



Life Long Learning

By John Mercer, Jr., P.E., SECB

Life long learning is a practice all engineers must subscribe to in order to stay abreast of the exploding information age. Structural

engineers in particular are burdened with the ever-changing design code criteria that emanates from the depths of new knowledge due to testing and research.

One question that has always puzzled me is, just because we know something new, do we need to change the rules we abide by in our structural design process? How far off base can our code requirements be before it is necessary to make a change? I'm sure we all have an opinion, but mostly one that is unheard unless we are a vocal participating member of one of our professional organizations.

One of the greatest technical challenges for the structural engineering community has been, and will likely continue to be the lateral load design phenomena. Wind, seismic, and hydrostatic have traditionally been the accepted lateral load criteria to be considered for design of structures. Recent past events have unfortunately introduced the concept of impulse loads from explosive blasts. Uncommon knowledge of the latter is a new opportunity for structural engineers to expand their skill set.

Beyond the technical aspects of engineering is the administration and understanding of engineering business practices. Historically, insurance companies have been the driving force for engineers, young and old, to learn about ethics and law in order to navigate the treacherous waters of contracts and construction administration. CASE/RMP committees have been busy in the preparation and distribution of productivity tools to assist RMP members with automation of the risk management of their businesses. Do you have yours?

As a member of the CASE/RMP Toolkit committee, I must say that the most practical learning materials that I have been exposed to have been prepared by practicing structural engineers. These include SEAW's *Handbook of a Rapid-Solutions Methodology for Wind Design*, CASE's *Guideline Addressing Coordination and Completeness of Structural Design Documents* and CASE/RMP's new *Guide to the Practice of Structural Engineering*.

Content developed by the three professional organizations will provide the information integrity that is necessary to assist structural engineers in staying current with building and material codes, as well as management processes for Risk Management.

This brings us to the methods of delivery available for learning. The traditional method of attending a University Continuing Education program will prevail due to its institutional nature. Professional organization and industry specific seminars will also continue to educate or attempt to expose our structural engineering community



with new information. E-Learning may soon be the vehicle of choice, as it will be globally available on a 24/7/365 basis.

I predict that, one day soon, a hosted Learning Management Platform will be accessible to all engineering firms, assisting them to manage their HR records, employee orientation history, and in-house training programs. A simple subscription system will provide engineers access to an external library of courses and information that can be taken for CEU and PDH credits necessary for technical and management advancement and licensure renewal.

A monthly subscription fee, much less than the cost of cable or satellite TV connections, will be the only obligation of each engineer to be able to have credible information at their fingertips. E-Learning Management System access by subscription will provide the structural engineer with both opportunities to take continuing education courses, as well as access to Just in Time (JIT) learning and current information review.

As a reminder, the upcoming CASE/RMP Convocation in Atlanta, November 1st and 2nd, will provide engineers with the opportunity to experience face to face dialogue and to hone their risk management skill set. See page 64 in this issue for details to register.

A final thought. The more technological we get as a profession the greater the potential is for us to distance ourselves as colleagues. We must remember that once we master the technical and administrative sides of our businesses, we also must return to the human side of the equation. Maintaining professional relationships between colleagues will become a new challenge for us. I encourage your participation in at least one of our three professional organizations to rise to this challenge. Remember, TEAMS WIN! individuals wither... ■

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