

EvoNet Summer School 2001 A Good Presentation

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The 6 “P’s” in presentations

- **Planning** a good structure
- **Preparation** of clear slides
- **Prompts** to manage your presentation
- **Pronunciation & Projection** :
work on voice & body language
- **Practice** & the importance of rehearsal

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I. Planning a good structure

- Your presentation is like a sales pitch
- Take a marketing approach
- Essential information only
- Put your ego aside and summarise
- Aim to cover 3-6 broad ideas
- Learn from politicians
- **Golden rule:** less is more

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I. Planning a good structure

- Anticipate your audience
- What information will they want to hear?
- Use detail only in support role
- Strong focus & clarity of thought
- A simple, easy-to-understand story

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I. Planning a good structure

- A *logical* progression of ideas
- A beginning-middle-end structure with
 - Short introduction
(preview of objectives and main points)
 - Subject material (approx 80-85% of time)
 - Succinct summary of ideas & conclusions
 - 5-10 mins of questions

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I. Planning a good structure

- Your introduction gives other clues
- Importance of positive impact from start
- Capture audience attention
- Remind them of research objectives
- Provides a clear audience challenge
- With satisfactory resolution at end

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I. Planning a good structure

- Allocate time in relation to importance of ideas
- Identify key steps which led to results
- Aim for dénouement or dramatic high point
- Qualitative conclusions rather than exhaustive quantitative results
- Always conclude with summary of main points to overcome audience “drift”

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II. Preparation of clear slides

- **Golden rule :**
keep things simple & uncluttered
- Minimal distractions to hold audience attention
- Slides pace your talk & act as your prompts
- Avoid crowding & too many ideas on one slide
- Determine appropriate number of slides

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II. Preparation of clear slides

- One broad idea per slide
- 6-12 lines of text per slide for easy reading
- Avoid sentences & aim for “bullet points”
- Avoid hyphenation
- Use sans serif fonts
- Use bold & large font size

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II. Preparation of clear slides

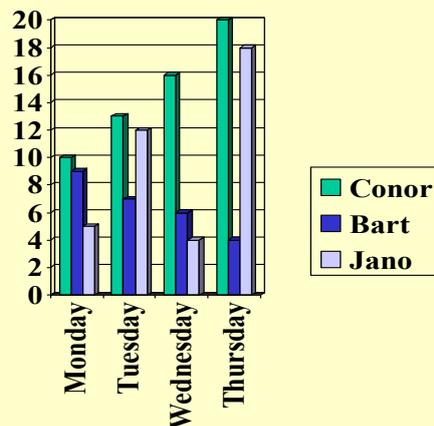
- Minimise slide clutter & decoration
- Do not be afraid of “white space”
- Proportion the text
- Leave good margins
- Provide good contrast
- Pay attention with technical detail:
aim for statistical summaries

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Number of beers drunk

(Mon-Thurs of this week)

Number of beers



Conor demonstrating steady increase in consumption

Bart started well but now in decline

Jano erratic, but can match Conor

Example: useful summary description of results

Schema Theorem and Theoretical Background

- The theoretical basis of genetic algorithms relies on the concept of schema (pl. schemata). Schemata are templates that partially specify a solution (more strictly, a solution in the genotype space).
- If genotypes are strings built using symbols from an alphabet A , schemata are strings whose symbols belong to $A \cup \{*\}$. This extra-symbol must be interpreted as a wildcard, being loci occupied by it called undefined. A chromosome is said to match a schema if they agree in the defined positions.
- The string 10011010 matches the schemata 1***** and **011*** among others, but does not match *1*11*** because they differ in the second gene (the first defined gene in the schema).
- A schema can be viewed as a hyperplane in a n -dimensional space representing a set of solutions with common properties.

