

Re-imagining the traditional lecture: an action research approach to teaching student teachers to 'do' philosophy

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Although we were required to lecture to large groups of over 170 students, the traditional lecture clashed with our commitment to teach in a way that was student-centred, relational and socially and politically transformative. In this context, and using an action research approach, we sought to turn our large-group lectures into a space that both met some of the historic aims of the lecture in passing on received knowledge, but also became a space for students to immediately engage in a process of discussion and dialogue around the concepts and ideas raised. Although the literature suggested this was not possible in groups of over a hundred, we found that our students identified that the re-imagined lecture significantly aided their learning in a number of key respects.

Keywords: lecturing; critical thinking; action research; teacher education; philosophy of education

After long years in traditional schools, teachers become conditioned to lecture, to assert their authority, to transfer official information and skills, as the proper way for professionals to do their work. It is not easy for them to share decision-making in the classroom, to negotiate the curriculum, to pose problems based in student thought and language, to lead a dialogue. (Shor 1993, 29)

Introduction

McNiff, Lomax, and Whitehead identify that action research can often emerge from the realisation that we are not living our values in practice in our professional lives (1996, 38, 129; McNiff and Whitehead 2002). This project emerged from just such a clash between our values and our practices. While we, as teacher educators, felt a commitment to teaching that was student-centred, relational and socially and politically transformative (Tormey 2003), we found these values difficult to realise when we were required to lecture to groups of up to 240 students at a time. This conflict was even more acute, since the content of our lectures addressed philosophy of education, and was being 'delivered' to student teachers. Recognising this clash between, on one side, our values and the course content, and on the other, our practice, we sought to re-imagine the traditional lecture. We refashioned it to maximise engagement, and as an opportunity for students to immediately engage in a process of discussion and dialogue around the concepts and ideas raised. We

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evaluated this, initially using a questionnaire and later using non-participant observation and focus group interviews.

We begin by exploring the literature concerning student learning in lectures. We identify that our project faced potential obstacles, notably the predisposition of the students towards passive learning in lectures. The combination of both qualitative and quantitative data reveals the complex and nuanced nature of the students' responses to the project. Although broadly positive towards an innovative approach our student cohort appears to be in transition in terms of understanding and developing their own learning styles.

The lecture and its critics

Orsmond and Stiles point out, academic teaching is often conceptualised in terms of 'traditionalists' who give lectures and 'innovators' who tend to shun traditional teaching methodologies (2002, 253). This, they note, hides the space in between, where tradition can be re-imagined. This is important because as Laurillard points out, lectures persist, in part because of tradition and in part because they are convenient for institutions of higher education (2002, 94). So, when one has to lecture, what should one do?

Curzon argues that lectures can be a useful learning experience and that well-constructed lectures can capture students' attention and communicate patterns of information effectively (1997, 316). On the other hand, Howard points out, there is substantial evidence to suggest that students learn more when they actively engage with the material, the lecturer and their classmates (2002, 764), while Sullivan and McIntosh note that once the number of participants goes over 100, the forms of student interaction possible are limited to students raising their hands to agree or disagree with lecturers' pronouncements, and that there is little opportunity for students to comment, question or feedback to the lecturer (1996, 4).

Laurillard identifies that the lecture is rarely an appropriate learning context due to the limitations of the lecture format in facilitating students' engagement in a learning process. Such a learning process, she notes, involves engaging with material to make sense of it and its structures in light of real-world examples and pre-existing understandings. Ideally this learning process would involve discursive engagement with material and immediate feedback on students' understandings as they construct them. The lecture is, she notes, a grossly inefficient way of engaging with academic knowledge (2002, 109) and ill suited to facilitating a learning process:

[Students] must do the work to render the implicit structure explicit to themselves, must reflect on the relationship between what the lecturer is saying and what they previously understood, and decide if it is different and how the difference is to be resolved. They must ... [initiate] their own reflective activities, retrospectively, using their notes of the lecture. Their personal redescriptions are then articulated in tutorial discussions and essays which later elicit feedback from the teacher to complete the 'discursive' loop. It can be done, but opportunities for breakdown or failure are numerous. (2002, 92)

