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SESSION 8

“Instilling Professionalism in Students”

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A bit about me

Construction Industry Experience (approx. 16 years)

Junior Engineer, A Monk & Company Ltd

Setting out: buildings in Manchester & Merseyside

Graduate Engineer, Sir Alexander Gibb & Partners (now Jacobs Gibb)

Sullom Voe Terminal, Shetland

Jubail Industrial City, Saudi Arabia

Engineer, Bridges Department, Greater Manchester County Council

Various highway structure design and site supervision projects (as ARE & RE); existing bridge assessments

Principal, Garrity Associates

Repair & strengthening of structures (UK and overseas)

Academic Experience (approx. 21 years)

Senior Lecturer, Bolton Institute (now University of Bolton)

L, SL then Head of Civil & Environmental Engineering, University of Bradford

Initially SL (PT) now Professor of Architectural Engineering, University of Leeds

A bit more ...

Professionally qualified:

CEng, MICE, FStructE, FCIHT

Notes

CEnv, CSci, ARB are professional qualifications as well as CEng.

Being a Member of learned societies such as ASCE, ACI, etc. does not mean you are professionally qualified.

Involvement with JBM

Full Board Member: 2000 – 2006 then 2013 – present

Member of Panel of Moderators: 2006 – 2012

(participation in accreditation visits only)

Chair: from 1st January 2014

Prepared/preparing JBM submission documents for Bradford (1999 & 2004) & Leeds (2009 and 2014)

Professionalism definition

Wikipedia ! *(an abridged version from the student's friend):*

- Expert and specialized knowledge in a field which one is practising professionally;
- Excellent manual/practical and literary skills in relation to one's profession;
- High quality work;
- A high standard of professional ethics, behaviour and work activities;
- Reasonable work morale and motivation;
- Having an interest and desire to do a job well;
- Having a positive attitude towards the profession;
- Appropriate treatment of relationships with colleagues.

Also see: "*Professionalism and the role of professional bodies*"
by the Institute for Learning (2009)



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Lack of Professionalism?

(Some) **Personal frustrations and disappointments about being a teacher:**

- Students who you “know” have some ability and the potential to do well BUT who don’t!
- Students graduating with a 2:2 who, you think, had the potential to have got a 1st !
- Students who turn up LATE to lectures or repeatedly submit work late.
- Colleagues who don’t seem to give a **** about students (none at Leeds, of course!)



Threats to Professionalism?

Staff have a collective responsibility to create, develop and maintain an ethos of professionalism in their students?

BUT in some universities (??):

- Academic staff promotion (still) tends to be based more on research performance than on a track record of delivering high quality teaching?
- Some staff are more motivated by research than by teaching. To some staff, teaching is almost viewed as an occupational hazard?
- Many universities only recruit staff who have followed a research career (**first degree + Masters + PhD + PDRA experience → lecturer**) and are REF-returnable.
- Such staff do not usually have any significant knowledge or experience of industry (construction or otherwise) where the seeds of professionalism tend to be sown?

(IMPORTANT POINT: this does not mean that research staff are not professional. They are but in a different way?)

Threats to Professionalism?

- What happens if insufficient staff buy into “professionalism”?
- Difficult to inspire and encourage students to have a professional attitude to what they do?
- Personal view – working towards gaining a professional qualification helps.
- Until recently: no need to become professionally qualified (not encouraged by Universities).
- Since the “JBM’s 50% rule” matters are changing?
- Some universities pay annual ICE, IStructE, IHE or CIHT, etc. subscriptions?
- Attitudes towards professionalism may change (or are already changing?) (*impact of £9000 tuition fee; employability; NSS results?*)

Professionalism – some personal reflections

Isn't professionalism about:

- Attitude;
- Setting the right standards;
- Setting the right tone, ethos and spirit?

Shouldn't we help students to develop the right attitude – an attitude that will help them to:

- Meet their full potential;
- Get the most out of their time at university (not just learning);
- Help them to meet employer expectations;
- Be better prepared for what comes next (a career in engineering or otherwise)?

The JBM thinks so

JBM Guidelines: Annex F – Professionalism

See:

http://www.jbm.org.uk/uploads/JBM126_AnnexFProfessionalism.pdf

Note: *they are guidelines not essential requirements that must be followed to “the letter of the law”!*

A few “highlights”

JBM Guidelines: Annex F

The key aim should be to ensure that engineers have appropriate Attitudes, Skills and Knowledge

“from the first day that students enrol on an accredited programme of study they have commenced on their career as a professional (engineer).”

“ the JBM believes that if the area of ‘Professionalism’ can be embedded into engineering education, this will make degree programmes more attractive and ensure that graduates have the appropriate skills to work effectively in the industry.”

“It (*the JBM*) therefore requires that degree programmes put forward for accreditation contain elements which provide a good understanding of a broad range of inter-related social, economic and environmental issues.”

JBM Guidelines: Annex F

The JBM view is that the appropriate Attitudes, Skills and Knowledge can be best achieved by a teaching and learning process that:

- “Provides an interdisciplinary perspective on the problems that engineers will tackle in practice;
- Develops an understanding of the interaction between engineering, the environment and society;
- Develops an ability to use engineering knowledge to help solve complex problems”

These tie in well with UK-SPEC and the QAA Engineering Benchmark statement and link with the JBM's guidelines on Design, Sustainability and H & S risk management.

JBM Guidelines: Suggested ways of demonstrating Professionalism in accredited programmes

- Confirmation that presentations concerned with engineering professionalism have been made by at least one of the JBM member professional institutions;
- Evidence from students work;
- A statement on Plagiarism;
- Ethical solutions to problems;
- Appropriate use of key skills;
- A statement on the impact of codes of conduct on the teaching of sustainability, health and safety and ethics.

JBM Guidelines: Suggested ways of demonstrating Professionalism in accredited programmes

- A list of lectures given to students by professional engineers;
- The Departments links with the local engineering community;
- Consultancy work undertaken by lecturers;
- A statement showing how the recommendations from the *Leitch Report have been incorporated into programme planning and design;
- A list of site visits undertaken by the students.
- Staff who are professionally qualified through a membership organisation such as the ICE, IStructE, CIHT and IHE (**note the JBM's 50% rule**)

** The Leitch Review of Skills: "Prosperity for all in the global economy – world class skills", HM treasury, December 2006*

CEng, MIStructE

IStructE has had its Research and Development Route to CEng for several years

(no 7 hour examination to pass!)

See:

<http://www.istructe.org/membership/types-of-membership/chartered-member/research-and-development-route>

IStructE is also developing a qualifications route for structural engineering teachers (non research-active staff)



The Research and Development Route to Chartered Membership and Associate-Membership



*The Institution
of Structural
Engineers*

**Membership Guidance Note (MGN22)
– Academic Research Pathway**



The Research Pathway is only applicable for those seeking to apply for Chartered Membership and is intended specifically for those candidates who have gained most or all of their experience through research activity within an academic or research organisation.

See: <http://www.ice.org.uk/mgn22>

Summary



- We have a collective desire and responsibility to create, develop and maintain a learning environment in which our students can fulfil their potential whilst at University and to create a positive attitude to help them to achieve more in the future.
- OUR attitude towards professionalism is important as WE set the right tone.
- We can help to instil professionalism in our students in many different ways.
- The JBM expects us to do this (and to be able to show how we do this).



PROFESSIONALISM

That's not my job.