# E-Newsletter

## August - September 2023

**Issue 6**

### *In This Issue*



We are delighted to share with you the 6th issue of our bi-monthly newsletter.

In this edition ...

- We review Artificial Intelligence (AI) as an educational tool.
- Focus on Well Operations Crew Resource Management (WOCRM) topic - Communication.
- We highlight the importance of a Process Safety Culture.
- Reflect on candidate feedback and quarterly results.

## Artificial Intelligence (AI) an Educational Tool

Artificial Intelligence (AI) has been branded the 4th Industrial Revolution, having the potential to assist humans to make better decisions and be more productive.

According to (Baker & Smith) AI can be applied in specific systems where candidates are able to learn specific topics or improve specific skills.

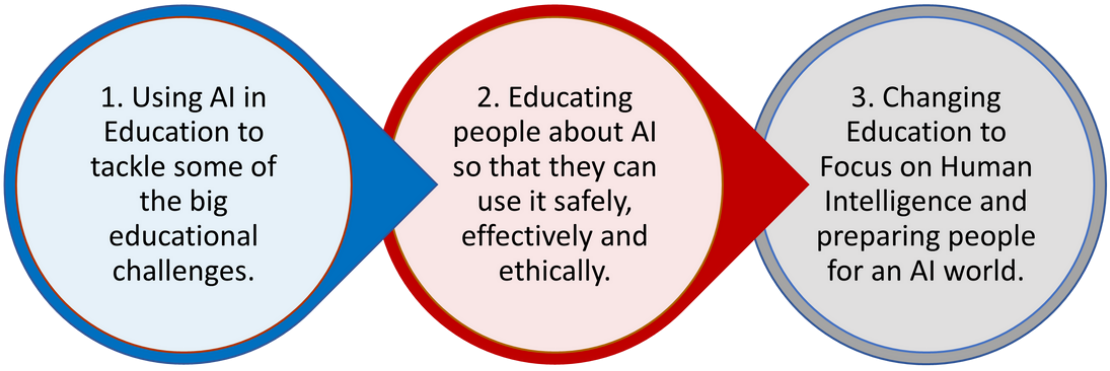
These AI systems can respond to candidates' individual and evolving needs, by adapting learning content to each candidate's knowledge and specific skills.

In addition, AI could be used by instructors to support and improve teaching methods, decreasing workload, monitoring candidates progress, and improving candidates' participation and performance.

We have an opportunity to rethink our role as a training organisation and how we can utilise AI to enhance candidate learning and skills competency.

Well Academy will continue to look into ways we can adapt our training and assessments to ensure the ethical use of AI.

## AI Challenges for Education

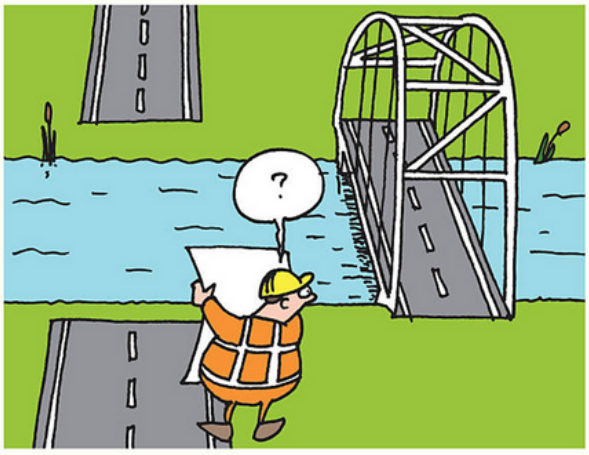



***Ref: Professor Rose Luckin***

In conclusion Professor Rose Luckin, UCL Faculty of Education and Society. notes - "ChatGPT does not understand a word it produces it is important to understand how Artificial Intelligence (AI) is different to Human Intelligence (HI). We want humans to complement AI automation, not repeat it".

## Well Operations Crew Resource Management - Communication

Communication is the second non-technical skill we will focus on to improve safety and efficiency and reduce the risk of an incident.




Communication is the transfer of information, ideas and beliefs via different channels. It is the responsibility of the entire crew to communicate effectively.

Communication needs to be clear and to the point.

