

The use of lectures: effective pedagogy or seeds scattered on the wind?

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Abstract

This case study of large-class teaching at a UK university focuses on the place of largescale lectures in academics' approaches to teaching, their use by students in their studies, and their relationship to institutional quality assurance policies. The case is a second-year module comprised of 180 students, and it includes two-hour lectures as the primary mode of teaching. The data is drawn from a range of sources including observations, interviews, focus groups, institutional documentation, and a student survey. Observations revealed largely transmissive lectures with little student interaction. The analytic framework of constructive alignment and outcome-based education is used to examine the promoted educational values and the practice experienced by students. The results are further explored in relation to two texts celebrating 50 years since publication: Donald Bligh's What's the Use of Lectures and Benson Snyder's The Hidden Curriculum, Both highlight the dissonance of espoused approaches to teaching, and the realities of large-class environments. While the institutional literature foregrounds student-centred, 'active learning' approaches, the teacher-centred practice observed would have been very familiar to Bligh and Snyder; the principles of constructive alignment were visible only at the policy level. The implicit reward mechanisms of the hidden curriculum ensure that the majority of students succeed and are satisfied with the educational offering. The students who attended the lectures appeared to enjoy them and indicated that the primary benefits are the structure offered by live lectures and the support of the peer networks which develop as a result of attendance.

Keywords Lectures · Large class teaching · Hidden curriculum · Constructive alignment · Constructivism · Outcome-based education

Introduction

Two seminal books in higher education (HE) celebrated their half-century in 2021: Donald Bligh's *What's the Use of Lectures* and Benson Snyder's *The Hidden Curriculum*. These two books have made a substantial contribution to the development of educational discourse and theory since their publication. While Bligh remains an advocate of the



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(proportionate) use of the lecture method, he is scathing of the casual overreliance on transmissive lecture styles often observed, arguing for smaller class sizes, variety, and interaction in teaching sessions. Snyder posits that there is a dissonance between the formal curriculum described in terms of a scholarly pursuit of knowledge and an informal 'hidden' curriculum, which centres around the implicit expectations of staff and students. He claims the hidden curriculum can foster instrumental behaviours in students: 'The classic example is the professor who says "Be creative" and rewards rote memory' (Snyder, 1971, p. 155). It can, he claims, result in short-term, assessment-driven learning, which has been shown to impair students' (long-term) performance in real-world settings.

Bligh retains a focus on what happens in the classroom, whereas Snyder takes a more holistic view of institutional structures which influence the beliefs and behaviour of academics and students. While Bligh and Snyder's frames of reference differ, the centrality of the student in learning and teaching is a theme common to both. Traces of their influence can be found in the policies of present-day HE which inform institutional, national, and international, quality assurance (QA) processes. A more contemporary influence of QA processes is outcome-based education (OBE) and particularly constructive alignment (CA). Loughlin et al. (2021) hold that CA operates at two levels within HE, firstly, internally as a qualitative tool to enhance the coherence of the educational offering and support the process of student learning; and secondly, externally, as a product-oriented means of audit and control of curricula by policymakers. They argue that CA used in QA processes can create an illusory appearance of student-centred approaches to learning and teaching, often misrepresenting the reality of practice. This paper is an empirical study that relates teaching practice to institutional rhetoric.

Transmissive lectures, in which students primarily listen to the lecturer and take notes, remain commonplace in HE (e.g. Gynnild et al., 2021). This case-study of large-class teaching at a UK university provides an opportunity to examine contemporary approaches to teaching in relation to the ideas discussed in the historical texts. The research looks at the totality of the module, with an emphasis on the place of non-mandatory large-scale lectures within it. The object was to understand the perceptions and expectations of the students who chose to attend them and how they *use* lectures in their learning. The analysis and discussion integrate findings from the case study with the historical texts and more contemporary theoretical perspectives.

Three core elements are considered in this paper: the study data, CA as curriculum theory, and the historical texts. These are discussed at two levels, firstly the institutional or structural level and secondly at the practice level (see Table 1 for a visual representation). It is the relationship between these elements and levels that form the article's underlying structure. That is, how the institutional documentation is informed by the QA requirements; if/how that translates into classroom practice; and to what extent the Bligh and Snyder texts retain explanatory power of the (contemporary) observed phenomena.

Table 1 The article structure of three elements over two levels

	Study data	Curriculum theory	Historical texts
Structural/insti- tutional	Institutional documentation	CA in the QA process (product-oriented)	Snyder: The Hidden Curriculum
Practice	Lecture: Observations/interviews and focus groups	CA as enacted in the module (process-oriented)	Bligh: What's the use of Lectures?



The theoretical perspectives below are followed by an overview of the case and the study methodology. The findings are then explored in a thematic analysis of the data, and the discussion in relation to the texts mentioned.

Theoretical perspectives

This section locates large-class transmissive lectures within selected educational literature. There is a great deal of overlap between the historical and more contemporary texts outlined below, all of them characterising aspects of students' study habits, at least partly, as a reaction to lecturers' approaches to teaching. They are also—implicitly or explicitly constructivist—describing student's learning as individual, prior knowledge dependent; and learning itself as an active, constructive, and goal-oriented process.

At the structural level then, the OBE movement is significant for this study because of its integration into UK and European QA frameworks, most notably through CA. John Biggs developed CA in the 1990s and fully articulated it in his 1999 book *Teaching for quality learning at university*: 'A good teaching system aligns teaching method and assessment to the learning activities stated in the objectives, so that all aspects of the system are in accord in supporting appropriate student learning. This system is called constructive alignment, based as it is on the twin principles of constructivism in learning and alignment in teaching' (Biggs, 1999, p. 11).

