

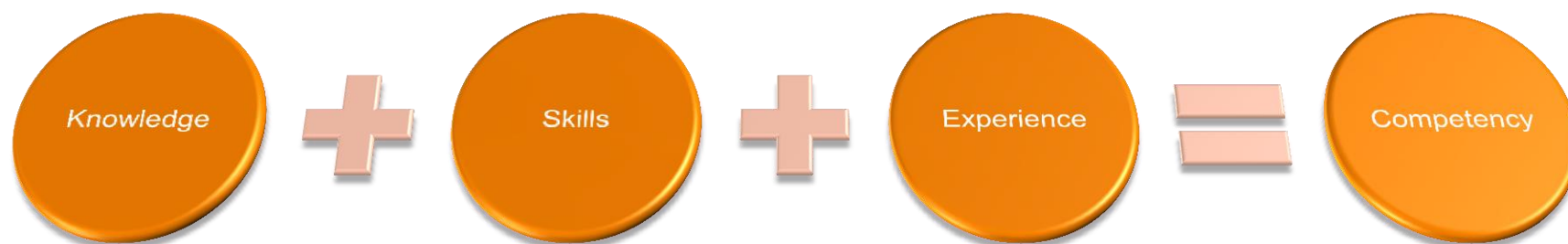


Offshore Pipeline Engineer Competency Framework



Presented by
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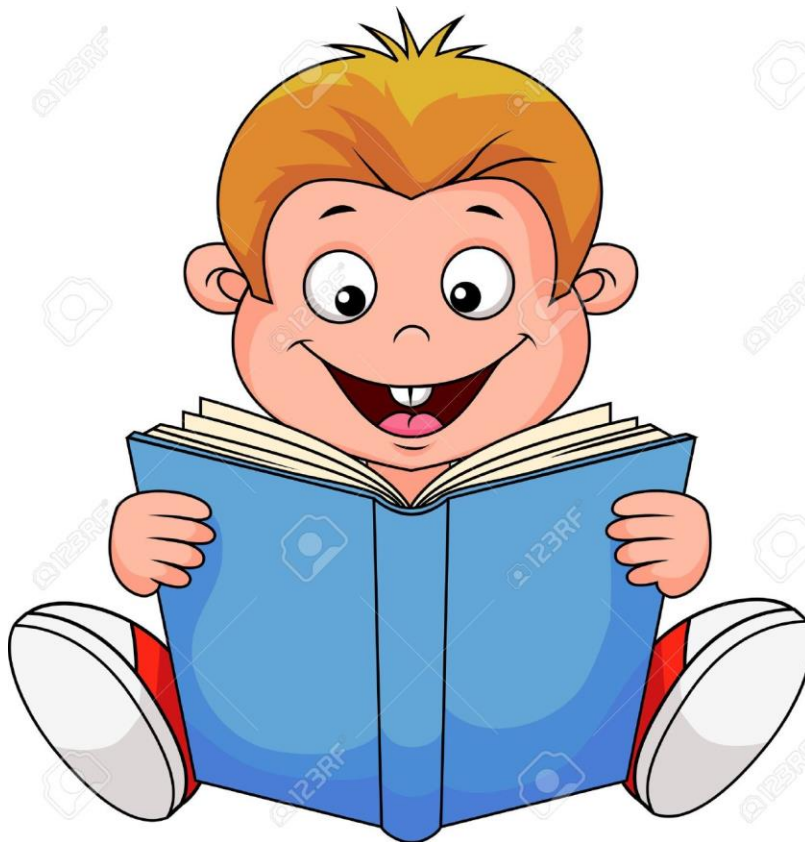
What is it?



