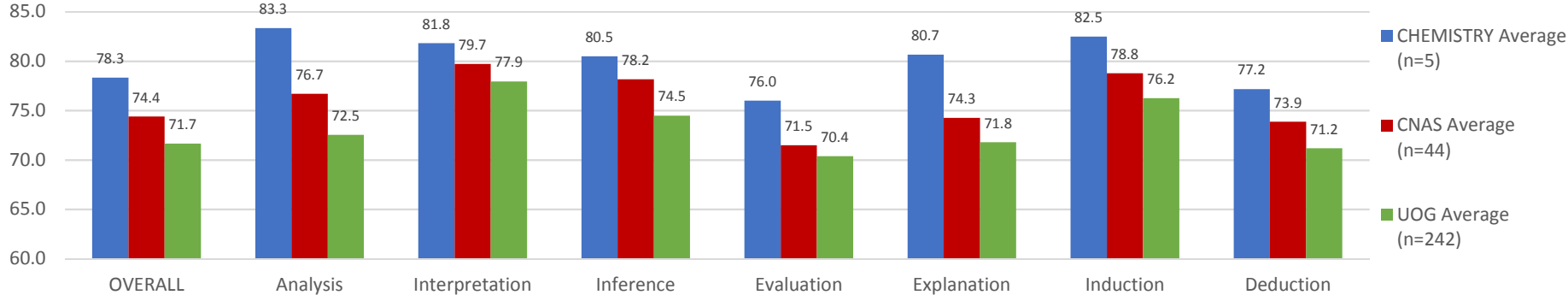## Graduating Seniors 2017 Spring

Category	BIOLOGY Average (n=26)	CNAS Average (n=44)	UOG Average (n=242)
OVERALL	72.7	74.4	71.7
Analysis	75.2	76.7	72.5
Interpretation	78.3	79.7	77.9
Inference	76.6	78.2	74.5
Evaluation	69.8	71.5	70.4
Explanation	73.8	74.3	71.8
Induction	77.0	78.8	76.2
Deduction	72.7	73.9	71.2

Critical Thinking Skills Test Percentile Results - Biology
Graduating Seniors 2017 Spring

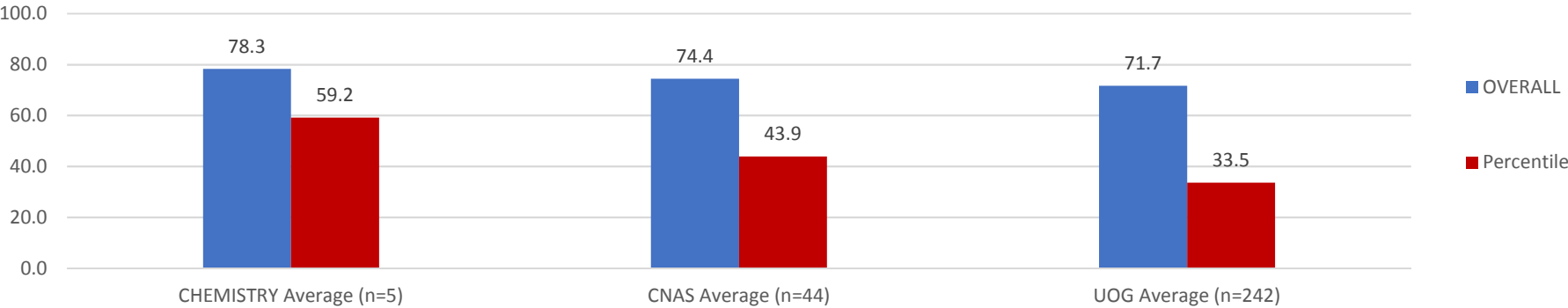|	OVERALL	Percentile
BIOLOGY Average (n=26)	72.7	37.4
CNAS Average (n=44)	74.4	43.9
UOG Average (n=242)	71.7	33.5

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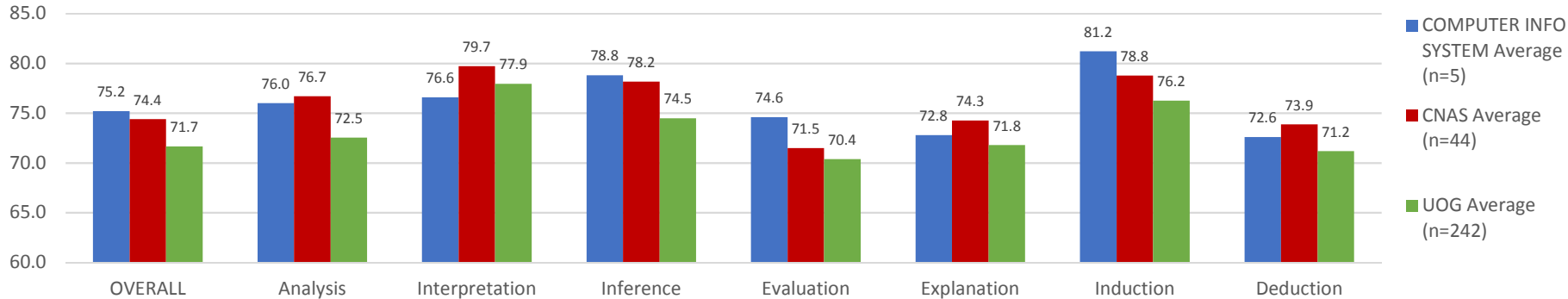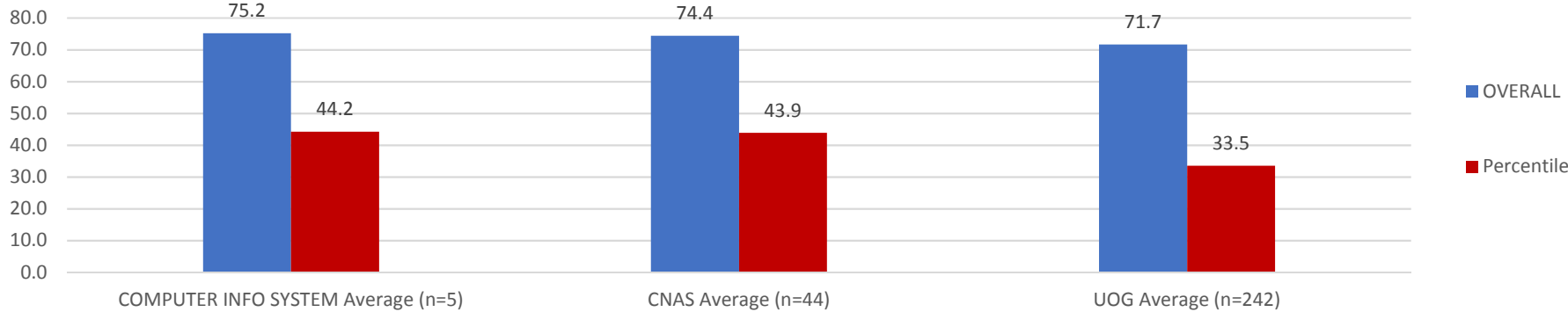## Critical Thinking Skills Test Overall Results - Chemistry Graduating Seniors 2017 Spring

Legend:
- CHEMISTRY Average (n=5) — blue
- CNAS Average (n=44) — red
- UOG Average (n=242) — green

Category	CHEMISTRY Average (n=5)	CNAS Average (n=44)	UOG Average (n=242)
OVERALL	78.3	74.4	71.7
Analysis	83.3	76.7	72.5
Interpretation	81.8	79.7	77.9
Inference	80.5	78.2	74.5
Evaluation	76.0	71.5	70.4
Explanation	80.7	74.3	71.8
Induction	82.5	78.8	76.2
Deduction	77.2	73.9	71.2

Critical Thinking Skills Test Percentile Results - Chemistry Graduating Seniors 2017 Spring

Legend:
- OVERALL — blue
- Percentile — red

	OVERALL	Percentile
CHEMISTRY Average (n=5)	78.3	59.2
CNAS Average (n=44)	74.4	43.9
UOG Average (n=242)	71.7	33.5