Biggs and Bligh do not imply lectures are never appropriate, rather that, an over-reliance on transmissive lectures is less effective than many alternative approaches. CA is archetypically student-centred in its approach, stressing the importance of carefully designed learning activities. 'Lecturing is logistically convenient [however] the learning that takes place in lecturing is demonstrably worse than in other teaching situations' (Biggs & Tang, 2011, p. 157). Biggs is practice-focused and intended CA as an educational tool to enhance learning through student-centred, activity-based approaches to learning and teaching. He is critical of its use by policymakers as a means of audit and control through QA processes. It is this dual perspective of CA that is considered in this study.

At a practice level, Ausubel contends that meaningful learning *is* possible from expository verbal instruction, but that misapplication in practice led to educational theorists dismissing it 'disdainfully as an archaic remnant of discredited educational tradition' (Ausubel, 2000, p. 6). There is little other published empirical research in defence of traditional lectures. As Bligh points out, that is likely to be because most studies are using lectures as the benchmark against which favoured alternative formats are measured. Even where lectures perform well in comparative studies, it is more likely to be perceived as a shortcoming of the alternative than the success of the lecture. In a paper that draws on Goffman's *Forms of Talk*, Fulford and Mahon argue a *philosophical* defence of lectures, which, while persuasive, is metaphoric and aspirational. One could imagine a hard-pressed academic facing two-hundred students on a rainy Thursday morning struggling with the concept that the 'lecture is the site for, and the possibility of, the passionate utterance' (Fulford & Mahon, 2020, p. 373).

There is no commonly accepted definition of a lecture, 'few rules', and 'no more agreement about what is a good lecture than there is about good music' (Bligh, 1972, p. 9). What's the Use of lectures? has a practice focus as it was originally penned with the aim of helping new lecturers (citations in this article are from the 3rd edition published in 1972 and the American edition of 2000). The research evidence presented in the first few chapters is damning; lectures performed poorly (in terms of students' assessment scores) in



almost every metric apart from knowledge transmission, where they were only *as* effective as other methods. Bligh's findings are that lectures are 'relatively ineffective' for inspiring interest in the topic, promoting thought, changing attitudes, or developing behavioural skills.

The psychology sections deal with issues of motivation, attention spans, and memory. He helped popularise the idea of the 20-minute attention span for students in lectures. Interestingly (in a world currently forced into online teaching), when mediated via TV screens, attention spans were 'much worse' than live lectures (Bligh, 2000, p. 53). While concluding that lectures alone are 'rarely adequate' (ibid, p. 251), he remains a proponent of the lecture method and two-thirds of the book is devoted to helping lecturers improve the quality of their lectures. The final sections of the book promote active and discursive approaches to classroom teaching.

The Hidden Curriculum was based on research carried out by Snyder at MIT during the 1960s. He sought to articulate, what he sensed was a disconnect, between the espoused approaches to university education and the reality that he observed. The scholarly pursuit of knowledge often overwhelmed with an overloaded curriculum containing too much assessment, commonly resulting in instrumental approaches to learning. He contributes to the discourse of the relationship between teachers' approaches to teaching and students' response to it. The themes explored resonate strongly with this case study, especially as Snyder's research involved academically able students, and addressed large class sizes.

Drawing on some similar themes to Snyder, Trowler's teaching and learning regimes (TLRs) provide a framework for understanding the relationship between teaching cultures and student learning. TLRs help frame the relationships between the institution, teachers, and students described in this study. Trowler describes how power relations, implicit theories of learning and teaching, conventions, tacit assumptions, and discursive repertoires (amongst other things) influence approaches to teaching, which can, in turn, influence students' approaches to learning (Trowler, 2019). That is, teacher-centred/transmissive approaches are associated with surface approaches to learning by students, whereas student-centred teaching is associated with deep approaches (Marton & Säljö, 1976; Trigwell & Prosser, 2020). Snyder uses the terms *instrumental* and *expressive* to describe the same phenomena. Surface and deep are broad-brush descriptions of students' approaches to learning, linked to extrinsic motivation (e.g., exam-focused) or intrinsic motivation (interested in the subject for its own sake). It is stressed in the literature that these attributes are context-dependent and not fixed dispositions of individual students.

The above theoretical perspectives form part of a complex and multi-faceted understanding of the relationships between teaching and learning; they are not explored in detail in this paper but provided as context for the analysis and discussion which follow.

The case

The case is a semester-long module (course) equivalent to 7.5 ECTS credits which took place at a pre-1992, research-intensive, Higher Education Institution (HEI) in England between October 2018 and February 2019. It is a compulsory module for second-year students on a programme in the faculty of health sciences and builds on a similarly themed first-year module. A high tariff (grade) is required for entry onto the (prestigious) programme, and places are limited to 180. The module is split into two self-contained parts: a research methods section which comprises five two-hour seminars and culminating in



a piece of groupwork which accounts for 25% of the final grade. The primary focus of this study is the other part, which consists of a series of eleven two-hour lectures, these relate to an exam that accounts for 75% of the final grade. The exam is made up of 30 min of multiple-choice questions and a one-hour essay question; the exam marks are weighted 50/50 for each element.

For context, the University documentation produced is clear about what type of teaching students should expect: for instance, the University's corporate strategy talks of 'innovative teaching' and the education strategy espouses 'active learning'. The institution commits to 'teaching practices which are strongly informed by up-to-date educational research. [We] explicitly recognise and reward excellent teaching'. The module descriptor reflects the Quality Assurance Agency (QAA) requirements founded on CA and LOs.