Laurillard's and Howard's focus on feedback, immediate engagement and relationship was attractive to us as it was in keeping with our own philosophy of

education. As we noted at the outset, we were motivated to change by concerns that our pedagogy was in conflict with our educational beliefs. Central to our values base was the concern that education be fully a relational art (Gilligan 2002) that facilitates the development of self-empowered, critical thinkers (Freire 1970; Shor 1993). We also felt our content matter clash with our methods in that we found ourselves asking our students to critically reflect on the educational writings of Rousseau, Dewey, Mary Wollsonecraft, and Paulo Freire, while we (in Freire's terms) 'lectured [them] into sleepy silence' (Shor 1993, 25).

If we were motivated to change, however, we were not sure our students were. We recognised that, although they were in their first year in university, our students had already developed their learning strategies in relation to a didactic post-primary education system. It is widely recognised that the form of examination used in Irish schools has tended to encourage learning by rote and 'a teacher-centred approach to teaching and learning in which a passive role ... [is] assigned to the student' (Coolahan 1994, 73). Most of our students were among those that had been most successful within that system. At the very least this might lead one to expect that many of them would be more comfortable with a didactic lecturing style than with the more engaged, relational style which we sought to develop. As a result, we might have expected some resistance from our students to our initiative.

The lecture re-imagined

In Ireland, student teachers typically learn about teaching in a large-group lecture environment. Our class size was formally over 240 (it has since risen to over 300). We identified that educational technology may have the potential to play a role in supporting engaged and participatory educational practices. Drenovianni and Selwood (1998, 88), for example, highlight the catalytic capacity of technology to 'shift the balance from "rigid curricula, rote learning and teacher-centred lessons"... to more open-ended and child-centred approaches to teaching and learning by enabling learners to take control over their own learning'. Diana Laurillard's work also focuses attention on the capacity for learning technologies to be effectively used to 'adopt and live by the values of a community of scholars' (2002, 2) in higher education contexts.

In attempting to address these issues, then, we utilised educational technologies. In order to enable students to engage with material, we first needed to make the material available to them. This is often seen as the sole purpose of the traditional lecture. We had previously found that our large group lecturing often took on the characteristics of a 'performance' with our attention being focused on making points clearly and in the right order, holding people's attention, managing timing, conveying a sense of freshness with the material, and so on, rather than on our relationship with the students and their responses to or bewilderment at the lecture. In order to free us from the need to perform at the students and to allow us to be more present with the students (Rogers 1990) – to participate, to listen, to question and to support - four 10-15-minute videos were prepared, to carry out this information transmission role. These covered the lecture topics and were scripted and narrated by one of the collaborating lecturers and produced by our technical colleagues. The videos included suitable excerpts from popular movies, as well as footage of practicing teachers at work, the soundtrack featured extracts from the

writings of various philosophers, while the use of still images of these philosophers also contributed to the stimulus variation.

Once the students had become acquainted with the material, they were in a position to be able to work with it. The short length of the videos meant that students could then undertake – in class – activities which made possible their immediate engagement with the material, thus enabling the sort of learning process described by Laurillard (2002) and others. Following the video screening, therefore, students were asked to engage in a range of activities sometimes alone, more usually in pairs or small groups. We interacted with the students, moved around the lecture hall and joined in a variety of conversations with them. This allowed us too to have an immediate engagement with them. This usually lasted for 15–20 minutes and allowed about the same time thereafter for whole class discussion of the issues. This was conducted in such a way that the lecturers became facilitators of a public engagement in philosophical practice. Our students did not just study philosophy, they engaged in philosophical practice.

Research methodology

There is no single, simple definition of action research. Reason and Bradbury attempt to synthesise the range of perspectives covered under the term in the following working definition:

... action research is a participatory, democratic process concerned with practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview ... It seeks to bring together action and reflection, theory and practice in participation with others, in the pursuit of practical solutions to issues of pressing concern to people ... (2001, 1)

There are a number of elements to this. First, action research is concerned with practical knowing and practical solutions. It is, as McNiff puts it, 'a practical way of looking at your practice in order to check whether it is as you feel it should be' (McNiff and Whitehead 2002, 15). Action research has become increasingly popular in education settings in the last decade or so, in part because it addresses this issue of practicality.

