PerspECtive

Theme: Doing More With Less

Closing the Knowledge Gap
Opening Remarks

Steve Cabano
ECC Past Chairman’s Council
Pathfinder, LLC
How to use WiFi connected ARS system

Closing the Knowledge Gap

Scroll to bottom
How to use WiFi connected ARS system

Have you been actively involved with academia within the past 3 years?

Please select an answer:
- As a Guest Speaker
- Adjunct Professor/Professor
- Advisory Board Member
- Currently work in Academia
- No...but attend lots of college sporting events

Finish ➤

Exit Poll

Edit My Responses
History of ECC’s Involvement

John W. Dalton, Sr.
ECC Past Chairman’s Council
Zachry Group
Audience Question

- Have you been actively involved with academia within the past 10 years?
  - As a Guest Speaker
  - Adjunct Professor/Professor
  - Advisory Board Member
  - Currently work in Academia
  - No…but attend lots of college sporting events
Have you been actively involved with academia within the past 3 years?
In 2005, a group of ECC Board Members believed there was opportunity to better link industry and academia.

However, there were some perceived gaps that needed to be validated.

In 2007, the ECC funded a study/survey with Texas A&M University and Dr. J. Vanegas.
The Drivers…

- The capital projects industry needs:
  - People that can be more effective and efficient in a dynamic changing global work environment (the **talent**)
  - People with a different set of skills and abilities that are more compatible to the current needs of the industry (the **competency**)
    - Technical, interpersonal, communication, technological, leadership, creativity, business acumen, etc.
The Questions…

- In the current educational context:
  - There are perceived gaps between the content of curricula versus industry needs…
  - Belief that current pedagogical approaches and learning environments are not keeping up with the dynamic changing environment of professional practice
  - Many educators are not taking advantage of a wealth of industry knowledge (best practices) and experience (lessons learned) in the curricula
The Results...

- Survey results validated significant gap in industry expectations and academia perceptions on
  - Curricula to industry needs
  - Adequacy of pedagogical approach
  - Use of industry knowledge and experience

- Over arching was the majority of universities did not recognize the need for change

- The survey also highlighted a number of barriers and challenges for the universities (especially at the undergraduate level)
  - Funding restrictions
  - Limitation of hours for degree completion
  - Accreditation challenges
  - Non-technical desired skills required courses from other colleges within the universities

- Over the past 10 years a core group of universities have been working with industry to “close the gap”
Audience Question #2

- Do you feel there is still a gap in skillset needs of graduates between industry and academia?
  - No gaps – graduation students are well prepared
  - Changes within academia have been limited to “close the gaps”
  - Recognize universities are working with industry to help close the gaps and make the changes necessary to support industry
  - Have no opinion – about to retire
Do you feel there is still a gap in skillset needs of graduates between industry and academia?
Great News!

A lot has been done by a number of universities across the country
- CII best practices courses
- Non-tech skills being taught
- Latest technologies being used within the courses
- New accredited degree programs being implemented

Today you will hear from a sampling of universities and what they are doing to support industry needs
Panel Members

PATHFINDER, LLC
Steve Cabano (Moderator)

ZACHRY
John Dalton (ECC History)

CONSTRUCTION INDUSTRY INSTITUTE
Cindy King

DREXEL UNIVERSITY
Christine Fiori

NORTH CAROLINA STATE UNIVERSITY
Ed Jaselskis

STEVEN'S INSTITUTE OF TECHNOLOGY
Ellyn Lester

TEXAS A&M UNIVERSITY
Jorge Vanegas

UNIVERSITY OF HOUSTON
Lingguang Song

VILLANOVA UNIVERSITY
Frank Falcone
Discussion Questions

What recent changes have you made in your course offerings to address the issues?

What has CII offered recently and how has this been received?

What are some future plans or programs in place to address the gaps?

What are some of the metrics around graduates with this additional education?
QUESTIONS

Please state your name, company affiliation and if appropriate, who you are directing your question to.
Wrap Up

What is Being Accomplished

- More integration of Practicing Professionals and Academia in Course delivery
- Attention to the Professional Skills of Project Management
- Targeting industry specific project issues rather than only technical issues
- Society attention to integrate universities into solving the problems/closing the gaps
- Extensive use of on the job training including co-op programs
- Planned 4 year adjunct curriculum to support Project Management needs
- Aggressive willingness to listen to the industry needs and implemented changes
- High degree of receptivity from industry on existing programs

We are closing the gaps, but we need your help…
Call to Action

PLEASE USE THE CONFERENCE APP TO PARTICIPATE…

– In the app, go to Schedule
– Find the Closing the Knowledge Gap session
– Scroll down under Surveys, click Academia Engagement
– Be sure to Finish the survey.

● How would you like to get engaged in Closing the Gap between Academia and Industry?
  – Guest Lecturing (Specific University or General)
  – Adjunct Professor
  – Internships
  – Mentoring
  – Research
  – Participation in ECC Academia committee
  – Other

If you have not downloaded the app, please fill out the survey on your table.
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The 49th Annual ECC Conference