

Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie - Academic Skills in Computer Science (ASICS)

60. Talking Interestingly

Prof. Dr. Uwe Aßmann Softwaretechnologie Fakultät Informatik Technische Universität Dresden 2016-0.2, 18.06.16 http://st.inf.tudresden.de/teaching/asics

- The development of talks (dressed talking)
- 2) Slides
- 3) Gestures
- 4) Nervosity is your friend
- 5) Dynamics



Literatur

- Christine Stickel-Wolf, Joachim Wolf: Wissenschaftliches Arbeiten und Lerntechniken. Erfolgreich studieren – gewusst wie! Gabler, 5., aktualisierte und überarbeitete Auflage 2009
- [Kleiser-Model-Speeches] Grenville Kleiser. Model Speeches for Practise. Gutenberg.org:[EBook #18323]

C Prof. U. Aßmann



[Kleiser-Model-Speeches]

THE KEY TO SUCCESS IN SPEAKING

The key to greatness of speech is **sincerity**. You must yourself be so thoroughly imbued with the truth and **desirability** of what you are urging upon others that they will be imprest by your integrity of purpose. To have their confidence and good will is almost to win your cause.

But you must have deep and well-grounded convictions before you can hope to convince and influence other men. Duty, necessity, magnanimity, innate conviction, and sincere interest in the welfare of others,—these beget true fervor and are essential to passionate and persuasive speaking.

Lord Lytton emphasized the vital importance of earnest purpose in the speaker. Referring to speech in the British Parliament he said, "Have but fair sense and a competent knowledge of your subject, and then be thoroughly in earnest to impress your own honest conviction upon others, and no matter what your delivery, tho your gestures shock every rule in Quintilian, you will command the ear and influence the debates of the most accomplished, the most fastidious, and, take it altogether, the noblest assembly of freemen in the world."

Keep in mind that the purpose of your public speaking is not only to convince but also to persuade your hearers. It is not sufficient that they merely agree with what you say; you must persuade them also to act as you desire.

Hence you should aim to reach both their minds and hearts. Solid argument, clear method, and indisputable facts are necessary for the first purpose; vivid imagination, concrete illustration, and animated feeling are necessary for the second.





Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie - Academic Skills in Computer Science (ASICS)

60.1. Controlled Talking (Dressed Talking)



Academic Skills in Computer Science (ASICS)) © Prof. U. Aßmann

Development Schemes for Talks

5 Academic Skills in Computer Science (ASICS)

- In the previous chapters, you have learned a lot for talks, too
 - Basically, all development schemes can be used for talks
 - Introductory parts with funnel introductions and hooks
 - Threading and decomposition
 - Argumentation
 - Conclusion parts
- Thesis slides (point slides) serve for controlled (dressed) talking
 - What's your controlling idea of your talk? Remember, otherwise your talk is **naked**
 - What is your controller on your thesis slide?
 - Do you have a mature green thesis statement?
 - Do you have an echo point or a upward message in the talk?
 - What is your development scheme?
 - Do you use a pivotal or dialectic development?
 - Do you have a global threading relation? (e.g., degree of importance)
 - What is the **skeleton** of the talk?
 - Try to distinguish slides carrying primary support from slides carrying secondary support (distinguish bushs from comb)
- Pivot-based schemes are nice for talks because they generate tension
 - "Knight" (Ritter) or tragedy..



Audience and Relevance Analysis

- Find out your audience "who is listening"
 - expert level:
 - newbies, dummies,
 - experts: technicians, scientists, engineers
 - age: young, old
 - society background
- What is relevant for your audience?
 - do a relevance analysis
 - Why would my audience pay to listen to my talk?
- Pain-Gain analysis:
 - Which value could it gain?
 - Which pain could it be relieved from



POPP/ZOPP for Problem Analysis (see Chap. 11-14)

7 Academic Skills in Computer Science (ASICS)

- Problems on one slide
- Goals on one slide
- Blocking factors on one slide
- Solutions (approach) on one slide
- MOPARC, ZOPP, B-POPP, nABC, PIBA, GulCaramel, all are useful

A good talk follows a problem-solving development scheme.



Rpt. From Ch. 14) NABC Elevator Pitches

- An elevator pitch is a 2-minute speech about the nABC of your project
- You should be able to tell it
 - an important investor in an elevator (2 min)
 - your professor
 - your grandmother
- It combines a problem solving scheme with a hook, a gripping introductory remark.
- Very good: use nABC with a hook and quantitative benefit-for-cost.
- my solution is 30% better than the competitors'



kit Max

- Goals and Questions
- Background
- Approach
- Challenges
- Conclusion



Introductions For Talks That Work

- **Funnel** introtroductions
 - Slide 1: very general
 - Slide 2: more specific
 - Slide 3: that's the point now
- Hook intros:
 - Surprising **soap-boxes** are very welcome: make the audience laugh to be interested
 - Anectodical or personal hooks also work quite well
- BPOPP/ZOPP introductions: start with a problem, continue with the goal, and discuss validation
- NABC elevator pitch
- Hooks
 - Riddles
 - Soapboxes
 - Introductory Examples



Riddles and Blind Alleys ("Sackgassen")

