How to Prepare a Lecture?

42

Sana Saeed, Khadija Humayun, Samiran Nundy,
Atul Kakar, and Zulfiqar A. Bhutta

The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then starting on the first one.

Mark Twain, American writer and humorist (1835–1910)

Lectures are an economical and effective way to convey information to large groups of participants. They can provide an overview of a difficult topic or different perspectives on a subject. They can be used to provoke thought and deepen understanding. Lectures can be used to give structure to the students' reading or to cover material not easily found in textbooks. When lectures are delivered well, the lecturer motivates the students and can become an inspirational role model [1].

Delivering a good lecture is like an artistic theatre performance, with the lecturer playing the leading role. So just as with acting, the lecture delivery must be well planned, thoroughly rehearsed, and properly timed [2].

***A lecture is an organized
oral presentation of subject
matter often augmented by
visual aids.***

The original version of the book was revised: The authors and co-authors have been cited within the chapters. The correction to this book is available at https://doi.org/10.1007/978-981-16-5248-6_49.

Fig. 42.1 Schema for lecture flow

42.1 Planning the Lecture

Know your subject and have a good command of what you have to talk about. Then know your audience, their background, needs, and prior knowledge.

Lectures can be taken as a feature film and with an identifiable beginning, middle, and end. Structuring the lecture this way makes it easier for the audience to follow and also provides a framework for preparing the flow of the lecture [3] (Fig. 42.1).

If your lecture is part of a series, it is good to know the content of the other lectures particularly those just before and after yours to avoid repetition.

42.2 Preparing the Lecture

Just like success in decorating or culinary skills, successful lecture delivery is characteristically dependent on its preparation. If you prepare appropriately for a lecture, delivering it is easier [4].

The essential ingredients for the preparation of a lecture are:

- Knowing the purpose of the lecture—formulate the learning objectives.
- Content.
- Organization.
- Preparation of audiovisual aids.

42.3 Developing the Lesson Plan

Lesson planning is the crucial step to make life easier in delivering a lecture. Although it requires patience, discipline, reflection, and time, however, the payoff is boundless: a clearly organized lecture that is easy for you to deliver, and for your audience to follow.

A lesson plan is the sketch of a sequence of activities engaged in by both the lecturer and the audience to achieve the desired objectives together with a schedule for the lesson and a list of instructional resources. The quality of planning affects the quality of results. For the lecturer it is important to consider the three basic elements when planning a lecture; the introduction (bridge-in, objectives, pre-assessment), the body (participatory learning), and the conclusion (post-assessment and summary). This structure is often referred to as the **BOPPPS** model [5, 6] (Fig. 42.2).

Bridge In	Objectives	Pre-Assessment	Participatory Learning	Post - Assessment	Summary
<ul style="list-style-type: none">• Begins the learning cycle• Gains learner attention• Explains why the lesson is important.• Provides reasons for learning the topic	<ul style="list-style-type: none">• Specifies learning intention• Clarifies what the learner should achieve by end of the lesson, under what conditions and how well• Defines "what" of your lesson	<ul style="list-style-type: none">• Identifies "What does the learner already know about the topic• Prompts retrieval to strengthen memories• Can prompt curiosity	<ul style="list-style-type: none">• The body of the lesson• "How" the learning happens• Both the teacher and learners involved are actively in the learning process• Intentional sequence of activities to make the process interactive and inclusive	<ul style="list-style-type: none">• Demonstrates if the learner has learned• The post-assessment answers two questions:<ul style="list-style-type: none">• What did the learners learn?• Were the desired objectives achieved?	<ul style="list-style-type: none">• Provides opportunity for learners to reflect and integrate the learning during the closing

Fig. 42.2 The BOPPS Model

42.4 How to Deliver a Good Lecture? [7]

- Actively engage students in the learning process. Students’ engagement is a vital part of the learning from a lecture. Various techniques can be used to make lectures more interactive and engaging (Fig. 42.3).
- Provide a supportive, trusting, and non-threatening environment in which the audience positively enjoys learning.
- Take into account how much the audience already knows about the subject being delivered and structure the lecture accordingly.
- Spell out the objectives of the lecture and focus on outcomes so that the audience is clear about what it needs to attain.
- Think about how best to use your tone of voice, emphasis, repetition, body language, and facial expression to achieve the best results.
- Humour, planned and spontaneous, can be an excellent way to relieve the stress and monotony during a lecture. It can be achieved by comical pictures, funny anecdotes, and succinct jokes appropriate to the subject.
- At the end of the lecture summarize the main points. Indicate that you have finished and be ready to answer questions.
- Seek the audience’s feedback about the lecture and change practice according to what they say.