Action research centrally involves engaging in practices, collecting data and evaluating those practices, reflecting, engaging with others in order to share the process of meaning making, and, through these processes, making mistakes and gaining insights which give rise to progressive learning and development of our practice (see McNiff and Whitehead 2002, 25). This was what we did in this case. The work could be broadly divided into five phases, though in reality the distinctions between phases were often far from clear.

Phase I. We reviewed our situation, drawing on informal conversations with students, colleagues, a review of the literature and a process of values clarification for ourselves.

Phase II. We planned an alternative to the traditional lecture series. This was then implemented, with one lecturer taking the lead in each lecture and the other (when possible) observing the whole-class elements of the lecture. Each lecture was followed

by a review involving the two lecturers to identify any alterations required for the following week.

Phase III. After the lecture series was completed and student learning had been assessed, students were invited to fill out a questionnaire to evaluate the lecture series. The data from these questionnaires were then analysed.

Phase IV. Following on from the results of this questionnaire, the lecture series was again reviewed. It was decided that in year two of the project two lectures would be presented in the traditional style and two lectures in the new format, in order to better facilitate students in making a comparison between the traditional and the new format.

Phase V. The lecture series was again evaluated, using, on this second occasion, nonparticipant observation during lectures and student focus groups.

One of the distinctive aspects of this action research project is the use of a questionnaire to evaluate the lecture series in stage one, something that may be out of keeping with the action research focus on shared meaning-making (Macintyre 2000; McNiff, Lomax, and Whitehead 1996; McNiff and Whitehead 2002; Reason and Bradbury 2001). Our decision to use a survey was based on ethical and practical reasons. Our ethical concerns arose from 'experimenting' with a compulsory course component. Before continuing we had to establish that our new approach was not damaging to student learning globally. In practical terms a questionnaire offered the best means of engaging with such a large student group.

The questionnaire used contained 27 closed questions and three open-ended ones. It was divided into two sections. Section one included 12 questions that provided basic demographic information on the respondent such as course of study (there were five different teacher education courses present in the lectures), and number of lectures attended. This section also evaluated the students overall impression of the course using a Likert-style format (see de Vaus 1996, 88), which asked students to identify the extent to which they agreed or disagreed with a range of statements on a five-point scale which ranged from 'strongly agree' to 'strongly disagree'. Section two included a further 18 questions, 15 of which also followed the Likert-style format. These questions asked the students to compare their experience of these lectures to their experience in a traditional lecture. The phrasing of the statements in this section was both positive and negative, in order to ensure students did not simply tick the same box repeatedly. The last three questions were open ended and allowed the students an opportunity to identify things they particularly liked or disliked about the lecture series when compared to traditional lectures. The survey was administered to the whole class after they had completed their assessment work for the course. The total attendance on that occasion was 170 (out of a possible figure of about 240). This was broadly in keeping with the attendance during the philosophy lecture series.

In the second year of the project, with the next cohort of students, and having established a broadly positive response to the approach, we used focus groups and non-participant observation to evaluate the approach used. Such qualitative research is commonly used when one needs to get at people's understandings of their own situation – the things that had meaning for them (Verstehen) (Weber 1949; Winch 1958). Qualitative practices are by necessity more dynamic than those of quantitative

research in which meanings are laid down at the outset. We were free to be surprised, puzzled and challenged by our students' responses (Whyte 1955, 279–80).

