Background and Context

The Department of Biomedical and Forensic Sciences at Anglia Ruskin University operates both a BSc (Hons) Biomedical Science course, taught face-to-face in Cambridge, and a dual-award BSc (Hons) Biomedical Sciences course, taught face-to-face at MAHSA University, Kuala Lumpur. The curricula are highly similar; both courses are taught entirely in English, and have been verified as meeting UK quality standards by the same external examiner.

From student achievement data, it appears that the UK-based and Malaysia-based students have different areas of strength and weakness in their academic performance. UK-based students tend to perform relatively well in coursework tasks that require the use of critical analysis, but perform less well in closed-book tests of detailed subject knowledge; the opposite pattern is seen in Malaysia-based students. This project explores the potential reasons for difference in student achievement in different assessment types between the two countries studied, initially using the two comparable biomedical courses described above as a ‘controlled’ sphere of focus. Further, the project identifies specific good practice in both the UK and Malaysian learning and teaching environments that could be ‘cross pollinated’ to enhance student achievement in the other cultural environment.

Previous work has been done on describing preferred learning styles of UK and Malaysian undergraduates (Healey et al., 2004; Shah et al., 2012; Husain et al., 2013), but an examination of the different learning and teaching cultures that may give rise to such preferences and norms has not yet been undertaken. There does exist a body of research on so-called ‘Western’ (typically USA) and ‘Eastern’ (typically China or Japan) learning cultures, in which authors have suggested that ‘Eastern’ learning culture places greater emphasis on the meritorious ‘struggle’ of study, whereas ‘Western’ learning culture more greatly celebrates intrinsic ability and external applications of learning (Li, 2012; Spiegel, 2012). Together with this come claims that ‘Eastern’ learning styles promote only surface-learning (Cross and Hitchcock, 2007), but other authors contend that memorisation-based techniques act as an effective prelude to deep learning (Kennedy, 2002; Tan, 2011); the area remains controversial. This project uses both quantitative and qualitative data to explore students’ and lecturers’ attitudes toward teaching and learning and their current practices, in the UK and Malaysia. Although it is recognised that confounding factors cannot be controlled-for entirely, data on the potential confounding factors (e.g. participant’s country of prior education; age; gender) were gathered for each participant, to allow sub-stratification of the results on these grounds.

Methods

The study employs mixed methods. An anonymous questionnaire of 44 questions was completed by four participant groups: undergraduate biomedical students in the UK and in Malaysia, and biomedical lecturers in the UK and Malaysia. Potential participant groups were approximately as follows: UK-based lecturers, n=15; Malaysia-based lecturers, n=15; UK-based students, n=300; MAHSA-based students, n=170. Recruitment rate from all groups was approximately 80%. The questionnaire consisted of statements with which level of agreement was indicated on a
numerical/Lickert scale, and free-text responses. Participants were recruited via an emailed request to complete the survey, and completing participants were given the option to enter a prize draw for an iPad. Statistical analysis was undertaken of numerical/Lickert-scale responses to determine potential differences between participant groups. Quantitative data was also sub-stratified by potential confounding factors, with appropriate statistical analysis.

A focus group was convened for each of the four participant groups. Focus groups each contained 4-6 volunteers, identified from questionnaire participants who indicate that they would be happy to participate further. Each focus group discussion lasted approximately 90 minutes. Conversations at the focus groups were semi-structured by the researcher, such that similar points were covered in every group. Discussions at focus groups were recorded, for subsequent transcription and coding/analysis. Qualitative data was analysed for trends and patterns, stratified by participant group and potential confounding factors.

**Preliminary Results**

Although data analysis is still underway at the time of writing (June, 2018), preliminary results indicate considerable similarities between the views of Malaysia-based and UK-based lecturers. On average, both groups felt that both coursework tasks and closed-book examinations were effective modes of assessment for learning, although Malaysia-based lecturers agreed more strongly that exams were effective as learning tools. A similar range of teaching and student support methods were used by both lecturer groups, including the provision of formative feedback on student coursework drafts; neither group was likely to advocate simple memorisation-based approaches.

Interestingly, the main type of exam preparation support given by Malaysia-based lecturers was ‘helping students to structure their responses’, whereas the main type of exam preparation support given by UK-based lecturers was ‘helping students to understand the principles [of the topic at hand]’. Student and lecturer groups in both countries suggested that under-preparation for exams is an issue. When participants were asked to quantify how many hours, in their view, should be spent in preparation for an exam (of standardised length and module weighting), and also to quantify how many hours are actually spent, UK-based students appeared to under-prepare by a significantly greater margin than Malaysia-based students. Qualitative data suggests that compulsory attendance at taught sessions in the Malaysia-delivered course – for which there is no equivalent in the UK-delivered course – was a key driver in Malaysia-based student achievement in exams.

UK-based students and lecturers were more likely than their Malaysia-based counterparts to state that acquisition of transferable skills was the most important outcome from students’ degrees, whereas Malaysia-based students and lecturers were more likely to prioritise the acquisition of subject knowledge. Both lecturer groups were generally of the view that students’ skills of critical analysis should be improved, and felt that such skills can be effectively assessed in coursework. Interestingly, however, Malaysia-based lecturers typically felt their students spent too long on the production of coursework tasks – a view that seems at odds with their expressed desire for students’ skills of critical analysis to be enhanced. UK-based lecturers were more likely than their Malaysia-based counterparts to use exemplars and case studies in their teaching practice, although ‘interactive’ forms of teaching and learning were
Both student groups generally felt that they allocated the correct number of hours to production of coursework tasks, whereas UK-based lecturers were more likely to judge students’ time allocation to coursework as inadequate.

Implications of the Study

The project presented here is Phase 1 of a wider study. Phase 2 will involve the expansion of both the quantitative and qualitative aspects of the research to include participants from 8 comparable institutions (4 UK; 4 Malaysia). Contrary to some existing literature on ‘East vs West’ teaching and learning styles, Malaysia-based lecturers did not value simple memorisation of facts by their students any more highly than UK-based lecturers. Culture and policy differences did seem to underpin the superior performance of Malaysia-based students in exams, however; I recommend that UK institutions adopt stricter policies of compulsory student attendance and place a greater emphasis on supporting students with ‘exam technique’ to improve student attainment in closed-book assessments.

Placing a high value on acquisition of transferrable skills seems to go hand-in-hand with student achievement in coursework tasks that require critical analysis. I therefore recommend that Malaysian institutions make greater use of exemplar-, debate- and case-study-based teaching to inculcate confidence and skills in critical analysis, and thus raise student achievement in this area.

References