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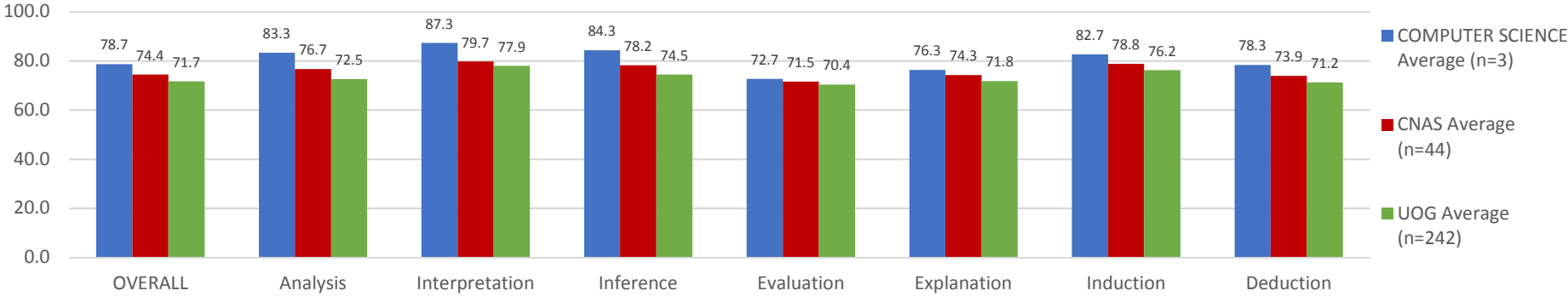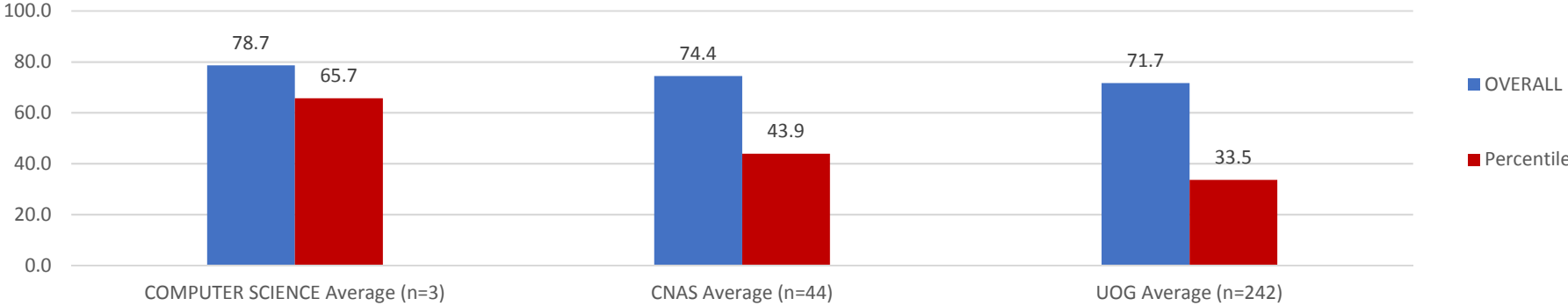## Critical Thinking Skills Test Overall Results - Computer Info Systems Graduating Seniors 2017 Spring

Category	COMPUTER INFO SYSTEM Average (n=5)	CNAS Average (n=44)	UOG Average (n=242)
OVERALL	75.2	74.4	71.7
Analysis	76.0	76.7	72.5
Interpretation	76.6	79.7	77.9
Inference	78.8	78.2	74.5
Evaluation	74.6	71.5	70.4
Explanation	72.8	74.3	71.8
Induction	81.2	78.8	76.2
Deduction	72.6	73.9	71.2

Critical Thinking Skills Test Percentile Results - Computer Info Systems Graduating Seniors 2017 Spring

	OVERALL	Percentile
COMPUTER INFO SYSTEM Average (n=5)	75.2	44.2
CNAS Average (n=44)	74.4	43.9
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Computer Science Graduating Seniors 2017 Spring
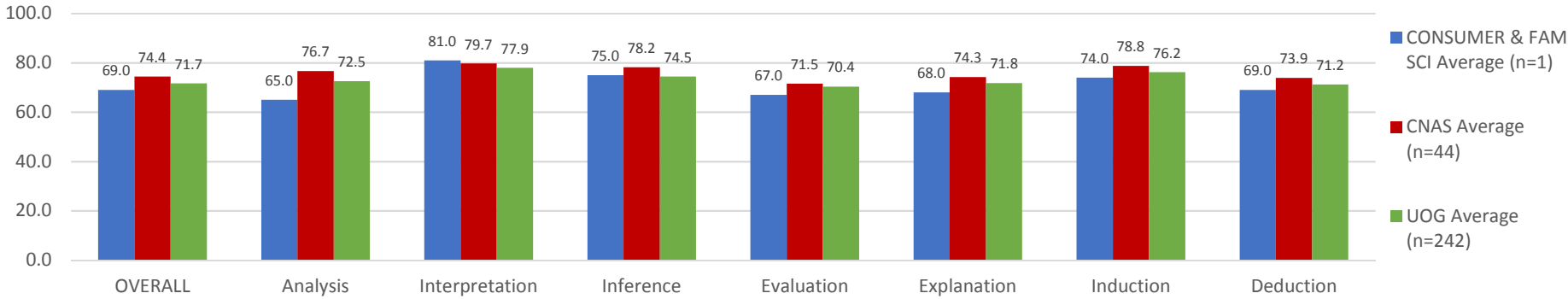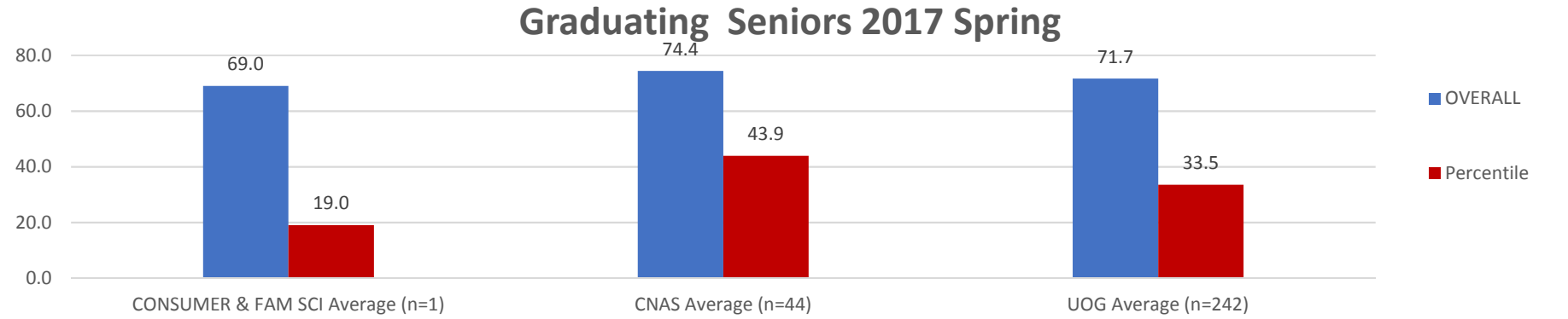

Legend:
- COMPUTER SCIENCE Average (n=3)
- CNAS Average (n=44)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
COMPUTER SCIENCE Average (n=3)	78.7	83.3	87.3	84.3	72.7	76.3	82.7	78.3
CNAS Average (n=44)	74.4	76.7	79.7	78.2	71.5	74.3	78.8	73.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Computer Science Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	COMPUTER SCIENCE Average (n=3)	CNAS Average (n=44)	UOG Average (n=242)
OVERALL	78.7	74.4	71.7
Percentile	65.7	43.9	33.5

University of Guam
Academic & Student Affairs
Institutional Effectiveness

Critical Thinking Skills Test Overall Results - Consumer & Family Sciences
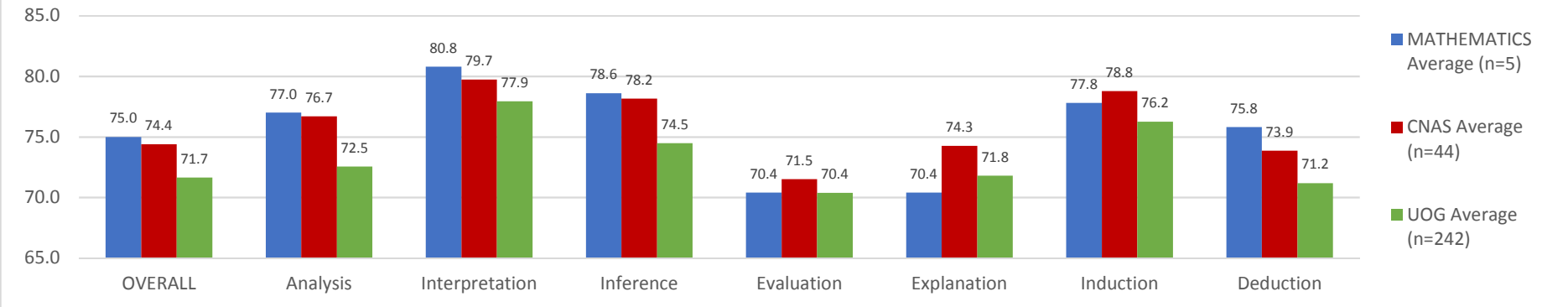## Graduating Seniors 2017 Spring

Legend:
- CONSUMER & FAM SCI Average (n=1) — blue
- CNAS Average (n=44) — red
- UOG Average (n=242) — green

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
CONSUMER & FAM SCI Average (n=1)	69.0	65.0	81.0	75.0	67.0	68.0	74.0	69.0
CNAS Average (n=44)	74.4	76.7	79.7	78.2	71.5	74.3	78.8	73.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Consumer & Family Sciences
Graduating Seniors 2017 Spring

