

THE INTERACTIVE LECTURE: NATURE OR NURTURE?

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Abstract: *Lecturing is a wide spread teaching approach used in many university settings. As a didactic technique aimed at transmitting information, lecturing is, by definition, a receptive-oriented method of presenting content and offering explanations. The effectiveness of lectures has often been subject to debate; however, when delivered properly, lectures can be effective. The issue discussed in the present paper is aligned with earlier concerns regarding ways of transforming lectures into more engaging and creative classes. In the current educational context, typified by a high degree of complexity, participative communication, and great dynamism, making lectures interactive and more energetic does, indeed, become a practical and a timely endeavour. The paper looks at ways of implementing effective interactive lecturing strategies, analyses the advantages of this approach and proposes practical activities to improve lectures in order to transform a traditionally passive learning experience in an enriching and stimulating educational environment for educators and students alike.*

Keywords: interactive lecturing, active learning, strategies, advantages, practical activities

1. Introduction

The word “lecture” is derived from the French *lecture*, which means *to read*. According to the traditional definition, this academic practice involves an oral presentation intended to teach by conveying information about a particular subject, by a member of the faculty. In academic settings, lectures have been used as fast, inexpensive, and efficient ways of presenting information about a particular discipline to a large number of students. In universities, they have survived as the preferred method of transmitting abstract information, theories, notions, concepts, definitions, etc. for a great majority of courses. However, this approach has been largely criticized, being imputed the fact that it does not involve audience participation

and promotes passive learning. Modern educators have rebuked this criticism, arguing that “Lecturing is not simply a matter of standing in front of a class and reciting what you know” [1]. Indeed, in the contemporary higher education era, where students are placed at the heart of the system, lecturing, as a mode of address, should divorce from the idea of showcasing the lecturer as “the sage on the stage” and embrace a more student-centered or even student-led form of active learning. The pivotal point that this article aims to draw attention to is that interactive lecturing should be practiced as a method of feeding information and cultivating skills by activating students’ natural curiosity and inquisitiveness, which ultimately leads to better and more efficient learning.

2. Interactive strategies for active engagement

Studies have shown that interactive learning facilitates both the acquiring of information in the form of new knowledge and the memorization of the material over longer periods of time. As a consequence, interactive lecturing, as a method of introducing new information, is aimed at transforming the student from a passive recipient of knowledge into an active participant in the process of teaching. Furthermore, such a dynamic approach activates critical and analytical thinking skills, as students are requested to interact with the content being presented in a variety of ways.

There is a wide range of interactive techniques that can be used to transform lectures into dynamic interactions.

Asking questions – This technique functions in a dual way: lecturers can ask questions to the audience, or, conversely, members of the audience are encouraged to ask questions. This approach is extremely functional both at the beginning of the lecture, as a way of stimulating curiosity and interest for the new topic, or at the end of the session, as a quick knowledge-check of the information that has been presented and assimilated. Students might be asked oral, impromptu questions or receive pre-defined quizzes. Depending on the type of content provided in the lecture, students might also receive problems to solve or case studies to discuss, as contextualized practice allowing them to apply the theoretical aspects presented in the lecture.

Use of case studies – It is well known that learning occurs better when theory is linked to practice. Against this background, presenting a case study at the beginning of the lecture motivates students to acquire new information in order to solve or discuss it at the end of the lecture. A practical discussion can be conducted in groups in a competitive way, with students presenting

their case solutions and voting on the best approach. An alternative to this technique would be to present the case study along with experts' solution to them and encourage students to critically analyze, compare and contrast the proposed approaches in light of the information acquired during the lecture.

Breaking up the lecture – This technique consists of briefly interrupting the lectures and asking the students to perform a short task related to the presentation. It might involve recalling information, discriminating among plausible alternatives, explaining concepts to other students, interpreting a graph or a chart or a quotation, reacting to a picture, etc. [2].

Peer instruction – It is an instructional method aimed at enhancing student interaction during lectures and at focusing students' attention on basic notions and concepts [3]. As opposed to traditional lecturing, where information is presented in detail from beginning to the end, peer instruction involves breaking down the lecture in a number of key points which are followed by short questions about the subject having been presented. Students are given time to think about the answer and then asked to discuss it with their peers, in pairs or groups.

