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Promoting Student Led Education

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Abstract

This paper will discuss the encouraging outcomes of a small scale study in which students were encouraged to actively contribute to various aspects of their education.

It will share an innovative Student Led Education Initiative that emerged by extending the author's teaching practice. First year undergraduate students were encouraged to actively contribute to various aspects of their education. The rationale behind this was to inspire students to lead the way in their education. The initial outcomes are positive which implies that these ideas may indeed be worth exploring and extending, perhaps modifying the approach to make the entire process even more efficient.

The population of university students is becoming increasingly diverse as British universities continue to host students from across the globe. The variety of cultural, socio-economic and academic backgrounds of students manifests itself through diverse expectations and requirements.

Further, the recent Higher Education White Paper may lead a new era of change with the focus on students as they become increasingly aware of the potential of university degree courses to improve their employability which is of growing concern to them, especially with the imminent rise in tuition fees. Students are becoming better informed because of the transparency in university performance information readily available through the National Student Survey.

Introduction

The Higher Education White Paper, "Higher Education: Students at the Heart of the System" published by the Government (June 2011) for Business, Innovation and Skills sets out proposals for the reform of Higher Education in England putting students at the centre of the proposals. These changes transform the role of the Higher Education Funding Council for England (HEFCE) into a promoter of a competitive Higher Education (HE) system.

The key points of these proposals relate to the areas below:

1. Sustainable and fair funding
2. Well-informed students driving teaching excellence
3. A better student experience and better-qualified graduates
4. A diverse and responsive sector
5. Improved social mobility through fairer access
6. A new, fit-for-purpose regulatory framework

Context and Concerns

Universities are progressively required to align their degree programmes to the requirements of the employment market, and aim at enhancing the employability of graduates.

University students are considered consumers rather than partners in their education. Universities are committed to providing prospective students with more detailed information about their degree courses and their potential to enhance employability. The National Student Survey (NSS) carried out by Ipsos MORI (independent market research agency) [2] makes relevant information about universities easily accessible to prospective students. The survey provides information about students' perceptions of their university experiences. Universities are encouraged to use this data effectively to improve student satisfaction. Further, universities are required to publish an employability statement (HEFCE, 2010 [1]) to help students make informed choices. The stakeholders in Higher Education are becoming highly aware of the relevance of the additional skills students should be gaining in addition to course-specific skills.

A student centred teaching approach (SCTA) allowing students to actively participate in education may be an effective way to respond to these new developments in HE.

Main Hypothesis

Student Led Education (SLE) will follow from an enhanced student experience and improved graduate employability, achieved by a SCTA.

The two related research questions to be considered are:

1. Would a SCTA enhance student learning experience and graduate employability?
2. Would such an approach inspire students to lead the way in their education?

The author's study will address key points 2 and 3 of the proposals of the White Paper focusing on first year undergraduate mathematics/statistics courses. Nonetheless, its principles can be applied to the wider HE context.

Approach

Undergraduates taking mathematics/statistics service courses generally seem to lack commitment and enthusiasm due to inadequate understanding of the relevance of these courses to their degree programmes and poor perceptions of the subjects due to pre-conceived negative notions. Further, the skills of MSOR (Maths, Stats and Operational Research) graduates (QAA, 2007) [4] must be considered while designing and delivering these courses.

A positive influence can be created on students' perceptions of mathematics and statistics courses by changing various aspects of the course delivery. The rationale behind this is that it may help achieve the two desired objectives:

1. Enhancing their learning experience
2. Promoting SLE

A SCTA may increase student interaction and create opportunities for active contribution, engagement and involvement. This could enhance graduate employability, inspire students to actively engage with their education and promote a sense of belonging to their respective universities. Further, given the opportunity, students may feel better motivated to lead the way.

First year under-graduates (FYUG) in this SCTA are invited to provide input into their education. SLE may emerge from this approach as a result of the enhanced student involvement/experience in education.

Encouraging Student Led Education

Classes provide an ideal setting to promote students' contribution and participation because they allow flexibility in terms of making sessions student-centred, with the only constraints being syllabi requirements and the duration of classes.