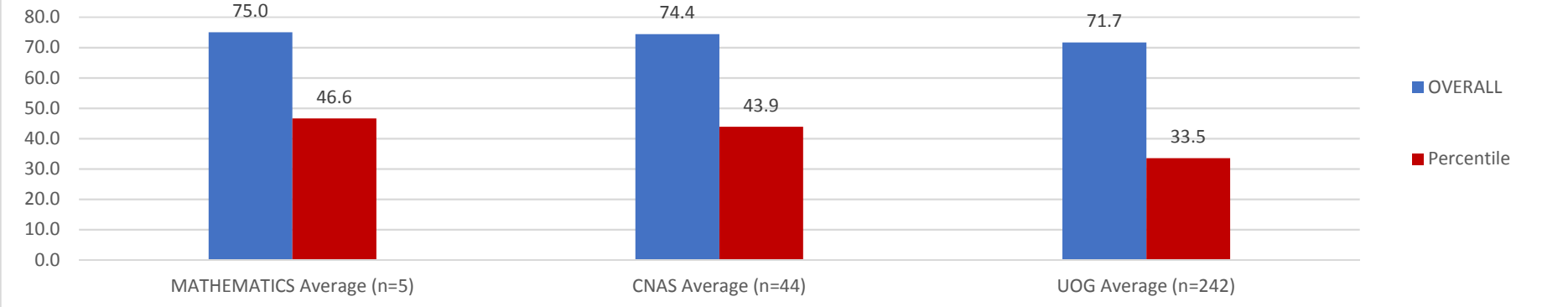|	OVERALL	Percentile
CONSUMER & FAM SCI Average (n=1)	69.0	19.0
CNAS Average (n=44)	74.4	43.9
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Mathematics
Graduating Seniors 2017 Spring

Legend:
- MATHEMATICS Average (n=5)
- CNAS Average (n=44)
- UOG Average (n=242)

Category	MATHEMATICS Average (n=5)	CNAS Average (n=44)	UOG Average (n=242)
OVERALL	75.0	74.4	71.7
Analysis	77.0	76.7	72.5
Interpretation	80.8	79.7	77.9
Inference	78.6	78.2	74.5
Evaluation	70.4	71.5	70.4
Explanation	70.4	74.3	71.8
Induction	77.8	78.8	76.2
Deduction	75.8	73.9	71.2

Critical Thinking Skills Test Percentile Results - Mathematics
Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	OVERALL	Percentile
MATHEMATICS Average (n=5)	75.0	46.6
CNAS Average (n=44)	74.4	43.9
UOG Average (n=242)	71.7	33.5

Assessing Core Competencies: Results of Critical Thinking Skills Testing

2017 Spring Graduating Seniors from the School of Business and Public Administration (SBPA)

Office of Institutional Effectiveness
Academic and Student Affairs
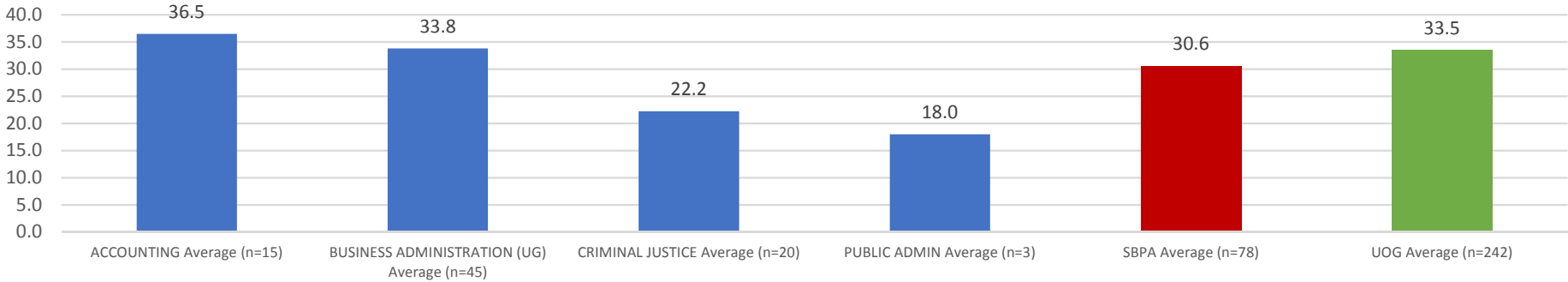University of Guam
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Critical Thinking Skills Test Overall Results - SBPA
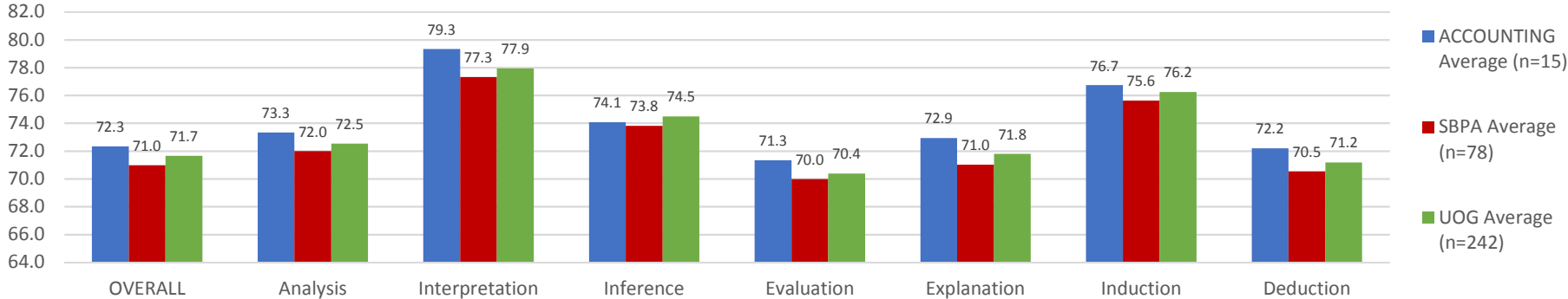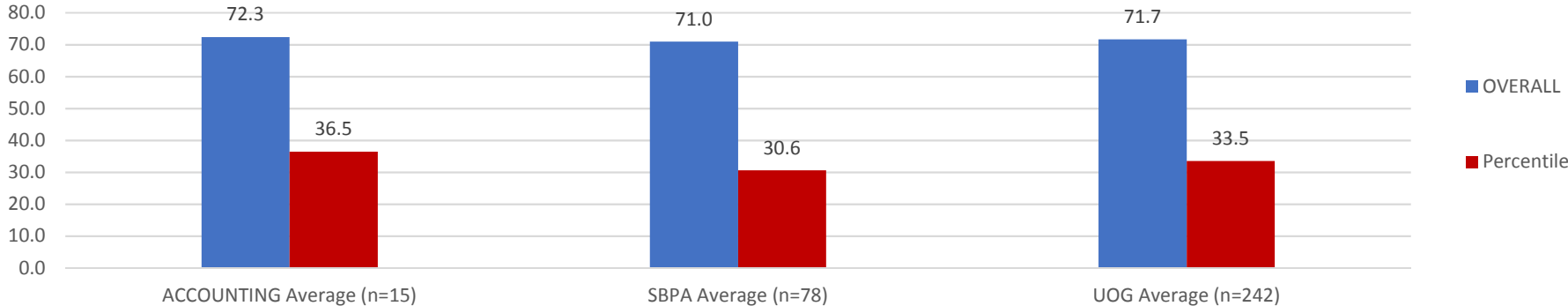## Graduating Seniors 2017 Spring

Category	Value
ACCOUNTING Average (n=15)	72.3
BUSINESS ADMINISTRATION (UG) Average (n=45)	71.8
CRIMINAL JUSTICE Average (n=20)	69.0
PUBLIC ADMIN Average (n=3)	67.7
SBPA Average (n=78)	71.0
UOG Average (n=242)	71.7

Critical Thinking Skills Test Overall Results - SBPA
Graduating Seniors 2017 Spring

Category	Value
ACCOUNTING Average (n=15)	36.5
BUSINESS ADMINISTRATION (UG) Average (n=45)	33.8
CRIMINAL JUSTICE Average (n=20)	22.2
PUBLIC ADMIN Average (n=3)	18.0
SBPA Average (n=78)	30.6
UOG Average (n=242)	33.5
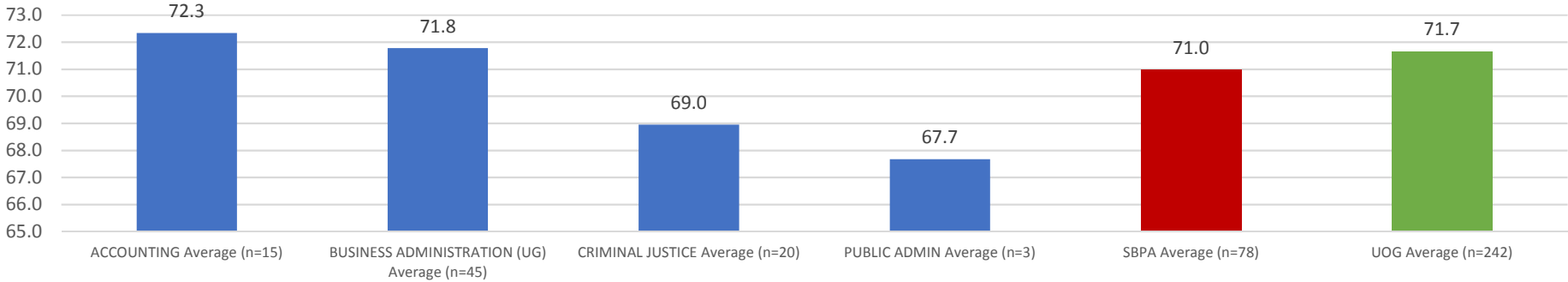
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Institutional Effectiveness

