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*For developing effective curricula which motivate student performance and improve student satisfaction and retention in large, diverse foundation Anatomy and Physiology classes*



My aim as a teacher is to stimulate the curiosity of my stud



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their degree program. The newly designed practical session (entitled "The Hydration Game") now incorporates many of the key elements of Renal Physiology within the context of maintaining hydration status and performance in an elite cyclist during the *Tour de France*. Student evaluations of the "Hydration Game" activity indicated that 90% believed that the applicability of the activity to their field of study was very good to excellent. 89% of students also indicated that the group work involved in the "Hydration Game" activity facilitated their learning and 97% indicated that the activity extended their knowledge and skills beyond that presented in lectures.

Pedagogical Approaches: The pedagogical methods used within the 6 newly formed foundation Anatomy and Physiology classes were carefully re-evaluated and modified with the aim of increasing student engagement and promoting deep learning (Biggs 2003). The adoption of a problem solving approach for many practical sessions was successful not only in increasing student participation and engagement but also in promoting small group work and providing the opportunity for more direct personal contact between individual students and the lecturers (which can be challenging to achieve with large class sizes). Students responded very favourably to these changes with comments in student feedback questionnaires centring on themes such as; *"the best aspect of this subject were the practical sessions. It was good to sit in a group and discuss what has been said in the lectures earlier in the week and ask the*



students believed that the availability of lecture podcasts improved their assessment performance and 86% of students supported the future use of podcasting in their Anatomy and Physiology subjects. Student's comments on podcasting were likewise overwhelmingly positive with comments such as; *"I love podcasts! They help my learning and retention", "podcasts are excellent, they help consolidate everything covered in lecture and you can listen to them as often as you like, whenever you like"* and *"I have found that podcasts are very useful when combined with lecture notes and readings, they have definitely increased my performance without them I believe I would be finding this subject a lot harder"*. My critical evaluation of the impact of podcast on student performance and satisfaction is currently in preparation for publication.

The practical sessions also provide students with a kinaesthetic learning preference the opportunity to actively engage with a broad range of activities designed to reinforce the key learning objectives for each week. The students have been particularly positive in their feedback on the usefulness of the practical sessions to their learning with comments centring on themes such as: *"the practicals were great, very hands on!", "the practical classes were a very positive learning environment"* and *"the best aspect of this subject was the format of the practical lessons, which I have found to be helpful. The extensive help provided by the lecturers and the other tutors during these practicals is appreciated"*.

Additional support materials also include the use of an interactive CD-ROM which allows students to explore interactive and dynamic tutorials on each subject area at their own pace. A series of weekly online formative quizzes were also introduced to foster frequent revision of material and as well as providing both rapid and frequent feedback on student performance. These weekly formative quizzes also received substantial positive feedback from the students with comments such as: *"the online quizzes were a helpful tool for revision"* and *"it was great that there were weekly quizzes so I had an understanding of what I knew"*.

Assessment: Foundation Anatomy and Physiology courses invariably contain a wealth of information delivered in a language that can be unfamiliar to students without previous training in biology. Students often find that both the complexity and volume of material that they are required to cover to be both challenging and daunting. In order to foster ongoing revision of content material and to decrease the stress associated with the final exams representing the bulk of

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*physiology subject (SP2007), with 10-11% increases in final grade performance attributed to the acquisition of a greater and sound knowledge base in the Anatomy and Physiology subjects". Positive feedback has also been received from*