In order to prevent our data collection from being 'contaminated' by the presence of one of the two responsible lecturers, data were collected by a third party who had observed the lectures but was not a faculty member in the university and had no responsibility for teaching or assessing the students in any way. Our data was collected from 41 students, in six focus group interviews. For group interviews the usual considerations that apply to open-ended interviews apply (Oppenheim 1992); however, the role of the interviewer/moderator is a little different in that they must 'ensure that the discussion remains on the issue at hand while eliciting a wide range of opinions on the issue' (Lunt and Livingstone 1996, 80). Merton, Fiske, and Kendall (1956) note there are three specific skills required of the group interviewer: preventing one person dominating the group; encouraging recalcitrant respondents/ participants to participate; and getting as full a coverage of the topics as possible. While early understandings of focus groups saw them as being used as some sort of unrepresentative surveying, with participants randomly chosen, Lunt and Livingstone argue that the focus group must be understood a special case of conversation. They write that:

... conversation, public discussion and gossip are all important processes in the production and reproduction of meanings in everyday life ... focus groups can be understood, not by analogy to the survey [or] as a convenient aggregate of individual opinion, but as a simulation of these routine but relatively inaccessible communicative contexts that can help us discover the processes by which meaning is socially constructed through everyday talk. (1996, 85)

This was certainly our experience, and the focus groups enabled us to look inside the process of meaning making in which our students were engaged.

It should be noted that student participants in the qualitative phase of data collection are different people, in a different year, who have experienced a slightly different process to the respondents in the quantitative phase. One must be careful therefore not to assume that the qualitative data is directly comparable to the quantitative. Such issues are common in action research, where the aim of the research is precisely to change the experience, while at the same time to continue to develop a stronger understanding of what is at issue. In our case, although different people were involved, the second cohort were students on the same education courses at the same point in their studies and drawn from the same applicant pool as the previous participants. As such there is a basis for using the data from one group to critically interrogate the data from the other. That is what we have done here.

Findings and discussion

In the survey, our students were asked to evaluate how the re-imagined lecture compared to traditional lectures they had attended. The data was analysed in order to identify if independent variables such as course of study or rate of attendance had an impact upon answers. No relationship was found between such independent variables and the responses presented below.

Evaluation of videos

The students evaluated the use of videos as a teaching tool positively. The videos were seen to make the material more engaging (65.5% saying they 'agreed' or 'strongly agreed' with this statement), more enjoyable (79.9%), more likely to maintain their interest (62%) and helped them to relate philosophical material to practical situations (70.3%) (Table 1).

A more nuanced picture emerged, however from our focus groups. Although students found a number of the elements of the videos very positive (the use of pictures, movie clips, and classroom images) a number of issues were also raised. Some identified problems with sound quality or with the perceived lack of liveliness in the video editing and presentation. More fundamentally, however, some identified that the presentation of this material in a video itself gave rise to some disengagement. As one put it:

With traditional [lectures], you can focus on lecturer and follow him around the room, it keeps your attention ... But with video you could tune out ... like when you're watching TV ...

Although the purpose of the video was to release the lecturer from the need to perform and to allow engagement, some of the students in the focus groups identified it actually decreased their engagement and became a more passive experience. The data from the non-participant observation seem to confirm this finding. Fewer students took notes while the video was playing than when the lecturer was talking. As such, while the technology does allow us to deliver the same material on screen as in a lecture, the culture of the students is such that they seem to engage less with this than with the 'live show'. This seems to suggest that actually having a lecturer provide a 'live' narrative within which the images and clips are used would provide for the students a richer and more engaged learning environment even if it means the lecturer feels, paradoxically, less engaged.

	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
The use of video technology made the material covered more engaging.	11.7	53.8	11	20.6	2.7
The use of video technology helped maintain my interest for longer during the lecture.	12.4	49.6	8.2	26.9	2.8
The use of pictures and movie clips made the material covered more enjoyable.	12.4	67.5	8.2	9.7	1.4
The use of classroom images (from real classrooms and from movies) helped me to relate the philosophical material to practical situations.	13.1	57.2	15.2	13.1	0.6

Interactive activities

From our point of view, the video was simply a tool to enable us to be free to engage more effectively with our students, something that the interactive activities were designed to accomplish. Although less positive than the response to the videos, the response to these activities was still largely positive, and the slightly lower levels of positive responses were due, in part, to the higher level of 'don't know' responses (typically about 24%), which probably reflects a greater level of ambiguity in students' responses to these activities as compared to their responses to the video materials.