Breaking the class into smaller groups – This strategy relates or may even be seen as complementary to the previous one. It consists in separating large group settings into smaller groups, which are each assigned a specific topic from the lecture to discuss [4]. It works best at the end of the session, as an interactive feedback during which students share their understanding and insights about the newly introduced content and can even clarify each other's blurry areas.

Use of written materials – Giving students handouts before or during the lecture itself is one manner of promoting interaction during the lecturing process. In addition to providing good summaries of the key points

in the presentation, handouts may be used to offer students incentives for analysis, reflection, criticism and evaluation. Such a technique is extremely efficient when used as a basis for lecturer-student interactions during and after the lecture session.

Use of technology – It is no longer an innovative practice to use power point presentations to structure content and offer a better visualization of the information or to embed video or audio recordings into presentations in order to engage active participation and supplement dry theory with authentic material. Nowadays, modern advances of technology allow us to insert real-time and real-life interactions into the classroom. Video-conferencing can be used to connect lectures to practice-based settings and external experts and to create a virtual but genuine space in which students can actually acknowledge the practicality of the otherwise barren theoretical information that is being fed to them. In such situations, the interactivity is achieved with people in relevant contexts, which are external to the lecture room, and thus lend a sense of reality to the educational setting.

The list of techniques presented is by no means exhaustive. Many of the methods described overlap and intersect at some point. While using some of these methods greatly depends on the type of information or content to be presented, we argue that they can be used across various disciplines in order to cover a wide array of subjects and specific topics. Unquestionably, the employment of such approaches during lectures triggers the students' attention, stimulates critical thinking and promotes enhanced engagement and discussion. Rather than diminishing the role of the lecturer, such practices can give them a bigger and more complex role in the lecturing process, a role that goes far beyond that of resource, as they become facilitators who enable students' learning by interacting with the

learners' input and managing their reactions while teaching.

3. Using interactive activities during lectures

There are a number of interactive activities that are based on and derive from the above-mentioned techniques and that can be used to engage students during lectures in order to retain their attention and facilitate learning.

The following section of the article explores ways in which specific activities can be successfully integrated during the lecture session by proposing a variety of such activities. As a general rule, they should be interwoven as naturally as possible into the content material and used as a break to separate the lecture into shorter portions. Apart from breaking the pace, these activities require the students to review and apply new learning and, most importantly, interact with each other in an instructional context that has been traditionally perceived as passive and individualistic. The change of pace, interaction, and variety enliven the classroom atmosphere, encourage deeper learning and, last but not least, promote lecturing as a versatile, flexible and enjoyable learning experience. Here is a list of possible activities to use during lectures.

Press Conference – Before the lecture, students are organized into teams and instructed to prepare a list of questions on the specific topic to be presented. During the lecture, students interview the instructor in a simulated press conference.

Outlines – Students are given a handout containing the key points of the lecture and enough space for them to write down the notes taken during the lecture. As a follow up activity, the students can be put in pairs and groups and asked to compare their notes.

Clusters – The reading material can be broken into sections. Individually or in groups, students are asked to read an assigned section, becoming an “expert” on

that section. Then, each student/group teaches the others about the specific topic they have researched. During this activity, the teacher acts as a facilitator and as a resource, intervening to clarify or develop specific issues.

Select the best response – Students are presented with a scenario-type question and then asked to consider which response (from a given list of possible responses) best answers it. This can be used to recall and apply the information presented in the lecture in a practical way.

Support a statement – The lecturer gives students a statement for which they must locate support in the lecture notes. Discussion is then promoted on the margins of the statement and the answer of the students is analyzed in correlation with the information in the lecture.

Short video – A short video can be useful in the beginning of the lecture as a relevant lead-in for a new topic, during the lecture in order to punctuate important aspects or at the end of the lecture as a follow-up, to summarize the information or promote further discussion.