Fig. 42.3 Making lectures interactive and engaging

42.5 Do's for Preparing a Good Lecture [8]

42.5.1 Content—How Much and What

- When starting preparation for the lecture, remember **'less is more'**.
- If using slides it is suggested to allow 1.5–2 min per slide, so do not have 80 slides for a 30-min talk. If using other means dwell on a point enough to make it clear to all participants.
- The assumption is that at any given time during the lecture 20% of the audience will have their attention elsewhere so put the most important points, at the beginning and end of the lecture when their attention is at its maximum.
- Avoid technical terms and jargon as much as possible. If you must introduce an acronym or an unfamiliar technical term, clearly define it the first time you use it.
- Use simple, common language with short words and sentences. If using slides just have enough text on each slide to remind you what to say. The best example of this technique is the 'newspaper headlines' where one has to use clear, direct, and engaging language due to the limited space to communicate ideas.
- If using slides keep them simple to minimize the work of the audience in figuring out what is being said so they will pay more attentive to the ideas in the lecture.
- The use of analogies or examples makes the material more interesting. If possible, relating it to personal experience makes the relevance of the material clearer. Use anecdotes and humour whenever the opportunity arises.

42.5.2 Adding Pictures

- For technical content, talk that is entirely in pictures can convey the message in an excellent manner. Once this is done then adding one or two words per slide will clarify the content further (Figs. 42.4 and 42.5).
- The images should be clearly labeled and annotated.
- If a graph is used the axes must be properly labelled. You will be intimately familiar with your graph or image, but your audience will be seeing it for the first time. They will need orientation, so take them on a guided tour, explaining the axes, annotations, and major features.

42.5.3 Fonts

Everything written on a slide should be readable, including subtitles, annotations, and labels. Use a font that is easy to read. **Sans-serif fonts** are better for slides than **serif fonts**. Too many different fonts in a slide or a presentation can be distracting, so limit to one or two. The font size should not be less than 20 points that can be seen by everyone in the room.

Fig. 42.4 Newspaper headline

Fig. 42.5 Advantage of using picture

42.5.4 Colour Scheme

Black text on a white background or white text on a blue background, makes the slides easily readable. However, blue slides in a dark room can induce sleep.

Varying the colour and font size to emphasize points can also make the text more interesting to look at. Colour schemes that do not have much contrast, such as red on blue or black on blue, are difficult to read and cause the audience to tire.

The slides should look neat, with the same background template and the same font throughout. Using bullet points and avoiding spelling mistakes are also very important.

42.5.5 Handouts

Provide copies of the text and figures used in the lecture, either as printed handouts or as web files. It is good to provide references as well. This will make the audience pay full attention to the lecture instead of writing down notes.

42.5.6 Introduction

A good introduction raises an audience's interest in the lecture and establishes the lecturer's authority to give the talk. To ensure that your lecture gets off to a solid start, write a brief description of yourself and your talk, which can be used by the person who introduces you (Fig. 42.6).

Fig. 42.6 Tips for preparing a good lecture

42.5.7 Contextual Learning

Connecting lectures to the real world broaden learning possibilities by changing the focus from recall to application.

42.5.8 Duration of a Lecture

- The usual standard length of a lecture period is 60 min, with approximately 45 min speaking and a 15-min question and answer period.
- The optimal attention span for an audience is approximately 20 min.
- Breaking down the lecture into smaller units, of 20 min can help in keeping the participants engaged with the lecture.

42.6 Don'ts in Preparing a Lecture

42.6.1 Busy Slides

Do not put too much information on an individual slide. Do not write whole sentences next to bullet points. The audience should be listening to the lecture, rather than reading on the screen.

Fig. 42.7 Poorly designed slide

A slide should not be overloaded with images, graphs, or complex tables. This will cause loss of concentration and confusion for the audience.

Do not go beyond the allotted time.

Excessive animation may cause distraction so avoid it. Keep animations subtle and simple and use only to augment a specific idea that needs reinforcement (Fig. 42.7).

Do not introduce every bullet point piecemeal, reserve this for times when it gives added importance.

42.7 Conclusions

- The success of a lecture is proportional to the time spent in planning and preparation.
- Delivering a good lecture is all about connecting with the audience.
- Make a lecture interactive whenever you can and allow time for questions.
- Keep the lecture simple—stick to key facts but do not try to cram too much in.
- Never let a lecture overrun.
- Develop your lecture skills by practicing and by acting on feedback.

References

1. Wojtczak A. Glossary of medical education terms. AMEE; 2003.
2. Domizio P. Giving a good lecture. *Diagn Histopathol*. 2008 Jun 1;14(6):284–8.
3. Brown G, Manogue M. AMEE Medical Education Guide No. 22: Refreshing lecturing: a guide for lecturers. *Med Teach*. 2001 Jan 1;23(3):231–44.
4. Brown S, Race P. *Lecturing: a practical guide*. Routledge; 2003 Dec 16.
5. Northern College. Lesson Plans. Last accessed on February 23, 2021. Available on <http://north-nrc.on.ca/lit/lesson-plans/> (not accessible).

6. Implementing active learning. BOPPS model for lesson planning. Last accessed on 13th February 2021. Available on https://www.queensu.ca/teachingandlearning/modules/active/18_boppps_model_for_lesson_planning.html
7. How to give a talk. Last accessed on February 23, 2021. Available on www.cs.duke.edu/brd/Teaching/Giving-a-talk/giving-a-talk.html.
8. University of East London. Last accessed on 13th February 2021. Available on www.uel.ac.uk/subaqua/site/articles/pages/how-to-lecture.htm.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.