

The Lecture: A Teaching Strategy through the Looking Glass

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ABSTRACT

This paper explores the viability of the lecture as a teaching strategy for large groups in light of the various elements that influence the choice of method for teaching large groups. The method employed in this paper draws on the Brunswick Lens Model and Foucauldian discourse to evaluate the dominant pedagogical perspective of the past to translate the perspective into the current view of the lecture as a teaching strategy within the context of current practice. Consideration is given to issues about the future of the lecture. The literature suggests that research and debate regarding the role of the lecture in the learning process has been minimal and mixed. Historically, the changes that have occurred in the lecture format are the result of new technologies applied to the presentation process rather than the content. The evolution of a discerning/sophisticated audience (students) has given rise to technological advances in the classroom and lecture theatre. Technology in its many guises, such as the creation of cyberspace, has motivated the development of alternative approaches both to the traditional lecture as a strategy and to its parameters.

Keywords: lecture; teaching strategy; technologies.

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Introduction

"Somehow it seems to fill my head with ideas — only I don't exactly know what they are!"
 — Lewis Carroll, *Through the Looking-Glass, and What Alice Found There*

Issues and problems regarding the use and value of the lecture as a teaching strategy in the university or academy, continue to surface from time to time, without any apparent resolution. The pedagogical value of the lecture continues to be questioned, more specifically whether students gain knowledge, or learn sufficiently from the lecture (Ardalan, 2008; Doran & Golan, 1998; Mazoue, 1999). Indeed in some subjects and courses, the lecture is often intended to be supported by tutorials, workshops and computer laboratories. It may be the case that they are mutually dependent activities. If the lecture is a 'large group delivery vehicle', then so are these supporting activities which have also grown in size, proportionally, (UA Student to Teacher ratios 1990-2006), but for the most part generally remain in the vicinity of twenty students per tutorial. Some subjects/courses also employ course management (e-Learning) systems, such as WebCT and BlackBoard, to support the lecture as a teaching strategy and as learning process overall. Additionally, the growing importance of computer technologies has, among other things, resulted in the adoption of computer laboratory time allocated for specific tasks in specific subjects/courses (Bongey, Cizadlo & Kalnbach, 2005). Nevertheless, the lecture has, for the most part, remained the dominant teaching strategy adopted for delivering course material to large groups of students.

A large group has been defined as a class consisting of over 100 students (Mataeo & Fernandez, 1996; Toby, 1988). The growing demand for university places as highlighted in the Bradley Review of Higher Education in Australia (2008) has had a number of flow-on effects with respect to staff workloads and the demand for resources within the university sector as addressed in the Australian Vice-Chancellors' Committee (the council of Australia's university presidents) recommendations for the 2005 Australian Federal Budget (2004). The scarcity of resources in turn has led the university sector to seek and implement alternative methods of delivering courses that will accommodate the greatest number of students at the lowest cost. This has led to a diversity of new methods of teaching that employ new technologies such as television broadcasting, narrowcasting, Edustream, MP3s, and Clickers (Masikunis, Panayiotidis & Burke, 2009). Even the mobile phone can be used for Twitter, standard SMS messaging or multiple-choice quizzes. However, the most aggressive changes have occurred in the use of the internet not just to support teaching but rather to add a new dimension to the concept of long-distance education the on-line learning environment (Lake, 1999; Mazoue, 1999). As a result of these new approaches being employed the continued use of the lecture has been called into question (Sourin, Sourina & Prasolova-Forland, 2006) especially regarding the extent to which the lecture can be claimed to contribute or enhance the learning experience for students. The question of the viability of the lecture as a workable component of the teaching process remains unresolved in the literature.