Three-minute paper – Towards the end of the lecture session, students are given three minutes to write down the most important information they can recall from the lecture. This task allows the lecturer to gauge student comprehension and offers students a motivation to understand and absorb course material.

Practice has demonstrated that using the above-mentioned interactive activities or similar ones greatly promotes active learning in a setting in which the focus has traditionally been on passive participation. Such activities are aimed at offering all students the opportunity to get involved in the teaching endeavor, by individually and actively contributing to the process, and by assuming responsibility for their own learning. Moreover, employing such activities during lectures creates an immediate relationship between students

and the lecturer and allows students not only to acquire knowledge but also to develop communicative skills: the ability to listen to others, to evaluate different points of view, to participate in discussions, to make joint decisions, to develop tolerance, etc.

These should not be seen as “activities for the sake of activities” but rather as essential moments in the development of the lecture. It goes without saying that such activities need to be tailored according to discipline, topic, content, target audience, their level of knowledge in the field, available time and resources, etc. The ideas in this list are not specific activities for specific learning objectives, but rather ideas that can be applied to the content under discussion. The general premise here is to ensure some diversity not only in what students are exposed to as information, but also in terms of what they can do with it. This is also a very effective way of supporting diverse learning styles, as different activities appeal to different students and respond to different learning strategies.

4. Advantages of interactive lecturing

The value of interactive lecturing is based on the principle that active participation and involvement is a prerequisite for learning beyond the simple memorization of information, and that students must be attentive, interested and motivated in order for effective learning to occur. Interactive lecturing has a number of advantages:

- ✓ It emphasizes learning instead of teaching, as the focus is on active discussions and meaningful discovery of specific information;
- ✓ It offers everyone a chance to get involved in the process, which is a great advantage if we think that in an usual academic setting, lectures are attended by a great number of students;
- ✓ It develops a democratic way of expression, as all students cooperate in discussions and share their input and

feedback on a given issue and everyone's opinions and point of view are valued and respected;

✓ It promotes critical thinking, due to the fact that participation requires activation of analytical skills including evaluation, summarization, paraphrase, comparison, problem-solving, decision-making, etc.;

✓ It trains self-expression, given that students have to respond by addressing a large audience and by articulating their opinion in a concise and coherent manner, in an academic context;

✓ It transforms dry theory into interesting information, as students have to engage with the content, to involve cognitively and emotionally with the information, thus feeling they are an integral part of the learning process;

✓ It increases attention and motivation, especially when the pace is constantly and systematically changed, thus discouraging boredom, passivity and the sense of irrelevance;

✓ It facilitates timely feedback, first and foremost on students' immediate (at the beginning, during and at the end of the lecture) and long-term needs (level of assimilation, possible gaps, avenues for further research, directions for future learning) and ultimately on the performance of the lecturer and their presentation strategies.

By and large, probably the biggest benefit of making lectures as interactive as possible is that such an approach is "something else". The lecture becomes a window through which the teacher invites the students to see the world in a particular way: to discover it, to interact with it, to

analyze it, to criticize it, to question it, to evaluate it.

5. Conclusion

The need to advocate the importance of interactive lecturing stems from the belief that traditional lectures do not add much to student learning and are often detrimental to their academic development. Implicit to conventional lecturing is the idea that information can be directly transmitted from one person to another. It basically means that one person stores the information received by the sender and then remembers it. This "information transmission fallacy" [5] is generated by the misconception that the human mind acts as a receiver. It has been demonstrated that in order to retain, later recall and use the information, students have to do something with it while receiving it. This theory links directly to why conducting lectures in an interactive manner helps students learn better. Active engagement during lectures can be achieved in different ways, using different techniques and a wide array of specific activities. Regardless of how and when such strategies are used, it is essential to understand that their major role is to help students elaborate upon the new information by activating prior knowledge, to rephrase it by using their own words, to understand it by discussing it with their peers and teacher or by explaining it to others and to apply it by solving real-life problems or situations.

The lecture hall is a good place to tell stories, to transmit information, to exchange ideas, to shape characters. The lecture is a good means to nurture people without forsaking their nature.

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