

## **Knowledge or Skills...or Both?**

John Shepherd  
Macquarie University

**Abstract:** Actuarial curricula everywhere tend to focus on “what actuaries need to know” at the expense of “what actuaries need to do”. This paper aims to identify a set of generic capabilities that underpin “what actuaries need to do”, and to suggest how future actuaries might be enabled and encouraged to develop these capabilities through their educational experiences.

Research evidence from higher education suggests that stand-alone skills development courses are less effective than programs that integrate skills development with the learning of core knowledge. This raises a challenge for course design of achieving a balance between substantive knowledge content and skills development.

The paper discusses the integration of generic actuarial skills into the education curriculum. A developmental approach is advocated, giving students regular opportunities to gradually build and appreciate such skills as they move through the curriculum. Opportunities to learn, practise, receive feedback, evaluate and reflect on the skills need to be embedded in the learning of the core knowledge and techniques.

Assessment of students’ skills is identified as a critical curriculum design issue. Traditional assessments like exams are suited neither to assessing levels of skills (eg teamwork, research) nor to assessing whether students can transfer skills from one context to another. The paper suggests ways in which actuarial education curricula may be enhanced to foster the development by future actuaries of capabilities and attributes that will ensure they not only know “what actuaries need to know” but can also do “what actuaries need to do”.