Region IV held its mid-year meeting at the 18th Annual Student Management Competition Thursday October 28th, 2010 at the Lied Arbor Day Lodge in Nebraska City, NE. Region IV Director Richard Bruce called the meeting to order at 3:00 pm. Associate Director Richard Gebken took these minutes.

Members present:

Eric Asa, NDSU	Ray Buyle, KSU	Joe Kupersmith, UCM	Leah Roue, MNSU
Dennis Audo, PSU	Steven Christianson, SDSU	Kenard Larson, UNK	M.D. Salim, UNI
Nate Barry, UNK	Larry Cormicle, ISU	Tom Logan, KSU	Scott Seltveit, MNState
Chuck Berryman, UNL	Jim Goddard, KSU	George Morcous, UNL	Dianne Slattery, MSU
Jad Breiner, NDSU	Kevin Grosskopf, UNL	Keith Pedersen, UNL	Kerry Slattery, MSU
Richard Bruce, MSU	David Joswick, MSU	Jerry Penland, UCM	

Quorum results: Quorum achieved with 11 out of the 15 Region IV schools represented.

Reports (Numbers correspond with Original Agenda)

1. *Faculty Forum Reports* – David Joswick, Richard Gebken, and Jerry Penland gave reports for the hands-on labs, BIM, and estimating/scheduling/project control breakout sessions (see detailed reports at the end of these minutes).
2. *Annual Conference* – Richard Bruce gave a report on the 2010 International conference in Boston.
3. *Mid-year Meeting* - Richard Bruce gave a report of highlights from the 2010 midyear meeting in San Antonio, TX. Region IV will oversee Information Technology Committee. Bruce reported that Bryan Bowers from SEMO agreed to chair this committee. He stated that Brian will work to provide a charge and will hold the first meeting at the International Conference this coming April. Chuck Berryman suggested that the Course Builder be incorporated into the initiatives of the committee.
4. *Career Fair* – Industry Coordinator Keith Pedersen reviewed this year's Career Fair participants. There were seven booths this year. Bruce and the Career Fair subcommittee hope to increase participation at next year's even to ten or more companies. The committee, which was formed in 2009, includes Dennis Audo, Keith Pedersen, Ray Buyle, Stu Bernstein, and Paul Prellwitz (Lusardi).
3. *Student Competition* – Associate Director/Competition Coordinator Richard Gebken reported on the student competition. Everyone seemed excited about the new format. Chuck Berryman told group about the new video cameras and how the presentations and solutions will be made available on an ftp site for one month after the competition so those interested can access their team or all team's materials.

Business Issues

1. There were no new nominations for Region IV ASC Awards. The group voted in favor of forwarding Stu Bernstein's 2009 material for consideration of the 2010 Outstanding Educator award.
2. Teddi Weigland from the Durham School of Architectural Engineering and Construction provided an update on the next *ASC International Annual Meeting* this April 6-9, 2011 in Omaha, NE.
3. Richard Bruce reminded everyone of the 2011 contract dates which were locked in last year. Those dates are October 26-29, 2011. The group voted in favor of reserving the Lied Lodge for October 24-27th, 2012.
4. The group discussed increasing the team enrollments in two categories (residential and design-build). The group also discussed methods to help teams recruit members for the design-build division. After discussion, the group made the following decisions:

Resolution #1
For one year, after the initial competition registration period, the two lowest enrollment divisions will reopen registration for schools to enter a second team with a maximum of two teams per division for any school on a first-come first-served basis.
Motion by Chuck Berryman
Second by Larry Cormicle

Unanimously passed (11 schools)

Resolution #2
For one year, allow up to two full-time non-construction students from a different school/institution to participate on a design-build team.

Motion by Chuck Berryman
Second by Dianne Slattery

10 votes for
0 votes against
1 abstain

Adjournment

Hands-on Lab Breakout Session Notes
(provided by David Joswick, MSU)

The hands-on building forum was an open discussion that focused on what types of activities were being used in construction course labs and issues associated with the lab activities.

General issues with lab courses:
- Size of the student projects: a wide range of projects were discussed (small models to mock-ups of 8' x 8'). The preference was for the larger projects vs models.
- Size of the student groups: most student labs ranged from 4 to 6 students, but the preference was for smaller groups, four or less.
- Student safety: there was a high concern when labs utilized cutting and pneumatic tools or required elevated work.

Types of activities being performed in lab courses:
- Materials & methods courses
  - Mixing and placing concrete
  - Masonry
  - Light wood and metal framing
  - Drywall
  - Ceiling grid
- Civil/Structures/Strength of Materials courses
  - Mixing and placing concrete

- o   Loading simple supported beams
- o   Models
- Electrical courses
  - o   Wiring of circuits
- Mechanical courses
  - o   HVAC simulator
  - o   Field trips
- Survey courses
  - o   Traditional outdoor surveying activities
- Soils courses
  - o   Performing soils tests
  - o   Viewing video
  - o   Visiting a geotechnical lab

Alternates to providing in class lab experiences
- Habitat for Humanity builds at some schools were being used as a replacement of in class lab activities.