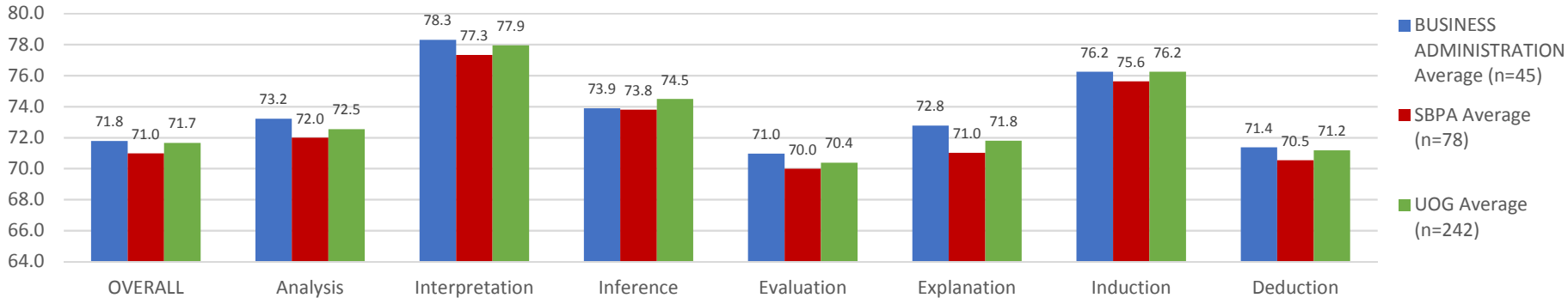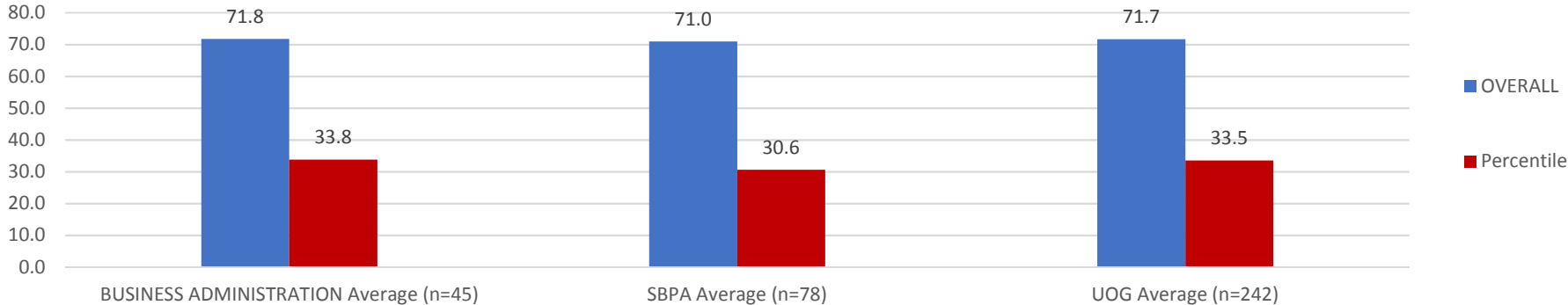## Critical Thinking Skills Test Overall Results - Accounting Graduating Seniors 2017 Spring

Legend:
- ACCOUNTING Average (n=15)
- SBPA Average (n=78)
- UOG Average (n=242)

Category	ACCOUNTING Average (n=15)	SBPA Average (n=78)	UOG Average (n=242)
OVERALL	72.3	71.0	71.7
Analysis	73.3	72.0	72.5
Interpretation	79.3	77.3	77.9
Inference	74.1	73.8	74.5
Evaluation	71.3	70.0	70.4
Explanation	72.9	71.0	71.8
Induction	76.7	75.6	76.2
Deduction	72.2	70.5	71.2

Critical Thinking Skills Test Percentile Results - Accounting Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	OVERALL	Percentile
ACCOUNTING Average (n=15)	72.3	36.5
SBPA Average (n=78)	71.0	30.6
UOG Average (n=242)	71.7	33.5

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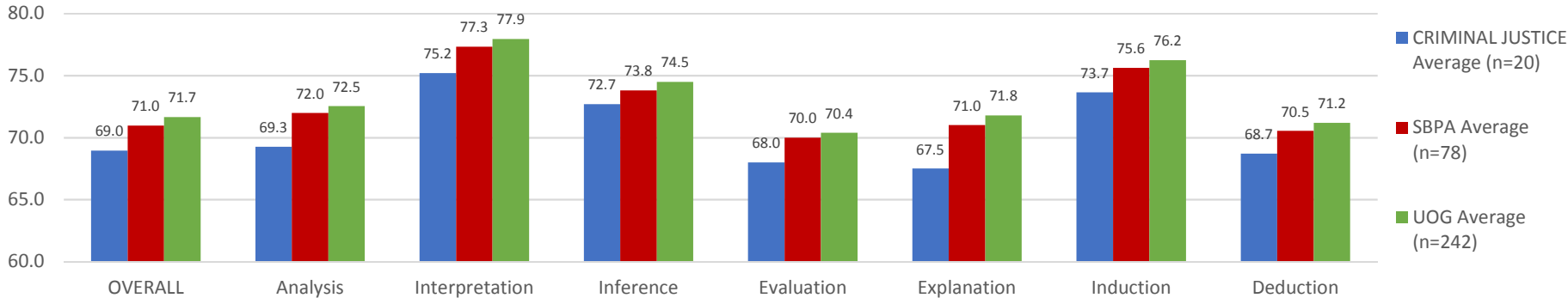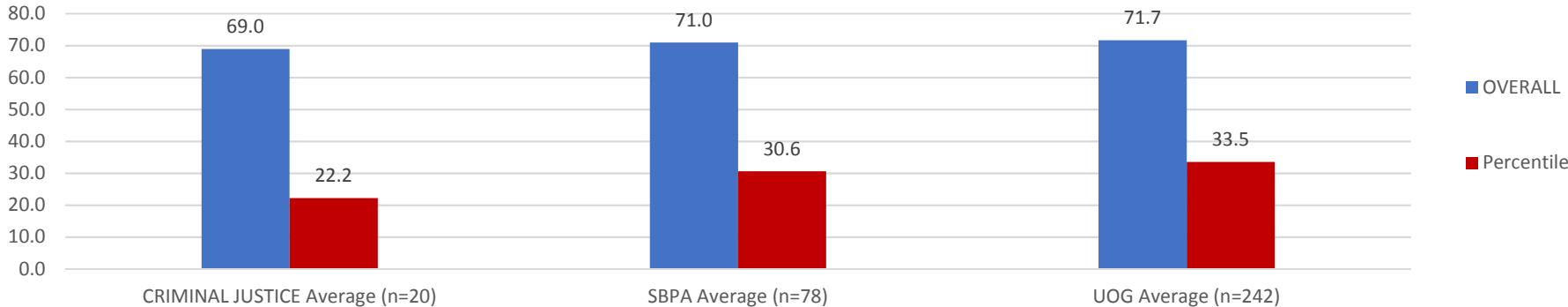## Critical Thinking Skills Test Overall Results - Business Administration Graduating Seniors 2017 Spring

Legend:
- BUSINESS ADMINISTRATION Average (n=45)
- SBPA Average (n=78)
- UOG Average (n=242)

Category	BUSINESS ADMINISTRATION	SBPA	UOG
OVERALL	71.8	71.0	71.7
Analysis	73.2	72.0	72.5
Interpretation	78.3	77.3	77.9
Inference	73.9	73.8	74.5
Evaluation	71.0	70.0	70.4
Explanation	72.8	71.0	71.8
Induction	76.2	75.6	76.2
Deduction	71.4	70.5	71.2

Critical Thinking Skills Test Percentile Results - Business Administration Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

Group	OVERALL	Percentile
BUSINESS ADMINISTRATION Average (n=45)	71.8	33.8
SBPA Average (n=78)	71.0	30.6
UOG Average (n=242)	71.7	33.5

