

**ASCE "Raise The Bar" Newsletter
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The ASCE Committee on Academic Prerequisites for Professional Practice (CAP³) 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. The National Society of Professional Engineers (NSPE), the National Council of Examiners for Engineering & Surveying (NCEES), and the National Academy of Engineering (NAE) have joined in this advocacy.



Below is a summary for some key committees.

Curricula Committee

This committee reviewed the first edition of the Body of Knowledge (BOK) and included 25 civil engineering programs across the US. The committee has completed its charge -- and their report can be found on www.asce.org/raisethebar.

Second Edition of the Body of Knowledge (BOK) Committee

Following its formation in the fourth quarter of 2005, the Second Edition of BOK Committee (BOK2) held its first face-to-face meeting in January 2006 in Tampa, Florida. Committee members carefully reviewed and discussed the First Edition of the Body of Knowledge (available at www.asce.org/raisethebar) and *The Engineer of 2020* reports from the National Academy of Engineering (NAE).

Committee members organized 14 subcommittees to review existing outcomes (i.e., technical breadth; communication; specialization; leadership; public policy; and multi-, inter-, and cross-disciplinary teams) in the BOK as well as some new topics (i.e., sustainability; globalization; emerging technologies; history/heritage; attitudes; discover mode; and risk and uncertainty).

Second and third face-to-face meetings were held in May 2006 and August 2006 in Reston, Virginia. Throughout 2006, the committee participated in weekly conference calls and email messaging to work through 28 different educational outcomes that were identified for possible inclusion in the Second Edition of the Civil Engineering BOK. By comparison, the First Edition of the Civil Engineering BOK includes 15

separate outcomes. The committee decided to divide some of the original 15 outcomes in an attempt to more explicitly address some topics that were obscured by the combination of some outcomes within the First Edition of the BOK. In addition, a subcommittee has been formed to study how humanities and social sciences should be incorporated into the BOK as well as what role the Bloom's affective domain may have in future editions of the BOK.

Key differences between the first and second editions of the BOK include: (1) an explicit connection to the aspirational vision for civil engineering (vision report is available at www.asce.org/raisethebar); (2) an increase in the number of outcomes; and (3) a more highly structured approach to the level of achievement expected for each of the outcomes, at various stages of a civil engineer's education, using Bloom's Taxonomy.

The committee remains on track to release a draft of the Second Edition of the Civil Engineering BOK for broad distribution and comment in July 2007. This draft for review by the civil engineering community will be posted on www.asce.org/raisethebar by mid-July 2007. The Second Edition of the BOK is currently scheduled for release to the public during Engineers' Week in February 2008 at the National Academy of Engineering.

Pre-licensure Experience to Fulfill the CE BOK

A new committee, focused upon pre-licensure experience guidelines to fulfill the CE BOK, will be formed in early 2007. The initial charge to the committee includes the following key items: (1) search for existing engineering/civil engineering experience guidelines published by private or public entities – national and international, (2) search for experience guidelines in other professions such as medicine and law, (3) study the recommendations regarding pre-licensure experience contained in the draft *Civil Engineering Body of Knowledge (2nd Edition)* and provide feedback to the Body of Knowledge Committee, and (4) define what constitutes progressive experience. The committee is expected to complete its initial charge in the next 12 months.

BOK Educational Fulfillment Committee

Plans are being made to initiate the BOK Educational Fulfillment Committee. The committee will likely begin with a workshop in the October 2007 timeframe and will work to review the second edition of the BOK. Committee is expected to have significant involvement from the academic community.

Questions, comments, or suggestions, please contact Jeffrey S. Russell at russell@engr.wisc.edu