Theme question

What is a desired balance between theory, applications and computer software for teaching?

Can a curriculum that focuses heavily on theory be a good environment for developing a COME attitude?

What should be the balance between theory and applications in an engineering degree course?

Does the use of computers necessarily lead to a decline in ability in engineering mechanics?

Care of the marine environment is a cultural issue.

Site safety is another issue of this type

In modern construction practice the number of deaths on sites has been reduced dramatically

The Forth Rail Bridge 63 fatalities

The Queensferry Crossing - target is zero fatalities

How have site fatalities been reduced since the 19th century. Why are they now so low?

Adopt an Integrated Safety Philosophy across the project

Thinking about improving safety is a pervasive activity among all people involved in the project. From the top managers to the 'nippers'.
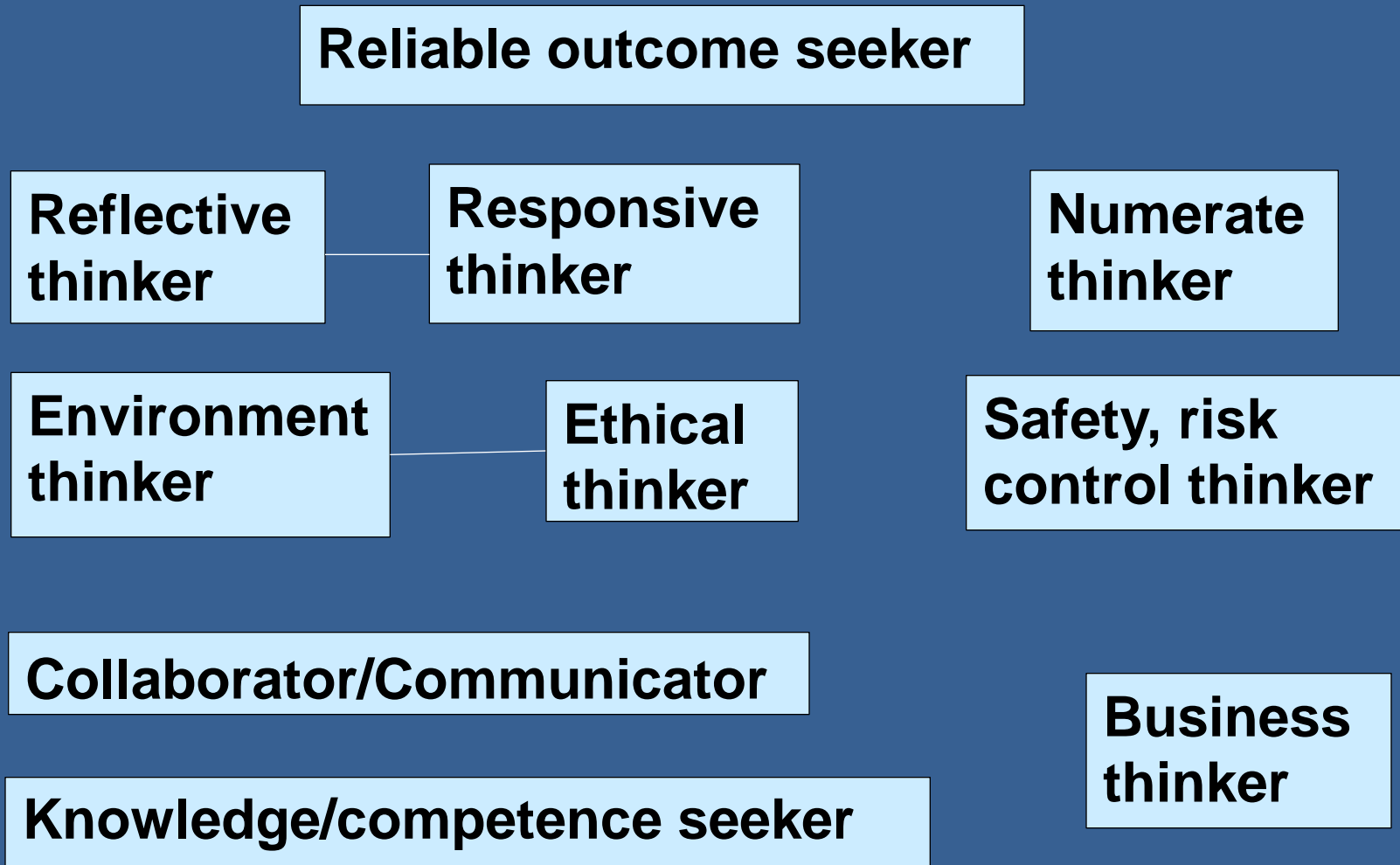
The 2012 London Olympic Park

No fatalities

Integrated Safety Philosophy across the project

How can education foster an integrated COME Philosophy in projects ?

IESIS Model of Engineering Competence

http://www.profeng.org/cpec/pec-model.html

Reliable outcome seeker

Reflective thinker

Responsive thinker

Numerate thinker

Environment thinker

Ethical thinker

Safety, risk control thinker

Collaborator/Communicator

Knowledge/competence seeker

Business thinker

Role of computers

To assist in learning

Role of computers

Role of computers

To assist in learning