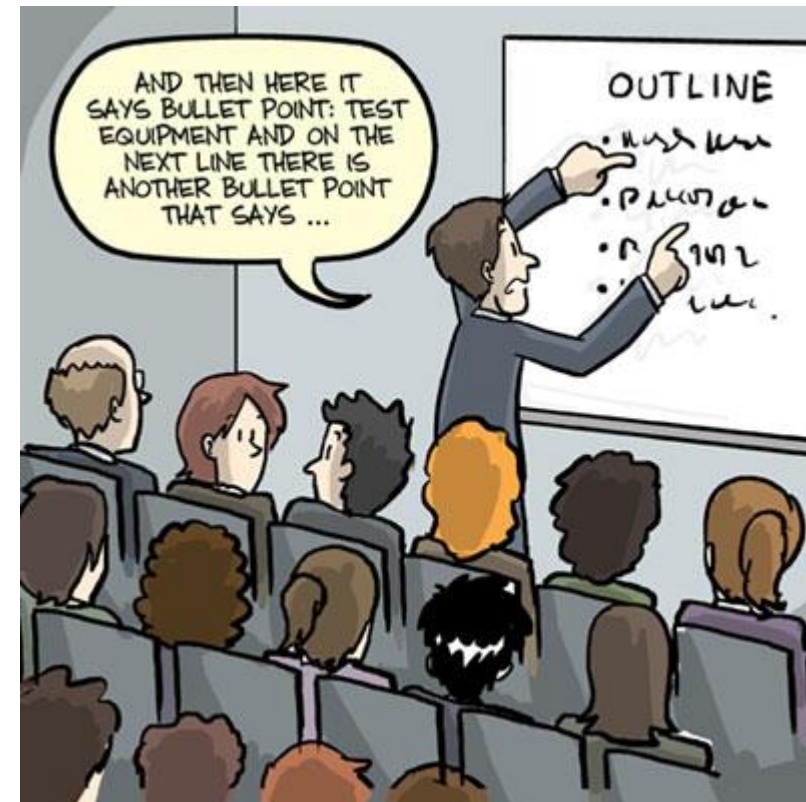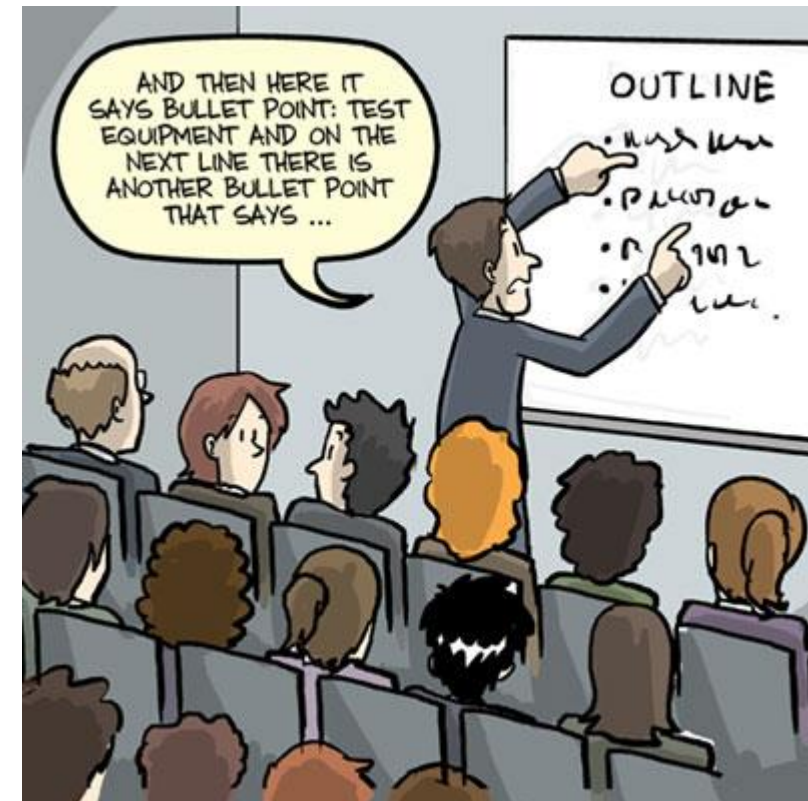# Relazione orali

- DURATA: 12 min (+ fino 5 min discussione)
- OBIETTIVO: riassumere/discutere esito esperienza
- QUANTE: ogni tavolo alla fine ne farà due «vere»

