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## BLENDING LEARNING: HOW CAN WE OPTIMISE UNDERGRADUATE STUDENT ENGAGEMENT?

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**Abstract:** Background: Blended learning is a combination of online and face-to-face learning and is increasingly of interest for use in undergraduate medical education. It has been used to teach clinical post-graduate students pharmacology but needs evaluation for its use in teaching pharmacology to undergraduate medical students, which represent a different group of students with different learning needs.

**Methods:** An existing B.Sc. - level module on neuropharmacology was redesigned using the Blended Learning Design Tool (BLEnDT), a tool which uses learning domains (psychomotor, cognitive and affective) to classify learning outcomes into those taught best by self-directed learning (online) or by collaborative learning (face-to-face). Two online courses were developed, one on Neurotransmitters and the other on Neurodegenerative Conditions. These were supported with face-to-face tutorials.

Undergraduate students' engagement with blended learning was explored by the means of three focus groups, the data from which were analysed thematically.

**Results:** Five major themes emerged from the data 1) Purpose and Acceptability 2) Structure, Focus and Consolidation 3) Preparation and workload 4) Engagement with e-learning component 5) Future Medical Education.

**Conclusion:** Blended learning was acceptable and of interest to undergraduate students learning this subject. They expressed a desire for more blended learning in their courses, but only if it was highly structured, of high quality and supported by tutorials. Students identified that the 'blend' was beneficial rather than purely online learning.

**Keywords:** Blended learning, E-learning, Medical education, Pharmacology



<b>S No.</b>	<b>Sections of the article</b>	<b>Strength of the study</b>	<b>Weakness of the study</b>
1	Title	Appropriate for the study	The study design was observed as appropriate with meticulous planning and also achieved the desired outcomes. No weakness or limitations were identified.
2	Background	Relevant for the present teaching learning scenario	
3	Objective	Well structured	
4	Material	Adequate	
5	Results and stat	In accordance with the research question	
6	Discussion and conclusion	Well written	









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