The collaborative 'research methods' element and associated coursework account for two of the three LOs, all four of the 'attributes developed', and three of the four 'teaching methods' described in the module documentation. The lecture series and exam account for only two of the four 'attributes' and a single learning outcome (to 'understand and critically reflect' on the topic), which 'gives students the basic knowledge on' the topic area.

The module leader is a senior academic who had been leading this module for eighteen months (and takes one lecture); the module itself was validated by a predecessor several years previously. The module leader and four lecturers share the teaching; the lecturer interviewed taught five of the eleven lectures. She had been a lecturer for three years and had recently completed the institution's teacher training programme.

The lectures were conducted in a 200-seat raked (tiered) fixed-seat lecture theatre and took place between 11am and 1 pm every Thursday during one semester. At the start of the semester, there were 179 students registered on the module, 169 completed it.

The research questions reflect the tensions that can be seen developing between the formal curriculum represented in the institutional literature and the informal curriculum which confronts the challenges of large-class teaching.

Research questions

How do students make use of the lecture?

How do students and staff understand the role of the lecture?

How does the lecture series relate to the 'formal curriculum' described in the institutional documentation?

Methodology

The rationale for choosing this particular module were its credentials as a *common case* (Yin, 2009). The course handbook describes the lecture element as: 'standard lecture format with interactive elements'; the cohort size falls within the mid-range at the University and the 200-seat lecture hall is the most common size of fixed seat venues (the mean capacity across all raked-seat lecture theatres at the University is 154). The discipline is obviously the most contentious point for claiming a 'common case'; however, observations across a range of distinct disciplines, in the specific context of a large-scale lecture, suggest that disciplines have more in common than separates them. Comparisons of 'effective teaching do not vary markedly across the academic disciplines'



(Dolnicar, 2005, p. 4). The major variables which affect student engagement with the lecture, such as personality, enthusiasm, and structure, operate independently of the discipline (e.g. Bligh, 2000).

The case study methodology was chosen as suitable to explore a complex social practice enclosed in a module and framed by formal curricular structures, and draws upon data from a number of sources:

- Observations: Seven of the eleven lectures were observed (including all five instructors who taught the module), and lecture recordings of the remaining four were viewed.
- Staff interviews and focus groups: The data collected from the two staff interviews (the
 module leader and primary lecturer) and two student focus groups were recorded and
 transcribed verbatim, they covered a lot of ground; in this analysis however, the focus
 on large-scale lectures has been retained.
- Institutional documentation: Institutional policy, syllabus, and module guides were gathered and analysed.
- Student survey: All students enrolled in the module were invited to take part in an online survey relating to notetaking practices, engagement with lecture recordings, and attendance rates. The online survey was completed by 100 of the 169 students who completed the module. Students were incentivised to take part with 'lab tokens' which contribute to extra-curricular credits. The survey and VLE data will be explored more fully in a forthcoming article on attendance; in this paper, it is used only in relation to the statistical correlation with exam performance and self-reported attendance.

The first focus group (quotes labelled FG1) took place shortly after the module ended; it consisted of five students (two international). The topics covered ranged from reasons for attendance, note-taking behaviour, and their use of lecture recordings. The second focus group (labelled FG2) took place one year later and picked up on emergent themes from the first. It was conducted to explore what students valued about live lectures in more detail; it comprised of four different students from the same cohort (three international), who were now in their final semester of the final year. The cohort was predominantly female and included a large proportion of international students. The students who took part in the focus groups received gift vouchers to compensate them for their time.

Ethical approval for this research was obtained from the university where the study took place prior to the data collection. Informed consent was obtained from all participants.

Thematic analysis (Braun & Clarke, 2006), was used to identify patterns and themes across the data. After familiarisation with the data, the initial codes generated from the separate data sources included anonymity; assessment; motivation; expectations; self-consciousness; anxiety and enjoyment; and the status quo. The iterative process of thematic analysis, which combines the initial coding into emergent categories, resulted in the following themes:

- Filling the pail: content acquisition
- Isolated teachers and anonymous students
- Normalising uncertainty: peer networks
- Loose coupling: lectures like seeds scattered on the wind

These themes are reflected in the findings below, with accompanying textual analysis and supporting evidence.



Findings

This module has been running successfully for several years (the programme consistently ranking top 30 in the UK) and there is a pervading sense that the module leader perceives his role as largely bureaucratic. As the current caretaker of a successful module, he sees neither the scope nor the need to change the delivery of the module. The module evaluation comes in at 'around 4-ish [out of 5] depending on the cohort [...] there is no area for concern regarding this'. He specifically does not see the scale of the lectures as problematic: 'whether I deliver this content to a hundred or a hundred and eighty is not a big difference'. He stressed the autonomy of both students and teaching staff in relation to the lectures. The issue of attendance is 'never discussed' at a programme or module level. Attendance is not monitored, and the students are free to attend lectures or not, 'as long as [they] do not complain about not knowing something that has [been covered in the lecture] it's absolutely up to them'. Attendance at the (non-compulsory) lectures ranged between 35% and 46% of the cohort, decreasing noticeably towards the end of the semester.

The following extract from the lecture observations helps to set the scene for the lecture series:

The two-hour-long lectures took place between October and January, the temperature in the hall was often on the cool side, most people were wearing sweaters, and a few kept on their outdoor coats. The hall itself is windowless, with just ten seats either side of the aisle, and ten rows deep.

