

Preparing Slides and giving an *excellent* academic talk

Boaz Nadler

Department of Computer Science and Applied Mathematics
The Weizmann Institute of Science
Rehovot, Israel

boaz.nadler@weizmann.ac.il

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Clearly, while some people are born with a gift of excellent communication skills, for the rest of us, giving a good talk requires some experience and **a lot** of preparation.

A note to academic advisers: Even though we teach our students how to do research, we rarely provide them guidance on how to *present* it.

Giving a Good Talk

The goal of these slides is to provide some tips advice and guidelines on how to

- ▶ prepare your presentation
- ▶ prepare for your talk
- ▶ give an excellent talk

This document is work in progress.

Comments and suggestions are most welcome !

drop me an email to boaz.nadler@weizmann.ac.il

Preparation

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Important things to consider *before* preparing your talk:

- ▶ what is the *purpose* of your talk
- ▶ who is the expected *audience*.
- ▶ how much *time* is your talk

Purpose of talk

Communicate your ideas.

Emphasize more on the main challenges, concepts and ideas, less on the very technical details.

Think:

what is the main message of your talk ?

what is the problem you considered ?

why is the problem (or the solution) interesting ?

Hint: Do not attempt to present the results of your 7 latest papers in one talk !

Don't be Lazy !

Most of us have worked for several months if not years, on formulating a problem, solving it, writing a paper and eventually publishing it. So, it is reasonable to spend a few DAYS summarizing this in a well polished and professional presentation.

If you did an excellent research, then you'll probably present (variants) of this talk multiple times at several places.

Key Message: *Preparation is well worth the effort.*

Don't be lazy !

At a conference/workshop/seminar between 10 to 100 other researchers will be listening to your talk, and spending their precious time paying attention to you.

This is a one-time opportunity. If you give a bad talk chances are they will not listen to any other talk of yours.

Don't lose your audience, don't talk to yourself.

Some Key Ingredients:

A good set of slides typically clearly states and explains the following:

What is the problem you solved / formulated ?

Why is it interesting ?

What is (high-level description) of previous work on subject ?

What is *your* contribution.

The time given to your talk typically depends on the venue.

In conferences, talks are typically between 15 to 45 minutes.

Department seminar talks are typically longer, between 50 minutes to 1 hour. Some seminars are 2 hours long.

DO NOT GO OVERTIME !!!

Rule of Thumb: Number of Slides $<$ Number of Minutes .

- Choose a clear short and informative title.

Don't forget to acknowledge your collaborators !

Checklist: Things to avoid

Do some of your slides contain:

- too many words ?
- too much mathematical / technical detail ?
- figures with fonts too small ?
- figures with too much detail ?

Does your presentation contain:

- too many slides ?
- too many messages in one talk ?
- too many acronyms, definitions, subscripts, etc ?
- English typos ?

Each slide should have one (and only one) clear purpose.

Use **color** to emphasize important point / concept of a slide.

Use centerline to emphasize a key conclusion

Use bold to emphasize key topics (e.g. **Theorem:**).

Do not:

- use too many colors in one slide
- use colors that are difficult to make out (e.g., yellow on white background).
- use non-white background (makes it difficult to read text).

They say a picture is worth a thousand words

yes, BUT

when the picture is in *focus*.

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When presenting a figure:

- Have clearly marked x and y axis
- Have large fonts
- Have wide enough lines that can be viewed from far

To make fontsize larger and viewable consider the following in Matlab:

```
figure(20);  
set(gca,'fontsize', 24);
```

For legends that contain latex symbols consider the following

```
h = legend(...);  
set(h,'interpreter','latex');  
set(h,'fontsize',24);
```

Clearly viewable lines:

```
plot(x,y,'b-', 'linewidth', 2);
```

Practice

Give the talk in your office, talk aloud, see that slides connect one to each other, that the presentation goes fluently.

Give the talk in front of your friends. Give a practice talk at your research group.

Do not speak in a monotonic voice (unless you want your audience to fall asleep...)

Show *enthusiasm* and excitement about your work. It will be viral.

If you are not a native English speaker, prepare in advance words that you want to use in your talk. Write them down.

Suggested Reading

- *How to write a paper*, by Oded Goldreich,
<http://www.wisdom.weizmann.ac.il/~oded/writing.html>
- *Giving an academic talk*, by Jonathan Shewchuk
<http://www.cs.berkeley.edu/~jrs/speaking.html>
- Many additional links appear here:
<http://www.samsi.info/forms-and-resources/postdocs>