Innovative Teaching and Learning Practices: The Student Perspective

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Abstract

As educators we are interested in continuous improvement; we want our teaching to be more impactful, to be engaging and innovative, culminating in students developing skills that facilitate lifelong learning. To date significant research has been conducted on innovative teaching and learning practices that educators may adopt to achieve these aims. However, fewer studies have focused on teaching and learning practices from the student perspective. This paper, reporting findings from a larger study, seeks to address this gap. An online survey was conducted across the student cohort in the School of Business of an Irish higher education institution (HEI). The findings show that students favour a mix of innovative practice and traditional teaching in helping them to learn effectively. Case studies and recorded lectures are the most popular choice of innovative teaching practice and students favour methods that help them to understand, thus leading to deep learning. Additionally, traditional teaching practices are still important to students, particularly first year undergraduates.

Keywords: Traditional teaching practices; innovative teaching practices; student perspective; higher education.

1. Introduction

Higher Education Institutions (HEIs) face continual change. Each academic year a new cohort of learners commence their studies replacing those who have graduated. Change is also apparent in teaching approaches where educators engage in innovation voluntarily to improve student learning, or perhaps necessarily, due to circumstances beyond their control such as larger participant numbers (Hannon, English, & Silver, 1999). Innovation is described as the implementation of new and improved ideas, knowledge, and practices (OECD, 2005). Innovation in Education may take the form of "a new pedagogic theory, methodological approach, teaching technique, instructional tool, learning process, or institutional structure that, when implemented, produces a significant change in teaching and learning" (Serdyukov, 2017, p. 8).

In Ireland, the National Forum for the Enhancement of Teaching and Learning in Higher Education (National Forum) provides resources to promote and develop an inclusive, collaborative, and innovative culture to maximise learning impact for all students. The HEI that is the subject of this paper, secured funding from the National Forum which was used to explore and share innovative teaching and learning practices in the School of Business. A study was designed to identify and document teaching and learning practices that were considered innovative by staff and students. This paper presents initial results describing key findings from the student perspective, which was based on an online survey completed by undergraduate and postgraduate students across the HEI. Future work will compare these findings to the HEI staff perspectives of innovative teaching learning practices.

While there is a substantial body of prior research in relation to innovative teaching and learning practices these have focused primarily on the perspectives of educators. Fewer studies have addressed student experiences and opinions of innovative teaching and learning practices (Walder, 2017). This paper provides two contributions to the extant research. First, it responds to calls for more studies reflecting student perspectives of innovative teaching and learning practices (Walder, 2017). Second, it provides additional insights into student opinions about innovation in teaching and learning practices and their views on the effectiveness of these practices.

2. Literature

This study explores two broad approaches to teaching and learning, traditional and innovative practices. Traditional teaching and learning practices are straight forward, based on the delivery of notes by a lecturer with (perhaps) a question and answer session included (Ebert-May, Brewer & Allred, 1997). To describe innovative teaching and learning practices, first the element of innovation must be addressed. Innovation involves the implementation of new and improved ideas, knowledge, and practices (OECD, 2005), which may be something novel

in one situation, a departure from what has been done before, or it may be something that is established in another situation (Hannon et al., 1999). Serdyukov (2017) proposes that innovation comprises three aspects, an idea, its implementation and the outcome of executing the idea that results in a change. In terms of education, innovations aim to raise productivity and efficiency of learning and/or improve the quality of learning. Educators often engage in innovation voluntarily to improve student learning and the quality of their teaching. (Hannon et al., 1999; Walder, 2017). They may innovate with the specific intention of "captivating, supporting, improving, problem solving, readapting, creating and communicating" (Walder, 2017, p. 74). Von Stumm, Hell, and Chamorro-Premuzic (2011, p. 574), explored the concept of curiosity in enhancing student learning, and found that intellectual curiosity "is a core determinant of individual differences in academic achievement". In an earlier study, Weimer (2002) criticized regimes that do not pique students' curiosity in creating mature responsible learners.

Previous research capturing student perspectives have reported on the types and innovative teaching and learning practices that are effective and engaging. Revell and Wainwright (2009), in their study of what makes lectures unmissable, found that the use of real world examples and current case studies in class was rated highly by students and considered powerful in encouraging deeper approaches to learning. Additionally, in a study conducted by Trinidad, Ngo, Nevada, and Morales (2020) students confirmed that the use of teaching practices involving real life applications and examples (such as case studies) was both engaging and effective. Research conducted prior to the onset of Covid-19 showed some different results regarding student views of traditional and innovative teaching and learning practices. A study based on undergraduates in the UK, Europe and South Africa over a twoyear period, highlighted that prior to the onset of Covid-19, 54 per cent of students preferred traditional teaching and learning practices using face-to-face lectures/classes, with textbooks and recommended resources (Cengage, 2020). An earlier study by Lawler, Mara Chen, and Venso (2007), found that almost half of all respondents, preferred a ratio of 10 per cent group work and 90 per cent formal lecture. In terms of online learning, a pre-pandemic Australian study found that only one out of three students preferred live lectures (Wolff-Boenisch, 2021). Research indicates mixed views regarding the use of videos in class. While there is evidence to confirm that shorter videos improve learning outcomes (Carmichael, Reid, & Karpicke, 2018) in a Covid-19 online learning environment, YouTube videos were not popular among students (Chen, Landa, Padilla, & Yur-Austin, 2021).