On my third visit to the steeply tiered lecture hall for this series of lectures, I took my usual place, off to one side in the back row of the fixed, high-backed seats. The podium appears distant from here, and there is a large projected display on the wall behind it. The rows are narrow, and they have fold-out tables coming from the seat in front, rather like an aeroplane tray-table, just big enough to accommodate a laptop. A young woman came into the hall and sat a few seats away from me in the back row. Before the lecture commenced, she put her tray-table down, laid her head on it and went to sleep. She remained that way for the entire two hours. *Observation number 3*

From the observations carried out, all five lecturers presented a largely transmissive lecture with the occasional question posed to the students. These questions were regularly greeted by the majority of students staring at their shoes until the moment passed. All the lectures had a break near the halfway point for ten or fifteen minutes. The break was often preceded by a two-minute small-group discussion question; the results of these discussions were rarely followed-up with a plenary conversation. Although an uninvited question from students was not observed during the lecture itself, in the break and afterwards, the lecturer generally had a queue of students to speak to.

The module leader said that the lectures are positioned as an introduction to topics and there is no expectation that students will have done any pre-reading. Individual lectures are 'self-contained', and while there are links between 'certain' lectures, there is no 'narrative running through all lectures'. He continued: 'I expect a lecture mainly to introduce a topic to students, to get basic concepts set in students, but mainly to spark interest to do their own further reading and work in the other 85% [...] of the time they should spend on the module'.

Each lecture was exclusively devoted to the week's topic, which related to a chapter in the course textbook. The textbook had 26 chapters (topic areas), 10 of which were covered in lectures, and the students were explicitly told that the exam questions were 'only' taken



from the topics 'covered' in the lectures. All five lecturers recorded their sessions and used lecture slides (which were made available a few days before each lecture). Most students had their laptops open with the lecture slides visible, and there were regular flurries of keyboard activity, although not the consistent typing throughout the lecture which would indicate very comprehensive notes.

Overall, the students stayed on task; there were occasions when Facebook would pop up on laptop screens or mobile phones would start appearing. From time-to-time, conversations would break out while the lecturer was still talking. However, the atmosphere tended to be respectful.

Self-reported attendance at lectures was not correlated to a statistically significant level with the exam scores. This is surprising given the emphasis placed by teaching staff on the direct relationship between the two. There was a modest significant positive correlation with lecture recording views (r(167) = 0.072, p-value < 0.001); this correlation applied almost equally to those students who indicated in the survey that they did not attend live lectures regularly. It seems unlikely that students attending 22 hours of lectures gain little or nothing from them. Although, as the module leader pointed out, these lectures represent just 15% of the learning hours allocated for the module, therefore, private study, review, and revision are always likely to be of greater consequence to student outcomes. However, the exam content and its relationship with the lectures were not examined as part of this study, and therefore, any further attempt to explain the disconnect would be speculative.

Filling the pail: content acquisition

It was noticeable that both staff and students spoke almost exclusively in terms of 'content' when discussing the lectures; lecturers 'delivering' it, and students clamorous for it. Attitudes developed markedly in the third year of study; however, the first- and second-year were mainly perceived as periods of content consumption: 'I think you know, it needs to be engaging and there should be a discussion, but also you do just need content, you need to get that knowledge and maybe there isn't necessarily the time to be chatting about one idea in-depth and really picking it apart for half an hour, because you don't really know anything and there's a lot to learn' (FG2 F1).

Despite the module documentation stating that there are 'interactive elements' to the lectures, the students view was, 'definitely, the majority is just the lecturer speaking' (FG1_F3). Talking about approaches to teaching, the module leader said that 'interactive teaching is encouraged', although this is in an informal and unspecified way. Guidance on teaching approaches is given to lecturers only if sought. He contrasts his own 'hyperactive' lecture style which involves 'running around the lecture theatre [...] up the stairs [...] so that they get a change in perspective', with those lecturers who just 'stay behind the computer'.

The lecturer acknowledges that there is a 'big push to try and make things kind of interactive but I feel that's virtually impossible with that number [of students...] 80/90% of it is just me talking [...] I don't really see any way round that'. She continued, saying that the physical space of the lecture hall was limiting, which combined with the volume of material that they had to go through, and the 'huge two-hour long blocks', were 'not really highly conducive to learning [but] the students keep coming to the lectures if you're an engaging speaker'.

For some students, their relationship with the content was characterised by rote learning for reproduction in the exam. One student attends lectures, 'because the slides just don't have enough content on to like answer any of the exam questions'; and another uses lecture



recordings as, 'it really helps me with memorising stuff'. The lecturer implicitly recognises rote learning among students when she complains that: 'some people scribble down everything you say which is not ideal [because] some random metaphor or something that you've given like appears in about ten different exam scripts'.

The module leader and the lecturer then, appear to be focused on the content. There is little mention of what the students do; the descriptions are teacher-centred; delivering content 'to' students, 'getting basic concepts set in students', putting 'your all into the content'.

Isolated teachers and anonymous students

The compartmentalised division of workload creates issues of ownership for the teaching staff on this module. The 'research methods' coursework element of the module is entirely self-contained, and the lectures comprise of stand-alone topics. The module was created and validated some years ago, by staff who are no longer at the University. The module leader assigns the lectures but has no oversight of the lectures themselves; the four lecturers involved are responsible only for their lectures and a proportion of the exam questions and marking. The lecturer said that, while 'in theory you are given a lot of free rein [...] in reality there's a set text that students are using' plus existing exam and multiple-choice questions, diverging from the previous year's content would mean a great deal more work in terms of preparation and re-writing exam questions. There appears to be little collaboration between teaching staff in planning the module. The lecturer said that she used to go to the introductory lectures each semester just so that she got an understanding of what the students are likely to expect, as if that were her only source of information. Each interaction is a cog in a (fairly efficient) machine, but no one appears to take ownership of the machine. As a result, there is a disconnect with the students; most interactions are at arm's length and largely anonymous. Questions are answered, but no relationships formed. Both staff and students describe a situation that is far more transactional than aspirational.

