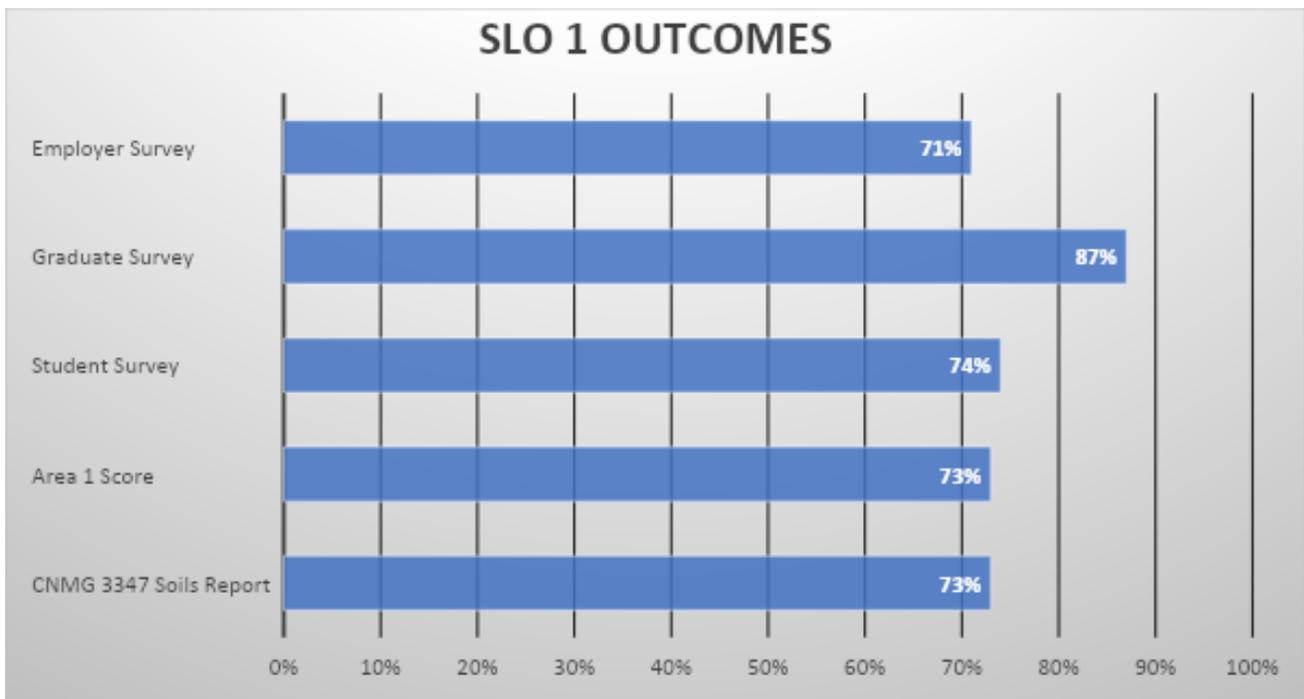


# UA Little Rock Construction Management **Assessment Measures and Results**

Compiled by Dr. Hollis Bray and Dr. David Manry

March 22, 2021

SLO 1 Create written presentations appropriate to the construction discipline.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 3347 Soils Report	Direct	70%	73%
AC Exam	Area 1 Score	Indirect	70%	73%
Outcome Surveys	Student Survey	Indirect	70%	74%
	Graduate Survey	Indirect	70%	87%
	Employer Survey	Indirect	70%	71%



**SUMMARY**

The performance criteria were exceeded or met in all areas. It is particularly noteworthy that student performance met the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

**ACTION TAKEN**

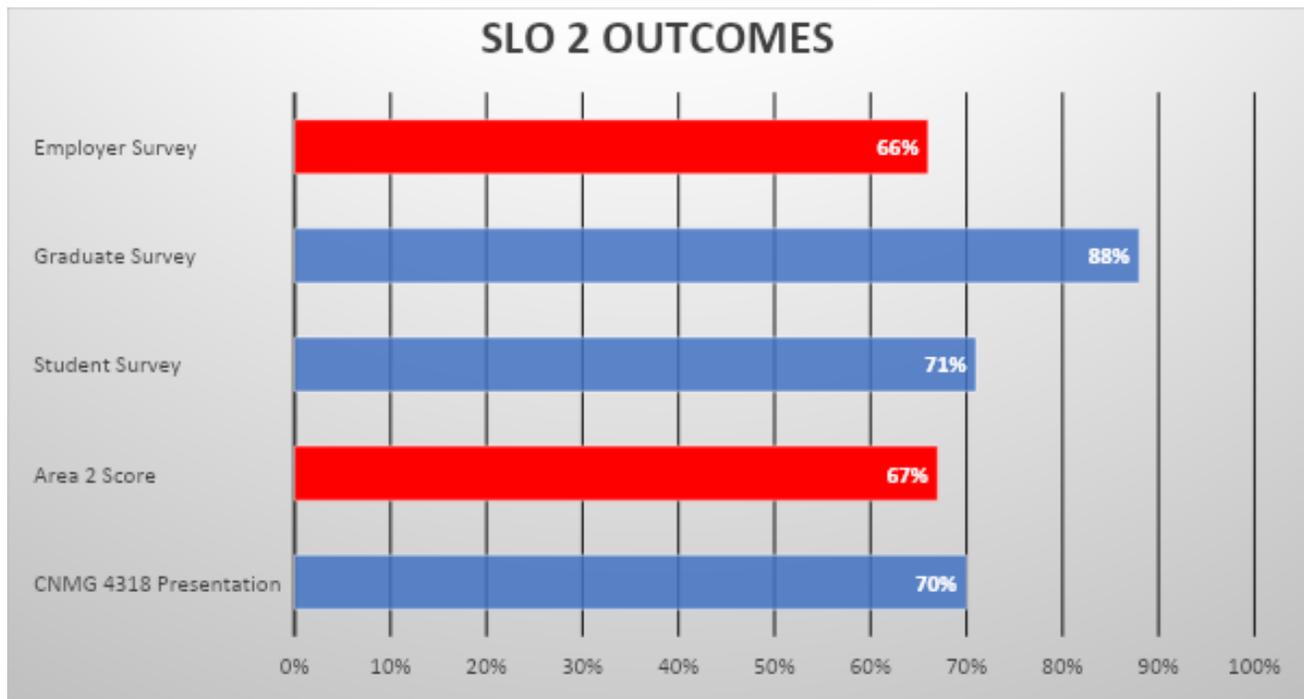
No action required.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 1 -- Create written communications appropriate to the construction discipline.

**SLO 2**  
**Create oral presentations appropriate to the construction discipline.**

Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4318 Presentation	Direct	70%	70%
AC Exam	Area 2 Score	Indirect	70%	67%
Outcome Surveys	Student Survey	Indirect	70%	71%
	Graduate Survey	Indirect	70%	88%
	Employer Survey	Indirect	70%	66%



**SUMMARY**

The performance criteria were exceeded in three areas – the CNMG 4318 Presentation, the student survey and the graduate survey. Both student performance on the Associate Constructor Exam and results from the employer survey were slightly below the performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

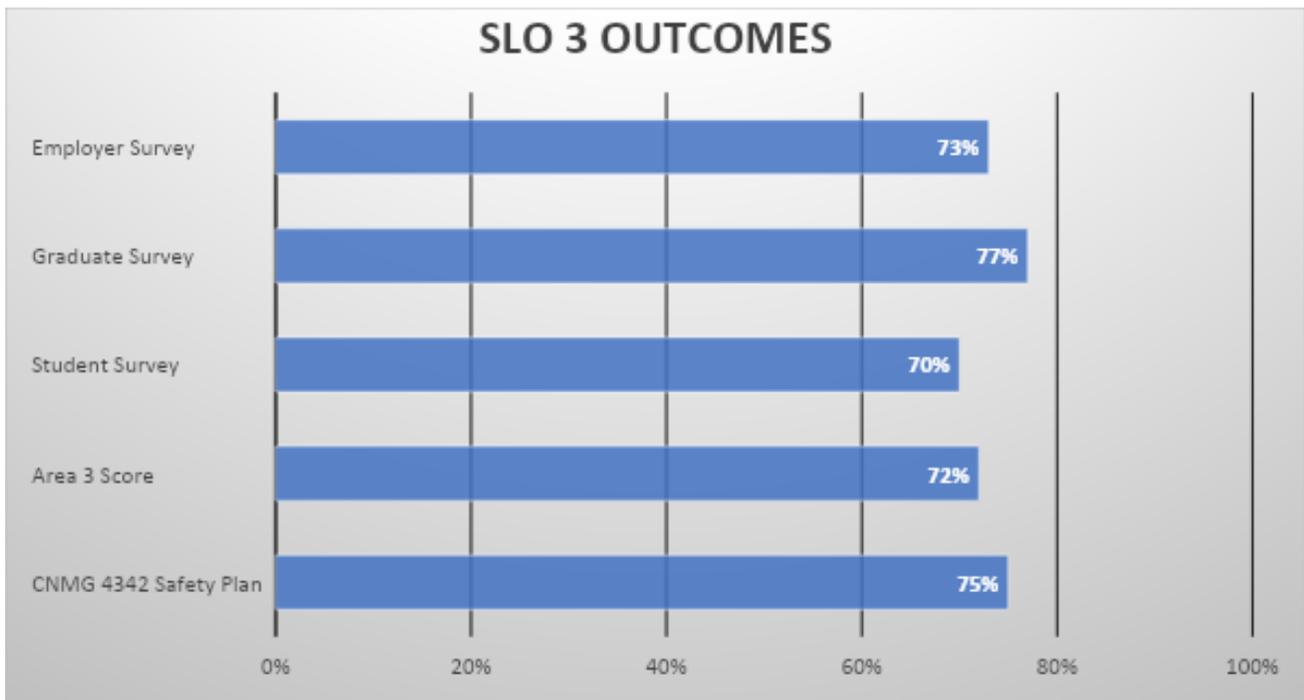
**ACTION TAKEN**

Because the employer survey shows an outcome below the performance criteria, it is desirable to determine the concerns of employers about the oral communication skills of our graduates. Contact with individual employers is being done to gain more in-depth feedback on employer’s desired outcome. The review mechanism is in place. Employer perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 2 -- Create oral presentations appropriate to the construction discipline.