Example – use of a chainsaw



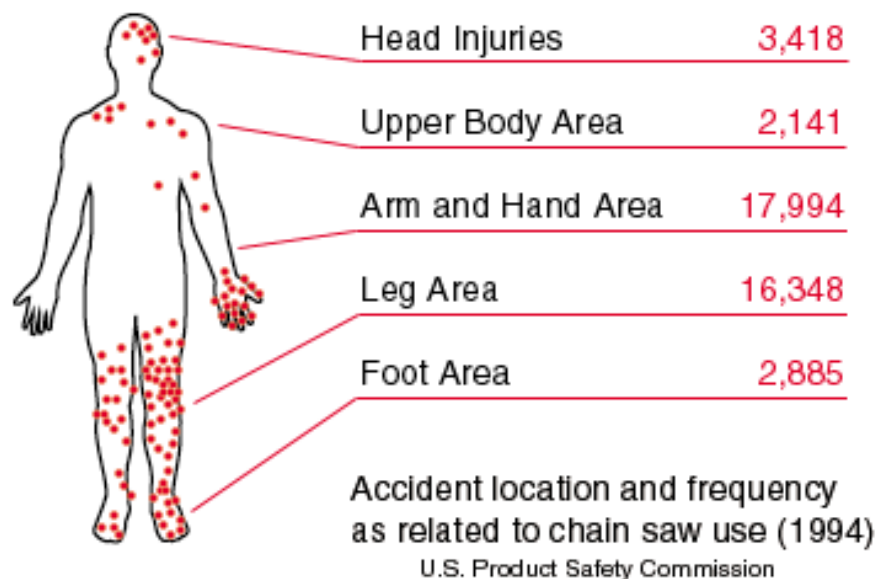
Step 1 – read instructions



Step 2 – give it a go

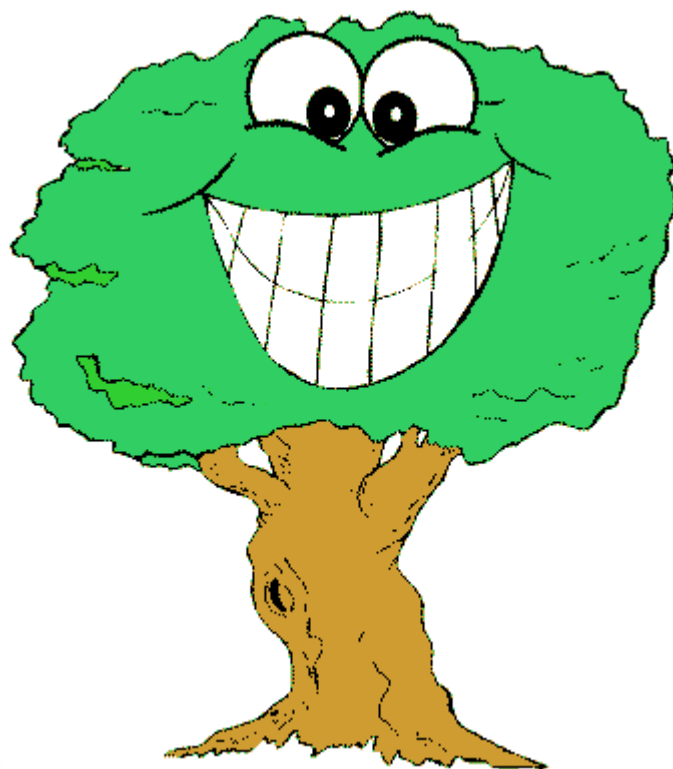


You probably will get hurt.....



..... or someone else.

And the job won't be done...



Competency doesn't just happen



The need in our industry

Resource Boom

2005 – 2015
Fuelled by major
LNG projects

Demand for
pipeline engineers
increased

Shortage of
pipeline engineers

Skills Shortage

Influx of pipeline
engineers

Focus on high
volume of output

“Silo” effect and
specialisation

Learn “on the job”

Skills Development

Develop engineers
with breadth (vs
depth) of expertise

Establish industry
framework to define
expectations

Better industry and
engineers

How to achieve competency? (examples)

Relevant engineering degree

- Engineering degree that will provide the theoretical underpinnings to the discipline
- Recognised by Engineers Australia
- Relevant science or other engineering discipline may also be considered

Experience

- Has designed or been in a design team, which has performed
- Demonstrates understanding and application of

Expertise

- Undertakes all aspects of the offshore pipeline mechanical design.....
- Identifies the range of mechanical design issues that may affect offshore pipelines Understands the key drivers and interfaces for offshore pipeline mechanical design.....

Resulting capabilities (examples)

- Capable of performing the mechanical design
- Capable of identifying aspects of the design that may influence
- Capable of effectively communicating the key drivers and interfaces



"As an engineer, my job is just to develop the best technical solution. So why do I need communications skills?"

"This is a common view from engineers. What are your thoughts?"



