ASCE "Raise The Bar" Newsletter September 2007 Vol. 4, No. 3

The ASCE Committee on Academic Prerequisites for Professional Practice (CAP^3) has continued its efforts to raise the educational requirements for the future practice of civil engineering at the professional level (licensure). For more than a decade, ASCE has been presenting, talking, and listening to many stakeholders. As a result, we have been progressively refining our proposed program to "raise the bar" in engineering education.

We're looking at civil engineering in a whole new light

Below is a summary for some key activities:

Second Edition of the Body of Knowledge (BOK) Committee

ASCE released the first edition of the BOK in early 2004 and has now released a refined, enhanced, and updated version in DRAFT report for your review. The BOK has proven to be a productive forum in which educators and practitioners come together to proactively determine how tomorrow's civil engineers should be prepared. CAP^3 is interested in your comments on this draft Body of Knowledge.

You can download your copy of the draft report from www.asce.org/raisethebar. Your thoughts and comments should be sent to CAP^3 at comments@bok.asce.org. To consider your comments, we must receive your comments on or before October 1, 2007. The *Civil Engineering Body of Knowledge for the 21st Century* (Second Edition) is scheduled for release during Engineer's Week in February 2008.

Accreditation Committee

The accreditation committee has prepared a new version of the civil engineering program criteria along with supporting commentary and advanced level general criteria. The basic level civil engineering program was unanimously passed by on second reading by Engineering Accreditation Commission on July 21, 2007. The new criteria will be effective for evaluations beginning in 2008-2009. The new criteria and supporting commentary are listed at www.asce.org/raisethebar.

Educational Fulfillment of the BOK

Another new committee is being formed before the end of 2007 to focus upon education fulfillment of the BOK. Ken Fridley, Chair, and Jeff Evans, Vice Chair will be leading the committee. The committee will be charged with (1) fostering the creation of a learning community of scholars interested in engineering educational reform, (2) reviewing the work products of the Body of Knowledge Committee and providing

feedback, and (3) documenting how programs can incorporate the Body of Knowledge into their curriculum. There is funding to support 10 participating schools and up to 20 more correspondents. A call for nominations has been made with applications due by November 1st. Applications are available from—

http://www.asce.org/files/doc/professional/BOKEdFC-Application-083107.doc.

Experience Fulfilment of the BOK

A new committee, focused upon pre-licensure experience, was formed in early 2007. Monte Phillips, Chair, and Forrest Holly, Vice Chair, led the committee through their committee charge. The committee completed its initial charge in July and summarized their findings in a final report. The report is available at www.asce.org/raisethebar. It is expected that a new BOK Experiential Fulfillment Committee will be started in the spring of 2008 to more fully explore appropriate attainment of the BOK via experience. The new committee will be charged with (1) recasting the ASCE BOK experiential guidelines into a form applicable and acceptable to engineers of all disciplines, (2) developing a matrix for attaining the elements of the generic experiential outcomes in an engineer intern's pre-licensure career, and (3) developing a stand-alone set of experience guidelines to be followed by a civil engineer intern during his or her pre-licensure career.

Licensure Committee

At its Annual Business Meeting in August 2007, the National Council of Examiner for Engineering and Surveying (NCEES) reaffirmed its 2006 decision to modify the NCEES Model Law. The specific language that was written into the Model Law is --

Licensure by Examination (Effective January 1, 2015) The following individuals shall be admitted to an 8-hour written examination in the principles and practice of engineering:

- (1) An engineer intern with a bachelor's degree, with an additional 30 credits of acceptable upper-level undergraduate or graduate-level coursework from approved course providers, and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (2) An engineer intern with a master's degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent, and with a specific record of an additional 3 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (3) An engineer intern with a doctorate in engineering acceptable to the board and with a specific record of an additional 2 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
- (4) An individual with a doctorate in engineering acceptable to the board and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.

To understand the Model Law, it is important to understand that an engineer intern is defined as a graduate of an engineering program of four years or more accredited by EAC/ABET, or the equivalent, and have passed an eight-hour written examination in the fundamentals of engineering.

Questions, Comments, or Suggestions? Please contact Jeff Russell (russell@engr.wisc.edu) or Tom Lenox (tlenox@asce.org).