

‘JUST IN TIME’ FOR THE LECTURE

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ABSTRACT

In ‘traditional’ science lecture-based courses we don’t demand that students come to lectures prepared, having read the textbook for example. This would not be acceptable in many other disciplines such as English or History. In addition, in the lecture environment we are often unaware of student problems and misconceptions and miss the opportunity to enhance their understanding by adjusting our presentation to their needs. It is only via assessment (possibly too late), or perhaps anecdotally in other learning situations such as tutorials, that we judge the match between our standards and student understanding and ability. We need better engagement between the students and the staff!

‘Just in Time’ teaching (e.g. <http://jittl.physics.iupui.edu/jitt/what.html>) is an active learning technique in which students do brief, web-based pre-work before a lecture and the lecturer adjusts and organizes material based on the student responses – just in time for the lecture. It helps bridge the disconnect between staff and student standards at a time when it can make a difference. We have recently trialled a ‘just in time’ approach in several different classes teaching first and second year physics and report on the practical realities of this attempt to bring the staff and student standards closer together.

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