Relazione orali

- DURATA: 15 min (+ fino 5 min discussione)
- OBIETTIVO: riassumere/discutere esito esperienza
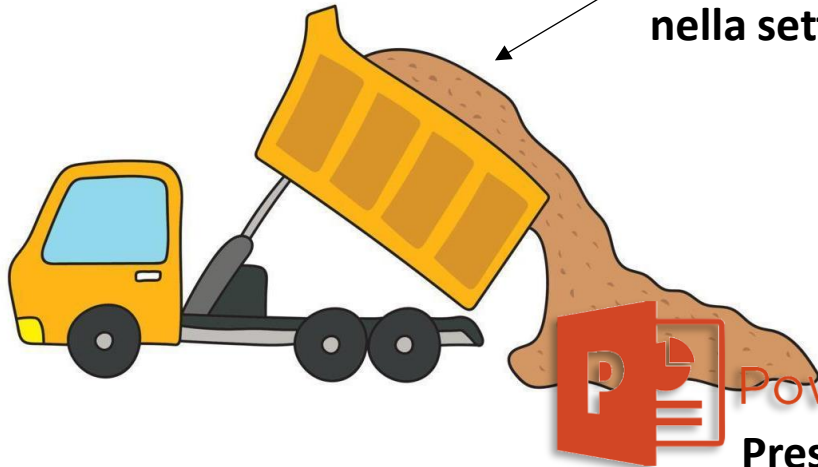- QUANTE: ogni tavolo alla fine ne farà due «vere»

OUTLINE (=DI CHE COSA VI PARLO ORA)

➔ Cose da non fare / evitare
➔ Cose fare
➔ Prima osservazioni sulla forma scritta

Cose da non fare / sconsigliate

NUMERO 1: Cedere ad alcune pulsioni primordiali

Qualunque cosa
mi sia capitata
nella settimana

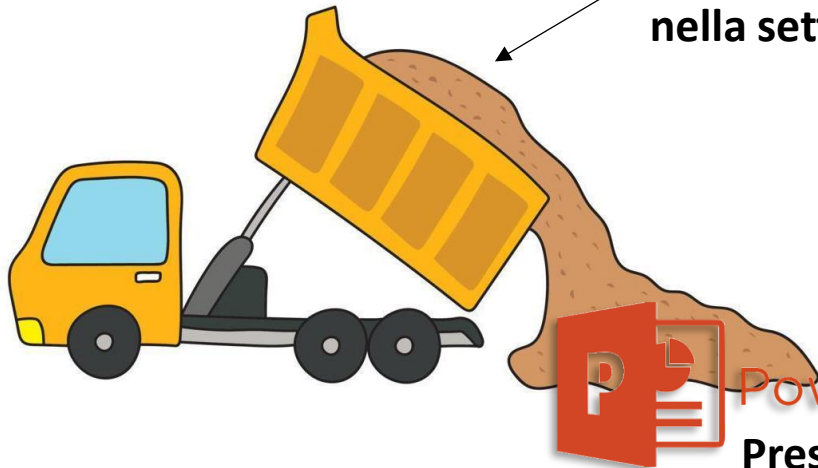PowerPoint
Presentazione-discarica

Cose da non fare / sconsigliate

NUMERO 1: Cedere ad alcune pulsioni primordiali

➤ **Non si nasconde nulla... ma non si può parlare di TUTTO** ➜ **SCEGLIERE PLS**

Qualunque cosa
mi sia capitata
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PowerPoint

Presentazione-discarica
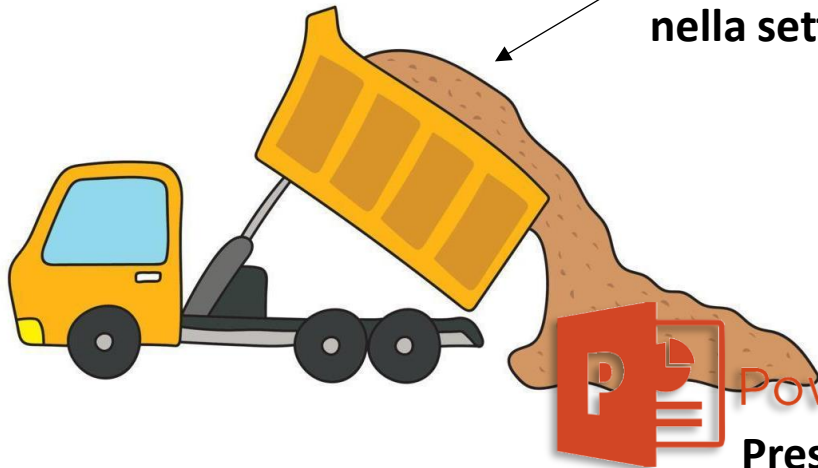
Cose da non fare / sconsigliate

NUMERO 1: Cedere ad alcune pulsioni primordiali

➢ **Non si nasconde nulla... ma non si può parlare di TUTTO**
➢ **Quel che si presenta deve essere funzionale al messaggio**