Teaching the large cohort first- and second-year classes regularly falls to more junior colleagues in the department, and in response to a question about training or preparation for teaching in large lecture theatres, the lecturer exclaimed that she had: 'None! None at all. Sometimes you don't even get the previous [slides] which is *really* hard'. Regarding time to prepare for lectures she thinks that lecturers 'have good intentions, but you end up re-running [last year's content]'. She said that due to workload allocation (two hours preparation per two-hour lecture) and the priority given to research in their career progression some lecturers, 'begrudge the teaching quite a lot of the time, which is a shame'. She added later that, '[I think it's sometimes] really difficult for the students [...] to understand why their lecturers are terrible'. Prompted to expand on what 'terrible lectures' entailed, she said, 'there are lecturers who don't think about the two-hour block [...] But worst is probably when it's just incomprehensible, they don't make any effort to make it accessible [...] some of the slides are awful as well [...] I think a lecture really needs shaping, to be in segments, to be a theme, to have focus, to link together'.

That aside, she enjoys the experience, 'I'm a bit strange in that I quite like it [laughs] I don't know if I'm a secret exhibitionist or something [...] it's like being on stage'. Acknowledging that the interaction with students is limited, she said 'when I was a student [...] I really didn't mind just listening', if it was put across in an interesting way. This lecturer was an accomplished student at a top university, who enjoyed transmissive lectures. Her ambition is to replicate that experience for her students.



The module leader said: 'we try to encourage [students] to use the social situation of the learning because they can directly discuss certain issues they are unclear about, either with their neighbour or in class or even ask a question, so we encourage also questions during lectures'. The students' perception is that although 'they want people to ask questions more [...] I feel like it would be weird. When lecturers [try to] involve people, I feel like everyone backs up because they're not used to it and they don't like it and they do feel self-conscious, so I feel like breaking the dynamic would be quite hard' (FG1_F1). 'I suppose the alternative is if everybody [asks a question], but if 200 people put their hands up just logistically that doesn't work, so like although you say anybody is free to ask any question, I think everybody kind of knows that you're not' (FG1_F4). The students from the focus groups indicated that they are quite contented being invisible and anonymous in the crowd.

Normalising uncertainty: peer networks

The social dynamic within a cohort is also one which features in the data and the literature. Most students sat in small groups around the lecture hall. Asked why they posed questions to the lecturer in the break rather than in the lecture, FG2_F1 replied, 'well, I guess part of it is just being self-conscious, you wonder if that's a question that a lot of people would have'. She was mindful that questions can take up time when there is a lot of material to get through 'because there's like 70 slides and two hours, so I just feel like I don't want to take up like a couple of minutes of 200 people's time if it's potentially just me or a handful of people that have that question [...] I worry that it's too disruptive to everybody else, I'm not sure if they would be getting much out of it'. Others were also reluctant to ask questions in the lecture: 'It's probably because I'm self-conscious and like I might feel so stupid, like asking something that [...] everybody understands [I wouldn't want to say] "oh I don't get it, can you repeat it", like so I prefer going to the lecturer and asking personally' (FG2_F2). A recurrent pattern among students is that they feel they are the only one in the hall not to grasp the content, and therefore do not want to expose themselves by asking for clarification.

Fellow students provide support: 'I think for me it's [...] the peer network, like I have friends that I'll sit with in my lectures [...] and I think it's nice to have that lecture where even in the break [...] even if you're not going up and asking questions you can sort of turn to each other and be like, "did you understand that?" And I think it's nice either way because if my friends understand it then great because maybe they can explain it to me in a slightly different way, and if they look back and they go, "no, I didn't get it either, it all went over my head", then it's kind of comforting, in that you're not the only one who has no clue what just happened [laughs] if everybody's really stuck, it's, you know, okay, "well let's try and like figure [it out]". If one person looks it up or gets the answer or figures it out, or has a new way of looking at it, they'd be like "guys, I think I've got it" [or] if we all have the same question, one person might go up to the front [and come back with the answer] I think it's something like it's the community of like learning [...] it doesn't feel so daunting when [...] you have people to like bounce off of, or like if you look round and you can see other confused faces and you're like, it's not just me, it's nice, and I think what I get out of like being physically in lectures, I think it's just the reassurance that [...] you can have people in the exact same position who get it and they can explain it or you can just be in this boat of confusion together' (FG2_F4). 'When everyone has the same doubt as you, it's like a sense of inclusivity, you're not on your own with that doubt' (FG2_F1).



This sense that it is okay not to immediately grasp difficult concepts (as long as you're not alone) came up a number of times and illustrates a valuable social aspect to lecture attendance to which the module leader alluded.

Loose coupling: lectures like seeds scattered on the wind

For staff, students, and the Institution, large-scale transmissive lectures are synonymous with higher education. They are normalised to the extent that they are invisible, appearing to require little reflection as to why they exist or what purpose they serve. Once individual lectures are 'delivered', teaching staff have no feedback mechanism to tell them how, or if, students benefit from them. What the students choose to do with the content is left to them. The staff have no knowledge of who attends the lectures, and for those who do attend, how they use the material presented in their learning.