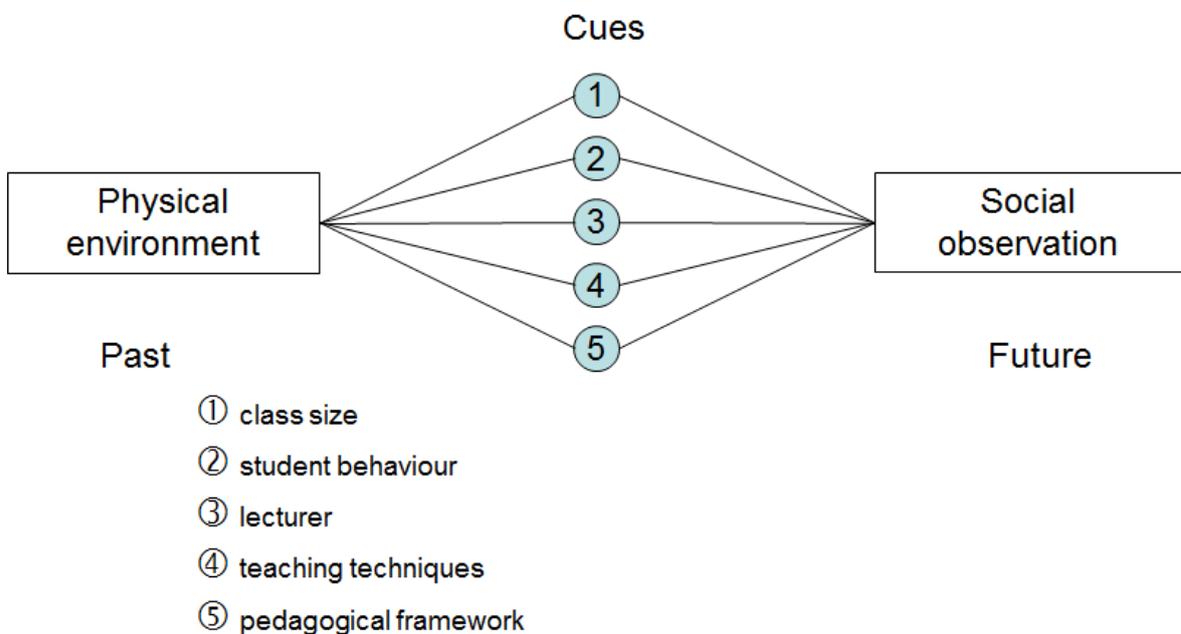
For this paper, discussion and comments are confined to the context of the lecture within academe, rather than the broader aspect that would take in the 'public' lecture of our everyday world in other places. The reader will note the mixed and longstanding research findings. Often, where the lecture is mentioned it is not so much within the Hamlet context, i.e., to be or not to be, but rather that its continuing existence is unquestioned. This paper cannot and does not cover the breadth of issues raised but ought to be accepted as a starting point, primer and brief excursion into a subject that deserves further research.

Method

In this paper the Brunswick (1956) Lens Model is used as a framework for identifying and displaying the various elements of the arguments concerning the Lecture as a teaching strategy. The model is used to analyse objective cues to perceive physical or social reality. The cues in this study come from the literature concerning the lecture as a teaching strategy which basically emphasises four elementary categories. The first is that of class size and specifically the learning outcomes of students in large groups compared to those in small groups. The second is concerned with student behaviour and focuses on different learning styles. The third examines the role that the lecturer has in supporting the learning process. The final category considers the various teaching techniques and encompasses the uses of technology in the lecture. Foucauldian (Foucault, 1977, 1980) constructs are used as a counter discourse to expose the lecture as an instrument of power and control within the learning environment.

Figure 1.

Brunswick Lens Model Applied to the Lecture



Class size

Research focusing upon differences between lectures and alternative modes of teaching (such as small group study) has not conclusively identified a superior method to the lecture. The research of Glass et al (1982) provided evidence that small class size was positively correlated with high achievement in elementary and secondary levels of education. The transition to higher education, especially in the business disciplines has not resulted in the same conclusions. Alagiah and Fatseas (1995) and Baldwin (1993) are examples of research in an accounting education context which did not find evidence that alternative methods of instruction/teaching produced better performance in terms of student results. Ott, Mann and Moores (1990) found that better performance associated with alternative methods of instruction/teaching were significant only within/between different personality traits. Rovin, Lalonde and Haley (1972) found that students attending lectures, as opposed to students who were given the same material in the form of prescribed reading assignments, performed better in tests on the subject matter. They concluded that the lecture was simply a directional device, which provided guidance for