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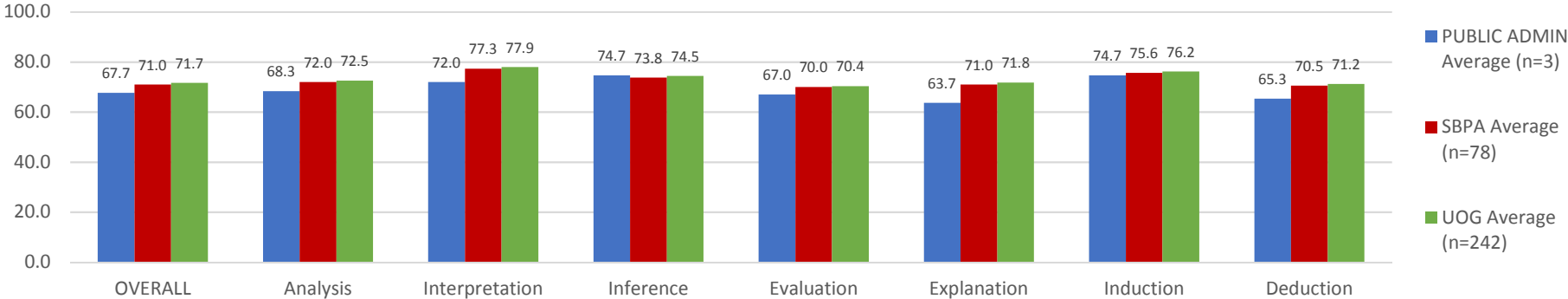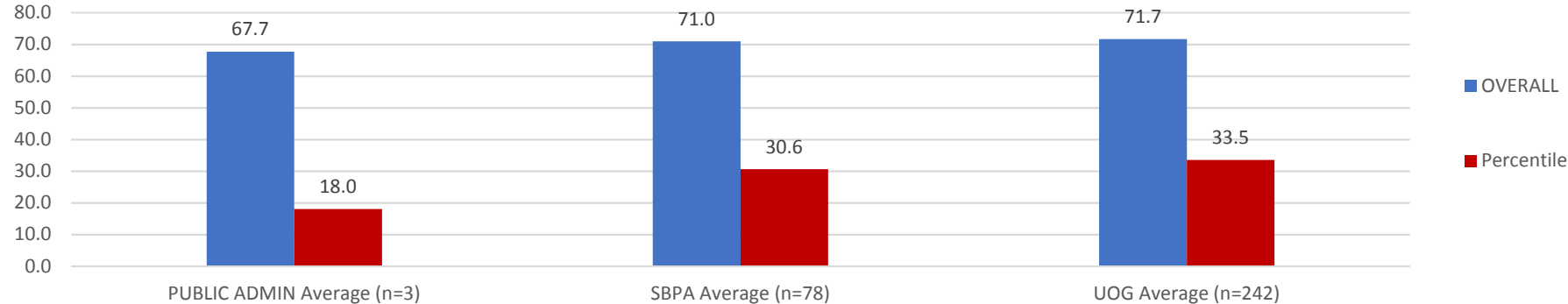## Critical Thinking Skills Test Overall Results - Criminal Justice Graduating Seniors 2017 Spring

Legend:
- CRIMINAL JUSTICE Average (n=20)
- SBPA Average (n=78)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
CRIMINAL JUSTICE Average (n=20)	69.0	69.3	75.2	72.7	68.0	67.5	73.7	68.7
SBPA Average (n=78)	71.0	72.0	77.3	73.8	70.0	71.0	75.6	70.5
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Criminal Justice Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	OVERALL	Percentile
CRIMINAL JUSTICE Average (n=20)	69.0	22.2
SBPA Average (n=78)	71.0	30.6
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Public Administration Graduating Seniors 2017 Spring

Legend:
- PUBLIC ADMIN Average (n=3)
- SBPA Average (n=78)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
PUBLIC ADMIN	67.7	68.3	72.0	74.7	67.0	63.7	74.7	65.3
SBPA	71.0	72.0	77.3	73.8	70.0	71.0	75.6	70.5
UOG	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Public Administration Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	OVERALL	Percentile
PUBLIC ADMIN Average (n=3)	67.7	18.0
SBPA Average (n=78)	71.0	30.6
UOG Average (n=242)	71.7	33.5

Source: Califonia Critical Thinking Skills Test Results

Assessing Core Competencies: Results of Critical Thinking Skills Testing

2017 Spring Graduating Seniors from the School of Nursing and Health Sciences (SNHS)

Office of Institutional Effectiveness
Academic and Student Affairs
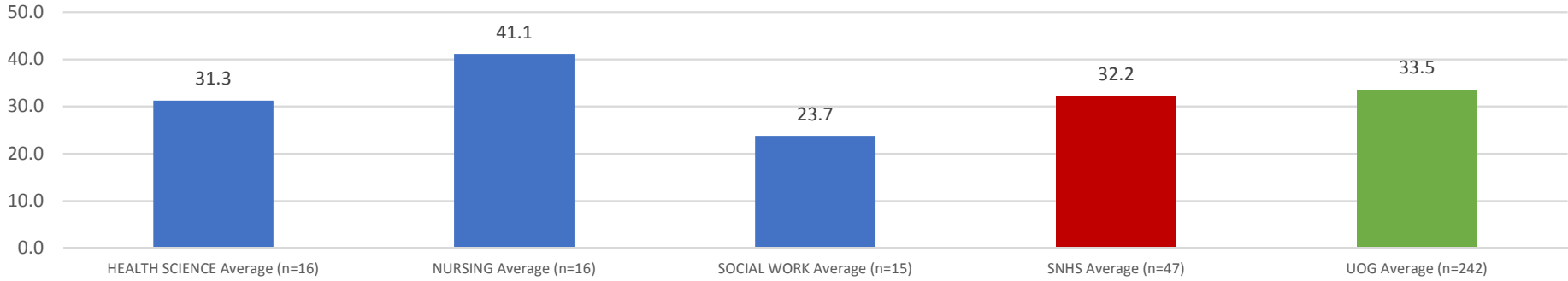University of Guam
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Institutional Effectiveness

Critical Thinking Skills Test Overall Results - SNHS
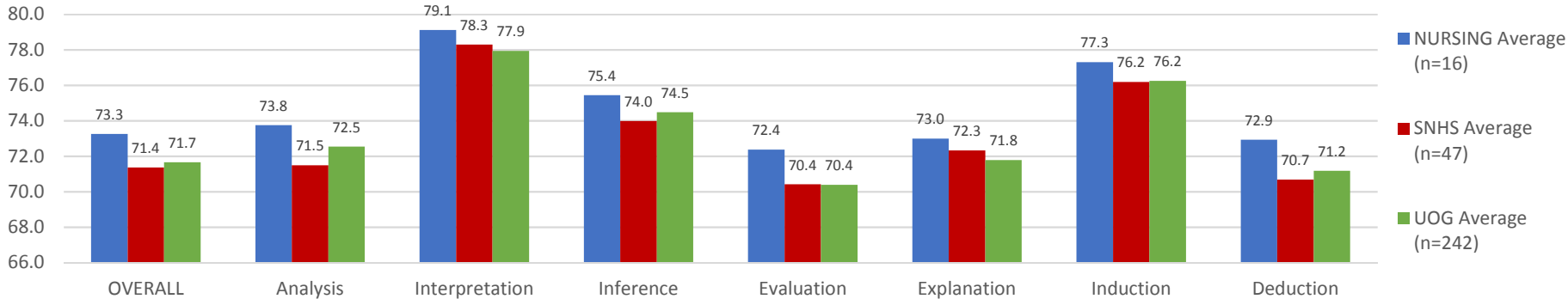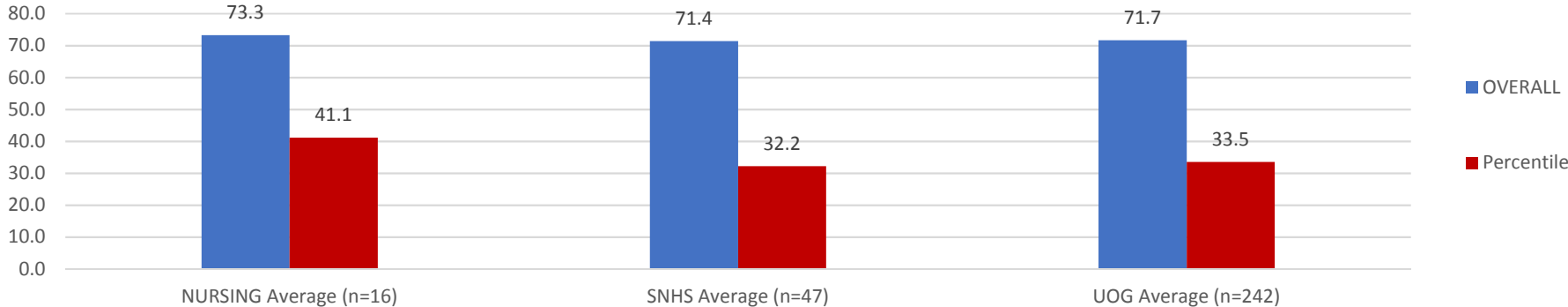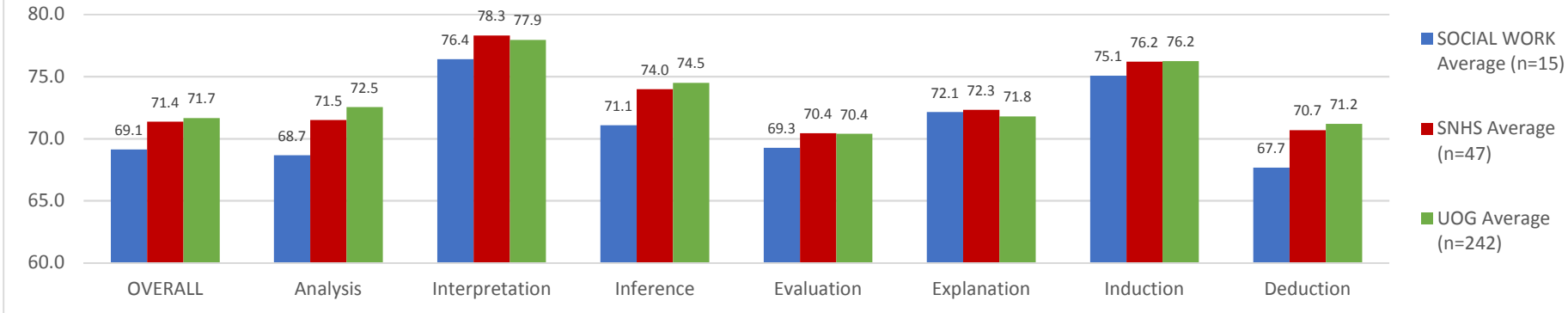## Graduating Seniors 2017 Spring