➔ **SCEGLIERE PLS**
➔ **QUALE è il mio messaggio?!**

Qualunque cosa
mi sia capitata
nella settimana

PowerPoint
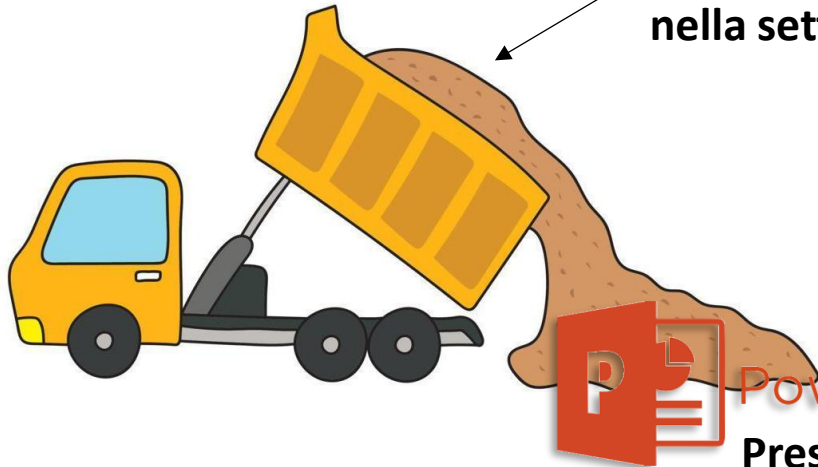**Presentazione-discarica**

Cose da non fare / sconsigliate

NUMERO 1: Cedere ad alcune pulsioni primordiali

➢ **Non si nasconde nulla... ma non si può parlare di TUTTO**   ➔ **SCEGLIERE PLS**
➢ **Quel che si presenta deve essere funzionale al messaggio**   ➔ **QUALE è il mio messaggio?!**
➢ **La mera esistenza di una fatto non è un messaggio interessante in sè**

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nella settimana

PowerPoint
Presentazione-discarica
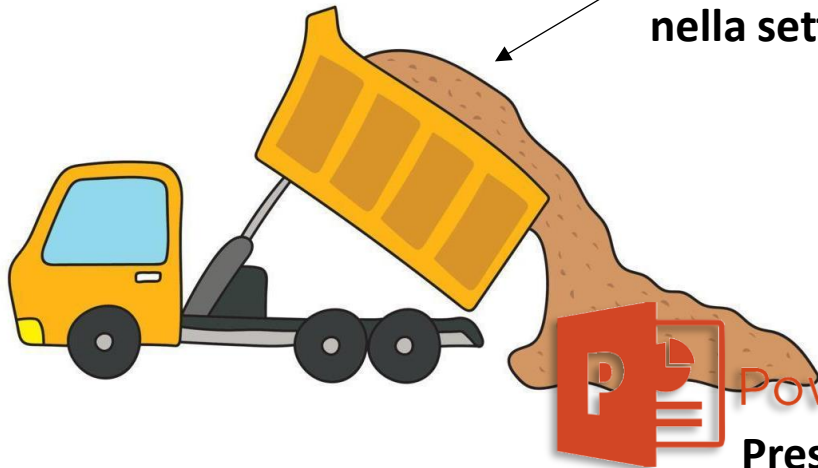
Cose da non fare / sconsigliate

NUMERO 1: Cedere ad alcune pulsioni primordiali

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➔ **SCEGLIERE PLS**
➔ **QUALE è il mio messaggio?!**

Qualunque cosa
mi sia capitata
nella settimana

Punto di partenza saggio: 1 slide/min

Non desiderabile parlare a razzo

20 min, non 8 ore

PowerPoint
**Presentazione-discarica**

Cose da non fare / sconsigliate

NUMERO 2: La valanga di testo

- Una cosa che rende particolarmente ostico seguire una presentazione è riempirla di valanghe di testo… il motivo per cui questo è <u>male</u> è abbastanza banale: i poveracci che vi stanno davanti dovranno scegliere se ascoltare quel che state dicendo ignorando il testo, oppure tentare di leggere quel che avete scritto cercando di non farsi confondere da quel che state dicendo. Probabilmente non riusciranno a fare bene nessuna delle due cose e non ci capiranno molto.

- Per questo motivo – senza farsi venire le paranoie, a volte un po' di testo si può scrivere – è meglio scrivere solamente il testo essenziale per aiutarvi a presentare quel che volete presentare. Tuttavia leggere parola per parola le vostre slides è una cosa decisamente pesante per chi vi ascolta… e poco desiderabile.

- Notare: gli elenchi per punti come <u>questo</u> (o magari come quelli che potete inserire in una slide di outline o di conclusioni) aiutano un minimo a navigare nel caos… ma se contengono una valanga di testo si ricasca nel problema di cui sopra… Meglio una dichiarazione monolitica poi spiegata a voce che mille dettagli inutili, che poi non sono mai completi veramente (d'altra parte c'è sempre qualcos'altro che potrei aggiungere…), su cui poi uno si perde a parlare per 40 minuti senza meta e alla fine non sa neanche perché, ecc, ecc, ecc…

AIUTO: LEGGO O TI ASCOLTO??