SLO 3 Create a construction project safety plan.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4342 Safety Plan	Direct	70%	75%
AC Exam	Area 3 Score	Indirect	70%	72%
Outcome Surveys	Student Survey	Indirect	70%	70%
	Graduate Survey	Indirect	70%	77%
	Employer Survey	Indirect	70%	73%



**SUMMARY**

The performance criteria were exceeded or met in all areas. It is particularly noteworthy that student performance met the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

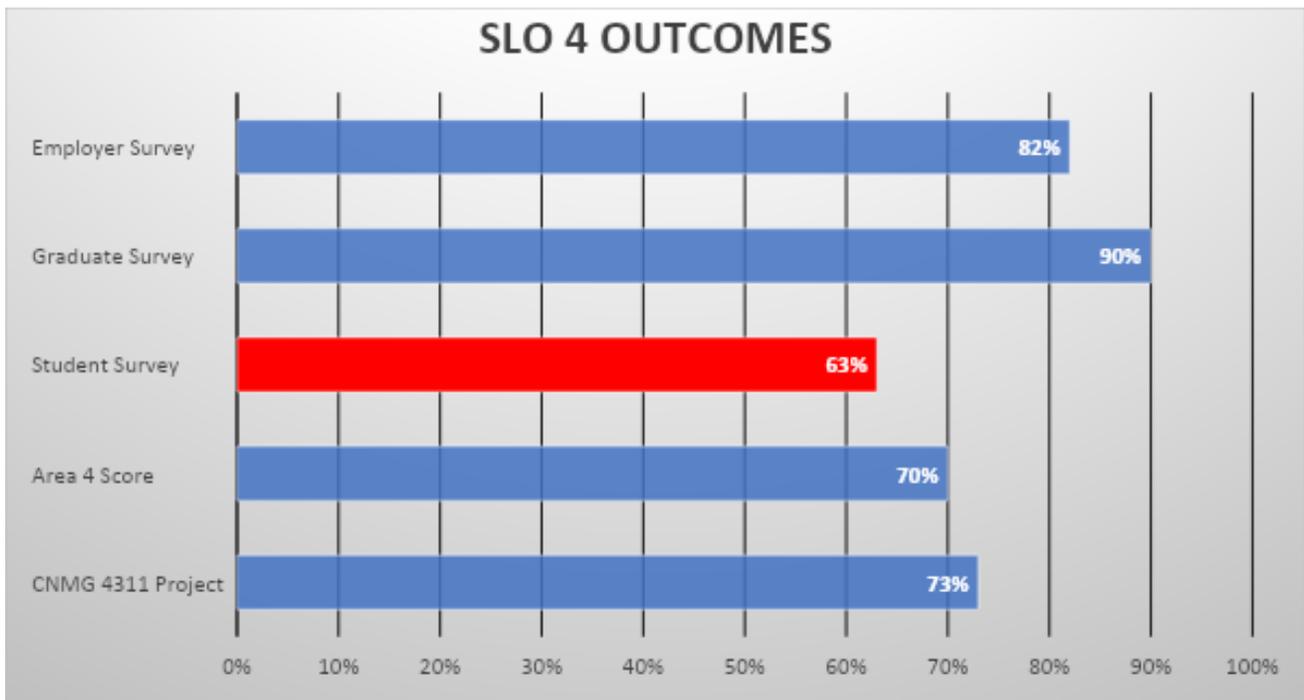
**ACTION TAKEN**

No action required.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 3 -- Create a construction project safety plan.

SLO 4 Create construction project cost estimates.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4311 Project	Direct	70%	73%
AC Exam	Area 4 Score	Indirect	70%	70%
Outcome Surveys	Student Survey	Indirect	70%	63%
	Graduate Survey	Indirect	70%	90%
	Employer Survey	Indirect	70%	82%



### **SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

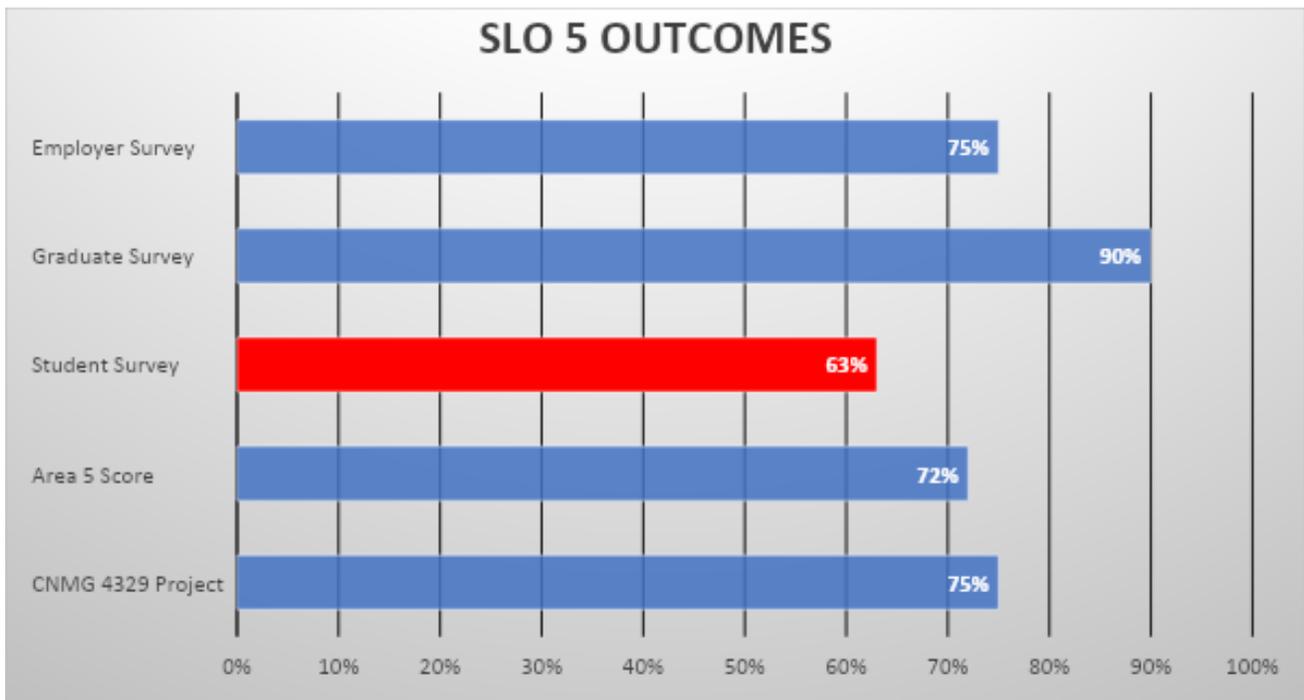
### **ACTION TAKEN**

It would be desirable to improve the perception of students concerning their understanding of construction project cost estimates. In future surveys, the wording of the question will include examples of what estimating topics are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

### **CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 4 -- Create construction project cost estimates.

SLO 5 Create construction project schedules.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4329 Project	Direct	70%	75%
AC Exam	Area 5 Score	Indirect	70%	72%
Outcome Surveys	Student Survey	Indirect	70%	63%
	Graduate Survey	Indirect	70%	90%
	Employer Survey	Indirect	70%	75%



