Giving the wrong talk
Physics 493 Seminar

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September 12, 2013
Here’s what you are in for; a mapping of the principal sections of this talk: there are 3

(1) How to give the wrong talk (2) Persuasion is Purpose Driven (3) A Nobel Talk
Q: What did Alley mean by ‘Giving the Wrong Talk’

1. Presentations to persuade
2. Presentations to inform
3. Presentations to inspire
4. Presentations to do all of the above...

You will need to size up your audience! Target your audience! What kind of convincing do they need?
Q: What did Alley mean by ‘Giving the Wrong Talk’

kinds of talks

1. presentations to persuade
2. presentations to inform
3. presentations to inspire
4. presentations to do all of the above...

you will need to size up your audience! target your audience! what kind of convincing do they need?
Your title should make your point
the visual should be the supporting evidence—suppose the ‘visual below was the slide’
Feynman, a participant on the Roger’s Commission made his point with a simple demonstrations
some times a visual prop makes an effective ‘slide’
Purpose must inform the means of persuasion

- consider Brian Cox’s talk two weeks ago. In persuading his audience of the dangers of cutting science funding, he avoided the use of complicated graphs (e.g. *well, for the most part*). Mistake?
Purpose must inform the means of persuasion

- Consider Brian Cox’s talk two weeks ago. In persuading his audience of the dangers of cutting science funding, he avoided the use of complicated graphs (e.g. *well, for the most part*). Mistake?

- Oppenheimer, however was famous for his ability to ‘elucidate complex technical matters’. Did this make him a great teacher? What was his purpose as a teacher?
Alley suggests that types of logic serve best for certain purposes

Look at the table below. Which sorts serve Cox? Which served Oppenheimer as teacher?

<table>
<thead>
<tr>
<th>Type of Evidence</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductive Reasoning</td>
<td>Mammals are all creatures that are warm-blooded and breathe oxygen; whales are warm-blooded and breathe oxygen; therefore, whales are mammals.</td>
</tr>
<tr>
<td>Inductive Reasoning</td>
<td>The gravitational force</td>
</tr>
<tr>
<td>Referenced Facts</td>
<td>The combustion gases in a gas turbine engine reach temperatures more than 500°C hotter than the melting temperature of the steel.</td>
</tr>
<tr>
<td>Statistics</td>
<td>Reducing the temperature on a gas turbine blade from 1140K to 1090K increases the blade’s life from 560 hours to 3900 hours.</td>
</tr>
<tr>
<td>Examples</td>
<td>Earthquakes can cause many deaths. For example, the 1976 earthquake in Tianjin, China, killed more than 242,000.</td>
</tr>
<tr>
<td>Analogies</td>
<td>Just as the designs for atomic bombs were reduced from the bulky size in Fat Man to the size of a soccer ball within a decade, so too could designs of neutron bombs.</td>
</tr>
</tbody>
</table>
Let’s enjoy the first few minutes of Dr. Eric Cornell’s Nobel Prize address!
What is his purpose? Do his evidences suit his purpose?