

VIEWPOINTS

CAPE Outcomes 2013: Building on Two Decades of Advances to Guide the Future of Pharmacy Education

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This issue of the *American Journal of Pharmaceutical Education* features the 2013 CAPE outcomes that were unveiled at the 114th American Association of Colleges of Pharmacy annual meeting.¹ The impetus for a review and update of the CAPE outcomes came from the 2010-2011 Academic Affairs Committee recommendation to convene a taskforce to develop outcomes related to traits in the affective domain.²

The CAPE panel is to be congratulated on a document that reflects the evolution of pharmacy education and practice while maintaining focus on the essential knowledge and skills required of a pharmacist in the 21st century. Inclusion of traits such as collaborator, includer, innovator, promoter, and leader capture traits and skills required for practice in the current and developing healthcare system. As with the 2004 revision of the outcomes, the 2013 document is timely given the revision of the ACPE Accreditation Standards and Guidelines for the Professional Degree Program in Pharmacy currently underway. The 2013 CAPE outcomes document provides a structured framework yet is customizable to suit the unique characteristics of individual colleges and schools.

This document represents the fourth iteration of a process that began more than 20 years ago. A brief review of the history reveals that the Commission to Implement Change in Pharmaceutical Education with its series of background papers guiding the evolution of pharmacy education in the 1990s was prescient.³⁻⁵ Among the recommendations of the Commission was to move to the 6-year PharmD as the sole professional degree in pharmacy. The Commission's Background Paper II suggested general outcomes including thinking abilities, facility with values and ethical principles, personal awareness and social responsibility, self-learning abilities and habits, and social interaction and citizenship.⁴

Subsequent to the work of the Commission, AACP established the Center for the Advancement of Pharmaceutical Education (CAPE) to assist colleges and schools

in transforming their curricula to train the practitioners of the future. Building on the 1980s outcomes-based education movement, an advisory panel of educators and practitioners released the first set of CAPE outcomes in 1994. The document contained 12 ability-based outcomes statements including 5 professional outcomes (provide pharmaceutical care, manage the practice, manage medication use systems, promote public health, and provide drug information and education), and 7 general abilities (critical thinking, communication, ethical decision making, contextual awareness, social responsibility, social interaction, and self-learning).⁶

In 1997, due to the "continued evolution of pharmacy practice and the roles and functions of pharmacists," the CAPE panel was reconvened and the second version of the CAPE outcomes was released in 1998. The 1998 document maintained the 12 outcomes from the original document.⁷

The 2001-02 AACP Academic Affairs and Professional Affairs Committees both urged reconvening the CAPE panel for a review and revision of the 1998 Educational Outcomes.^{8,9} These calls for action were based partly on Institute of Medicine reports on patient safety and quality of health care delivery^{10,11} and the evolution of scientific knowledge, specifically pharmacogenomics.¹⁰ The 2004 CAPE Outcomes document was a greatly streamlined version that used language common to documents from other health professions and the Institute of Medicine core competencies. The Joint Commission of Pharmacy Practitioners 2015 Future Vision of Pharmacy Practice was developed concurrently with the 2004 outcomes. Both the JCPP 2015 Vision and the 2004 AACP CAPE Outcomes reaffirmed patient-centered care as the basis of pharmacy practice.^{12,13}

The forward thinking work of the Commission to Implement Change in Pharmaceutical Education has stood the test of time. Background Paper II stated:

A number of the outcomes cannot be taught by discrete courses; many are inculcated into students across the curriculum through a variety of techniques. Professional pharmacy students must learn . . . by solving

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patients' drug-related problems. . . Most students enter health professional schools, including pharmacy schools, as dependent learners; that is, they enter with the perception that it is the teachers' responsibility to teach students while de-emphasizing, if not ignoring, the responsibility of students to learn on their own. Students come to health professional schools adept at memorizing facts and the teaching methods at most professional schools readily focus on this ability. . . in practice, the responsibility to learn must reside with the learner/practitioner. And so it must be while in school: the responsibility to learn must rest with the learner/student, not with the teacher. It follows, then, that a major responsibility of pharmacy educators is to shift the burden of learning from the teacher to the student. The transition from a dependent learner to an independent learner must occur as the student progresses through the pharmacy curriculum. Students must understand that to become educated is to know what questions to ask and where the answers may be found. Teaching must be achieved through educational processes which involve students as active learners. Teachers must view themselves as coaches and facilitators rather than merely as providers and interpreters of information.⁴

In 2013, we have reaffirmed the wisdom of the Commission to Implement Change in Pharmaceutical Education. Pharmacy educators must assist students in becoming independent learners who have a firm grounding in the science of pharmacy as well as the "soft skills," those personal and professional skills, attitudes, and attributes that pharmacists need to practice team-based, patient-centered care in the 21st century.

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