### **SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

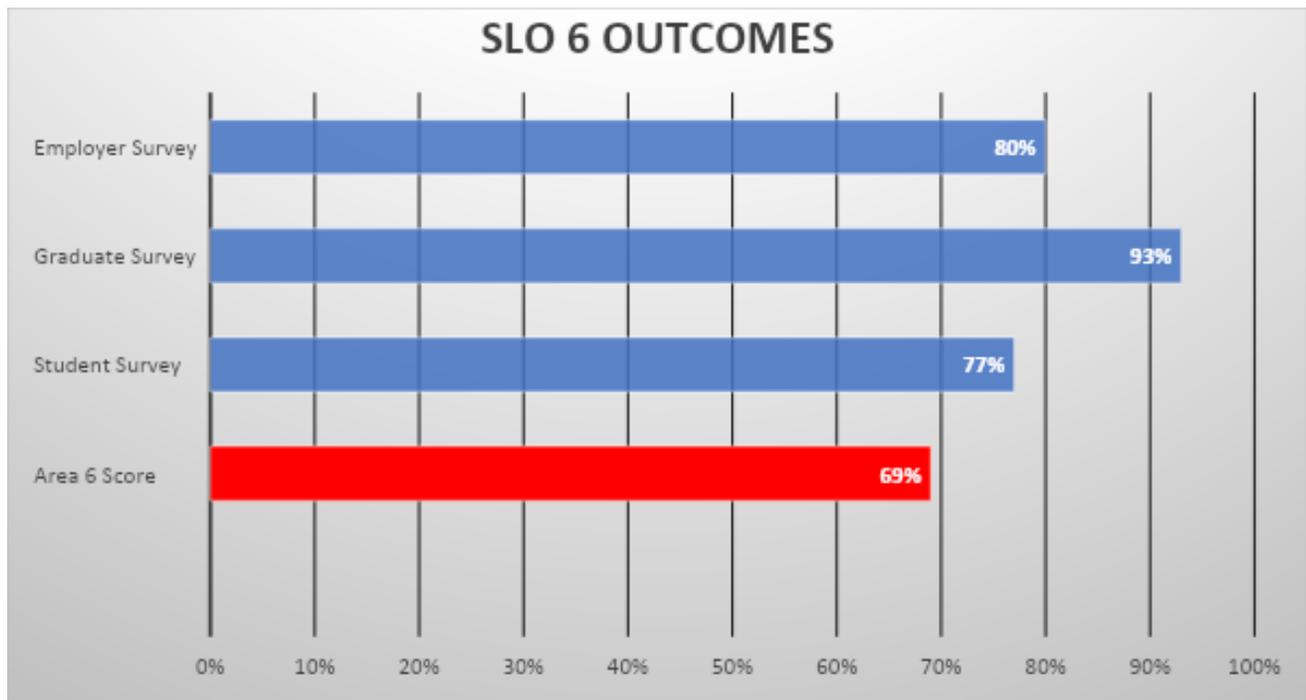
### **ACTION TAKEN**

It would be desirable to improve the perception of students concerning their understanding of construction project scheduling topics. In future surveys, the wording of the question will include examples of what scheduling topics are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

### **CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 5 -- Create construction project schedules.

SLO 6 Analyze professional decisions based on ethical principles.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 6 Score	Direct	70%	69%
Outcome Surveys	Student Survey	Indirect	70%	77%
	Graduate Survey	Indirect	70%	93%
	Employer Survey	Indirect	70%	80%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the AC Exam Area 6 Score – although the score was close to the desired performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

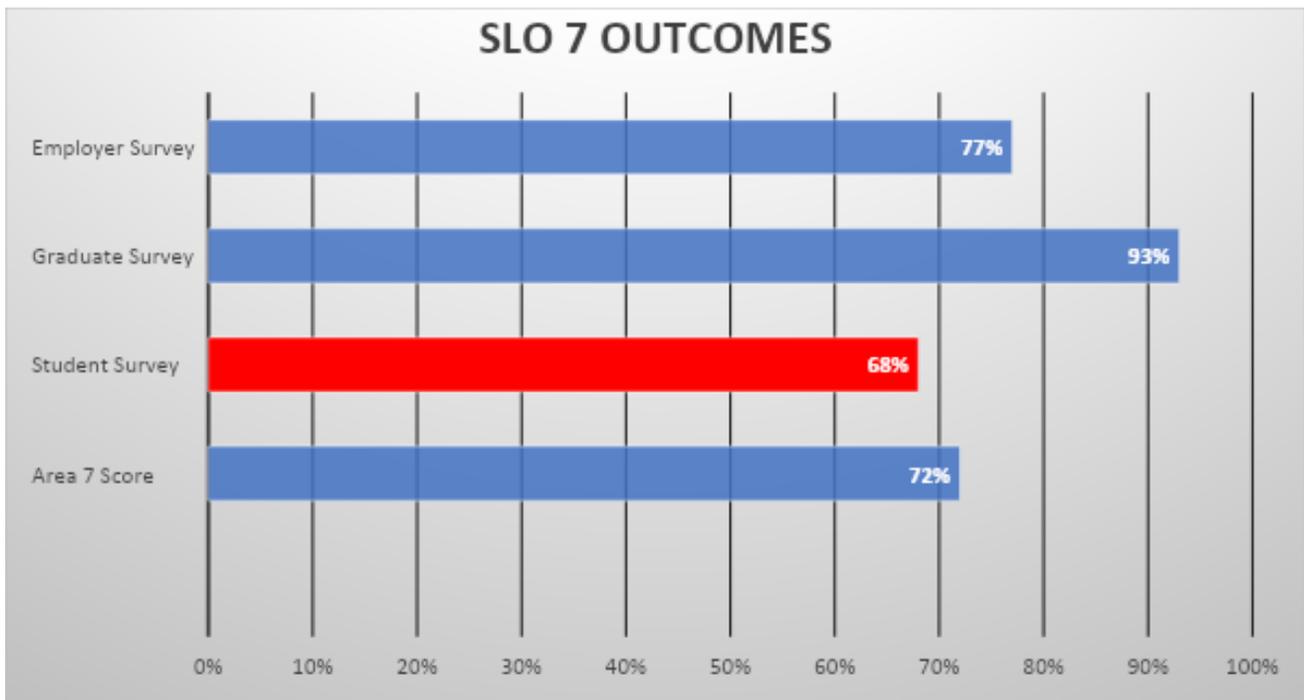
**ACTION TAKEN**

It would be desirable to improve both the student scores in Area 6 of the AC Exam Analyze professional decisions based on ethical principles. For the current assessment cycle, the AC Exam outcome has averaged under the desired performance criteria. A closer look at individual test date data shows a slight upward trend in scoring for Area 6. Thus, recent test dates indicate results meeting the performance criteria. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 6 -- Analyze professional decisions based on ethical principles.

SLO 7 Analyze construction documents for planning and management of construction processes.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 7 Score	Direct	70%	72%
Outcome Surveys	Student Survey	Indirect	70%	68%
	Graduate Survey	Indirect	70%	93%
	Employer Survey	Indirect	70%	77%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

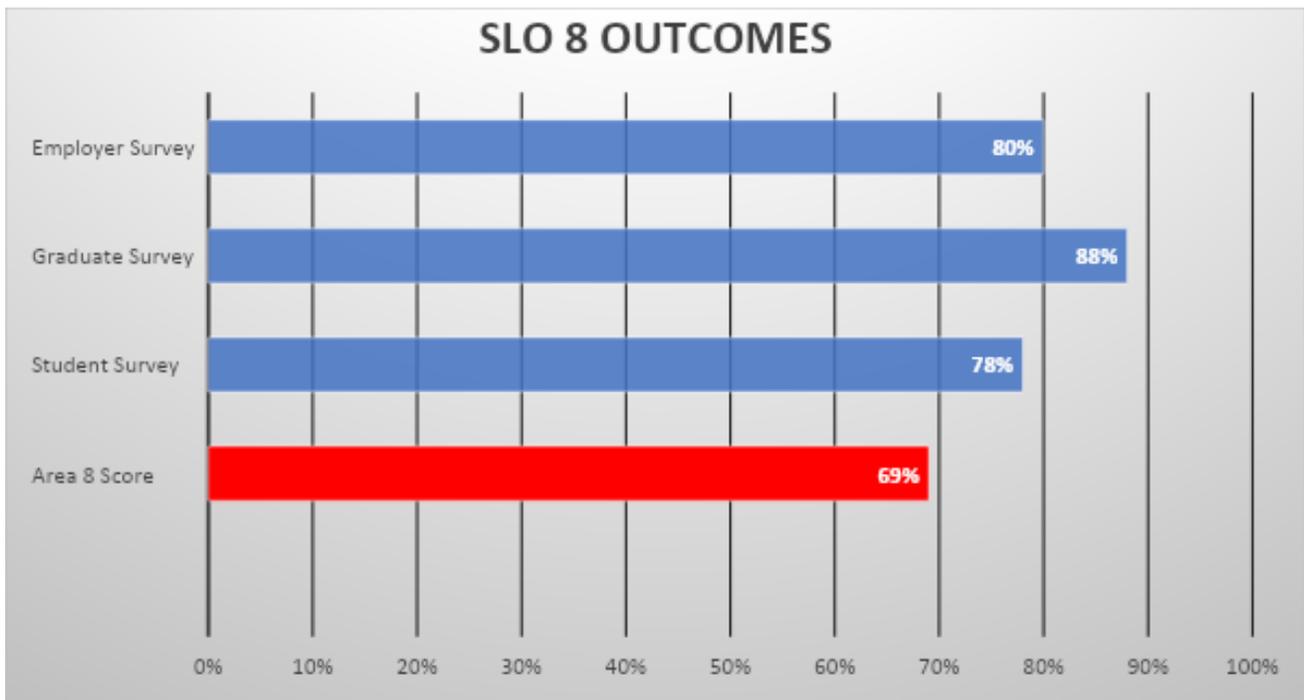
**ACTION TAKEN**

It would be desirable to improve the perception of students concerning their understanding of construction document topics. In future surveys, the wording of the question will include examples of what topics are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 7 -- Analyze construction documents for planning and management of construction processes.