The author had 12 class groups during the academic year 2010-2011 with 172 students altogether. Each class had 13-18 students on a variety of degree programs. These were Actuarial Science, Econometrics and Mathematical Economics, Economics and Economic History, Government and Economics, Accounting and Finance, Management, Philosophy and Economics, Environmental Policy with Economics, Management Sciences, Geography with Economics, Human Resource Management and Employment Relations, Mathematics and Economics, Business Mathematics and Statistics and Social Policy and Economics.

These hour long weekly classes are generally used to provide feedback on weekly coursework exercises. This was the approach initially used by the author who observed a few points that seemed to obstruct student engagement and needed some action. Hence, the author developed her own teaching approach to effectively address the variety of learning requirements resulting from the diversity in students' academic/cultural backgrounds, enhance student engagement, promote interaction and improve the social climate in teaching rooms. This SCTA involves a range of elements such as feedback on weekly coursework followed by group work questions that students are asked to solve in a workshop setting under the author's guidance. The author describes its successful application in her previous paper (Kotecha, M 2011 [3]), reporting how this approach not only fulfilled her initial expectations but far surpassed them making a positive contribution to academic self-efficacy and kindling interest in mathematics/statistics.

This SCTA was used for all 12 classes. In this approach, students are invited to contribute to the designing of classes in order to help develop a format that addresses their diverse learning requirements. This is done by providing information about the class format and the rationale behind it at the outset. They are advised on what is expected of them in terms of preparation for the classes and the extent of student participation required. This is necessary because several students may not be used to the idea of a student centred approach due to their multi-cultural backgrounds and the variety in their learning experiences.

Further, students are given the opportunity to provide feedback on the classes during the initial period of the first term. The significance of students' feedback is clearly communicated to them. Students are invited three times during the academic year to participate and contribute to the process in various ways. They are asked to comment on the aspects of teaching they find beneficial and those they consider to be obstructing their engagement with classes. They are also encouraged to share their anxieties/queries on issues of concern anytime during the academic year. This is to prevent such issues from impeding learning.

The class format is appropriately amended and aligned, in accordance with students' suggestions and learning requirements. This demonstrates to them that their feedback is taken seriously which promotes constructive two-way communication and a greater sense of belonging in students.

They are motivated to play an active role in the process of feedback on formative assessments by making feedback interactive. This is done by providing them with a feedback sheet before the first class. They are asked to attach it to each weekly assignment and write comments/concerns relating to that particular assignment in the 'student's comments' section. Classes are designed carefully taking students' comments on the attached feedback sheets into account. This helps align the classes to students' individual learning requirements/queries and promote enthusiasm and motivation to engage in classes with full commitment. Common problem areas and

errors are highlighted in classes advising students to review and annotate their marked scripts, to help improve their future work (Kotecha M, 2011 [3]). This helps them develop evaluative skills, encourages them to review their work critically and plays an important role in encouraging students to take ownership of their learning.

Classes commence with a short question followed by feedback/recap and finally group work questions for students to attempt in a workshop setting with the teacher circulating and helping them with their queries. The group work questions are set to intellectually stretch them, promote dialogue and help them develop employability skills (Kotecha M, 2011 [3]). This format improves the social climate of classes, enhances students' perceptions of the courses and increases student engagement.

Students enthusiastically participate in the process of providing feedback on classes and appreciate being asked to provide comments. Further, their unprompted qualitative feedback on the discussed approach reflects enhanced students' satisfaction and engagement, which leads to a transformation of their attitudes from lack of engagement to demonstration of a keen interest in the courses and enhanced commitment to engaging with the learning process.

The discussed SCTA contributes to creating a positive impact on students' attitudes towards the course. Students show a strong sense of commitment, obligation, responsibility and keenness to improve their performance standard/grades of formative assignments, as reflected in their work. The outcome is greater engagement and an outstanding display of interest in the course. They become motivated to optimise the author's guidance/resources and office hours in order to be well prepared for the summative assessment.

Some comments are shown below to illustrate how much students appreciated being asked to provide feedback on classes.

"I currently enjoy your class very much...I will "vote" for continuing the current class format. Thanks very much for asking."

"...thanks for letting us give our opinions and for being so open about it - I really appreciate it. Let me know if you want to know anything else"

"I am really enjoying your classes I particularly enjoy the new questions we are given as they help me realise what I need to work on and what I understand."