Questions raised on Lab classes:
1. Are small scaled models a useful and practical replacement for full sized projects or mock-ups? There was a general discussion without consensus. Schools doing a higher level of physical labs and having available space preferred the larger projects.
2. Safety with cutting tools such as table saws, miter box saws, pneumatic nail guns, etc were discussed: safety practices to avoid the more dangerous processes, i.e. panel saw vs. table saw or hammer vs. nail gun. (SawStop system reviewed).
3. Space and cost demands. Varied per program and available space. Most material was either donated or covered by lab fee. Generally student PPE was the responsibility of the student.
4. Disposal of lab projects and materials: practical use for projects preferred vs. disposal, but not always possible from a practicality and cost standpoint.

BIM Breakout Session Notes
(provided by Richard Gebken, MSU)

Kansas State

- BIM elective course using Autodesk Revit
- Course open to both CM and AE students
- Course focused on MEP approach to building information modeling
- School received donation from corporate partner for object library
- AutoCAD recently made a required course for both CM and AE students
- Anticipate seeing more integration of BIM across the curriculum in the near future

Missouri State University

- BIM elective course using Autodesk Revit
- Course focuses on architectural perspective (taking 2D plans and turning them into 3D models)
- BIM (Revit and Navisworks) used in project administration course as well – focus of material on using BIM models for MEP coordination and 4D scheduling
- AGTEK being used as a demonstration software in heavy highway course
- Encourage students and faculty to register for FREE software from HTTP://STUDENTS.AUTODESK.COM

Southern Illinois University - Edwardsville

- Used VICO software in the past with a brief introduction to Revit also
- Software/course includes estimating and scheduling integration with BIM

North Dakota State University

- Revit just now being integrated in the curriculum
- Software licensing is slowing process
- Started doing some on-screen take-off

University of Northern Iowa

- Construction graphics course using AutoCAD in both 2D and 3D
- Also using Projectwise (from Bentley systems)
- Hired faculty to teach BIM in Methods Improvement and Quality Control Course
  - Required for all CM students
  - Spend about 4-5 weeks on BIM in this course
  - Course also includes LEED material as well

General Notes

- Look for software companies who will donate an academic license if an industry partner purchases a license for their company use
- Faculty commented that they do not see much use of BIM in construction education for either structures work or Heavy Highway construction

Estimating/Scheduling/Project Control Breakout Session Notes
(provided by Jerry Penland, UCM)

Keith Pedersen – University of Nebraska Lincoln - kpedersen1@unl.edu
Chuck Berryman - University of Nebraska Lincoln - cberryman1@unl.edu
Eric Bartholomew – Kansas State University - ebar@k-state.edu
Nate Barry- University of Nebraska Kearney - barryna@unk.edu
Dennis Audo – Pittsburg State University - daudo@pittstate.edu
Eric Asa – North Dakota State University - Eric.Asa@ndsu.edu
Jerry Penland – University of Central Missouri – penland@ucmo.edu

Estimating

1. Three schools offer one estimating course and three offer two estimating courses
2. Most of schools use spreadsheets for estimating early in the course
3. Use of commercial software programs
PSU - On Center – Timberline – MC^2
UNK – On Center
UCM – WinEst
Dennis Audo uses Isqft.com to find current projects that are bidding to use
UNL – has integrated Revit into many courses and uses it in the estimate process
4. Timberline has been problematic in Windows 7.0 for a few schools
5. Most agreed that students enter the estimating course with minimal plan reading skills which slows the pace of the course.
6. Most schools require the students to estimate an entire project with a bid day simulation.
7. Commercial projects are the focus of four of the estimating courses with little or no heavy estimating coverage. One school integrates some heavy concepts and one school has more significant heavy content depending on the instructor and the major.
8. UCM has a heavy course that covers cost estimating on a conceptual level.

Scheduling

1. Use of commercial software programs
Three schools are using Primavera 6.2
Three schools are using SureTrak
UCM is just beginning to use Primavera Contractor. Several others expressed an interest in this software.
2. All schools are using a specific project each semester to develop the schedule. KSU uses a more basic project (50 activities) early in the semester for the students to work on individually. A team scheduling project on a more complex project (100 – 150 activities) is used at the end of the semester.

3. Estimating is a prerequisite to scheduling at two of the six schools. Those that do not have estimating as a prerequisite agreed that students were still struggling with plan reading, determining quantities and productivity rates for developing durations, and determining means and methods .

4. UNL offers most courses only once a year. Estimating and scheduling are taught in sequence. If a student gets out of sequence, that will typically delay graduation for a year. Chuck did not feel that they were losing students with this approach.

5. UNL teaches estimating and scheduling in sequence using the same contract documents for both courses. They cover more aspects of scheduling than many of the other schools, but the class meets for 1 ½ hours three days per week.

6. KSU has a $150 lab fee for estimating for the printing of plans and specifications to be used in estimating and scheduling. The students then own and keep the drawings. UNL is approximately $80 with the same approach. Most other schools had lab fees in the $15 range and used small format drawings.

Project Control

1. The first struggle in this category was to define the course name and content for this material for the various schools.

UNL – Budget and Cost Control

PSU – this material is integrated into two different courses - Project Management and Contracts

UCM – has a course with this title covering advanced scheduling, estimating, and cost control topics

UNK – similar to UCM

KSU – this material is covered in scheduling and the capstone course.

2. Most schools were limited to a business accounting course rather than an accounting course specific to construction. NDSU does have a Construction Finance course.

General Notes

UNL requires 121 credit hours for graduation. This includes four technical electives. They have reduced their credit hours by using the ACCE matrix to combine course content and eliminate material repetition in multiple courses.