SLO 8 Analyze methods, materials, and equipment used to construct projects.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 8 Score	Direct	70%	69%
Outcome Surveys	Student Survey	Indirect	70%	78%
	Graduate Survey	Indirect	70%	88%
	Employer Survey	Indirect	70%	80%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except for the AC Exam. Although for the current assessment cycle the AC Exam outcome has averaged under the desired performance criteria, scores from recent test dates indicate results meeting the performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

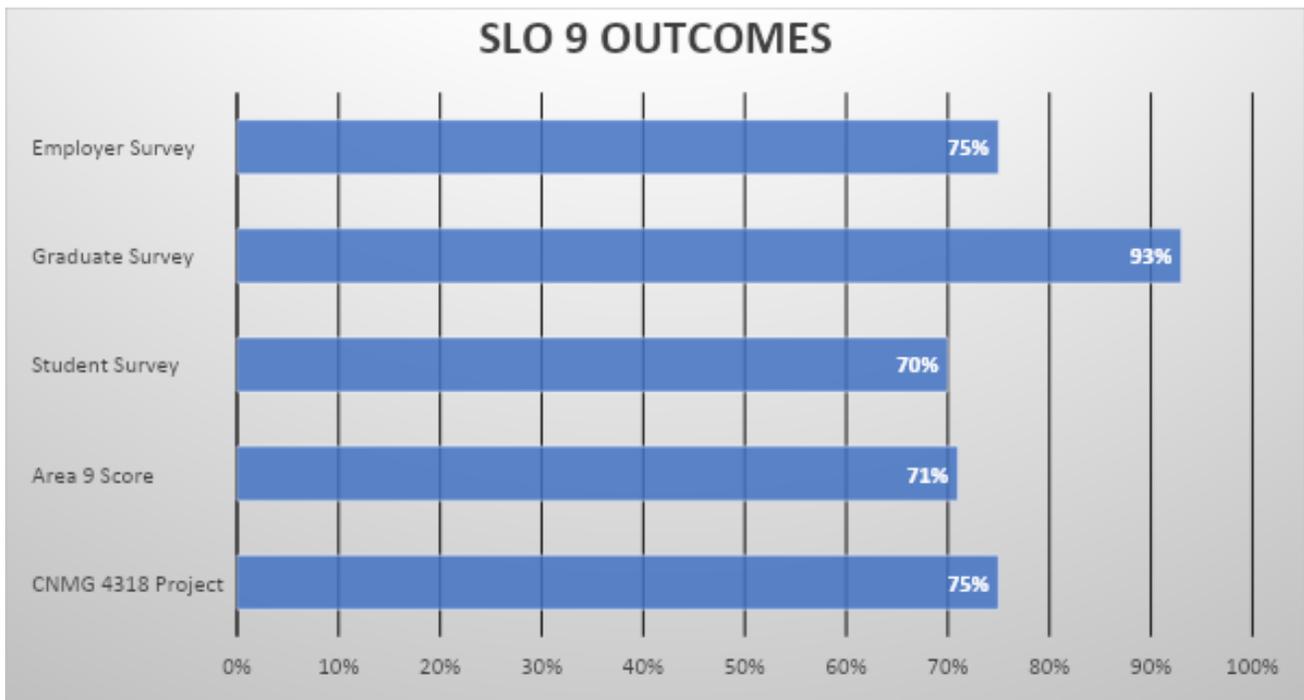
**ACTION TAKEN**

It would be desirable to improve both the student scores in Area 8 of the AC Exam Analyze methods, materials, and equipment used to construct projects. For the current assessment cycle, the AC Exam outcome has averaged under the desired performance criteria. A closer look at individual test date data shows an upward trend in scoring for Area 8. Thus, recent test dates indicate results meeting the performance criteria. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 8 -- Analyze methods, materials, and equipment used to construct projects.

SLO 9 Apply construction management skills as a member of a multidisciplinary team.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4318 Project	Direct	70%	75%
AC Exam	Area 9 Score	Indirect	70%	71%
Outcome Surveys	Student Survey	Indirect	70%	70%
	Graduate Survey	Indirect	70%	93%
	Employer Survey	Indirect	70%	75%



**SUMMARY**

The performance criteria were exceeded or met in all areas. It is particularly noteworthy that student performance met the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

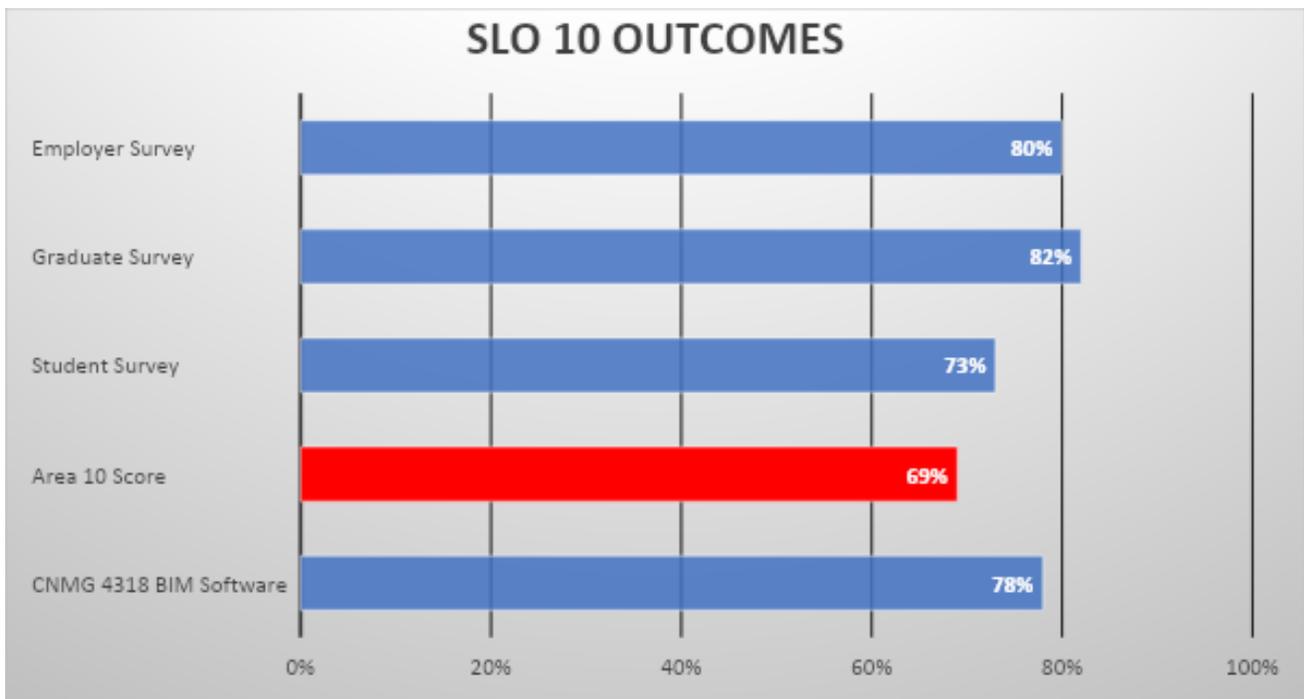
**ACTION TAKEN**

No action required.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 9 -- Apply construction management skills as a member of a multidisciplinary team.

