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APRIL 2015

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This PACE Newsletter highlights activities and noteworthy events in the PACE program.

For more information or to submit prospective articles, contact the PACE Team at:

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AE Welcomes Dr. Aly Said to Structures

Aly M. Said is currently an associate professor in Architectural Engineering at Penn State, with a specialty in structural engineering. Aly teaches structural courses on reinforced concrete design and modeling. His research interests focus primarily on the structural elements of concrete that range from seismic design, to design of reinforced concrete, to the use, composition, and recycling of concrete materials in rehabilitation of structures in construction.

Engineering. He is a certified professional engineer in both California and Nevada, as well as an active member of multiple building code committees within The American Concrete Institute. Aly also worked on a river building expansion project in 2005 for the Hospital for Special Surgery in New York City, which received a special recognition award.

For more information on this, or simply to welcome Dr. Said to the department, please contact him at aus59@psu.edu.

Aly received his bachelor's in Civil **Engineering at Ain Shams** University in Cairo, Egypt in 1994. He went on to receive two masters degrees specializing in Structural Engineering, one in Applied Sciences at the Université de Moncton in New Brunswick, Canada in 1998 and another in **Engineering at McMaster** University in Ontario, Canada in 2000. Aly completed his education in 2004 at The **University of Western Ontario** After receiving his doctoral degree in Structural Engineering.

Before coming to Penn State in August 2014, Aly was an associate professor at The University of Nevada in Las Vegas for eight Years (2006-2014), where he Taught structural courses in Civil



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OWNER'S GUIDE TO SUCCESS FOR INTEGRATED PROJECTS

Following an intense, two year research effort focused on studying successful delivery decisions, practices, and strategies for project delivery, the Owner's Guide to Maximizing Success in Integrated Projects is being released. Developed by a joint team from Penn State's Architectural Engineering Department and the University of Colorado Boulder, this guide leverages statistical analysis from more than 200 completed projects. The results ultimately identify the ability to select and continuously develop an integrated, cohesive team as the most important consideration in success- fully delivery.

Through a latent class analysis, three critical success factors were identified that allow project delivery strategies to better enable the selection and alignment of a team:

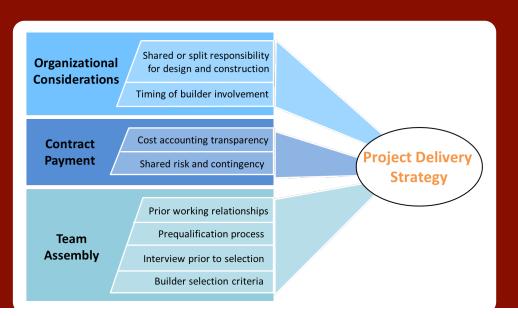
- 1. Early involvement of contractors and specialty trades,
- 2. Use of Qualifications as key criteria in the team selection process, and
- 3. Transparency in cost accounting.

The inclusion of these three success factors allows greater participation in integrated processes, from design charrettes, BIM Execution planning, and colocation during construction. In addition, the creation of cohesive teams, those which have timely communication and greater team chemistry through commitment to project goals, were enabled by integrated process. Projects that had the best performing teams, enabled through proper delivery strategy, were able to increase the rated quality and turnover experience by the owner, they reduced cost growth, on the order of 2% of the budget, for each incremental improvement of team, and the reduced schedule growth in the scale of 4.4% of the duration. If you are interested in receiving a copy of the Owner's Guide when released, please register at https://bim.psu.edu/delivery.

For more information on this or related project delivery research, please contact Dr. Robert Leicht at rmleicht@engr.psu.edu.

Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results.

-Andrew Carnegie



2015 NECA SERVICE TRIP

A team of 15 students from the Penn State National Electrical Contractors Association (NECA) Student Chapter along with Dr. Riley and Dr. Brown traveled to Roatan, Honduras to install a 3kWsolar array for a community of over 250 families. The solar array was built to supply power to the water pump for the community. The team was able to successfully install the array in 4 days and is currently planning another trip to Roatan to help another community in need.



For more information on this activity, please contact Kevin Clement at Kevn.Clement27@gmail.com.

AE CONSTRUCTION FACULTY



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Upcoming Activities

Advisory Board Meeting- June 12

AE Social and Career Fair- Sept. 21-22

PACE Roundtable- Nov. 2-3 at the Penn Stater Hotel

S:PACE Trip- Fall 2015 If you are interested in hosting the students at one of your project sites, please contact the S:PACE Vice President, Melissa Consiglio at mac5944@psu.edu

Upcoming PACE Events

Advisory Board Meeting- June 12, 2015
Representatives from PACE Member companies meet to discuss key issues facing the building industry, and establish a research agenda for the next year. This year's meeting will be hosted by James G. Davis Construction at their headquarters in Rockville, MD.

PACE Roundtable-Nov. 2-3, 2015

An open forum discussion in which key topics selected by the advisory board are discussed by students and industry practitioners. This year's Roundtable meeting will be at the Penn Stater Hotel.

WE WOULD LIKE TO THANK THE FOLLOWING COMPANIES FOR THEIR SUPPORT OF PACE

Thank you for your support of PACE's 2014-2015 activities!

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