71.6	73.3	69.1	71.4	71.7
HEALTH SCIENCE Average (n=16)	NURSING Average (n=16)	SOCIAL WORK Average (n=15)	SNHS Average (n=47)	UOG Average (n=242)

Critical Thinking Skills Test Overall Results - SNHS
Graduating Seniors 2017 Spring

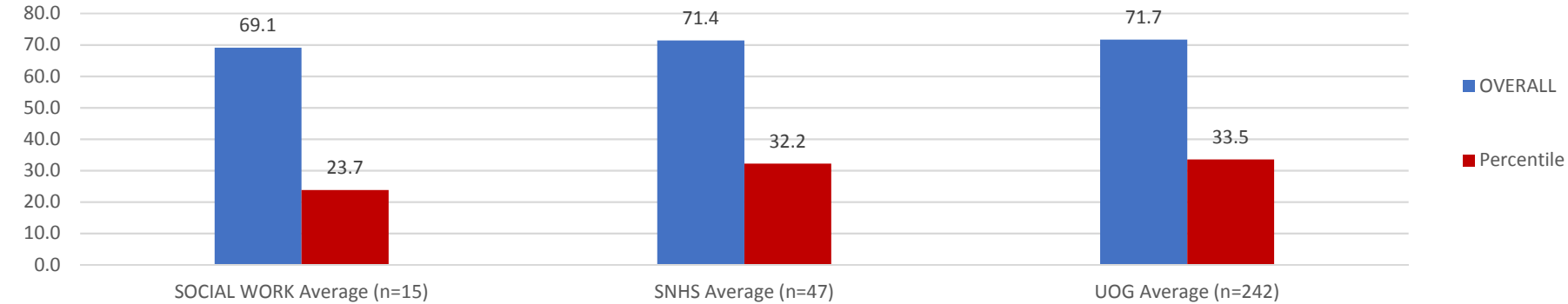|				
31.3	41.1	23.7	32.2	33.5
HEALTH SCIENCE Average (n=16)	NURSING Average (n=16)	SOCIAL WORK Average (n=15)	SNHS Average (n=47)	UOG Average (n=242)
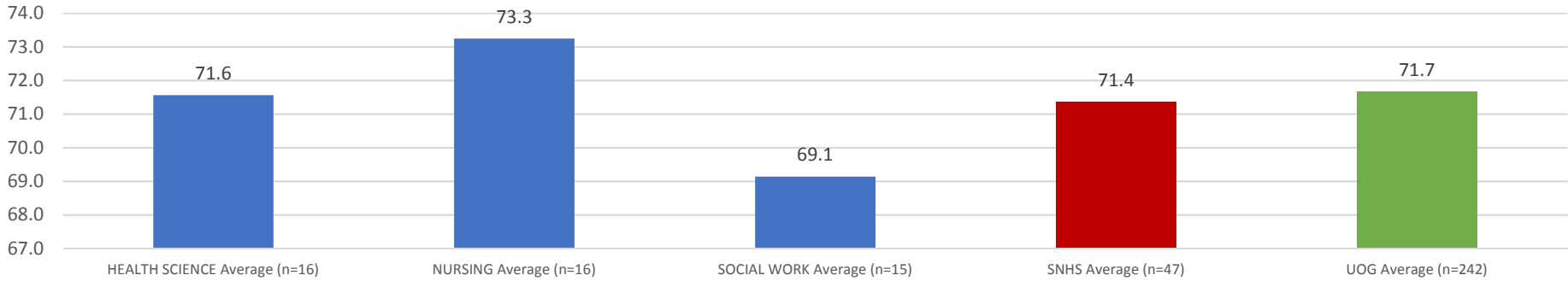
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Critical Thinking Skills Test Overall Results - Nursing Graduating Seniors 2017 Spring

Legend:
- NURSING Average (n=16)
- SNHS Average (n=47)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
NURSING Average (n=16)	73.3	73.8	79.1	75.4	72.4	73.0	77.3	72.9
SNHS Average (n=47)	71.4	71.5	78.3	74.0	70.4	72.3	76.2	70.7
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Nursing Graduating Seniors 2017 Spring

	OVERALL	Percentile
NURSING Average (n=16)	73.3	41.1
SNHS Average (n=47)	71.4	32.2
UOG Average (n=242)	71.7	33.5

Source: Califonia Critical Thinking Skills Test Results

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Critical Thinking Skills Test Overall Results - Social Work Graduating Seniors 2017 Spring

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
SOCIAL WORK Average (n=15)	69.1	68.7	76.4	71.1	69.3	72.1	75.1	67.7
SNHS Average (n=47)	71.4	71.5	78.3	74.0	70.4	72.3	76.2	70.7
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Social Work Graduating Seniors 2017 Spring

	SOCIAL WORK Average (n=15)	SNHS Average (n=47)	UOG Average (n=242)
OVERALL	69.1	71.4	71.7
Percentile	23.7	32.2	33.5

Source: Califonia Critical Thinking Skills Test Results

Assessing Core Competencies: Results of Critical Thinking Skills Testing

2017 Spring Graduating Seniors
from the School of Education (SOE)

Office of Institutional Effectiveness
Academic and Student Affairs
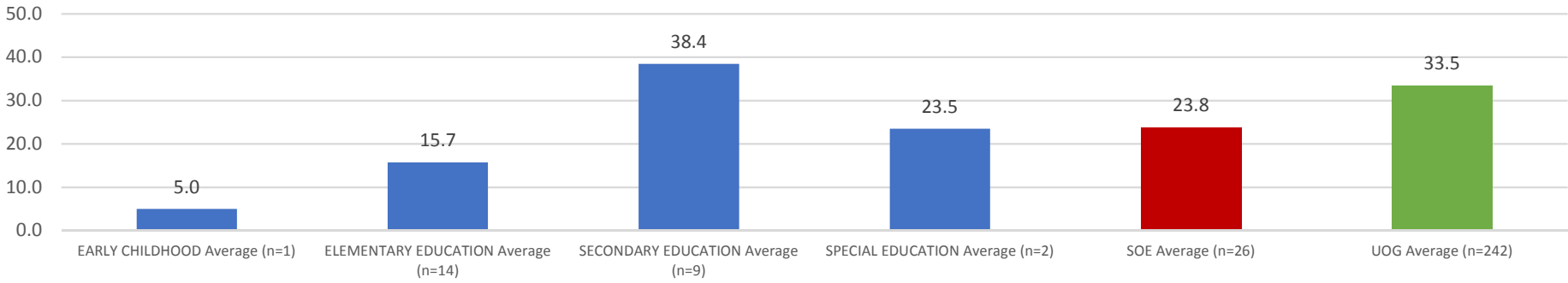University of Guam
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Critical Thinking Skills Test Overall Results - SOE
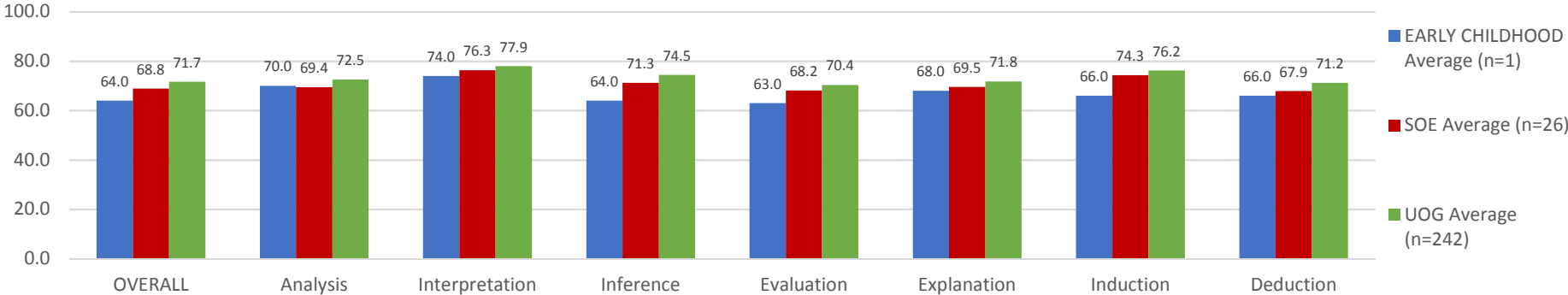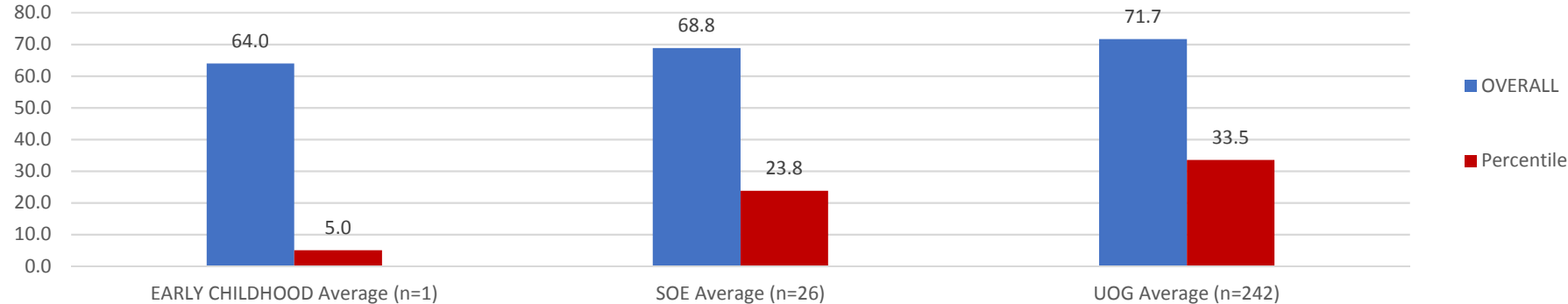## Graduating Seniors 2017 Spring