SLO 10 Apply electronic-based technology to manage the construction process.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 4318 BIM Software	Direct	70%	78%
AC Exam	Area 10 Score	Indirect	70%	69%
Outcome Surveys	Student Survey	Indirect	70%	73%
	Graduate Survey	Indirect	70%	82%
	Employer Survey	Indirect	70%	80%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the AC Exam Area 10 Score – although the score was close to the desired performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

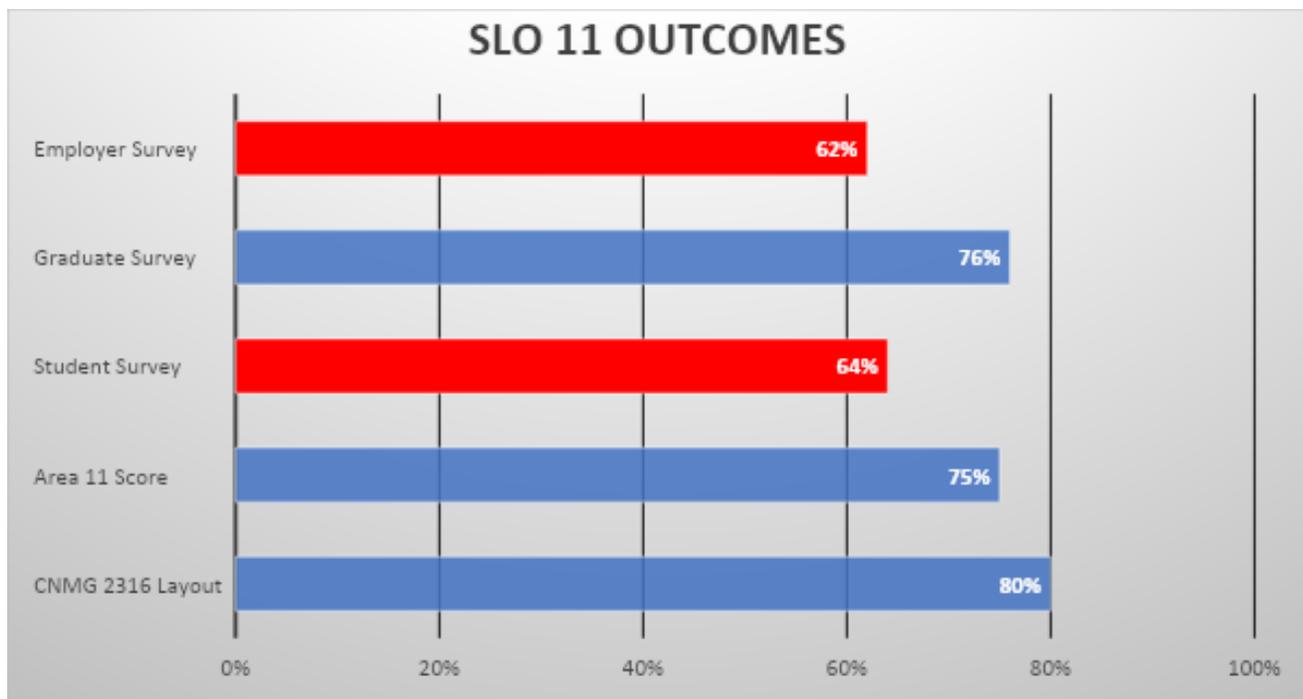
**ACTION TAKEN**

It would be desirable to improve both the student scores in Area 10 of the AC Exam Apply electronic-based technology to manage the construction process. For the current assessment cycle, the AC Exam outcome has averaged under the desired performance criteria. A closer look at individual test date data shows an upward trend in scoring for Area 10. Thus, recent test dates indicate results meeting the performance criteria. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 10 -- Apply electronic-based technology to manage the construction process.

<b>SLO 11</b> <b>Apply basic surveying techniques for construction layout and control.</b>				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)	CNMG 2316 Layout	Direct	70%	80%
AC Exam	Area 11 Score	Indirect	70%	75%
Outcome Surveys	Student Survey	Indirect	70%	64%
	Graduate Survey	Indirect	70%	76%
	Employer Survey	Indirect	70%	62%



**SUMMARY**

The performance criteria were exceeded in three areas – the graduate, the AC exam, and the CLO. Results from both the employer survey and the student survey were slightly below the performance criteria. The CNMG 2316 Layout assignment is used as a direct assessment, while surveys of students, graduates, and employers and the AC Exam Area 11 Score are used as indirect indicators of performance.

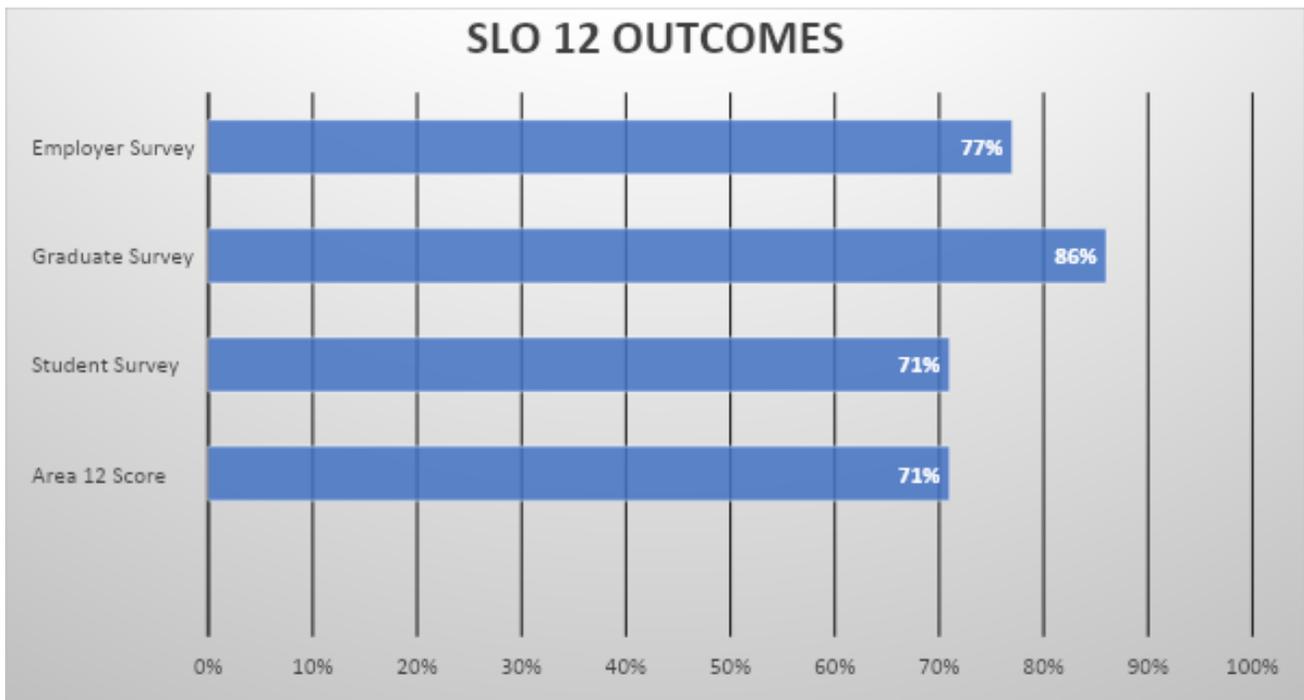
**ACTION TAKEN**

Because the employer survey shows an outcome below the performance criteria, it is desirable to determine the concerns of employers about our graduates understanding surveying techniques. Contact with individual employers is being done to gain more in-depth feedback on employer’s desired outcome. The review mechanism is in place. Employer perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 11 -- Apply basic surveying techniques for construction layout and control.

<p align="center"><b>SLO 12</b>  <b>Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.</b></p>				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 12 Score	Direct	70%	71%
Outcome Surveys	Student Survey	Indirect	70%	71%
	Graduate Survey	Indirect	70%	86%
	Employer Survey	Indirect	70%	77%



**SUMMARY**

The performance criteria were exceeded or met in all areas. It is particularly noteworthy that student performance met the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

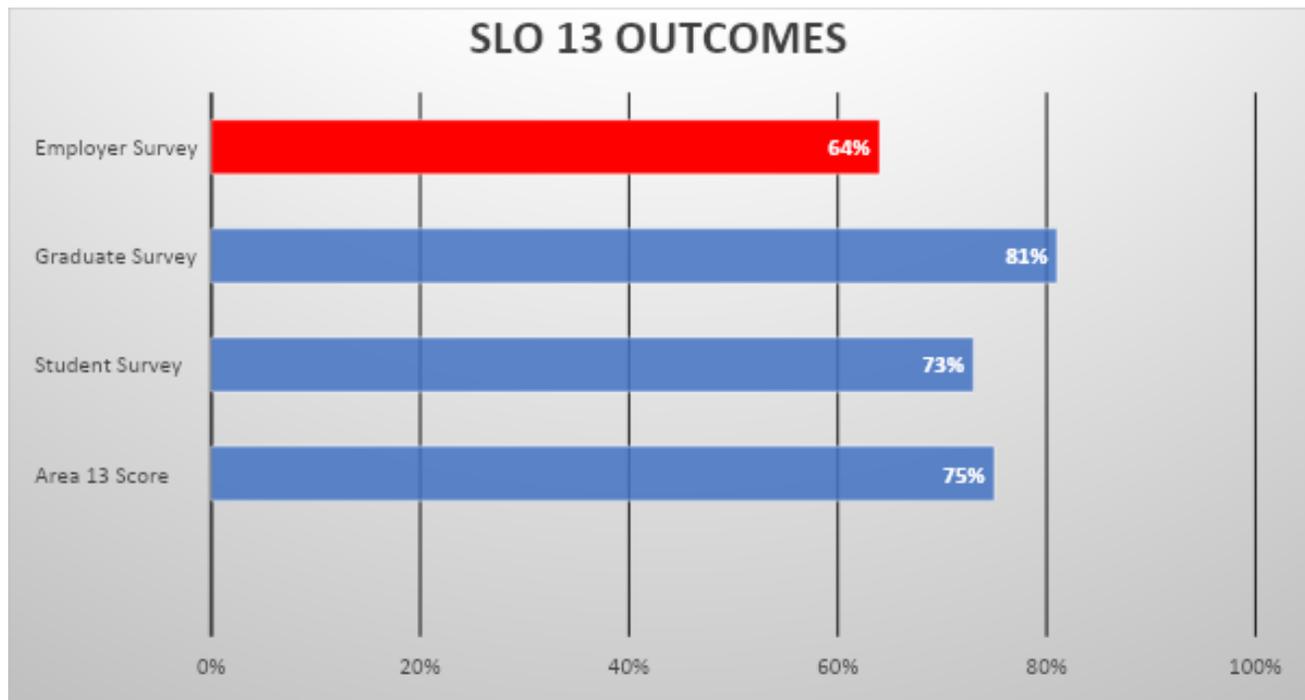
**ACTION TAKEN**

No action required.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 12 -- Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.