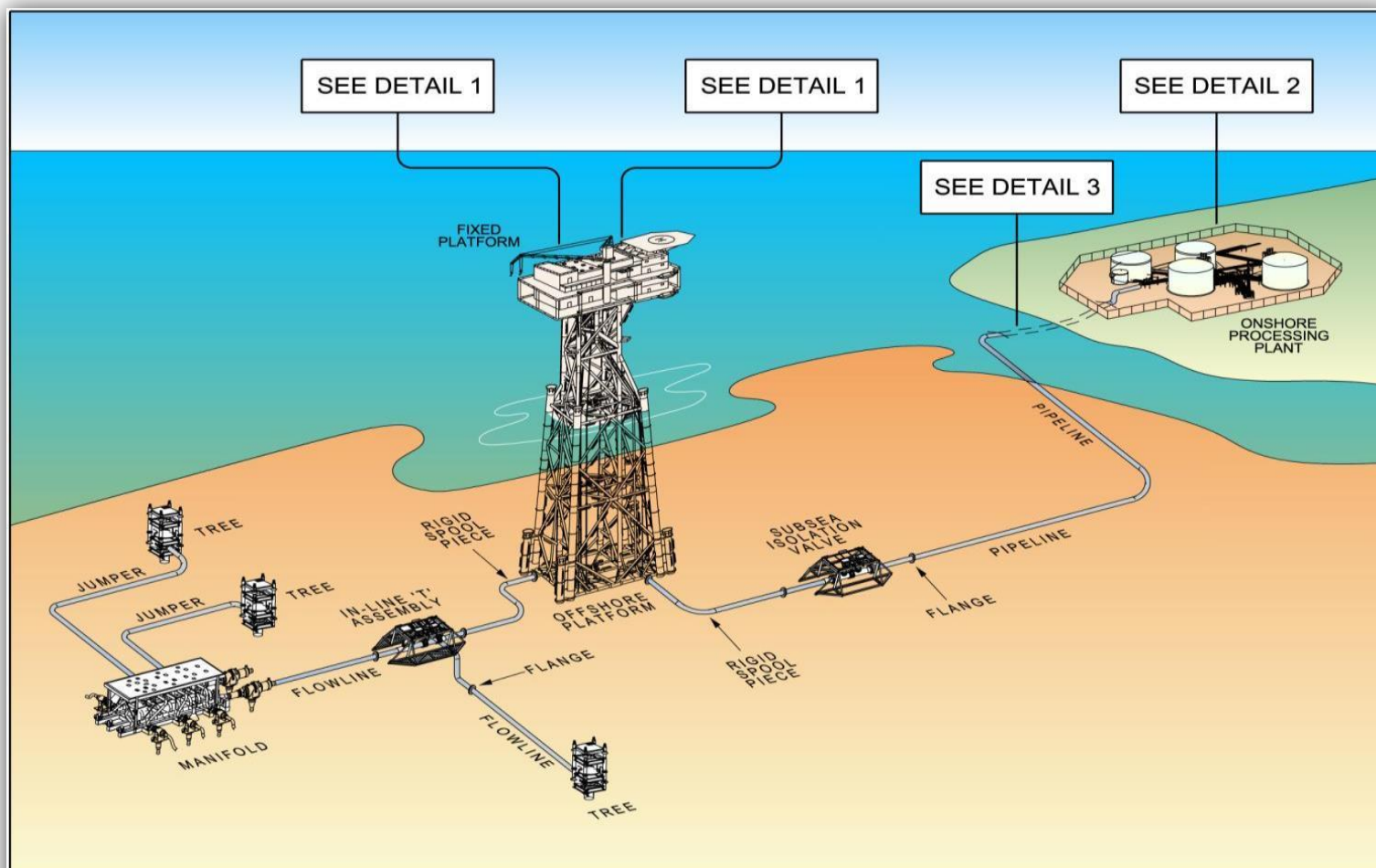
IEEE



Engineers? Communicating?



Battery Limits



FIELD DEVELOPMENT SCHEMATIC (FIXED PLATFORM)

Competency Framework

12 Competency Areas

57 Competencies

**Applicants required to
achieve 21 Competencies**

Competency Framework

1. General Engineering
2. Flow Assurance and Process Engineering
3. Materials, Welding and Corrosion
4. Safety Management and Risk Assessment
5. Environment and Heritage
6. Design of Offshore Pipeline Systems
7. Design of Pipeline Related Structures
8. Design of Risers (Rigid, Flexible, SCRs)
9. Construction Engineering and Management
10. Offshore Pipeline Project Management
11. Hydrotest, commissioning and preparation for operation
12. Asset management and Pipeline Operations

How does it affect you?

- Framework to developing the expertise of engineers
- Provide clarity to pipeline engineering career pathways
- Emphasises the value and importance of pipeline engineers
- Emphasises the value and importance of pipeline industry
- EA recognition of Pipeline Engineering as a discrete discipline

In the long term, this framework delivers a highly competent workforce that can support development of the industry

What's next

- Implementation in Australia
- Implement globally