- **Riddles** are fantastic measures to keep an audience alive
- Ideas
 - Start an interactive competition "Preisausschreiben" ("who wants to win 1 Euro?")
 - Let them guess a photo puzzle (klick-uncover photo puzzle)
 - Tell a story about a riddle
- Blind Alleys are pivot developments (Strawmen) that lead the audience into a wrong direction before being refuted
 - Blind Alleys use pivotal development with refutation



Soapbox

- A *soapbox (hook)* is an eye-catcher for a talk to win the interest of the audience
- Fotos
- Anecdotes
- Be careful with jokes
- See the following soapbox slide from course "Component-based Software Engineering", ch. "Introduction")



Example from CBSE Course Introductory Lecture: "The Power of Components"





How to Use Examples

- Start with an introductory, pedagogic example
 - it should not example *how* your technology works, but *what* it does
 - It should be comprehensible by everybody in your audience
 - It should have an appealing character for the audience
- Use Running Examples
 - **Running examples** reappear, and augment the initial example step by step
 - In the end, they present the full picture
 - A carefully constructed running example is a big win for a talk



Leitmotifs

15 Academic Skills in Computer Science (ASICS)

- A leitmotif is a
 - sentence
 - slide
 - example
 - anecdote
 - citation
- that reappears all over the talk and chains it together

Leitmotifs can be displayed on a second, parallel slide

to improve orientation



The T-Shape Concept for Scientific Talks with Unknown Audience

- If the audience is unknown or mixed from informed and uninformed listeners, many of them may not understand your technical content. Then, use the **T-concept**:
- A talk is in *T-shape* if it its backbone is a large overview part *and* one section that dives into technical detail (like a T)
- Advantage of the T-shape:
 - Uninformed listeners will understand large parts of the talk
 - Informed listeners will see your excellence because they understand the detail
- Disadvantage of leaving out the vertical part: you do not show excellence
- Disadvantage of leaving out the horizontal part: you loose the audience



The T-Shape Concept for Scientific Talks with Unknown Audience

17 Academic Skills in Computer Science (ASICS)

Similar is the **Pi-Talk scheme** with two parts showing technical detail





Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie - Academic Skills in Computer Science (ASICS)

60.2 Slides



Academic Skills in Computer Science (ASICS)) © Prof. U. Aßmann

General Tips on Slides

- Not too much on slides (only profs are allowed to do that :-(
- Don't read the slides
- Visualize as much as you can
- Include convincing examples for your technology
- Train the talk before so that you fit into the given time
 - present to your colleagues in the "research sharing group" of your chair



Graphs and Function Plots

- If you use a function plot to show the advantages of your approach and the disadvantage of competitors, mark with colors and smileys (visual ordinal scale)
- => Comprehensible







Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie - Academic Skills in Computer Science (ASICS)

60.3. How to Act While Talking

Talking is being put on the screen or theater stage. You must "act" like an orator or actor



Academic Skills in Computer Science (ASICS)) © Prof. U. Aßmann

60.3.1 Gestures

- Hands should exert gestures, not be hidden.
- Try to present what you want to present **with your hands**, not only with your voice
- Watch your talk's video to analyze your gestures and your voice it will help you a lot



- If you are not nervous, your talk will be boring and lousy.
- Nervosity drives you to your best!

- Nervosity is reduced by:
 - Test the talk with timing watch. The shorter it is the more it must be tested.
 - The first sentence of every slide, the **kickoff sentence**, is very important, because it kicks you of talking about the slide.
 - Example: This slide contains the kickoff sentence as first sentence.
 - Try to learn by heart the kickoff sentence of every slide (!!)
 - Because slides are read from left to right top down, anchor a word or graphics in the upper left corder that reminds you of the first sentence.
 - If you know all kickoff sentences by heart, you won't be nervous anymore, and your talk will be finished in time, because you can always get up again after a stumble.



Nervosity Ceases with Pain-Gain-Analysis

- If you have done a good pain-gain analysis, and you know
 - why the talk will relieve pain for the audience
 - why the talk will deliver a gain to them
- you will not be nervous,
- but you are the doctor, you will remove their pain!
- Nervosity stays, if you don't know what to relieve the audience from.



63.3.3. How to Manage Fair Interruptions

25 Academic Skills in Computer Science (ASICS)

[Stickel-Wolf/Wolf]

Strategies for dealing with fair interruptions

- Answer shortly
 - "It is great that you raise this point. This concept is...."
- Qualify your answer (to avoid black-white discussions)
 - "As far as I know,..."
 - "To my knowledge,.."
- Delay
 - "Thank you, this is a great point, and I will come back to it soon."
- Ask back
 - "I did not understand your comment. Could you repeat?"



How to Manage Unfair Interruptions

[Stickel-Wolf/Wolf]

Strategies for personal attacks ad hominem

- Do not listen, continue, do not focus, ignore
- Ask back
 - "Do you really mean..."
 - "What do you mean by this?"
- Fire back against motives
 - "I do not believe that this discussion is appreciated by the audience"
 - "This comment does not lead anywhere; instead, consider...."



60.3.4 Change the Dynamics

- Plan the change of dynamics
 - Which part of your talk with be how loud and how fast?
- Do you have a global threading scheme which drives the dynamics?
 - For instance, if you use a **climactic threading of your arguments**, you should become louder while developing them
- Use more gestures, when speaking louder
- Stop now and then to surprise listeners
- Ask questions and wait for answer



The End

28 Academic Skills in Computer Science (ASICS)

Some slides are courtesy to Dr. Birgit Demuth