further study. Costin (1972) compared lecturing to discussion and concluded that acquiring of knowledge was as readily achieved by the lecture as by discussion. Bligh (1972) concluded that lectures were as effective as other methods for imparting information, but not more so. Nolan (1974, 256) found that students preferred lectures as they felt compelled to take notes. The test results of the students who had been given lecture notes and only attended tutorials did not differ significantly from previous sessions. Schmerler (1974) examined the difference between small group discussion and lectures, finding no significant difference in the performance of the students. These studies suggest that the lecture provides a large group of students with an opportunity to learn, measured by performance outcome, equal to small group teaching. By contrast, Baldwin (1993) found that students who were taught, introductory financial accounting, in a mass-lecture format performed more favourably than students who were taught the same material exclusively in small classes. None of these findings would deliver a coup-de-grace to those who continue to advocate value of the lecture as a teaching strategy for large groups.

Student behaviour

Research has examined several aspects of student behaviour regarding lectures as an effective method of instruction. Canter & Gallatin (1974) studied student attitudes toward lectures as opposed to discussion. They found a discrepancy between student attitudes and behaviour in that students who had indicated a preference for discussions to lectures, when given the opportunity, actually preferred the lecture. Säljö (1975) emphasized perception as the reason for behaviour. In a structured learning situation the majority of students were found to modify their approach, suggesting that students who memorized information had perceived the situation as one demanding descriptive summaries rather than understanding.

The Lecturer

Research focusing upon the lecturer/instructor style of presentation has created additional avenues to be factored into the analysis of the lecture method. Wyckoff (1973) provided evidence that differences between instructors were positively correlated with student achievement. Perritt (1974) found that students considered the tutors (graduate assistants) as the effective providers of feedback and the lecturer as secondary. The lecture was considered important in providing the introduction only and the tutorials provided the confirmation of understanding. Kyle (1972, 325) came to the conclusion that "What is at fault with the lecture technique is not the method but the man." He suggested that the personality of the lecturer was important and that the enthusiasm and knowledge of the subject material could impact upon students instilling them with an experience which would be remembered long after the lecture.

Publications and research concerning methods and techniques of lecturing are, for the most part, prescriptive. Coverdale and McDermott (1974) discussed the presentation of the lecture, modified forms of the lecture, and evaluation of lecturing. Brown (1978) focused on the structure and design of lectures, with emphasis on preparation and presentation. As he suggested in the prologue: "We seldom have the opportunity to consider either the rich variety of possible lecturing methods or the most efficient ways of preparing lectures and the most effective ways of presenting them." Gibbs, Habeshaw and Habeshaw (1988) provided 53 suggestions to make lectures interesting and effective. Newble and Cannon (1990) prescribed techniques for presentation and evaluation of lectures. They provided details of audio-visual and other technology, activities for students, and advice on potential problems likely to be encountered during lectures. While various techniques may have the potential to improve the lecture the incorporation of new technology seems to provide the most promising solution to overcoming some of the more concrete disadvantages previously associated with lectures. Gregory (2013) suggested that active learning strategies would be an effective way to deliver lectures so as to improve student learning.

Technologies

The use and application of the lecture has been dramatically influenced by technology. Technology has and is now all encompassing, from the use of computer software, such as MS PowerPoint, through to the very incorporation of computer systems in what are being referred to as smart lecture theatres. This pervasive nature of technology has associated with it some insidious outcomes which are adverse to the notion of providing an education to all – specifically if a student does not have a computer and does not have access to the internet they are at a disadvantage and in more recent times Time magazine (online)^[45] reported that here are colleges which insist that their students have a laptop or computer as part of the study requirements.