Almost 51% identified that the interactive activities made the course more challenging (twice the number who disagreed), 45.5% felt the interactive activities made the course more enjoyable (almost twice those who did not), 51.1% felt the activities helped them to engage with the course material (again, twice as many as those who did not), 46.9% said the activities significantly helped them develop their understanding of course material (27.6% felt it did not), 55.2% identified that the use of interactive activities in lectures helped to develop their thinking skills (almost three times the number that did not) and 57.2% identified that the engagement of the lecturers with the class during lectures made them seem more approachable (24.8% did not). Overall, the interactive activities were positive for many students (Table 2).

The potential downsides of the pedagogic approach adopted was also assessed. By devoting so much lecture time to discussion and activity, clearly the lecturer has less time to deliver content. It is also possible that students would find the discussion activity uncomfortable, and, given the difficulty of one or two lecturers supervising around 170 students closely, it is possible the students would simply use this time to chat with friends rather than to discuss the prescribed topics. The survey provides a basis for challenging all of these arguments. The students were asked if they learned less because there was less time for content delivery. Of the students, 57.8% felt they did not learn less due to the time spent on discussion, while only 22.1% felt they did; 65.9% felt that the discussions did not make them uncomfortable, while 25.5% did; and 49.7% identified that the use of interactive activities did not mean 'I was more likely to switch off from the focus of the lecture and chat to those near me', while 35.1% did.

The focus group data again allow us an opportunity to see how students make sense of this process. The divergence of views between those who were positively disposed towards group activities and those who were less positive is again evident. However, the focus group data also highlighted that these differences were underpinned by different learning styles. Those who tended to be less positive towards these discussion activities also tended to prefer to take notes in lectures and try to make sense of them later (what we have come to refer to as the 'hunter-gatherer' approach to learning). While Laurillard criticises this practice as being, for the learner, a grossly inefficient way of engaging with academic knowledge (2002, 109), it was the practice that a number of our respondents preferred:

I think the traditional is better for exams cause with the non-traditional once you go out the door you forget everything. If you go to a traditional lecture you will take down notes and have something to look back at.

	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
Engaging in interactive activities in the lectures made my experience of the course more challenging.	5.5	45.1	20	26.9	0.7
Engaging in interactive activities in the lectures made my experience of the course more enjoyable.	2.1	43.4	26.2	26.9	0.7
Engaging in interactive activities in the lectures helped me to engage with the course material.	1.4	49.7	24.8	22.1	2.1
Engaging in interactive activities in the lectures significantly helped me to develop an understanding of the course material.	1.4	45.5	23.4	26.2	1.4
Engaging in interactive activities in the lectures helped me to develop my thinking skills.	2.1	53.1	24.1	19.3	0

Table 2. Evaluation of interactive activities used (figures are percentages).

At the same time, quite a few of our respondents did identify themselves as being engaged in a process of meaning making in lectures, and as such, good lectures were those which supported that meaning-making process. As one put it when describing how he learns best in lectures:

I think its not so much taking notes but listening to what he is saying, by really paying attention to what he is saying and maybe taking the notes down later on. However you probably need a period in the lecture where you are not just listening to him talk the whole time. Besides listening to him talk it might be beneficial to use the general questions and discussions.

The practical issues associated with such group work, however, make some of these students question their usage. They found it difficult to take responsibility for their own learning and would have preferred more direct interaction with a lecturer who would 'keep them on track' rather than requiring/allowing them to manage their own discussions

Learning from the course

The questionnaire asked two specific questions about students' overall learning from the course in comparison to 'large-group lectures in general'. Their responses to this question were somewhat ambiguous. These two items had the highest rate of 'don't know' responses (39.3 and 42.8%), and the responses to the two questions were somewhat contradictory. While only 31.8% indicated that the way the course was taught gave rise to them learning more (26.2% identified that it did not), 42.1% identified that the videos 'significantly aided my learning on the module', and 46.9% identified that the interactive activities 'significantly helped me to develop an understanding of the course material'. Of the respondents, 57.8% also identified that they did not learn less due to the time spent on discussion, while only 22.1% felt they did. Overall then this seems to suggest that while a sizeable minority felt that the style of delivery significantly aided their learning, for many students their learning was felt to be broadly similar to what they would attain in a more traditional lecture.

