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Active Learning in Thermal and Statistical Physics at the University of the Witwatersrand

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Abstract content
 (Max 300 words)

Active learning techniques have been employed in the 2nd and 3rd year Thermal and Statistical Physics modules since 2009. The introduction of these methods has resulted in increased student participation during lectures, and improved student performance in both modules. This paper reports on an ongoing evaluation of active learning initiatives in these two modules, and compares and contrasts student performance in, and attitudes to, modules at 2nd and 3rd year level that are not presented using active learning. The study suggests that active learning has the potential to improve student performance and understanding in higher level courses, and that this approach may benefit experienced physics instructors in teaching concepts that are traditionally regarded as difficult by students.

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