It should be remembered that less than fifty percent of the cohort attend the lectures; however, those that do generally feel that attendance contributes to their learning, a contribution that is a little amorphous in nature. In terms of the lecture's impact on their learning, FG1_P1 said 'I think it's like an indirect effect, like your lectures contribute to your notes which contribute to your learning. Because if I hadn't gone to the lectures, I wouldn't have got such high-quality notes, and then that would have affected my overall learning for like revision, exams and assignments'. FG1_P2 felt 'lonely' and 'weird' when she had missed lectures and said that they gave her the structure she needed to organise her learning: 'Like once I missed two lectures in a week and I was like I feel stuck, like I'm not learning anything new'. FG1_P4 said, 'I just feel better about myself if I go to the lecture. It motivates me to take more detailed notes and do the reading – like a self-perpetuating cycle. It all starts with the lecture'. FG1_P4 said that her notes were better from lectures she attended in person and that 'if the lecture hasn't really been clear I don't really want to go and find out for myself'.

The students from both focus groups were unanimously in favour of lecture recordings (Panopto) as were the lecturer and module leader, although rarely as a replacement for live lectures: 'I feel like Panopto [is not] as direct, and I don't learn as much from Panopto, I have to be talking to people, interacting, and listening first-hand, like to really take the information in, [the recording] just doesn't go in my mind the same way' (FG2_F1). FG2_F2 responded: 'I have the opposite situation, like always I am in the lecture, but my mind is somewhere else [...] I am physically there, but most of the time I learn from Panopto'. The survey data tend to support the latter view.

The students were candid about how they used lectures to understand what they did not need to study: 'I think the lectures and slides for me [...] are key, [they're] more than 95% of what I do [...] there are certain areas that I'm really interested in [but other modules that I just want to pass] So for those [...] the lecturer, or module convener is going to be writing the slides [...] and the exam; [and] in my experience I've just tended to find that if I know the lecture slides [...] really, really well, you know, I can get a first without doing any of the reading'. She continued, 'rather than reading a book chapter [...] or a whole book in which [only a few paragraphs will be] relevant to the exam [and could take ten hours, and] might only be worth a few marks [...] I could listen to ten hours of [...] lectures and re-listen to the Panopto and that stuff is going to be a lot more relevant to the exam' (FG2_F4).

Students often used the lectures as a touchstone for organising their schedule, for example: 'I try and go to the lectures because I know that if I relied on Panopto I think it's



harder to motivate myself [...] I just feel like it's easier for me to stick to somebody else's timetable rather than having like a whole day of free space' (FG2_F4).

Although not uncritical of lectures and lecturers, students who attended the focus groups and the majority who responded to the survey were positive about the lectures. The theme of 'lectures like seeds scattered on the wind' describes a situation where, without a clear purpose or intent from staff, the students use the freedom they have to find their own ways of benefiting from them.

Discussion

Whatever the intention or expectation of this lecture series, what was delivered was a transmissive allocution containing little interaction between student and lecturer within the lectures themselves. This discussion explores why that is so, and what students may derive from the experience.

This module has all the appearance of two separate modules bolted together to meet QA requirements. The principles of CA were embedded into QA processes in an effort to ensure that learning and teaching became more student-centric and 'active' (see Loughlin et al., 2021). Although the lecture series and the exam represent 75% of the overall module result, it would be challenging for these elements (alone) to meet QA criteria for active/collaborative learning. Most of the discursive and collaborative activity takes place in the self-contained research methods (coursework) element of the module. Because student interaction is checked-off in the module documentation, the course team are free to use the 'standard lecture format' for the balance of the module. Given the institutional ambition to provide 'innovative' and 'active' learning experiences, there is consequently a disconnect between the institutional rhetoric and the larger part of the module, made invisible by the design of the module syllabus. Hence, the function of LOs described in European HE policies and manifested in the module documentation has little to do with the learning and teaching practices they were intended to guard.

How the lectures 'give' students the 'basic knowledge', as described in the module LO, is unspecified. The module leader describes the lectures as an 'introduction' to each week's topic (with no explicit form or outcomes); the lecturer speaks of being akin to a 'personal trainer', guiding students through the material, but emphasising that *they* do the work. Some students viewed lectures as a source of course content, others strategically, gaining insight to help them in the exam, others still, as an enjoyable social occasion with their friends. There is subsequently, no common understanding or expectation of the lecture.

The Institution approved a module description of eleven lectures and an exam, despite its avowal of 'research-informed' teaching; the lecturers then accept their allocation without complaint, while recognising that they are not 'ideal for students or lecturers'; and a proportion of the students attend them because 'they are timetabled'. Each of them trusting that learning will take place during these sessions, but none with explicit rationales for *how* that learning will take place. There is still then an expectation that content and 'thinking skills [will] be absorbed, like some mystical vapours, from an academic atmosphere' (Bligh, 1972, p. 3).

Bligh is harshly critical of the large-scale transmissive lecture-style observed in this case study, and sceptical about the perceived obligation to 'cover ground' in lectures (particularly evident in early-career lecturers), he feels that what is 'important is what the students learn, not how much the lecturer covers' (1972, p. 19).



