

Professor Gordon Holden... talk to NZIOB October 12 2007

New Zealand Institute of Building
Central Chapter Student Awards

I welcome you this evening to the Faculty of Architecture and Design at Victoria University of Wellington. We are honoured to host this important occasion, where worthy students in construction industry programmes are recognised.

I was asked to talk on the topic: “**Moving forward from academia into the workforce and realising one’s value in the construction industry**” and while it is something of a mouthful I will do my best.

In addressing the topic I would like to start by talking about **authority and competence** in both academia and industry, but mainly from the perspective in academia.

I suggest that there are three sources of authority related to competence: those of **scholarship** or knowledge of the field; **practice** or demonstrated ability to bring about results; and, **research** - a commitment to inquiry.

Scholarship is the authority of the subject and it underpins the transmission of principles and values which are important in providing a framework for education. Authorative sources in our field demands a systematic historical knowledge embracing origins, transformations in time and the enduring source of values which they exemplify.

Scholarship functions as a source of wisdom derived from knowledge of the subject and also knowledge of the sources from which information can be derived. This is also a source of theory, or overview by means of which we can make sense of things from a critical perspective....something that is invaluable in this age of information overload.

Practice appears to be a source of authority particularly relevant to education for the professions...especially does it appear so to practitioners. Practice authority is based on the ability to perform in practice but this relies on up-to-dateness and constant demonstration of competence. And this can be undermined when a practitioner moves fully into academe, thereby risking the loss of relevance...unless the practitioner can also draw on one of the other sources of authority.

Practitioners practice on the basis of implicit theories, based on experience...with best of it is self-critical, engaging in reflection in action (Schon, 1983)...but this ‘knowing-in-practice’ tends to be private to the individual...what we call a black-box environment, in which nothing can be seen from the outside and others can only try to imitate. This is in contrast with a ‘glass-box’ in which the decisions and actions remain visible and accessible to outsiders.

Research authority derives from critical investigation and it requires a deep scholarly knowledge of the field as well as of research techniques...which is a kind of practice. What a researcher does must be explicable, repeatable and as far as possible error-free. Research is expected to add to knowledge and provide reliable outcomes, on which in many instances subsequent actions are based.

Researchers are mentors as teachers, giving assistance in problem framing rather than the ready-made solution. They help to answer questions while also challenging the question as well as the answer...a bit like the sign on the Theosophical Society building in Marion Street “*Questions answered and answers questioned*”.

I advocate that for the constructed-environment professions academia needs all three types of authority to properly prepare graduates in realising their value.

With increased accountability demands in society, it is envisaged that built-environment professionals in the future will distinguish themselves by their research-based knowledge and capabilities. This implies the need for further strengthening research-based pedagogy within every discipline so that as graduates gain experience and responsibility in industry they will bring high quality knowledge and skill in both procedural and substantive domains and in research that helps to improve outcomes.

To this end academia is committed to continually enhancing the quality and scope of programmes based on a strong research culture and on scholarship.

As healthy and balanced as we consider programmes to be already, this should not be interpreted as graduates being ready-made for immediate 'economic-technical-procedural-creative usefulness' in practice. Very good educational grounding is provided and graduates are in the process of shaping-up for useful practice. However they must receive mentoring embedded in practice before they will become fully competent. Graduates have only completed part of their education and training, the other part is largely the responsibility of each individual together with the professions and industry in the post-graduate phase.

Some years ago I ran a workshop on the topic "*What is the shelf-life of our discipline's initial education?*" This was triggered by an article in the "The Weekend Australian" newspaper that talked about canvassing education experts across a range of disciplines to estimate the 'shelf-life' of degrees. All of the 'experts' agreed while the subject content of a degree changes, a degree provides essential 'intellectual capital' on which to build future learning and that on-going learning will be required throughout a professional person's lifetime. We now see this reflected in built environment professions including architecture and engineering where continuing professional development is essential for continued registration, let alone to remain relevant and competitive in practice.

Interestingly 'computer science' at one year was considered to have the shortest shelf-life while architecture at 15 years had the longest, with civil engineering at about six years.

Our workshop tried to explain why architecture had the longest....and explored this question from both a negative and positive perspective. The conclusion was that the essence of architectural education (and I suggest this also applies wider in the building professions) is understanding of the discipline's history and theories and the development of the capacity to solve problems, and that the methods needed for this were core. Methods must synthesize competing elements that scope across functional matters, through human factors, through philosophical ones and through technical ones. The elements encompass a very wide range of human endeavours from the sciences to the arts. Notwithstanding continual evolving functional needs, changes in building materials and construction types, and the physical expressiveness and performance of buildings the skills needed to synthesise are of a long-living nature and the knowledge base is grounded in history and theory.

So then back to the matter of 'moving forward from academia into the workforce and realising one's value in the construction industry', I offer these concluding thoughts:

- Commit to a principled and value based career, be ethical;
- Take your training in scholarship and research into practice to strengthen your decisions and actions;
- Develop and refine your practice abilities in a reflective way, learning from them and externalising them for collegial feedback...seek a glass-box rather than a black-box;
- Adopt the approach throughout your career that to learn something new every day makes it a good day;
- Engage fully in a continual upward cycle of professional development;....and
- Seek to answer questions and constantly question your answers.

I hope you are learning or have already learned these points in academia.

We in academia consider ourselves as centre-stage in what may be called 'collages of colleagues' embracing students (junior colleagues), academic staff (senior colleagues) and practitioners (practice colleagues). I look forward to seeing many you colleagues back in academia in due course, in time to refresh your knowledge and skills, to reflect and to mentor the generations that come after you.

I congratulate all award recipients and look forward to hearing about your brilliant careers.