Problem: Too much detail on slide

Genetic Algorithms

- Basic Operations are **generation** and **evaluation** of an initial population.
- **Selecting** the best individuals, crossing them and applying **mutation** on every locus (string position)
- **Solution** is best string present in the final population
- Computational effort is **evaluation** of initial and new strings.
- **Fitness function** is complex, mathematical function with many parameters
- **Operators** like selection, mutation, crossover or replacement are of **linear complexity** and work at constant rates for a given problem.
- Traditional GA works on **binary strings** of fixed length and applies fitness proportionate selection, one point crossover and bit-flip mutation

Problem: Too many ideas on one slide

Preparation of hard-to-read slides

- Can you read this text?
- Or is it too small?
- Or too faint to read?
- It means that it is not very clear to the audience
- And they may lose key ideas in a presentation

Problem: Font size is too small and hard to read

Preparation of unclear slides

- This is Times New Roman
- Because of serifs, it is slightly harder to read
- This is Bookman Old Style
- It is easier because of wider spacing
- This is University Roman but is too feint
- Best to use sans serif fonts
- **Especially in BOLD and LARGE SIZE**

Serif fonts are not as clear to audience as sans serif

Poor Positioning of text

- Does not take account of margins
- Crowds the text together
- Therefore confuses ideas
- This slide uses minimal line spacing
- And is not aesthetically pleasing
- Use Power Point templates if you are unsure
- Give plenty of space for ideas

Problem: Poor positioning of text without space between ideas

Colour choice

- Depends on personal preference
- Generally best:
 - OHP with dark text on light background
 - Beamer with light text on dark background
- Aim for complementary colours

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Genetic Algorithms

Basic Operations	Schema Theorem	Theoretical Background
Genotype and Fitness	Models of Evolution	Advanced Operators
Non-Conventional Genotypes	Implementation of a GA	Response to Selection

Problem: Too much colour clash

Visual Distractions

- Is the audience looking at your text?
- Or are they being sucked into the void?

Preparation of clear slides

- A dash of colour can emphasise
- Creativity is good
- But decoration can distract
- It can compete with your message

III. Prompts to manage your presentation

- Prepare a reminder checklist:
check AV, lights, watch, water etc
- **Golden rule:** finish on time
- Work on time management skills
- Over-running ruins presentations
- Plan so you can compress or eliminate

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III. Prompts to manage your presentation

- **Golden rule:** do not read
- Reading kills your presentation
- Reading invites audience switch off
- Use slides to present the “live version”

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III. Prompts to manage your presentation

- Slides move you forward in logical progression
- Avoid jumping back and forth
- Reformat contrasting data on new slide to avoid fumbling backwards
- Explain technical data & identify coordinates

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III. Prompts to manage your presentation

- Repeat & reinforce main points
- Prepare for questions
- Keep answers short
- Prompt notes with stage & voice directions
if you are nervous
- Avoid excuses by planning ahead

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IV. Pronunciation and Voice

- Use an actorly approach to voice
- Open your voice box & relax
- Practice the “UH” sound
- Speak slowly and clearly
- It gives you authority and control

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IV. Pronunciation and Voice

- Practice voice projection with raised head
- Vary your intonation and speaking tempo
- A droning voice sends everyone to sleep
- Work on pronunciation:
 - esp non-English & regional accents
- Leave a gap between words

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Pronunciation Practice

**I am a pheasant plucker
I'm a pheasant plucker's son
I like plucking pheasants
'Cause pheasant plucking's fun**

IV. Pronunciation and Voice

- Know when to pause for emphasis
- Aim to stress important words with a "punch word"
- Avoid "uhms" and "ahs" and "you knows"
- Be clear & creative with vocabulary
- Adopt an internationally-accepted English vocabulary

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IV. Projection & Body Language

- Use an **actorly** approach to body language
- Head back & face forward
- Good eye contact with audience
- Avoid twiddling or arms, legs, pens, ears
- Keep knees relaxed & chest out for good voice projection
- Look interested, positive and upbeat

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5. Practice & Rehearsal

Practice helps to:

- Ensure your presentation is well structured
- Helps you to relax
- Anticipate potential problem areas
- Practice voice projection and pronunciation
- Manage time

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5. Practice & Rehearsal

- Rehearse until you are comfortable
- Privately in front of a mirror
- With colleagues
- Your mother (to her you are a genius!)
- Top actors rehearse before performances, so should you!

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A reminder of the 6 “P’s” in Presentations

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Golden Rules for Presentations

- Prepare well
- Keeps things simple and uncluttered - less is more
- Do not read – use your slides as prompts
- Use an actorly approach to voice and body
- Finish on time
- Rehearse, rehearse, rehearse

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