SLO 13 Understand construction risk management.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 13 Score	Direct	70%	75%
Outcome Surveys	Student Survey	Indirect	70%	73%
	Graduate Survey	Indirect	70%	81%
	Employer Survey	Indirect	70%	64%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the employer survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

**ACTION TAKEN**

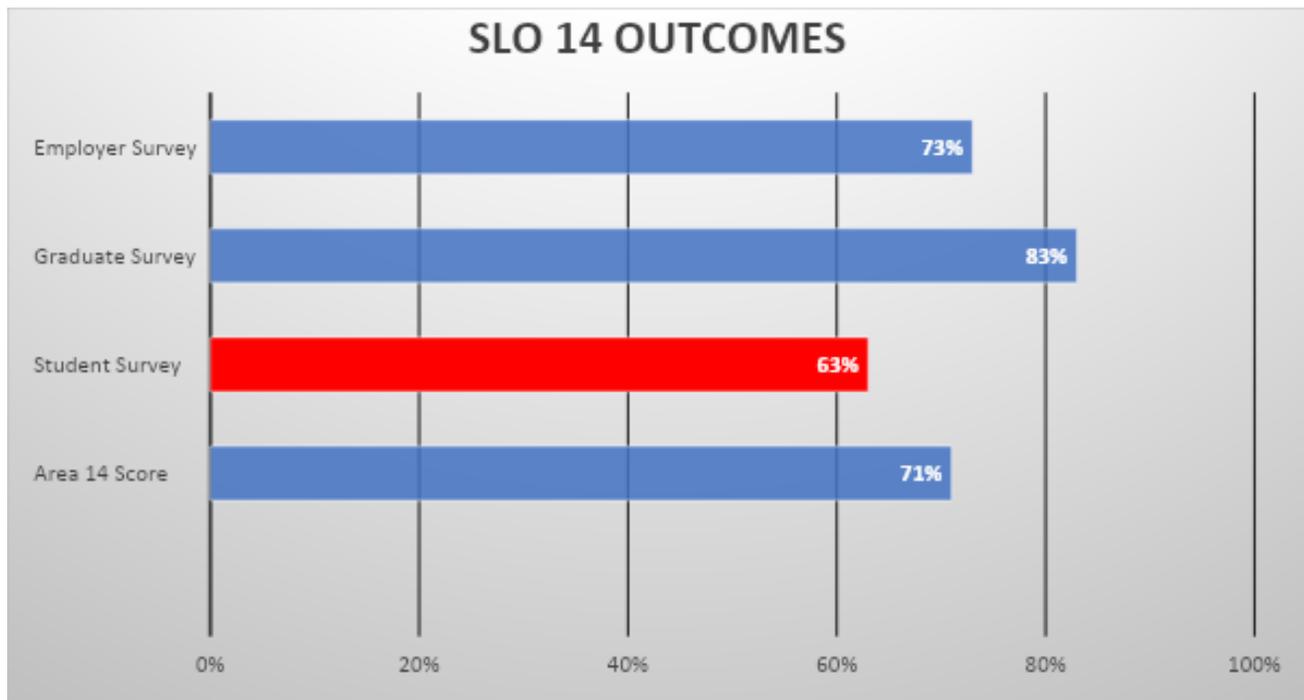
Because the employer survey shows an outcome below the performance criteria, it is desirable to determine the concerns of employers about our graduates' understanding of construction risk management. Contact with individual employers is being done to gain more in-depth feedback on employer's desired outcome. The review mechanism is in place. Employer perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 13 -- Understand construction risk management.

**SLO 14**  
**Understand construction accounting and cost control.**

Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 14 Score	Direct	70%	71%
Outcome Surveys	Student Survey	Indirect	70%	63%
	Graduate Survey	Indirect	70%	83%
	Employer Survey	Indirect	70%	73%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

**ACTION TAKEN**

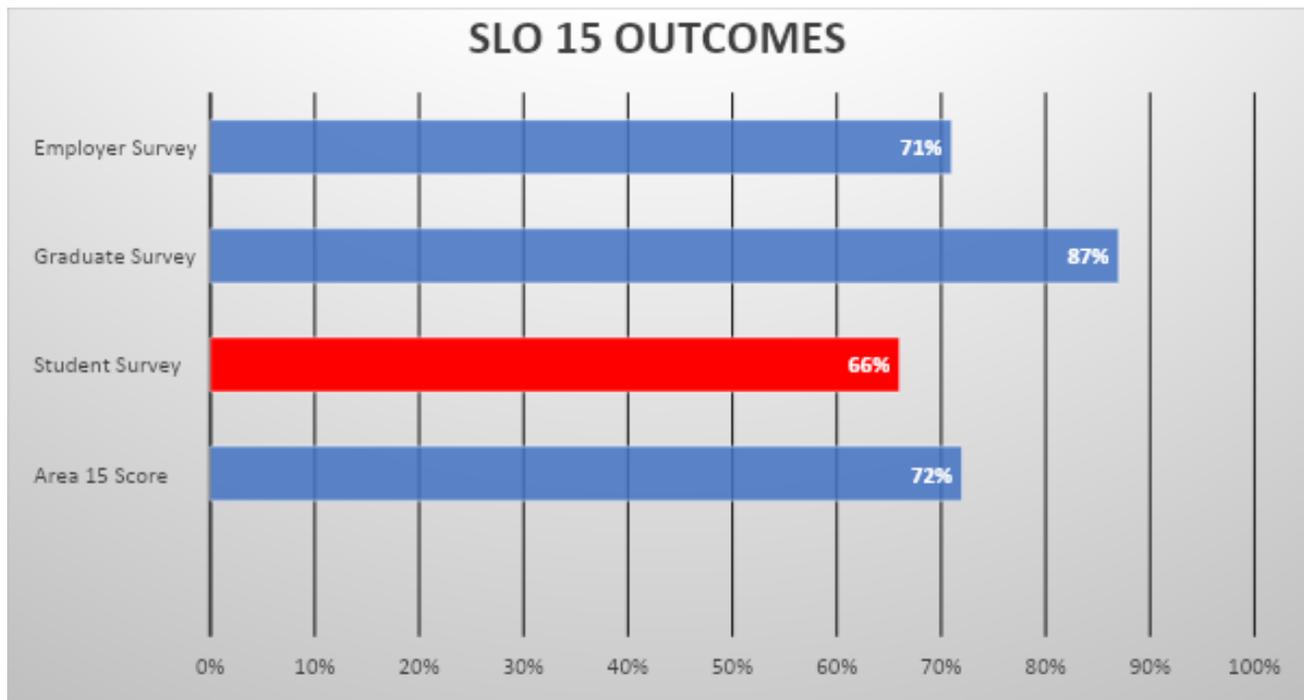
It would be desirable to improve the perception of students concerning their understanding of construction accounting and cost control topics. In future surveys, the wording of the question will include examples of what topics are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 14 -- Understand construction accounting and cost control.