In some sense, the focus group data presented above allow us to unpick some of the nuances within this ambiguity. It has already been suggested that, while many of the aspects of the experimental lecture were welcomed, others were regarded as more problematic. However, the focus groups also identified a more fundamental issue in the students' responses: for many, their response to the traditional lectures is itself ambiguous. Those students who identified strongly with a more traditional (huntergatherer) learning style in lectures, for example, also expressed reservations about these types of lectures:

It's kind of a Catch 22 situation cause it's the boring type lecture is what we learn most in. The traditional gets boring – after 15 minutes you want to get out but you are still learning more.

Things were equally ambitious for those who favoured the non-traditional approach to lecturing, some of whom found themselves doubting themselves and hankering after something more traditional:

I think I remembered more [in the non-traditional lecture] anyway because of different experiences. But I don't know how it will transfer when it comes to exams. I have the notes to refer to from the traditional [lecture] but I can't really remember the lecture.

As such, it seems likely that the ambiguous response to the overall evaluation of the non-traditional lectures reflects a deeper ambiguity in many students' responses to lectures. The focus groups show many of the students in a process of thinking about and transforming their own understanding of and approached to learning in lectures. The focus group data suggested that our conflict with the lecture as lecturers was, in many ways mirrored by our students' conflict with the lecture. Few of those who were comfortable with the more traditional approach to learning in lectures were actually happy with it, while a number of those who would prefer alternatives were not fully convinced that such alternatives provided all the answers. In such a context, it is hardly surprising that the quantitative data provided such ambiguous results.

Conclusion

This project arose from a desire to attempt to live our educational values in practice, in a context that required large group lecturing. Although much of the literature suggested that either (a) lecturing should be avoided; or (b) real engagement was impossible once student numbers went over 100, we nonetheless sought to re-imagine the process in order to achieve our aims. We attempted to turn our lectures into a space that both met some of the aims of the traditional lecture in passing on received knowledge, but also became a space for students to immediately engage in a process of discussion and dialogue around the concepts and ideas raised. Our thinking in this respect was influenced by a recognition that traditional lectures take little account of contemporary thinking in the scholarship of learning, which identifies the need for a learning process based on students engaging with material, relating it to their own

experiences or prior knowledge, translating it into their own terms, articulating this understanding and getting relatively immediate feedback (Laurillard 2002).

The quantitative data highlight that the students responded positively to the experimental mode of lecturing which we developed. The use of images, movie clips and classroom footage was regarded as beneficial, while the group discussions and activities were also evaluated broadly positively. The qualitative data provided some opportunity to explore nuances within this, and allowed us to identify that, while the video may have allowed us to engage more with our students, it had the unintended effect of distancing a number of them from the content, perhaps because they were culturally predisposed to be passive in their engagement with video/television content. This has led us to rethink the way in which we team teach the material and, now one of us presents the lecture material 'live' (supported by the sound and vision possibilities of slideshow technology) while the other takes responsibility for the interactive and group work. This ensures that at least one of us can be engaged with the students, while the other works to keep the students engaged.

The need for us to continue to re-think the traditional lecture is clear. Our data show that even those students whose learning styles cause them to value the traditional lecture are far from comfortable with it. Many other students have moved further, and identify that they learn best in contexts other than the traditional lecture. This highlights to us that we were correct to begin to seek alternatives to traditional lecturing. While we started off trying to make changes to our practice to try to meet students' needs, we came to realise that many of them appear to be learners in transition, for whom their understanding of their own learning in lectures is in the process of development. This process of flux may be related to the fact that they are teacher education students (who are, as such learning about learning), or it may be related to the fact that they are in transition from post-primary to higher education and as such are beginning to develop for the first time as independent learners. In some sense, this further highlights the need for us to continue to engage in dialogue with them concerning their emerging learning styles, such as was facilitated by the process of questioning and re-imagining the lecture in which both we and they engaged during this action research project.

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