The expectations of the students and society have changed and these are reflected in the political debate concerning access to university student-places and the all pervasive costs of providing the facilities (Bradley 2008). Innovations in the form of televising subject material and packaging subject material on video or CD's format together with internet sites have proven to be popular alternatives for dealing with the need to teach large groups (Rogers, 1987). However, the strategies are still very much based on the presentation of material in a lecture format. Some of the newer methods have adopted different strategies and the key differences may be summarized as providing relevance to the experiences of students and most certainly making the presentation interesting (Daniel, 1988).

Students particularly from the so-called generation Y are a far more sophisticated audience to-day than their predecessors and they pose a different set of problems when determining appropriate approaches to teaching at university (Shaw & Fairhurst, 2008; Pardue & Morgan, 2008). The reason for this may be found in the level of sophistication employed in the various forms of entertainment available to-day (Vanderburg, 1986; Blythe & Sweet, 1979; Oxford & Moore, 1979; Siegel, 1975). Specifically, movies; live theatre; sports; electronic devices; and advertising have changed the way society communicates and our expectations. By considering students not as immature young adults but as a sophisticated "audience" a new perspective emerges by which to consider the role of the lecture in the learning process. Not only must the lecture contain the specific information, intended to convey meaning, it must do it in a way that both captures and motivates the imagination of the audience. As lecture theatres become more sophisticated, through the incorporation of new technology, it seems appropriate that the lecture format should evolve to a new level of sophistication. Just as live theatrical presentations have adapted and changed to reflect an increase in the demands from a more sophisticated audience, so too, the lecture needs to go through a process of change.

It seems ironic that the very technology that is providing the means for improving the lecture format, threatens the demise of the lecture. The software such as MS PowerPoint, BlackBoard, WebCT, and Macromedia Breeze which were intended to support the lecture are in fact supplanting the very need to attend a lecture (Birch 2009). Indeed, the advent of the internet and the World Wide Web has been crucial to the speed with which knowledge and information can be disseminated and heralds the start of the new millennium in education (Volkov & Volkov 2009). The university of the future may well exist solely in cyberspace and have little or no need for bricks and mortar, much less face to face interaction between students and academics and not quite an anonymous, amorphous distance education mode of delivery. This may seem like fanciful speculation, to some, however the rate at which technology is developing should be carefully considered in conjunction with the rate at which all new technology has been readily adopted by society.

A Brief Diversion from the Mainstream

Though substantially beyond the immediate scope of this iteration of the themes herein, we should mention a more adventurous pathway beyond the generally accepted mainstream ontological, epistemological and methodological approaches to research in this area. A huge leap forward in time enables us to consider some recent comparative work by Ardalan, (2008).

The educational philosophy underpinning the lecture as a method of teaching is summarized as:

“In the lecture method-teaching is telling, knowledge is facts, and learning is recall. Teachers deliver content, in the form of factual information, and students receive it. Learning is satisfactorily completed when the student transfers the material back to the teacher at the specified time.” (Ardalan, 2008, 21).

On one level, we can engage with Ardalan’s (2008) analysis of the lecture compared with the case study approach as an approach to education.

Table 1:

Comparison of Lecture against Case Method of teaching

Lecture	Case method
Teaching is disconnected from learning.	Teaching is about conveying information i.e. organizing & communicating content.
Education consists of cumulative & unending acquisition of factual knowledge.	Growth is mechanical – adding of information or skills.
The lecturer has control over the activity: Sequence & timing.	Subject material drives the content.
The objective is for certain concepts to be fully understood.	Extensive involvement in technical details.
Students are presented with a set of generalized rules to determine an answer.	Education is devoted to applying methods as a form of problem solving.
The lecturer determines what is important – professional expertise.	Education is about students learning the topics.

Source: derived from Ardalan (2008)

By adopting Burrell and Morgan’s (1979) matrix of sociological paradigms Ardalan identified a reference marker for the analysis of lectures that could be used as a means of comparison against the case study method. This highlights the positioning of the traditional research on the efficacy of the lecture as firmly encamped within Burrell and Morgan’s functionalist paradigm with its connection to a realist ontology, an epistemology founded on empiricism and a methodology that covets the methods of the sciences. Furthermore we could take a brief trip at warp speed to another part of the universe of research which could deliver us to the radical humanist dimension via the galaxies of the interpretive quadrant.

