CS-M00 Research Methodology

How to Give a Great Presentation

Anton Setzer

http://www.cs.swan.ac.uk/~csetzer/lectures/researchmethodology/14/index.html

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1. What’s the Goal of a Talk?
2. How to Prepare Slides
3. How to Structure a Talk
4. Designing a Talk
5. How to Prepare Before a Talk
6. How to Perform a Talk
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Do you Want Approval?
Do you Want to Dominate your Audience?
Do you Want to Stay Safe?
Hold on - This was all about ...
Hold on - This was all about . . .

. . . Your Ego

. . . Your Ego
Didn’t you forget something?
Your Audience!
The Goal of Talk should be . . .
The Goal of Talk should be . . .

Shopping
- skirt
- shorts
- t-shirt
- jeans

Good morning!
Do you sell . . . ?

yes, we do.
no, we don't.
The Goal of Talk should be . . .

. . . to transmit knowledge, your message,
. . . to your audience.
You have something to say!
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Readability

- Use big font.
- Not small font.
- Use colours which readable.
Colours

- Don’t use too many colours (maximum 4 different combinations of colours-fonts-sizes).
- Otherwise it looks confusing.
- Consistent colour scheme throughout the presentation:
  - **Headlines**
  - **Emphasised words**
  - Repetition from previous slide
  - **Definition**
 Restrict Content

- No more than 7 lines per slide.
This slide is quite unreadable, because it is a long boring text without any structure. It is hard to read, especially if it is shown only for 50 milliseconds. Most of the audience will not even make an effort to try to read it. However one can see such kind of text often, because some presenters simply make a copy of the text of their report.
A Picture Says more than a 1000 Words
Stephen Cook (Toronto)
Introduced 1971 the
Complexity Classes $P$ and $NP$
Formulated the $P \neq NP$ Problem
Pictures Make Presentations More Lively

Stephen Cook (Toronto)
Introduced 1971 the Complexity Classes $P$ and $NP$
Formulated the $P \neq NP$ Problem
Spell-Check Your Talk

[Image of a street with the word "SCHOOL" painted on it]
Don’t Overdue Effects
Don’t Overdue Effects
Don’t Overdue Effects

Having
Don’t Overdue Effects

Having too many
Don’t Overdue Effects

Having too many effects
Don’t Overdue Effects

Having **too many effects** doesn’t
Don’t Overdue Effects

Having too many effects doesn’t look good
Don’t Overdue Effects

Having **too many effects** doesn’t look good

!
Don’t Play a 5 Minute Video
class Nat {
    public NatElim el;
    Nat(NatElim el) { this.el = el; }
    public Object elim(NatVisitor visitor) { return el.ap(visitor); }
    public static Nat Z() { return new Nat(new NatElim() {
        public Object ap(NatVisitor visitor) { return visitor.zeroCase(); }
    }); }
    public static Nat S(final Nat n) { return new Nat(new NatElim() {
        public Object ap(NatVisitor visitor) { return visitor.succCase(n); }
    }); }
    public String toString() {
        return (String) elim(new NatVisitor() {
            public Object zeroCase() { return "Z"; }
            public Object succCase(Nat n) { return "S(" + n + ")"; }
        });
    }
    public Nat plus (final Nat n) {
        final Nat this1 = this;
        return (Nat) n.elim (new NatVisitor() {
            public Object zeroCase() { return this1; }
            public Object succCase(Nat m) { return S(plus(m)); }
        });
    }
}
class Nat {
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    public Nat plus (final Nat n) {
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            public Object succCase(Nat m) { return S(plus(m)); }
        });
    }
}

... that doesn’t work
class Nat {  public NatElim el;  Nat(NatElim el) {this.el = el;}  public Object elim(NatVisitor visitor) {return el.ap(visitor);}  public static Nat Z() {return new Nat(new NatElim() {    public Object ap(NatVisitor visitor) {return visitor.zeroCase();}  });}  public static Nat S(final Nat n) {return new Nat(new NatElim() {    public Object ap(NatVisitor visitor) {return visitor.succCase(n);}  });}  public String toString() {    return (String)elim(new NatVisitor() {      public Object zeroCase() {return "Z";}      public Object succCase(Nat m) {return "S(" + m + ")";}    });}  public Nat plus (final Nat n) {    final Nat this1 = this;    return (Nat) n.elim (new NatVisitor() {      public Object zeroCase() {return this1;}      public Object succCase(Nat m) {return S(plus(m));}    });  }}

... that doesn’t work
... especially if you change code during the lecture
• Remind latecomers about your name and the title of your talk.
• In the Footer.
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Basic Principle

In a talk

- you tell the audience what you’re going to say,
- say it,
- then tell them, what you’ve said.