In terms of how teaching practices may help students to learn, prior studies suggest that a clear structure to lectures is preferred by students (Lawler et al., 2007; Revell & Wainwright, 2009) and not presenting too much information all at once allows information to be prioritised and assimilated to reveal the big picture (Revell & Wainwright, 2009). A study based on undergraduates in the UK, Europe and South Africa over a two-year period confirmed that

students prefer their learning to be structured for them but also that they preferred to work independently rather than collaborating with others. The study also found that first year students were consistently looking for support with basic aspects of their course, suggesting more instructor-led involvement and preference for traditional ways of learning (Cengage, 2020). This contrasts strongly with Revell and Wainwright (2009), who claim that pedagogic scholars are now emphasising the role of the lecturer as a facilitator rather than teacher, whose primary role is to give students the tools to learn for themselves.

The Covid-19 pandemic forced HEIs to move to online teaching and academics to their adapt practices. This created more familiarity of online teaching practices and resources and altered opinions. In the UK, European and South African study noted above, the findings indicate that due to imposed remote learning as a result of the pandemic, the preference for traditional teaching practices had fallen slightly to 47 per cent (Cengage, 2020). Conversely, the Australian study showed that since the onset of Covid-19, 40 per cent of students preferred face to face lectures (Wolff-Boenisch, 2021), suggesting a negative impact of the pandemic on online learning. Additionally, in their study of online learning during the pandemic, Chen et al. (2021) also note that students strongly favour face to face instructional format rather than fully online or a hybrid.

3. Methodology

This study was submitted to and approved by the School of Business ethics committee prior to commencement of the research. An online questionnaire was developed to collect data for this study. A purposeful random sampling approach was used in compiling the questionnaire. The researchers sought to understand students' views of innovative teaching and learning practices. The study took place within the School of Business in an Irish HEI. The population for this survey was 1,196 students including both undergraduate, postgraduate and part-time students. The questionnaire was prepared based on themes drawn from teaching and learning literature, and a prior study of staff perspectives regarding innovative teaching and learning practices. (A list of teaching and learning practices was compiled comprising case studies, recorded lectures, YouTube and other videos, Online resources such as blogs, forums and Padlet, guest lectures, work placement, mentoring, reflective practice, lecturer shared delivery, problem based learning, simulations, learning portfolios and traditional teaching). To facilitate their completion of the questionnaire students were provided with the list of teaching and learning practices including a short explanation of each type. While students may have been aware of a variety of these teaching practices, they may not have had direct experience of all of those included in the listing. The questionnaire was pilot-tested in advance to ensure that it "operated as designed" (Bryman & Bell, 2007).

The online questionnaire consisted of 18 questions. 15 were closed questions (including nominal, multi response ordinal and ranking questions) while three questions were open ended. A link to an online survey platform was made available to students through the virtual learning environment Moodle. The link was released on 22nd November 2021 and the collection period remained open until 25th January 2022. The response rate was 23 percent with 93 per cent from undergraduates and 7 per cent from post-graduates. This is broadly in line with the numbers enrolled on the School programmes. Responses came from across the range of programmes in the School of Business. The data collected was analysed using the analysis tools of the online survey platform and descriptive statistics were derived from the data, and this helped to develop the narrative of the study.

The main limitation of the methodology applied to this study is that both researchers are academics in the School of Business and are known to many study participants. To mitigate against this, the researchers maintained participant confidentiality as a priority during data gathering and analysis.

4. Findings

Initially students were asked to rank (based on the list of teaching and learning practices noted above), the *teaching practices that were most effective for their learning*. The findings indicate that students consider case studies and recorded lectures to be most effective with almost 36 per cent of participants selecting these as either their first or second choice. Work placement and YouTube videos were ranked equally in third place. The least effective methods as ranked by students were learning portfolios, simulations and shared delivery. Traditional teaching methods ranked surprisingly high, coming in fifth out of 13 possible practices. When these results were further analysed by year of study, the findings show that traditional teaching methods were highly favoured by first year students but were the second least preferred method for postgraduate students. Aside from the teaching methods listed and specified in the survey, other practices noted by students as being helpful to their learning included group discussions, tutorials, and project work/labs. Group discussions were mentioned most often suggesting that students learn effectively from each other when given the opportunity.

