Assessing SLO #9: Intent, Issues, and Approaches

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American Council for Construction Education
Guidance Committee Workshop
Tucson, Arizona, February 22, 2018
Assessing SLO #9
Agenda

- SLO #9 Standards
- Background and intent
- Issues
- Approaches
- Example
Assessing SLO #9 Standards

Student Learning Outcome #9
Upon graduation from an accredited ACCE Bachelor Degree program, graduates shall be able to:

9. Apply construction management skills as a member of a multidisciplinary team.

ACCE Document 103 (OBS Version Revised 09/15/2017), Section 3.1.5.1, pages 9-10 (emphasis added)
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Assessment

*Evaluate each Student Learning Outcome by a **minimum of two assessment methods**, **at least one of which must be direct**, and provide a table identifying the specific assessment methods used for each Student Learning Outcome. Note: **If student teams or group projects are used for assessment, there must also be a process in this team/group environment to assess individual student learning.**
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Background & Intent

Initial 31 SLOs

#3 - Apply communication skills to function effectively in a diverse team
(September, 2012)

Commentary on the ACCE Student Learning Outcomes, prepared by the SLO Task Force, June 2013, p. 6
Old standards

*The Constructor must have an understanding of the contribution of the design disciplines' processes. The Constructor must be able to communicate with the design professionals, and should be capable of participating during the planning phase of design-build projects.*

ACCE Document 103 (revised 7/2006), Section 3.3.2.4, p. 12
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Background & Intent

Example course learning outcomes a program may use for this topic:

*Graduate shall be able to:*

- Work effectively in diverse teams including designers, owners, government agencies, and other key members of a project team.
- Demonstrate the ability to a) effectively plan, organize, schedule, execute, and lead construction management-related projects in a project team environment and b) assess team, team members, and project performance.
- Engage in collaborative problem-solving and decision-making processes, while maintaining emphasis on issues impacted by ethics, diversity, and globalization.
- Use team building and high-performance management behaviors to lead a team task that results in effective team performance.
- Productively engage and resolve team conflict.

Commentary on the ACCE Student Learning Outcomes, prepared by the SLO Task Force, June 2013, p. 20
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Background & Intent

A multidisciplinary team will have people from different disciplines working together to address different aspects of a project. In my opinion construction is a discipline and design, engineering, and management are other disciplines that traditionally interact with construction discipline during the design and construction of a project. In addition, stakeholders such as owners, government agencies, financiers, lawyers, and users are also involved in a project team.

Dr. Abdol Chini, Standards Committee Chair
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Issues

- **Multidisciplinary**
  - What is a “discipline”
  - Versus different roles

- **Individual assessment**
  - Not just team as a whole
  - How to assess
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Approaches & example

The following presents a way, not the way...
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Approaches

Assess during internships rejected

- Not all students have a “multidisciplinary” experience
- Expected low return rate from employers
- Variation in employer evaluation
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Approaches

Assess in interdisciplinary classes rejected
▶ All offered as technical electives
▶ Not all students enroll
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Approaches

Assess in team assignments *rejected*
- Unequal distribution of designers
- Difficulty in role playing
- Care factor of volunteers
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What we wanted:
- Assess entire standard
- Effective
- Replicable
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What we did:
- Used Value-Engineering (VE) assignment
- Embedded in required Construction Estimating course
- IAB member & design faculty participation
- Evaluated in team presentation/meeting
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Assignment scenario:
- Hangar project from several years ago
- All documents provided
- IAB & faculty assigned disciplinary roles
- Evaluated by CM faculty member
- Modified AACU assessment rubric
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What the students did:
- Formed teams
- Prepared written VE proposal
- Presented to rest of team
- Applied CM skills when changes & challenges presented
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What happened:

- Students given healthy dose of realism
- Difficulty with VE assignment
- Too many other participants
- Revising for next year
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Thank you!
Questions?

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