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Science led vs design led teaching approaches in materials science and engineering for aeronautical engineering students

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Poster abstract

A comparison on teaching styles has been conducted by analysing behavioural, cognitive, developmental, social cognitive and constructivist perspectives of 26 students (higher engineering apprentices). All of those students are in their full-time employment at Broughton factory (Airbus UK) and were comprehensively surveyed at the end of module (ENGF405: Composites and Aeronautical Materials) to quantify their learning experiences. It is generally assumed that design led, in comparison to science led, approach is the most appropriate method for these hands-on engineering professionals. However, presented results are quite interesting because majority of the high achievers have opted for science led approach for their improved learning experiences during the module.

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