Insufficient communication is often cited as a factor during unexpected incidents in drill and well operations:

- Inaccurate radio use, cultural differences and language barriers are considered as some of the most important communication challenges.
- Poor shift handover communication has been identified as a key contributor to a number of significant accidents including Piper Alpha, Grangemouth, Texas City and Buncefield.
- Some examples relating to ineffective shift handover problems:
  - Failed to clearly define responsibilities and information
  - Provided inadequate training or written guidance
  - Carried out little or no monitoring or auditing of handovers
  - Driller not proficient in English, difficult to communicate clearly

## Effective Shift Handover Communication Principles

- Clear procedures/written guidance should be in place for shift handover describing the key information that should be exchanged and how this should be done.
- Handovers should not be conducted under time pressure or other distractions.
- Handover procedures take into account higher risk periods for example lengthy maintenance campaigns; employee absence; where safety systems have been overridden; where operating conditions are unusual.
- Handovers should be face to face wherever possible allowing crews to question each other and reduce the possibility of misunderstandings.
- Regular and thorough auditing should be conducted.
- Information from incidents and accidents due to shift handover problems should be reported.

## The Importance of Process Safety

Process Safety Management continues to be the main concern for many companies. Assessing the possibility of an incident is challenging.

In October 2020, IOGP released Process Safety Fundamentals (Report 638), in support of companies in pursuit of reducing / eliminating fatal and high severity process safety incidents.

The report recommends a set of 10 Process Safety Fundamentals:

1. Respect hazards
2. Apply procedures
3. Sustain barriers
4. Stay within operating limits
5. Maintain safe isolation
6. Walk the line
7. Control ignition sources
8. Recognise change
9. Stop if the unexpected occurs
10. Watch for weak signals


***www.iogp.org***

In May 2023, IOGP released the third edition Process Safety - Recommended Practice on Key Performance Indicators (KPI'S) - Report 456 incorporating API RP754.

This report provides greater clarity on the classification of process events that relate to Well Operations as well as a classification for Well Control Incidents, which in turn assist IOGP members to report these events more consistently.

We will review Part J - Well Control Incidents - which provides guidance for a Well Control Incident KPI classification system.

International Association of Oil & Gas Producers

IOGP Report 456 guidance Part J - Well Control Incidents, applicable to well operations which includes rig and rig-less activities related to well construction, intervention, workovers and abandonment. www.iogp.org

The classification system for Well control Incidents follow below:

| | |
|---|---|
| **WCI – Level 1** | **Loss of Well Control**<br>- Failure of well barrier envelopes, uncontrolled flow from well to surface, seabed |
| **WCI – Level 2** | **Complicated Well Control**<br>- One or more well barrier envelopes failed. Remaining well barrier envelope still had pressure integrity but may have been degraded. Any flow from well is temporary, planned procedures immediately implemented |
| **WCI – Level 3** | **Routine Well Control**<br>- One of more well barrier envelope failed. Single planned and tested barrier envelope remained. Remaining barrier operated within design capacity and operated as expected. Any flow from well is temporary, planned procedures were immediately implemented |
| **WCI – Level 4** | **Near Miss or Potential Well Control Incident**<br>- Had the potential to escalated and / or could have resulted in the failure of a well barrier. |

Offshore Energy UK (OEUK) established 8 Principles of Process Safety Leadership for the UK Energy Industry.

1. Clear and positive process safety leadership
2. Senior leadership involvement, understanding and competence
3. Constant active engagement
4. Visibility and promotion of process safety leadership - setting a positive safety culture
5. Engagement of the entire workforce
6. Regular auditing, ensuring system weaknesses are identified
7. Publication of process safety performance
8. Sharing good practice and information on process safety incidents that may benefit others

https://oeuk.org.uk/wp-content/uploads/2023/03/Principles-of-Process-Safety-Leadership-1.pdf

In order to prevent major accidents, it is important to establish effective process safety systems in compliance with relevant legislations and standards.

## Quarter 2 - 2023 - Results and Feedback

The Well Academy AU/AP/ME team is extremely proud to have achieved another stellar quarter.

Our performance is on par with our annual KPI's and we would like to thank our candidates for choosing us.

Our results speak for themselves, join us for your next Well Control or Well Intervention training course!

| | |
|---|---|
| **Average Pass Rate - Drilling Well Control Level 3-4 (Face to Face)** | **88%** |
| **Average Pass Rate - Drilling Well Control Level 3-4 (Virtual)** | **94%** |
| **Average Pass Rate - Well Intervention Level 3-4** | **87%** |
| **Average - Overall Positive Course Feedback** | **89%** |

## Bespoke Training Projects Completed

Rig intake (inspections and acceptance testing), Fully independent Managed Pressure Drilling support to Inpex' Ichthys drilling campaign offshore Western Australia.

Support provided by ModuResources included onshore and offshore project-specific MPD training (level 1 to 4), review and development of MPD operational procedures, and offshore supervisory support during MPD drilling sections.


Rig Inspection and Safe Environment (RISE) Training Course for ExxonMobil in Malaysia.

All candidates successfully completed the IADC DIT accredited training course achieving an average score of 92%!