This point cannot be emphasised too strongly. The idea that lecturers should use the lecture method and no other for fifty minutes on end is absurd; yet it is quite common practice. (Bligh, 1972, p. 70)

The argument for large-scale lectures is regularly made on economic grounds; however, 'the lecture method is not economic in terms of time or anything else, if it cannot achieve the required objectives, and this achievement is open to question' (Bligh, 1972, p. 19). That more than 50% of the cohort in this study do not attend the live lectures, and those that do benefit so little in terms of exam performance lends support to the idea that the live lectures fail in their only stated objective: to 'give' students the 'basic knowledge', which is presumably tested in the examination. The lecture recordings appear to have more of an impact, although if anything, the relative success of the lecture recordings (in comparison to the live lectures—and still modest) reinforces the notion that the *live* lectures are relatively ineffective. If CA were working as intended at the practice level, then the assessment would reflect the intended learning outcomes, and the learning activities in the teaching sessions be aligned with the assessment. In this scenario, it would seem reasonable to expect a correlation between attendance at the live teaching sessions and the exam scores. It is possible of course that the issue lies with the assessment rather than the lecture. Even so, following the lecturer's analogy of the personal trainer, if you went to a personal trainer for 11 weeks to prepare for a fitness test, would you expect to perform better (on average) than people who prepared for the test without professional instruction?

It is important to reiterate here that this module is successful in terms of the metrics valued by the University. It is oversubscribed (with academically able students); the student module evaluation results are higher than average for the University, as are the retention and pass rates.

The situation we are describing here is that of a module that performs well; most students pass the course with good grades and are largely satisfied with the course offering, yet the live lectures appear to contribute little to students' success. This could be because the students are academically able and attuned to the requirements of the hidden curriculum. They have established what work they need to do to pass the course, and many appear to require little input from the teaching staff.

There is, however, an over-reliance on the student module evaluation at both the institutional and department level. The response rates for these evaluations at the Institution are typically low (around 30%) and therefore not necessarily representative of the cohort. The research evidence suggests that there is little or no correlation between these scores and the quality of teaching delivered (Tight, 2021); and connected to this are students' misconceptions of effective teaching methods, and indeed their own learning strategies. For instance, in one study, students perceived that in active learning situations, they learned less than in passive lectures, whereas, in fact, the opposite was true (Deslauriers et al., 2019).

The hidden curriculum is premised on the idea that the formal curriculum is undermined by incompatible reward mechanisms for institutions, staff, and students. These reward mechanisms create implicit expectations and demands, antithetical to the aims of the formal curriculum. Institutions, for instance, are required to produce module documentation for QA processes that suggest student-centred teaching (the external audit driven expression of CA/OBE), but are rewarded such that there is no imperative to follow that through into practice (the inner/qualitative expression of CA/OBE) (Loughlin et al., 2021). Trigwell and Prosser argue that the teacher-centred approaches observed



in this study lead to students adopting surface approaches to learning, 'in which the intention is to reproduce the material' (2020, p. 7), and that mindset was certainly evident in the focus group interviews, with many references to rote learning course content.

The fact is that, while most professors do want their students to explore ideas, generate new questions, and engage in intellectual risk-taking, they find themselves caught in a trap that militates against these goals. Large classes, rigid testing methods, overextended scholars who derive their principal rewards from research, all reinforce the system. (Snyder, 1971, p. 14)

Recurrent practices 'involve unreflective habitual routines [...] learned by newcomers during the process of secondary socialisation' (Trowler & Cooper, 2002, p. 238). In this teaching and learning regime, they are the key to the maintenance of the status quo of large-scale transmissive lectures. The Institution, module leader, lecturer, and students all accept their lot, each gaining enough from the hidden curriculum to ensure that none pushes hard for an alternative, an alternative of which they are all aware, but presently have no imperative to pursue. In part, this is because it would entail additional effort from both staff and students for a conjectural benefit. Indeed, academics who adopt active learning approaches regularly suffer in student module evaluation scores, as many students prefer the (less effective) passive lectures (Deslauriers et al., 2019). There is a silent collusion between institutions, staff, and students which reifies the symbolism of traditional lectures and eschews more challenging alternatives.

There exists a delicate state of tension between the main stakeholders. If any of them questioned the educational offering, the power balance would be disrupted. For instance, the students or Institution could insist that the course team deliver the 'active learning' promised in the corporate literature or the academic team insist on resources from the Institution to enable those more collaborative and active approaches. Institutional constraints such as workload, time for preparation, cohort size, lecture theatre layout, student expectations, module evaluations, set textbooks, and career KPIs all appear to conspire in the reproduction of the status quo.

From the students' perspective, the hidden curriculum in this module is not terribly well hidden. The formal curriculum has a set textbook, plus two recommended books and multiple journal articles for further reading. However, the course team repeatedly told the students that only topics 'covered' in lectures would be examined, which is a paradoxical approach to CA as all the recommended reading is then rendered more or less redundant for the purposes of succeeding in the module. Students are able to pick up on the cues of which study behaviour will be rewarded, and 'get the highest grade with the least expenditure of effort' (Snyder, 1971, p. 8), as one of the focus group demonstrated when claiming that she 'can get a first without doing any of the reading'. Channelling both CA and the hidden curriculum, Kickert et al. describe *misaligned curricula*, wherein only sections of curricula content is assessed, and assert that: 'When our curricula are indeed implicitly encouraging students not to invest effort in unassessed learning, the consequences for both students and society will be dire' (Kickert et al., 2021, p. 8).

What then, are the students getting out of attending the lectures? The structure and routine offered by lectures came through strongly in the focus groups and student survey, as did the social aspects of attendance. Student networks operate as independently organised study groups, but also have a crucial support function, encouraging each other to attend, and resolving queries within the group.

An interesting aspect of these groups was their function in normalising uncertainty. Students who found that they were struggling to understand difficult concepts could become extremely anxious, yet if others in their network were also struggling, they were



able to relax as they were all in 'the same boat of confusion'. The realisation that it is okay not to understand everything at first hearing was important for these students.