Bar chart (scale 58.0 to 74.0):
- EARLY CHILDHOOD Average (n=1): 64.0
- ELEMENTARY EDUCATION Average (n=14): 66.6
- SECONDARY EDUCATION Average (n=9): 72.9
- SPECIAL EDUCATION Average (n=2): 69.0
- SOE Average (n=26): 68.8
- UOG Average (n=242): 71.7

Critical Thinking Skills Test Overall Results - SOE
Graduating Seniors 2017 Spring

Bar chart (scale 0.0 to 50.0):
- EARLY CHILDHOOD Average (n=1): 5.0
- ELEMENTARY EDUCATION Average (n=14): 15.7
- SECONDARY EDUCATION Average (n=9): 38.4
- SPECIAL EDUCATION Average (n=2): 23.5
- SOE Average (n=26): 23.8
- UOG Average (n=242): 33.5
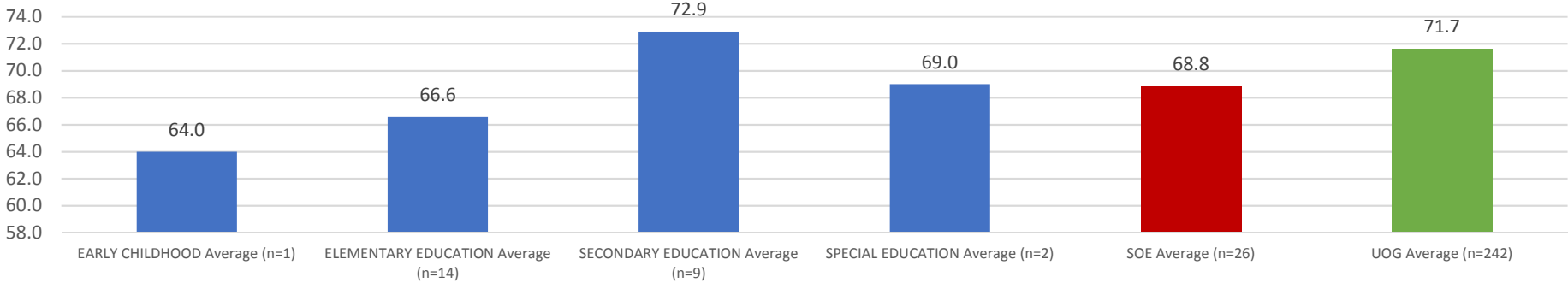
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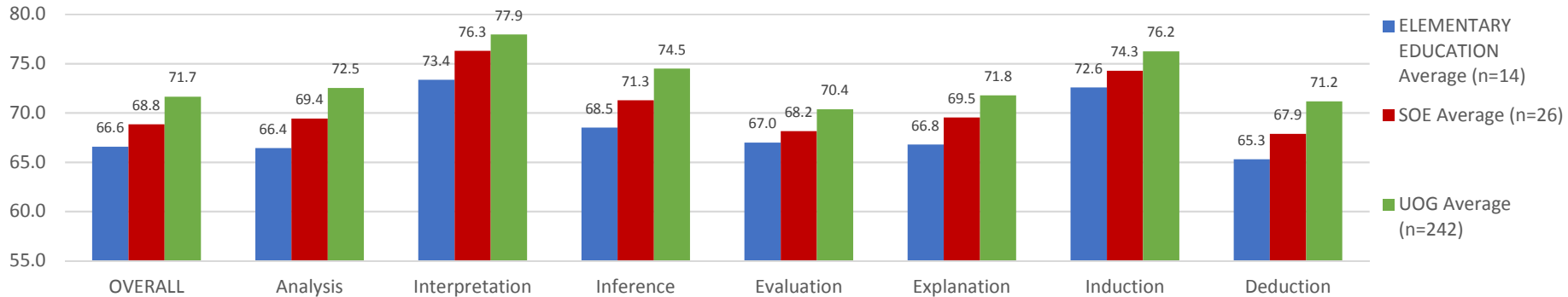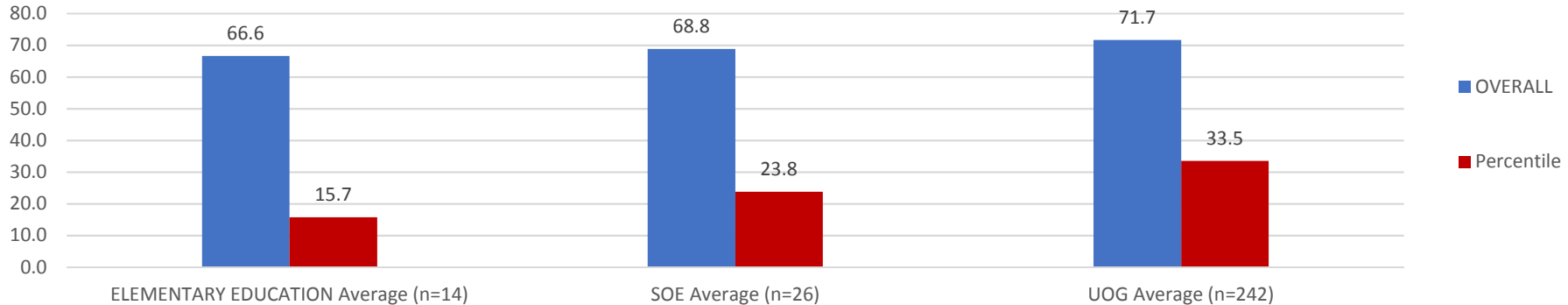## Critical Thinking Skills Test Overall Results - Early Childhood Graduating Seniors 2017 Spring
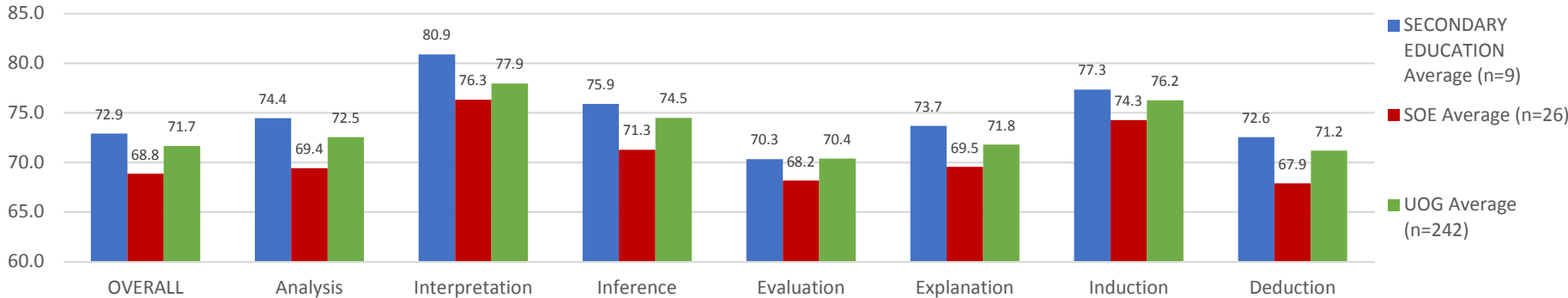