**SLO 15**  
**Understand construction quality assurance and control.**

Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 15 Score	Direct	70%	72%
Outcome Surveys	Student Survey	Indirect	70%	66%
	Graduate Survey	Indirect	70%	87%
	Employer Survey	Indirect	70%	71%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

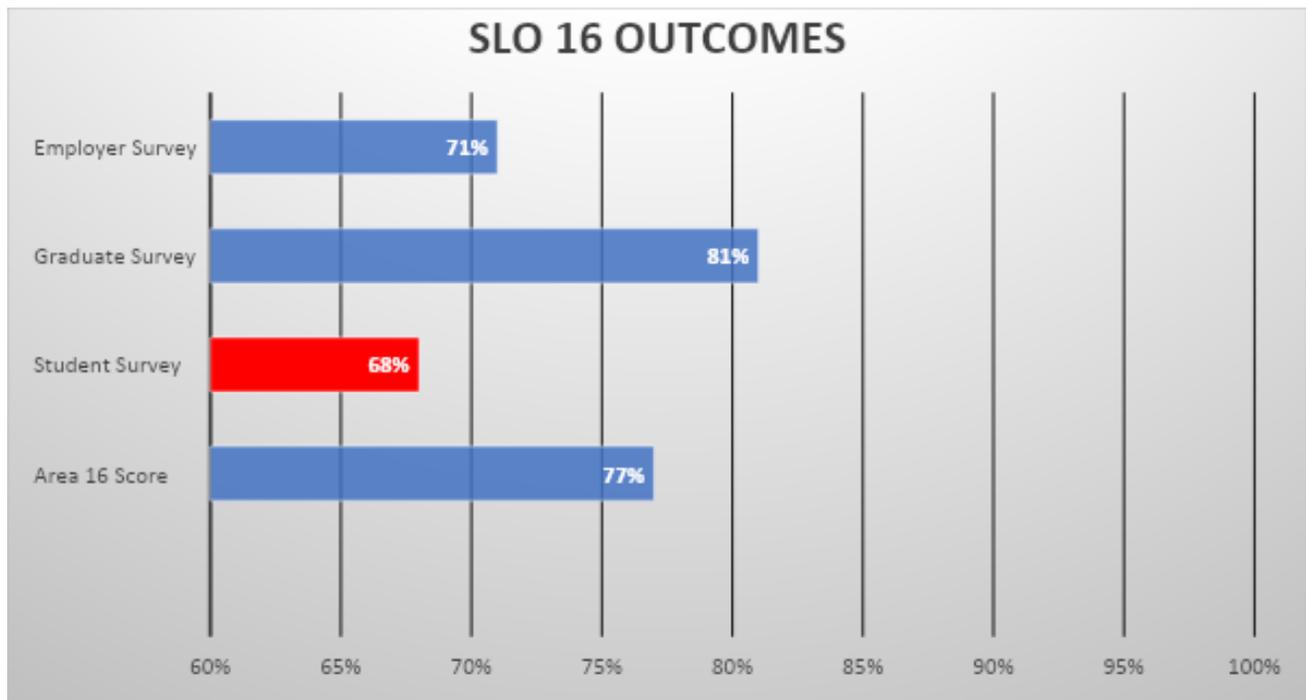
**ACTION TAKEN**

It would be desirable to improve the perception of students concerning their understanding of quality assurance and control topics in future surveys, the wording of the question will include examples of what topics are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 15 -- Understand construction quality assurance and control.

SLO 16 Understand construction project control processes.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 16 Score	Direct	70%	77%
Outcome Surveys	Student Survey	Indirect	70%	68%
	Graduate Survey	Indirect	70%	81%
	Employer Survey	Indirect	70%	71%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the student survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

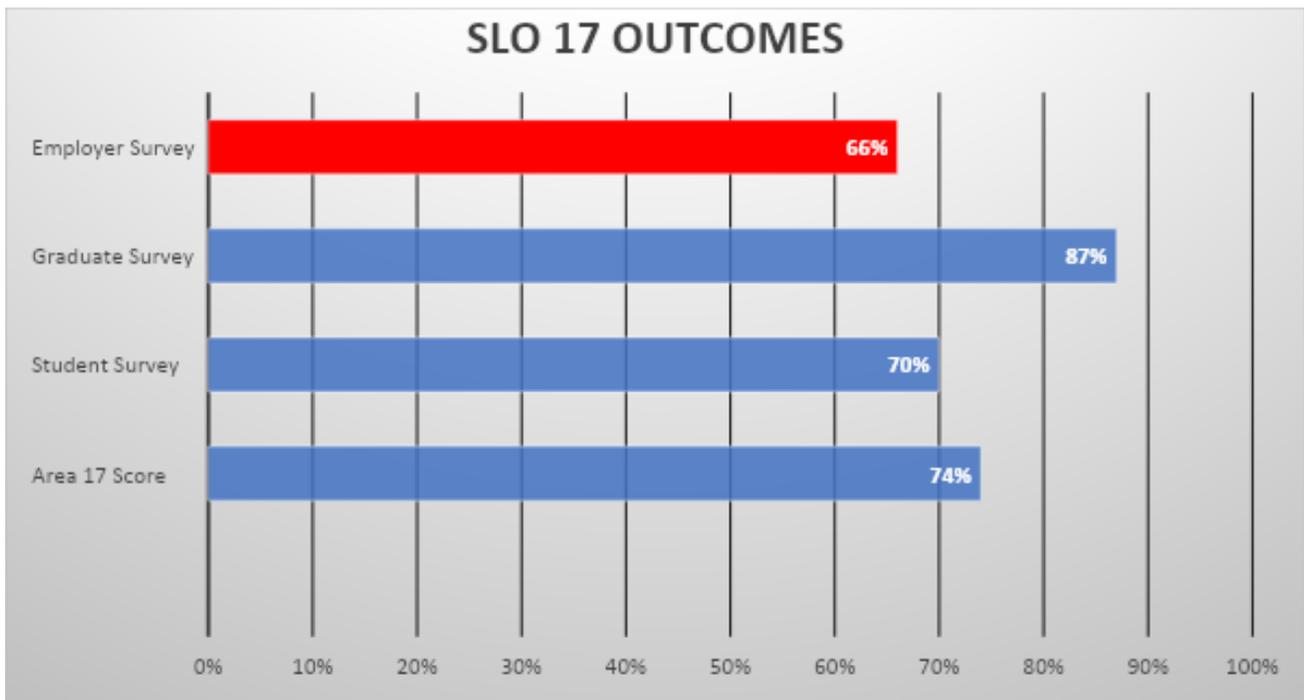
**ACTION TAKEN**

It would be desirable to improve the perception of students concerning their understanding of construction project control processes. In future surveys, the wording of the question will include examples of what processes are covered under the question. The review mechanism is in place. Student perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 16 -- Understand construction project control processes.

<p style="text-align: center;"><b>SLO 17</b>  <b>Understand the legal implications of contract, common, and regulatory law to manage a construction project.</b></p>				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 17 Score	Direct	70%	74%
Outcome Surveys	Student Survey	Indirect	70%	70%
	Graduate Survey	Indirect	70%	87%
	Employer Survey	Indirect	70%	66%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except the employer survey. It is particularly noteworthy that student performance exceeded the criteria for the Associate Constructor Exam. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

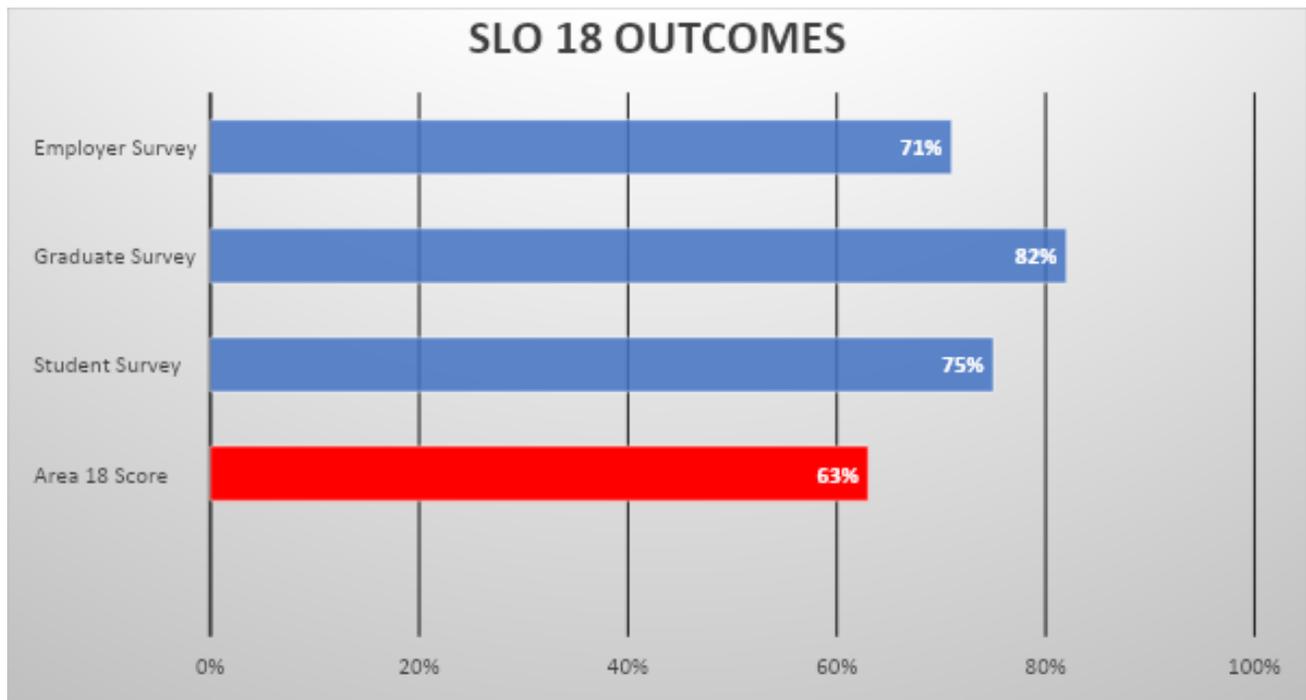
**ACTION TAKEN**

Because the employer survey shows an outcome below the performance criteria, it is desirable to determine the concerns of employers about our graduates' understanding of legal topics. Contact with individual employers is being done to gain more in-depth feedback on employer's desired outcome. The review mechanism is in place. Employer perception will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 17 -- Understand the legal implications of contract, common, and regulatory law to manage a construction project.

