

## **CETL-MSOR Conference 2015**

### **Ruth Fairclough and Liam Naughton: Maths vs Numeracy: Diagnostic Testing of Undergraduate Engineers.**

In September 2014 the University of Wolverhampton conducted a mathematics diagnostic test covering algebra, trigonometry, functions and basic geometry. Perhaps unsurprisingly this demonstrated that the first year engineers were weak in all these areas of mathematics. At the same time, NUI Galway did a similar test with their engineers solely testing numeracy skills. These students were weak in mental arithmetic, percentages, decimal representations and fractions.

Despite the different school systems the students had experienced (Irish and British) and the different type of institution (Traditional and Post '92), there were extensive gaps in knowledge at a basic level in both mathematics and numeracy.

This talk will cover what the students demonstrated they knew in the tests, their gaps in knowledge and the course development that is ongoing, partially informed by the results of these diagnostic tests.