Legend:
- EARLY CHILDHOOD Average (n=1) — blue
- SOE Average (n=26) — red
- UOG Average (n=242) — green

Category	EARLY CHILDHOOD Average (n=1)	SOE Average (n=26)	UOG Average (n=242)
OVERALL	64.0	68.8	71.7
Analysis	70.0	69.4	72.5
Interpretation	74.0	76.3	77.9
Inference	64.0	71.3	74.5
Evaluation	63.0	68.2	70.4
Explanation	68.0	69.5	71.8
Induction	66.0	74.3	76.2
Deduction	66.0	67.9	71.2

Critical Thinking Skills Test Percentile Results - Early Childhood Graduating Seniors 2017 Spring

Legend:
- OVERALL — blue
- Percentile — red

	OVERALL	Percentile
EARLY CHILDHOOD Average (n=1)	64.0	5.0
SOE Average (n=26)	68.8	23.8
UOG Average (n=242)	71.7	33.5

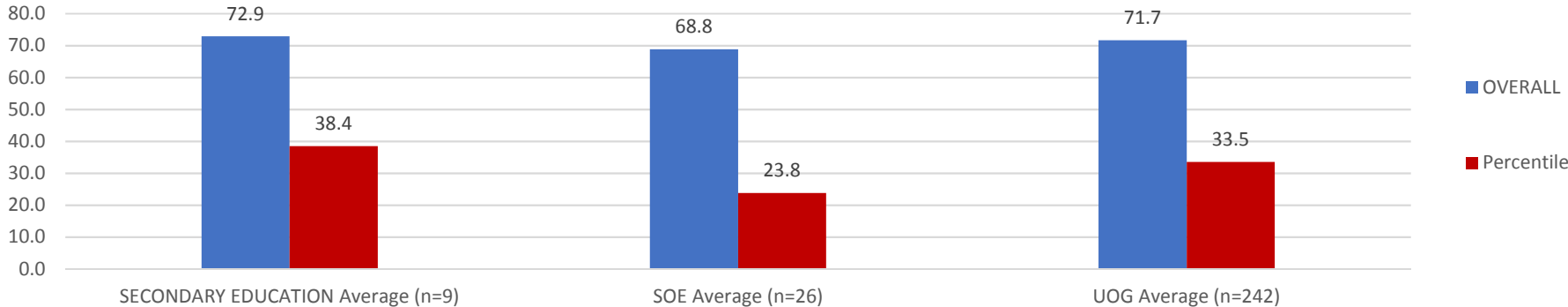Source: Califonia Critical Thinking Skills Test Results

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Critical Thinking Skills Test Overall Results - Elementary Education Graduating Seniors 2017 Spring

Legend:
- ELEMENTARY EDUCATION Average (n=14)
- SOE Average (n=26)
- UOG Average (n=242)

	OVERALL	Analysis	Interpretation	Inference	Evaluation	Explanation	Induction	Deduction
ELEMENTARY EDUCATION Average (n=14)	66.6	66.4	73.4	68.5	67.0	66.8	72.6	65.3
SOE Average (n=26)	68.8	69.4	76.3	71.3	68.2	69.5	74.3	67.9
UOG Average (n=242)	71.7	72.5	77.9	74.5	70.4	71.8	76.2	71.2

Critical Thinking Skills Test Percentile Results - Elementary Education Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	OVERALL	Percentile
ELEMENTARY EDUCATION Average (n=14)	66.6	15.7
SOE Average (n=26)	68.8	23.8
UOG Average (n=242)	71.7	33.5

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Critical Thinking Skills Test Overall Results - Secondary Education Graduating Seniors 2017 Spring
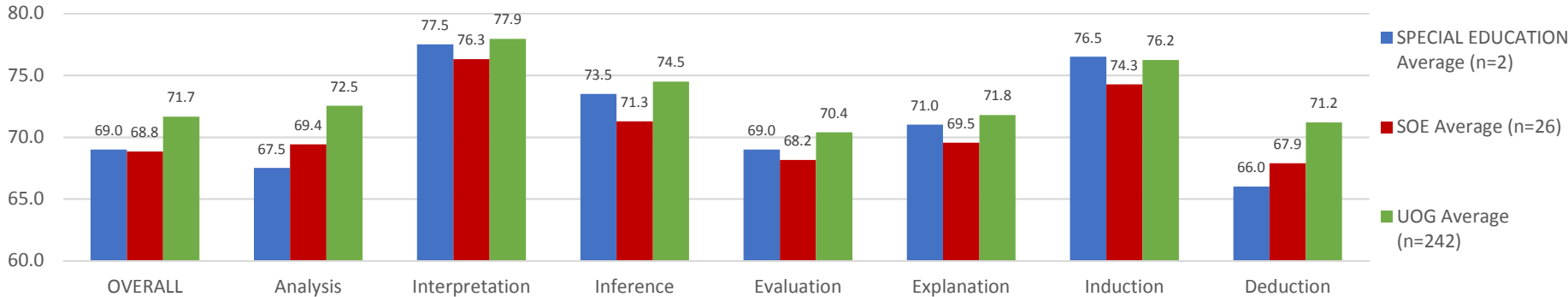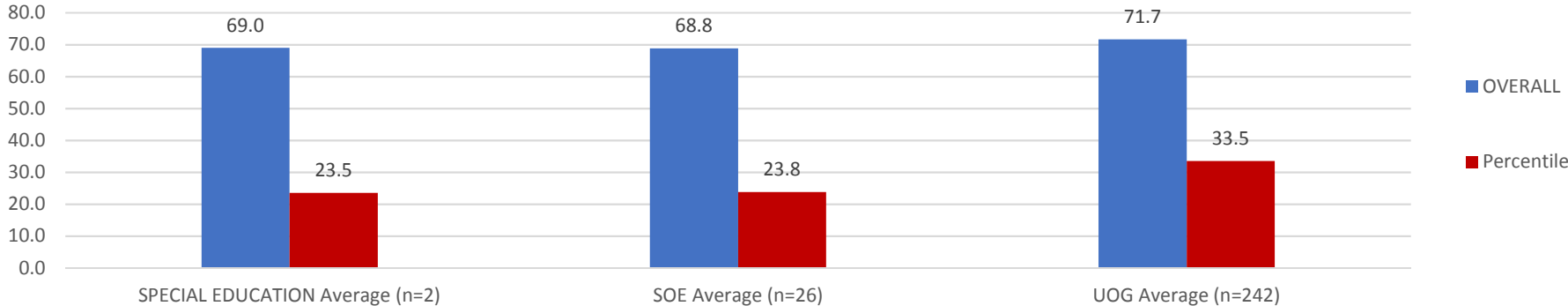
Legend:
- SECONDARY EDUCATION Average (n=9) — blue
- SOE Average (n=26) — red
- UOG Average (n=242) — green

Category	SECONDARY EDUCATION Average (n=9)	SOE Average (n=26)	UOG Average (n=242)
OVERALL	72.9	68.8	71.7
Analysis	74.4	69.4	72.5
Interpretation	80.9	76.3	77.9
Inference	75.9	71.3	74.5
Evaluation	70.3	68.2	70.4
Explanation	73.7	69.5	71.8
Induction	77.3	74.3	76.2
Deduction	72.6	67.9	71.2

Critical Thinking Skills Test Percentile Results - Secondary Education Graduating Seniors 2017 Spring

Group	OVERALL	Percentile
SECONDARY EDUCATION Average (n=9)	72.9	38.4
SOE Average (n=26)	68.8	23.8
UOG Average (n=242)	71.7	33.5

Source: Califonia Critical Thinking Skills Test Results

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Institutional Effectiveness

Critical Thinking Skills Test Overall Results - Special Education Graduating Seniors 2017 Spring

Legend:
- SPECIAL EDUCATION Average (n=2)
- SOE Average (n=26)
- UOG Average (n=242)

Category	SPECIAL EDUCATION Average (n=2)	SOE Average (n=26)	UOG Average (n=242)
OVERALL	69.0	68.8	71.7
Analysis	67.5	69.4	72.5
Interpretation	77.5	76.3	77.9
Inference	73.5	71.3	74.5
Evaluation	69.0	68.2	70.4
Explanation	71.0	69.5	71.8
Induction	76.5	74.3	76.2
Deduction	66.0	67.9	71.2

Critical Thinking Skills Test Percentile Results - Special Education Graduating Seniors 2017 Spring

Legend:
- OVERALL
- Percentile

	SPECIAL EDUCATION Average (n=2)	SOE Average (n=26)	UOG Average (n=242)
OVERALL	69.0	68.8	71.7
Percentile	23.5	23.8	33.5

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.

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 sold belief in our conclusions and a reasonable basis for action.

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.

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.

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.

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.

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.

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.