The most surprising finding of this study was the lack of intentionality with regard to lectures; neither staff nor students could articulate a clear sense of their purpose. The students who go to lectures regularly enjoy them; they do not seem to overthink attendance, and, rather like their lecturer before them, in most cases, it simply 'doesn't occur' to them not to attend. On the whole, there is no driving motivation, rather a sense that the lectures are provided, and 'if it's timetabled, you might as well go'. The primary benefits for the students appear to be the routine and structure that lectures offer, along with an opportunity to clarify problem areas, either with the lecturer during the break or with their peer network.

Conclusion

Their lectures contain the necessary information; there is little recognition of the inevitable fall-off of attendance as the weeks progress, or of the passive response of the majority of the class. Or, if acknowledgement is made, it is soon wrapped in the comfortable assertion that the students are free agents, they can attend lectures, take advantage of the library and the facilities as they see fit, cull through a bibliography, learn on their own. (Snyder, 1971, p. 119)

Government and regulatory bodies of UKHE all espouse the virtue of student-centred approaches to learning and teaching, while simultaneously cutting funding per-student to levels that adversely impact staff-student ratios and contact hours. The Institution promotes active learning, while at the same time stipulating large class sizes and building fixed-seat lecture halls, which make that difficult for academics. The academic department also promotes active learning, while simultaneously enacting a bureaucratic style of leadership and allocating large-class lectures to junior colleagues, both of which, research indicates, lead to teacher-centred approaches (Trigwell & Prosser, 2020). The lecturer would like to use more student-centred approaches but does not have the workload capacity, or reward mechanisms to facilitate it. That students then adopt surface or instrumental approaches to their studies seems almost inevitable. That they do so well and seem reasonably content is perhaps more puzzling.

The Hidden Curriculum and What's the use of Lectures are as relevant now as they were fifty years ago. While Bligh describes the problems with large-scale lectures and offers solutions, Snyder explains the implicit reward mechanisms for institutions, staff, and students, which tell us why those solutions are unlikely to be enacted (at scale) within contemporary HE.

As large-scale lectures are destined to be with us for some time, what can students extract from them? Student claims about the efficacy of their various study techniques can be questioned, but the emotional support offered by the informal networks created in lecture theatres is plain to see. And maybe that's enough. While the mensurable impact of the lecture may be muted, it provides the space for these informal networks to exist. It would appear that for many of these students, the conversations and clarifications that take place in the breaks and after the lecture are (at least) as important as the content of the lecture itself.



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Declarations

Ethics approval Obtained at the University where the study took place.

Consent to participate Informed consent obtained from all participants.

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References

Ausubel, D. P. (2000). The acquisition and retention of knowledge: A cognitive view. Kluwer Academic Publishers.

Biggs, J. (1999). Teaching for quality learning at university: What the student does (1st ed.). Open University Press.

Biggs, J., & Tang, C. S. (2011). Teaching for quality learning at university: What the student does (4th ed.). McGraw-Hill, Society for Research into Higher Education & Open University Press.

Bligh, D. A. (1972). What's the use of lectures? (3rd ed.). Penguin.

Bligh, D. A. (2000). What's the use of lectures? (1st ed.). Jossey-Bass Publishers.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Deslauriers, L., McCarty, L. S., Miller, K., Callaghan, K., & Kestin, G. (2019). Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. *Proceedings of the National Academy of Sciences*, 116(39), 19251–19257. https://doi.org/10.1073/pnas.1821936116

Dolnicar, S. (2005). Should we still lecture or just post examination questions on the web?: The nature of the shift towards pragmatism in undergraduate lecture attendance. *Quality in Higher Education*, 11(2), 103–115.

Fulford, A., & Mahon, Á. (2020). A philosophical defence of the university lecture. Oxford Review of Education, 46(3), 363–374. https://doi.org/10.1080/03054985.2019.1702013

Gynnild, V., Leira, B. J., Holmedal, L. E., Mossige, J. C., & Myrhaug, D. (2021). From teaching as transmission to constructive alignment: A case study of learning design. *Nordic Journal of STEM Education*, 4(2), 1–11. https://doi.org/10.5324/njsteme.v4i1.3402

Kickert, R., Meeuwisse, M., Stegers-Jager, K. M., Prinzie, P., & Arends, L. R. (2021). Curricular fit perspective on motivation in higher education. *Higher Education*. https://doi.org/10.1007/s10734-021-00699-3

Loughlin, C., Lygo-Baker, S., & Lindberg-Sand, Å. (2021). Reclaiming constructive alignment. European Journal of Higher Education, 11(2), 119–136. https://doi.org/10.1080/21568235.2020.1816197

Marton, F., & Säljö, R. (1976). On qualitative differences in learning: I—Outcome and process. British Journal of Educational Psychology, 46(1), 4–11.

Snyder, B. R. (1971). The hidden curriculum (1st ed.). Knopf.

Tight, M. (2021). Syntheses of higher education research: What we know. Bloomsbury Academic.



- Trigwell, K., & Prosser, M. (2020). Exploring University Teaching and Learning. Springer International Publishing. https://link.springer.com/https://doi.org/10.1007/978-3-030-50830-2
- Trowler, P. (2019). Accomplishing change in teaching and learning regimes: Higher education and the practice sensibility. Oxford University Press.
- Trowler, P., & Cooper, A. (2002). Teaching and Learning Regimes: Implicit theories and recurrent practices in the enhancement of teaching and learning through educational development programmes. *Higher Education Research & Development*, 21(3), 221–240. https://doi.org/10.1080/0729436022000020742
- Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Sage Publications.

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