Effective Presentation Techniques

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Structuring presentation
Designing slides
Pausing techniques
Answering questions
Structuring Presentation

- Planning
- Delivery
- Sign posts
Planning

- Talk: A → B
- Consider audience
- Set goal
- Create slides
Delivery

- Prepare audience
- Move audience
- Reflect on journey
- “Tell ’em” × 3
- Rehearse!
Sign Posts

- Orient listener
  - Current topic
  - Progress

- Two styles
  - Intermittent
  - Ever-present
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Designing Good Slides

- Content
- Unveiling
- Color
- Subliminal messages
Content

- **Purpose**
  - Complement speaker
  - Talk ≠ technical report

- **Density**
  - 7 lines/page
  - 4 words/line
A speaker may put his entire presentation on his slides. He turns his back to the audience and reads the slides aloud. Perhaps he feels this approach guarantees all the information will get to the audience.

This may be the most annoying way to give a presentation. Audience members feel insulted: they already know how to read! They wonder why the lecturer doesn’t simply hand out a copy of the slides.

The visual presentation dominates the presenter. The presenter is not adding any value to what is on the slides.
Speaker Interprets Slides

- Slides dominate
  - Provide all content
  - Hold audience’s attention

- Speaker supports
  - Faces slides
  - Helps audience understand
Complicated Derivation

\[
\psi(n, p) \leq \frac{\sigma(n) + \varphi(n)}{\sigma(n) + \varphi(n)/p + \kappa(n, p)}
\]

\[
\Rightarrow \psi(n, p) \leq \frac{p(\sigma(n) + \varphi(n))}{p\sigma(n) + \varphi(n) + p\kappa(n, p)}
\]

\[
\Rightarrow \psi(n, p) \leq \frac{p(\sigma(n) + \varphi(n))}{\sigma(n) + \varphi(n) + (p-1)\sigma(n) + p\kappa(n, p)}
\]

\[
\Rightarrow \psi(n, p) \leq \frac{p(\sigma(n) + \varphi(n))}{\sigma(n) + \varphi(n) + T_0(n, p)}
\]

\[
\Rightarrow \varepsilon(n, p) \leq \frac{\sigma(n) + \varphi(n)}{\sigma(n) + \varphi(n) + T_0(n, p)}
\]

\[
\Rightarrow \varepsilon(n, p) \leq \frac{1}{1 + \frac{T_0(n, p)}{\sigma(n) + \varphi(n)}}
\]

\[
\Rightarrow \varepsilon(n, p) \leq \frac{1}{1 + \frac{T_0(n, p)}{T(n,1)}}
\]

\[
\Rightarrow T(n,1) \geq \frac{\varepsilon(n, p)}{1 - \varepsilon(n, p)} T_0(n, p)
\]

\[
\Rightarrow T(n,1) \geq C T_0(n, p)
\]
Good Illustration > Complicated Derivation

- Memory Size
- Number of processors

- Scales poorly
- Scales well

Memory needed per processor
Slides Enhance Speaker

- Speaker dominates
  - Faces audience
  - Provides content

- Slides support speaker
  - Reinforce message
  - Orient listeners
Mixing Important/Unimportant Words

- The isoefficiency and the scalability metrics of a parallel algorithm are crucial.
- The typical parallel computers of the future will have thousands of CPUs and terabytes of RAM.
Important Words Only

- Crucial metrics
  - Isoefficiency
  - Scalability function

- Future systems
  - Thousands of CPUs
  - Terabytes of RAM
Unbalanced Lists

- Speedup
  - Sequential time
  - Parallel time
    - Parallel computations
    - Parallel overhead

- Efficiency
Balanced Lists

- **Speedup**
  - Expresses time reduction
  - Sequential time, parallel time, overhead

- **Efficiency**
  - Expresses processor utilization
  - Speedup, number of processors
“Fly In” Fails

- Could you read this?
- How about this one?
- Maybe the third time is the charm!
“Wipe from Left” Works

- Less distracting
- Reduces eye movement
- Increases readability
Typical Eye Movement

- Upper left
- Upper right
- Lower left
- Lower right
Wall of White

- Increases glare
- Causes eyestrain
- Distracts from speaker
Subliminal Messages

- Orientation
- Motion
Message: Decline
Message: Improvement
Message: Good Event
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Pauses

- Useful
- Powerful
- Difficult
Silence Useful

- Awaiting thought
- Switching gaze
- Reading slide
- Reinforcing point
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Pitfalls

- Hostile gestures
- Wandering gaze
- Body language
- Missing point
- Seeking approval
- Excluding audience
Opportunities

- Welcoming gestures
- Focusing gaze
- Body language
- Getting point
- Reinforcing message
- Including audience
Dangerous Responses

- “Good question”
- “I’m glad you asked that question”
Summary

Guide audience gently

Design slides carefully

Use pauses effectively

Answer questions inclusively