(Dale Carnegie)
Basic Structure

- Title Slide.
- Maybe Motivation.
- Table of Contents.
- 3 - 4 Parts.
- Conclusion.
The Gower Peninsula

Prof. Dr. hc. mult. Anita Flowerlove
Motivation Slide

The Problem of Pollution
Overview

1. The Beauty of the Gower.
2. The problem of pollution.
3. Measurements by the government.
4. Our proposal.
Section 2: The Problem of Pollution

Signpost clearly when moving to a new section.
Conclusion

- Last chance to sell your work!
- Remind audience of what you did.
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Top Down Approach

- Start with your message
  In this talk I demonstrate the dangers of pollution in the Gower Peninsula, the measurements of the Government, and our solution.

- Create sections from your message:
  1. The Beauty of the Gower.
  2. The problem of pollution.
  3. Measurements by the government.
  4. Our proposal.
Tow Down Approach

- Do the same for each section
- until you have reached individual slides.
The Time Issue

• Don’t have too many slides.
• 24 slides per minute is a film.
The Time Issue

- Practice, practice practice
  - On your own
  - In front of a trial audience.
The Time Issue

- Have prepared short-cuts.
- Have hidden slide, you can use if you have more time than expected.
- Finishing too early: No message to tell.
- Finishing too late: bad speaker.
Interaction

- Ask questions to audience.
- Ask a question which makes them raise their hands.
- Make a joke (not a strong one).
Strong Beginning and End

• Prepare
  • a strong beginning,
  • and a strong ending.

• Audience will remember those two parts most!
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Trial Talks

- Trial Talks
- Trial Talks
- Trial Talks
• Take with you
  • the first or first two sentences,
  • the last sentence.
• Write it on cardboard.
  • paper exaggerates your nervousness.
  • you can hold on to it.
• Don’t take with you a script of the whole talk.
Exercises

- Do exercises such as Yoga, Qigong, Relaxation CDs etc. for
  - dealing with nervousness,
  - getting you into a high energy state.
- Try it out beforehand!
- A healthy level of nervousness can be good!
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Dress Smartly

- Dress a little bit better than normal.
- Don’t overdress.
- Don’t underdress.
Time Keeping

- Put a clock in a good position.
- Regularly look at it.
Posture

- Talk with your hands (but not too much)
- Don’t have hands in your pockets.
- Smile.
- Don’t hide the screen.
Eye Contact

- Make eye contact with all zones of the room.
- Divide room in left, middle, right, and look at each sector alternating.
- With good eye contact your audience has to listen!
- Don’t look at screen but get information from
  - printout of your slides (optimal)
  - or from laptop.
• Try to speak slowly and clearly.
  • Nervousness might result in speaking faster than usual.
Conclusion

- Goal of a talk to pass on a message to your audience.
- Trial talks, trial talks, trial talks.
- Create lively well structured slides.
- Focus on passing on your message.
- Strong beginning, strong ending (visually and auditory).
- Good confident body posture.
• Markus Roggenbach: How to cook up a presentation. 
  Presentation given for third year students at the Dept. of Computer 
  Science, Swansea University, October 2008.

• How to give a great presentation.
  2005.

• Tips on making presentations.
  http://www.kent.ac.uk/careers/presentationskills.htm
  2012
• Dale Carnegie Quotes.  
  http://www.brainyquote.com/quotes/quotes/d/dalecarneg156635.html  
  2012
Sources of Pictures

- Applause at Cern
  http://images.iop.org/objects/ccr/cern/52/7/25/CCmel1_07_12.jpg
- Sleeping Audience
  http://www.johnlund.com/images/10001300049.jpg
- Shocked Audience
- Speaker with hands in pocket
  http://i.ytimg.com/vi/1K0jYOBJFqM/0.jpg
- Ego
  http://2.bp.blogspot.com/_EkCXxv6Las/TKcVWLDwJWI/AAAAAAAAA9U/0tWUHeMD9Lw/s1600/EGO376.gif
- Audience
  http://american-accent-training.org/wp-content/uploads/2012/03/Online-Teaching-Degrees1.jpg
- Teaching
  http://www.projects-abroad-groups.co.uk/_photos/_global/photo-galleries/en-uk/thailand/_global/large/teaching-volunteer.jpg
- Questionmark
- Exclamation mark
- Three dots
  http://static.thelabelfinder.com/imaging/other/1757370/21435/three-dots.png
- Giving
- Wormshead Gower
  http://static.guim.co.uk/sys-images/Society/Pix/pictures/2008/05/30/gower2.jpg
Sources of Pictures

- Port Talbot
  http://upload.wikimedia.org/wikipedia/commons/3/3e/Port_Talbot_Steelworks.--geograph.org.uk-.41552.jpg

- Steve Cook
  https://www.student.cs.uwaterloo.ca/~cs462/Hall/cook.jpg

- Shcool misspelled
  http://a0.twimg.com/profile_images/1545843253/shcool_misspelt.jpg