## Course Calendar August / September 2023

**31 July - 4 August 2023**
- Drilling Well Control Level 3,4 (VIRTUAL)
- Well Intervention Level 3,4 (VIRTUAL)

**14 - 18 August 2023**
- Drilling Well Control Level 3,4 (VIRTUAL)
- Well Intervention Level 3,4 (VIRTUAL)

**21 - 25 August 2023**
- Drilling Well Control Level 3,4 (PERTH) - FULL
- IADC WellSharp Level 3 Subsea (VIRTUAL)

**4 - 8 September 2023**
- Drilling Well Control Level 3,4 (PERTH)
- Well Intervention Level 3,4 (PERTH)

**11 - 15 September 2023**
- Drilling Well Control Level 3,4 (VIRTUAL)
- Well Intervention Level 3,4 (VIRTUAL)

**18 - 22 September 2023**
- Drilling Well Control Level 3,4 (PERTH)
- Well Intervention Level 3,4 (PERTH)

**25 - 29 September 2023**
- Drilling Well Control Level 3,4 (VIRTUAL)

## Our Full Bottle 100 Club Members

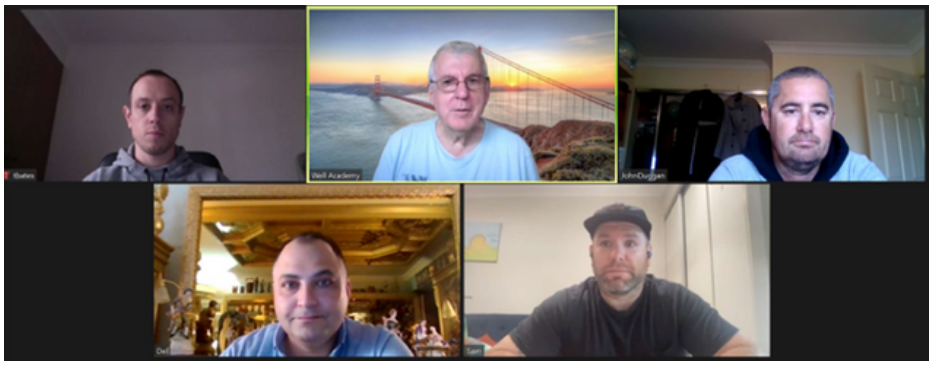
Amanda Abraham

Amy de Groot

Sean Kielland

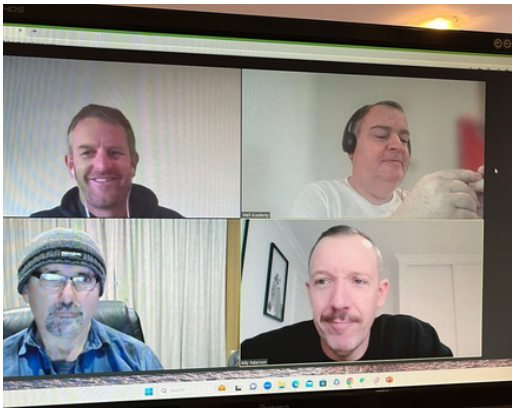

Stephen Harler

## Classroom Photos

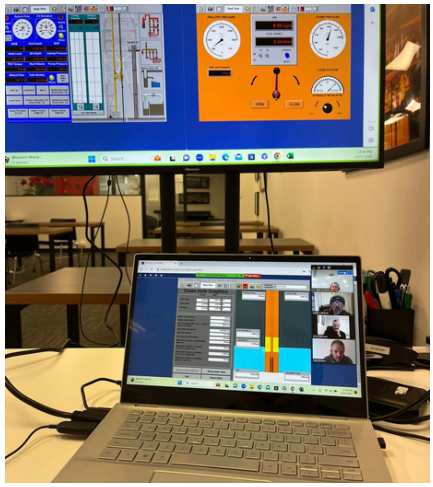


*Virtual Drilling Well Control with Len Shapcott - candidates achieved an average score of 92%*

*Face to Face Assessment morning!*



*Virtual Drilling Well Control with Dave Pollock - candidates achieved an average score of 91%*



*Introduction to the Virtual Simulator*

Well Academy is part of the ModuResources (MR) Group. The ModuResources group is a specialist in rig inspection both on and offshore.

ModuResources supports the upstream industry in drilling wells more safely and efficiently reducing non-productive time and establishing a safe work environment. ModuResources Group are the Parent Company of Well Academy, WellSpec, Deepwater Subsea and Horizon Resources.

## Contact us:


**Australia**
**Admin.au@wellacademy.com**

**Asia Pacific / Middle East**
**Solutions.apme@mrgroup.org**