Pedagogical framework

The selection and evaluation of a teaching strategy should encompass the needs of the students, teacher/facilitator, subject curriculum, and the facilities/resources available. In essence all aspects of the teaching and learning phase of a body of students should be examined to determine the extent to which a teaching strategy has or has not met the expectations of the curriculum. To address these issues research models based on pedagogical aspects are required to conceptualize the role of the lecture as one component of an overall teaching strategy

The "lecture" in the form applied to-day dates back to the mid 19th century. A hundred years ago "class recital" was the dominant method of "teaching" large groups. The lecture was consistent with the dominant pedagogical paradigm at the time which considered students to be empty vessels devoid of the essential knowledge that had to come from the lecturer. Kyle (1972) suggested that the revolt against the dominant method (class recital) was both vigorous and controversial. The factor which contributed to the adoption of the lecturing method was (and still is) the ability to deal with a large number of students at the one time. In the business and commerce faculties which comprise large numbers of undergraduate students the lecture seems to be an obvious choice as the method for teaching.

However, opposition to the lecture can be traced to the research of Simmons (1959) who found that superior results were achieved by smaller classes when teaching intermediate algebra. In contrast, literature reviews by Dubin and Taveggia (1968), Milton (1972), and Laughlin (1976) found little evidence to substantiate the claim that class size affects achievement.

The Lecture as an Instrument of Power, Control and Surveillance

Would you tell me, please, which way I ought to go from here?"
"That depends a good deal on where you want to get to."
"I don't much care where –"
"Then it doesn't matter which way you go."
 — Lewis Carroll, *Alice in Wonderland*

The lecture may also be conceptualized as an instrument or mechanism through which considerable power and control can be exercised. Three recurring themes in the works of Foucault are power, knowledge, and subjectivity (Foucault, 1980). The philosophies and work of Foucault challenge the existing social order and emphasize structural conflict, especially in terms of domination. Indeed the empirical, functional, mainstream education literature has supported, if not promoted, the concept that the pedagogical justification of any teaching method is somehow an 'objective' and 'value-free' activity modelled after the natural sciences.

Foucauldian themes have, for example, been used in the accounting discipline by Macintosh (2002) to discuss surveillance, discipline and punishment in the context of management control of workforces, through, among other things, the use of techniques for watching.

Consider Foucault's (1977) commentary on Bentham's Panopticism. Compare the physical lecture layout that permits the lecturer to conduct surveillance and control the audience as well as maintain its docility. As well as providing for hierarchical observation of the class, there are also opportunities for normalizing sanctions by correcting inattentive or distracting behaviour by recapturing focus on the lecturer. The lecturer is also able to conduct an examination of class in their docile, enclosed state. Positing the lecture in this light is to generate an alternative role, let alone conception for this strategy that takes it beyond its traditional perception.

Concluding Remarks

Current management philosophy, in the higher education sector, appears to be driven by economic rationalism and the need to justify costs in terms of a production paradigm. The preceding discussion may provide a framework for further ongoing evaluation and benchmarking of the lecture as a teaching strategy. The specifics of the costs, returns and analysis will vary from one educational setting to the next due to the very nature of the investment in bricks and mortar as compared to new technologies. Consider the common first year business or commerce degrees (the 'cash cow' degrees that deliver surpluses to help maintain other disciplines in a university/academy) which comprise large numbers of students, ranging anywhere from 200 to 1,000 in any one semester. Stresses on staff workloads and training needs cannot be expunged from the equation either. It seems that cost pressures will also allow academic managers to exploit the skills of the staff delivering lectures. We anticipate that it will be associate lecturers, and teaching assistants, on much lower pay rates than full professors, who will carry the loads.

And finally, there is that other strategy that the lecture could satisfy, that of a surveillance mechanism with a control imperative. More often than not, the lecture will continue to be the teaching strategy of choice for delivering the basic curriculum to as many students as will fit in a lecture theatre given the economic constraints on institutions, staff, facilities and students.

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