In terms of *what had influenced student's choice of effective learning practices*, over 90 per cent of participants either agreed or strongly agreed that they had selected practices that helped them to score well in assessments and that helped them to remember the topic later. Teaching practices that helped them to see the relevance of class material in the real world was also an important factor for 78 per cent of participants, with one participant remarking "When an abstract concept is explained to me in a real-life scenario it helps me to understand it and piques my interest. I also grow in confidence around that subject". However, 35 per

cent of all participants did not agree that the teaching practices would encourage them to learn more about the topic. Looking only at post-graduate level, this view had fallen to 25 per cent.

In addressing *how specific practices help them to learn more effectively*, almost all of the students indicated that the teaching practices that they had highlighted made it easier for them to understand the module material and this led to a deeper understanding of the topic. The findings also indicate that the majority of students had selected specific innovative practices because they allowed them to learn at their own pace.

In terms of *how effective learning practices help to engage in class*, the findings suggest that innovative teaching practices help students to engage in active learning. One student commented that, "doing actual exercises keeps me much more engaged". When asked *how* this happens, approximately half of the participants strongly agreed that being actively involved in exercises captured their attention and made them more alert. The majority of students agreed that active involvement kept them stimulated and motivated to learn. Over 68 per cent of students agreed that interacting with classmates made learning more interesting while 63 per cent of respondents agreed that innovative teaching practices just "make learning fun".

Finally, there were mixed views relating to the effectiveness of online remote teaching, (for example during the COVID19 pandemic lockdown period). There were equally strong opposing views on whether or not, online teaching improved the ability to learn. Overall, the study found that online lectures did not affect the ability to learn with up to 73 per cent of respondents agreeing that online teaching does not in itself improve learning, it is simply a channel for delivering material. There were, however, some calls for online assessment and for access to recorded lectures as a study/revision tool.

5. Discussion

The study highlights case studies and recorded lectures as innovative practices that are most effective for student learning, which confirms the findings of Revell and Wainwright (2009) and Trinidad, Ngo, Nevada & Morales (2020). Additionally, in this study work placement and the use of short videos were also found to be effective learning tools. However, this finding both supports and contradicts extant research that presents mixed views regarding the effectiveness of using videos in class. While there is evidence to confirm that shorter videos improve learning outcomes (Carmichael, Reid and Karpicke, 2018), when situated in a Covid-19 online learning environment YouTube videos were not popular among students (Chen, Landa, Padilla and Yur-Austin, 2021).

The research suggests that students welcome innovative teaching approaches to support their learning yet continue to place significant value on the importance of traditional practices to support their learning. This finding is most applicable to first year undergraduates and concurs with a study conducted by Cengage (2020), which highlighted that this student cohort prefer their learning to be structured, and require support with basic aspects of their course. This suggests that first year undergraduates require more instructor-led involvement and prefer traditional ways of learning. In contrast, Lawler et al. (2007) found that almost half of all students surveyed favoured 90 per cent or more as formal structured lectures and 10 per cent or less as student group work.

In attempting to understand what influenced students' choice of effective teaching, the findings indicate that students prefer innovative practices that help them to score well in assessments, to remember the topic later and to relate academic theory to the real world. These findings support the work of Revell and Wainwright (2009) who found that applied methods and the use of real-life examples are powerful ways of encouraging deeper approaches to learning. However, the research also found that innovative practices did not always pique a students' desire to learn more and could limit true understanding, particularly at undergraduate level. These findings echoes earlier research of Von Stumm (2011) who found that curiosity or a desire to learn more, is a core determinant of academic achievement.

In contrast with Cengage (2020), who found that students preferred to work independently rather than collaborating with others, this study finds that innovative practices that foster peer-to-peer interaction were particularly effective in promoting student engagement and real learning. Whether it was the collective intelligence or the opportunity to spend time together, interacting with each other was found to be very important for effective learning. This finding supports the work of Revell and Wainwright (2009) and suggests that students can learn effectively from each other, when the lecturer moves from instructor to facilitator and provides students with the tools to learn for themselves. The onset of the COVID 19 pandemic accelerated the move from traditional face-to-face teaching to online teaching. The study finds that although online teaching has benefits, (specifically in the form of recorded lectures as a study tool), online approaches do not necessarily improve learning. The findings suggest that they are simply a channel for communicating a teaching approach. In a study of student perception of online learning following the Covid-19 pandemic, Wolff-Boenisch (2021) also found that one out of three students preferred face to face lectures and this increased after Covid-19 thus suggesting a negative impact of pandemic on online learning.

Similar to prior research, primary data was collected using a survey requiring students to assess the effectiveness of teaching practices on their learning, there was no independent measure of their performance (Lawler et al., 2007; Trinidad et al., 2020). Consequently, the question remains, do students' perceptions of their learning outcomes really correlate with their actual learning? This suggests an avenue for future research.

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