SLO 18 Understand the basic principles of sustainable construction.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 18 Score	Direct	70%	63%
Outcome Surveys	Student Survey	Indirect	70%	75%
	Graduate Survey	Indirect	70%	82%
	Employer Survey	Indirect	70%	71%



**SUMMARY**

The performance criteria were exceeded or met in all areas, except for the AC Exam. Although for the current assessment cycle the AC Exam outcome has averaged under the desired performance criteria, scores from recent test dates indicate results meeting the performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

**ACTION TAKEN**

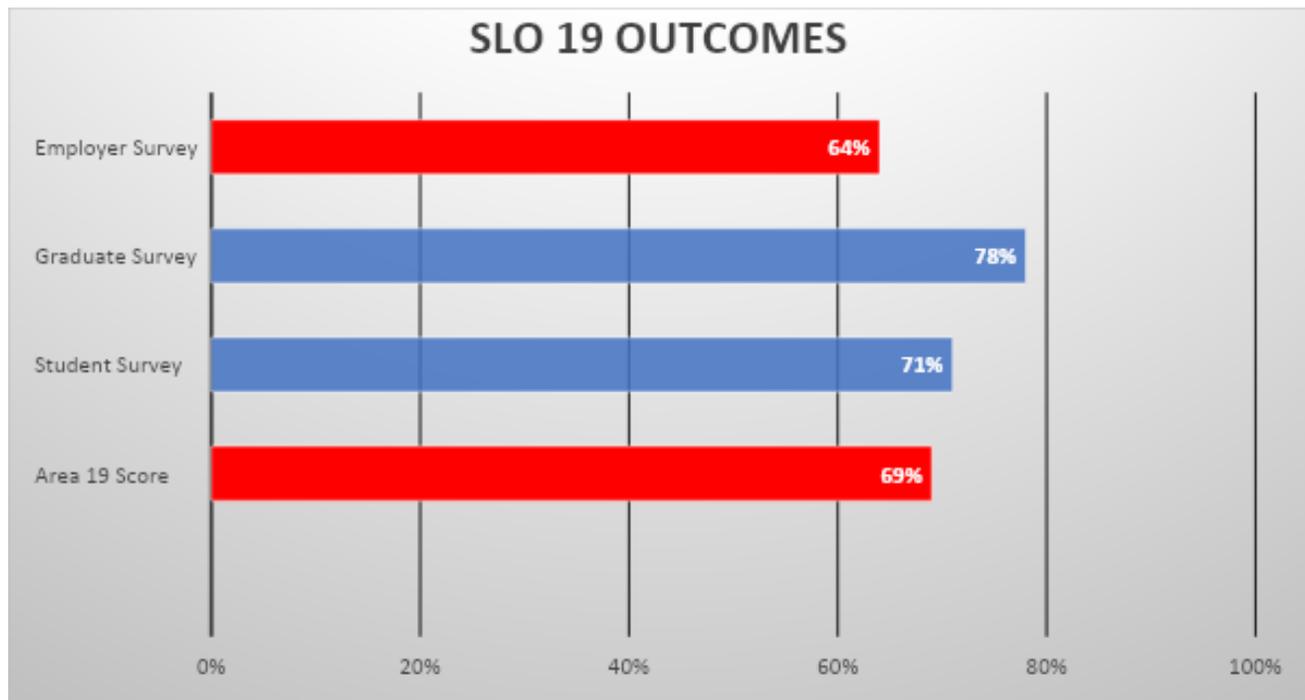
It would be desirable to improve the student scores in Area 18 of the AC Exam. For the current assessment cycle, the AC Exam outcome has averaged under the desired performance criteria. A closer look at individual test date data shows an upward trend in scoring for Area 18. Thus, recent test dates indicate results meeting the performance criteria. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 18 -- Understand the basic principles of sustainable construction.

**SLO 19**  
**Understand the basic principles of structural behavior.**

Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 19 Score	Direct	70%	69%
Outcome Surveys	Student Survey	Indirect	70%	71%
	Graduate Survey	Indirect	70%	78%
	Employer Survey	Indirect	70%	64%



**SUMMARY**

The performance criteria were exceeded in two areas – the student survey and the graduate survey. Both student performance on the Associate Constructor Exam and results from the employer survey were slightly below the performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

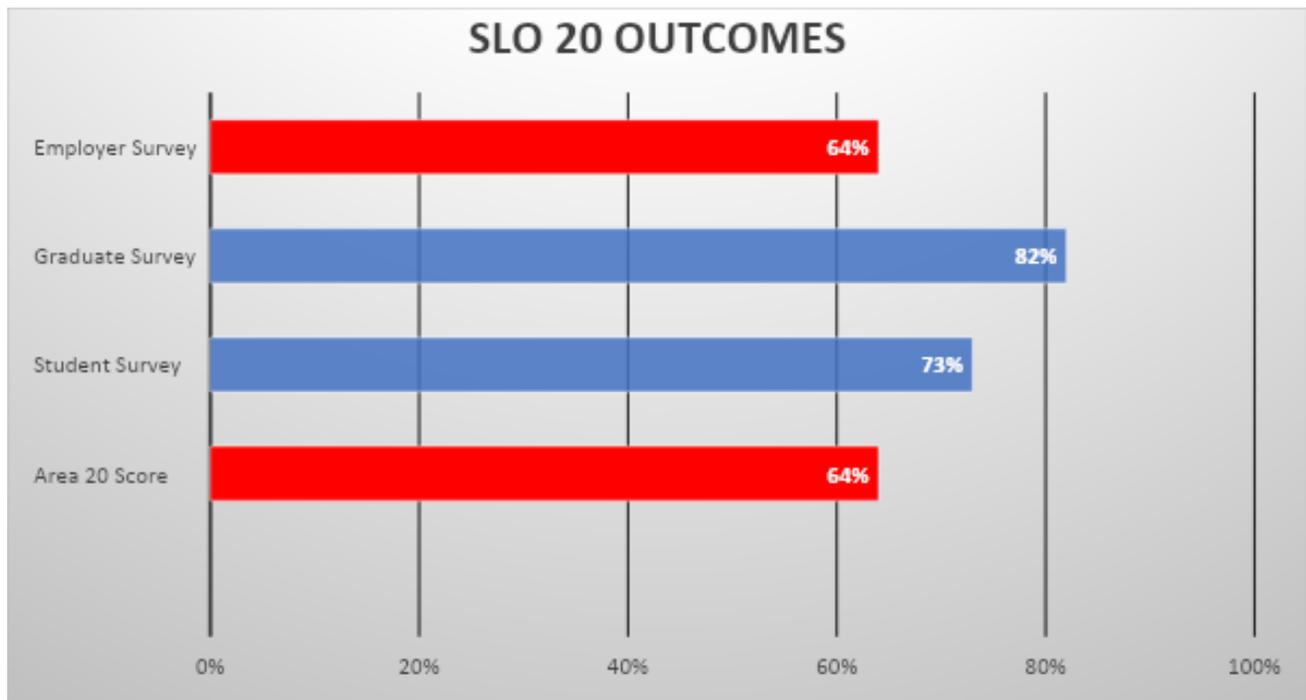
**ACTION TAKEN**

It would be desirable to improve the student scores in Area 19 of the AC Exam. For the current assessment cycle, the AC Exam outcome has averaged under the desired performance criteria. A closer look at individual test date data shows an upward trend in scoring for Area 19. Thus, recent test dates indicate results meeting the performance criteria. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 19 -- Understand the basic principles of structural behavior.

SLO 20 Understand the basic principles of mechanical, electrical, and piping systems.				
Assessment Tools	Performance Indicator	Type of Assessment	Performance Criteria	Outcomes
Course Learning Outcomes (CLO's)				
AC Exam	Area 20 Score	Direct	70%	64%
Outcome Surveys	Student Survey	Indirect	70%	73%
	Graduate Survey	Indirect	70%	82%
	Employer Survey	Indirect	70%	64%



**SUMMARY**

The performance criteria were exceeded in two areas – the student survey and the graduate survey. Both student performance on the Associate Constructor Exam and results from the employer survey were slightly below the performance criteria. The AC Exam is used as a direct assessment, while surveys of students, graduates, and employers are used as indirect indicators of performance.

**ACTION TAKEN**

It would be desirable to improve both the student scores in Area 20 of the AC Exam and the perception of employers concerning the understanding of MEP systems by graduates. The department desires to use the AC Exam to directly assess the topical content, so CNMG 2314 Mechanical, Electrical, and Plumbing (MEP) Systems will be reviewed to verify that the topics are covered in the class. The review mechanism is in place. Student performance on the appropriate section of the AC exam will be monitored. No additional action will be taken at this time.

**CONCLUSIONS**

The assessment data validates the postulate that students graduating from the UALR Construction Management program meet SLO 20 -- Understand the basic principles of mechanical, electrical and piping systems.