

Canada's Nuclear Intellectual Capital: Status Review

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Bill Garland
McMaster University
UNENE
CANTEACH

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Nuclear Intellectual Capital

■ In Canada, we have these uncoordinated elements:

- CANTEACH – an open CANDU document repository (2001)
- UNENE – a nuclear centre of excellence (2002)
- NUCENG – an university based portal and repository (1998)
- CNS – a society of nuclear individuals (conferences, bulletin, ...) (1979)
- COG – an industrial consortium of operators and designers (1984). Sponsors CANTEACH and member of UNENE

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Existing Elements

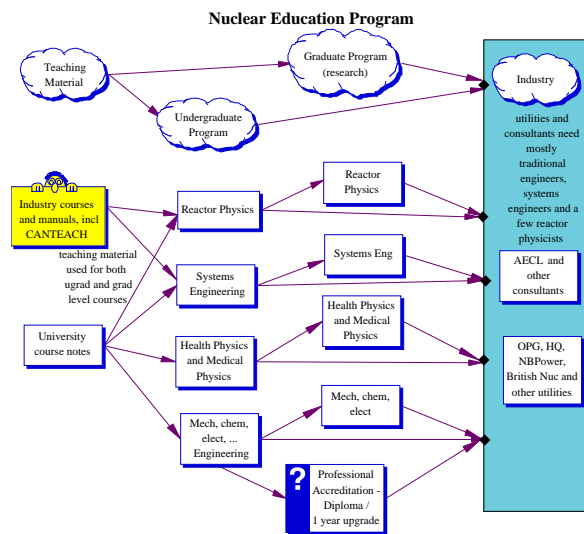
- CANTEACH is about info.
- UNENE is about delivery.
- NucEng is about students.
- CNS is about professionals as individuals.
- COG is about industrial partnerships in R&D

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What's the education situation?



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What's the problem?

- Professionals come from the universities
 - ◆ Inadequate preparation for industry
 - ◆ Research emphasis over development and teaching
 - ◆ Lack of systems approach
 - ◆ Self-reinforcing myopia
 - ◆ No upgrade path for C students
 - ◆ Grades not a good measure of the person
 - ◆ System shuts out and destroys people
- University is not going to change its mandate or structure for industry
 - ◆ It is answerable to the public, not to industry

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Where is industry in all this?

- Industry is faced with a huge hiring and expertise gap problem
 - ◆ They are faced with a huge training cost
 - ◆ Industry time horizon is too short
 - ◆ Industry cannot give accredited courses
 - ◆ Big mismatch between what industry needs and what universities supply

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What do we need?

- We are not going to change industry or the university
- Therefore, need
 - ◆ Access to information -> a portal?
 - ◆ Professional development upgrade path
 - ◆ Access to mentors and apprenticeship
 - ◆ Better measures of the person
 - ◆ Remedial programs
 - ◆ Bridging programs

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End

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