Further SCTA promoted a sense of obligation to optimise the guidance and resources as shown in some comments below.

"...I thought I owed you some sort of "progress report"..."

"I would certainly make the most out of the extra resources..."

"...I just wanted to say a big 'thank you' for everything this year. I don't think I could possibly have been in better hands!"

Methodology

The author aiming to extend her existing SCTA, sent a message to all 172 students from her classes after the completion of their mathematics and statistics courses, asking if they would like to spare a few minutes talking to the new FYUG at the start of the following academic year, given that they benefited from the authors' classes. Further, it was explained that they were considered to be ideal candidates to advise the FYUG because they have had first-hand experience of her classes. It was proposed that they could make a positive contribution to the mathematics/statistics course experience of the FYUG by suggesting ways to make the most of the classes.

Initial Outcome

The initial outcome was promising and encouraging. 78 % of students replied and expressed a willingness to contribute. Further, a dialogue emerged highlighting the aspects of class teaching they appreciated, which was an unintended outcome that could become a useful source for reference while designing future classes.

Some replies are included here and will be referred to in the discussion section.

Student A

"Indeed I benefited a lot from your interesting and engaging statistics classes over the academic year. I could tell that you took much effort in creating application questions that could help us understand the concepts well. You prepared us adequately for the exam, which was relatively simple. I do hope I score well in the exam, so that I can do you proud.

Regarding your suggestion, I think it's a good idea and wouldn't mind helping out to advise your students next year, provided the schedules do not clash. I think it will benefit them when they hear advice from a 2nd year student on the...course in general, providing them insight into possible strategies to approach the course."

Student B

"I'd be more than delighted to speak to the new students as I'm sure it will benefit them to know how best to make use of their time as well as your lesson time.

Oh, also thank you for your guidance for the past year; it has been pleasure learning from you. I speak for the whole class here when I say your lessons are really engaging and helpful to all of us, and we thank you from our hearts."

Student C

"With regards to your suggestion, I think that this is a very good idea and would be happy to help, as I certainly feel that I would have benefited from this, even just a few comforting words.

I think that sometimes students are more receptive to advice given from their peers, particularly concerning exams, as older students have been through the learning process so to speak...as first year exams can be a bit daunting..."

Issues

The main issue was the time table clash which made it difficult for several second year student volunteers who were keen to contribute. Further, it was time consuming to reply to the students' enthusiastic messages which also required developing selection criteria as only one volunteer was required for each class. Coordinating the ex-students' visits to classes required much organisation.

Success

The student volunteers came in at the beginning of the classes and gave a brief talk advising students to appreciate the extra support they receive in classes. They also made advisory comments on how to make the most of the class work questions and group work. FYUG students listened with interest and shared their queries and concerns relating to the course, which were addressed by the student volunteers. These 5-7 minutes spent on the entire process created a positive impact on the engagement of FYUG and on their attitudes towards the classes as well as the courses generally.

Discussion

The SCTA enhanced the student experience which kindled their enthusiasm to create a positive impact on FYUG students which could be a step towards SLE. The quotes from students A, B and C indicate how SCTA promoted a sense of responsibility, gratitude and commitment. The enhanced learning experience of students inspired them to contribute to the future of FYUG students and begin to lead the way. Further, it enhanced the student volunteers' presentation skills and helped them develop the ability to influence others. The student volunteers invested much effort into their talks to the FYUG. The author advised them to share their class experiences in their own words commenting on how they optimised the class time. This was to encourage them to use their own initiatives which turned out to be a risk worth taking because of the spontaneity, enthusiasm and genuineness that came through in their talks. They displayed self-discipline in arriving on time, remaining focused during their talk and addressing questions by the FYUG. This may help enhance graduate employability.

Further, this appeared to put the FYUG at ease. They were able to share their concerns about the course with their peers with greater ease because they could easily relate to them. The student volunteers' enthusiasm was transmitted to FYUG students as reflected in their enhanced engagement, greater commitment and interest in the course.

Conclusion

The suggested SCTA may be a way forward for SLE which may follow from students' enhanced university experience, which may contribute positively to enhancing graduate employability.

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