Cose da non fare / o almeno fare con cautela...

NUMERO 3: La valanga di equazioni
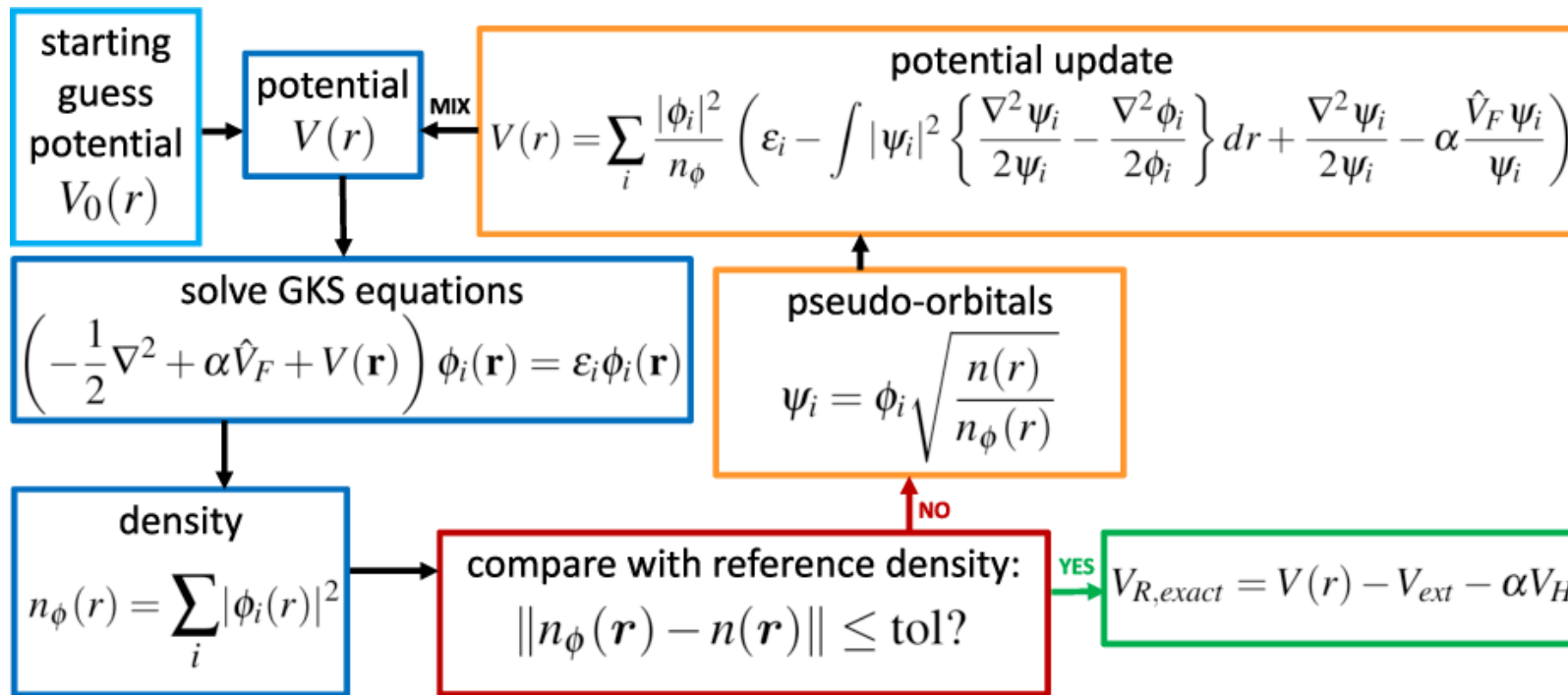
OPZIONI:
1. Chi ascolta conosce già tutto
2. Chi ascolta è un genio a razzo
3. Chi ascolta, nei 30-40 sec che dura la slide, non ci capirà nulla...

Cose da fare

PIANIFICARE/PENSARE
- **Quale è il mio messaggio/messaggi?**
- **Perché è interessante?**
- **Chi mi ascolta che ne sa?**
- **Modo migliore per far passare il messaggio? ➔ piano logico**
- **Che evidenze, dataset, analisi ho da mostrare? ➔ figure**

Cose da fare

PIANIFICARE/PENSARE
- Quale è il mio messaggio/messaggi?
- Perché è interessante?
- Chi mi ascolta che ne sa?
- Modo migliore per far passare il messaggio? ➔ piano logico
- Che evidenze, dataset, analisi ho da mostrare? ➔ figure

AUTOCRITICA/IMMEDESIMAZIONE
- Ma si capisce?!
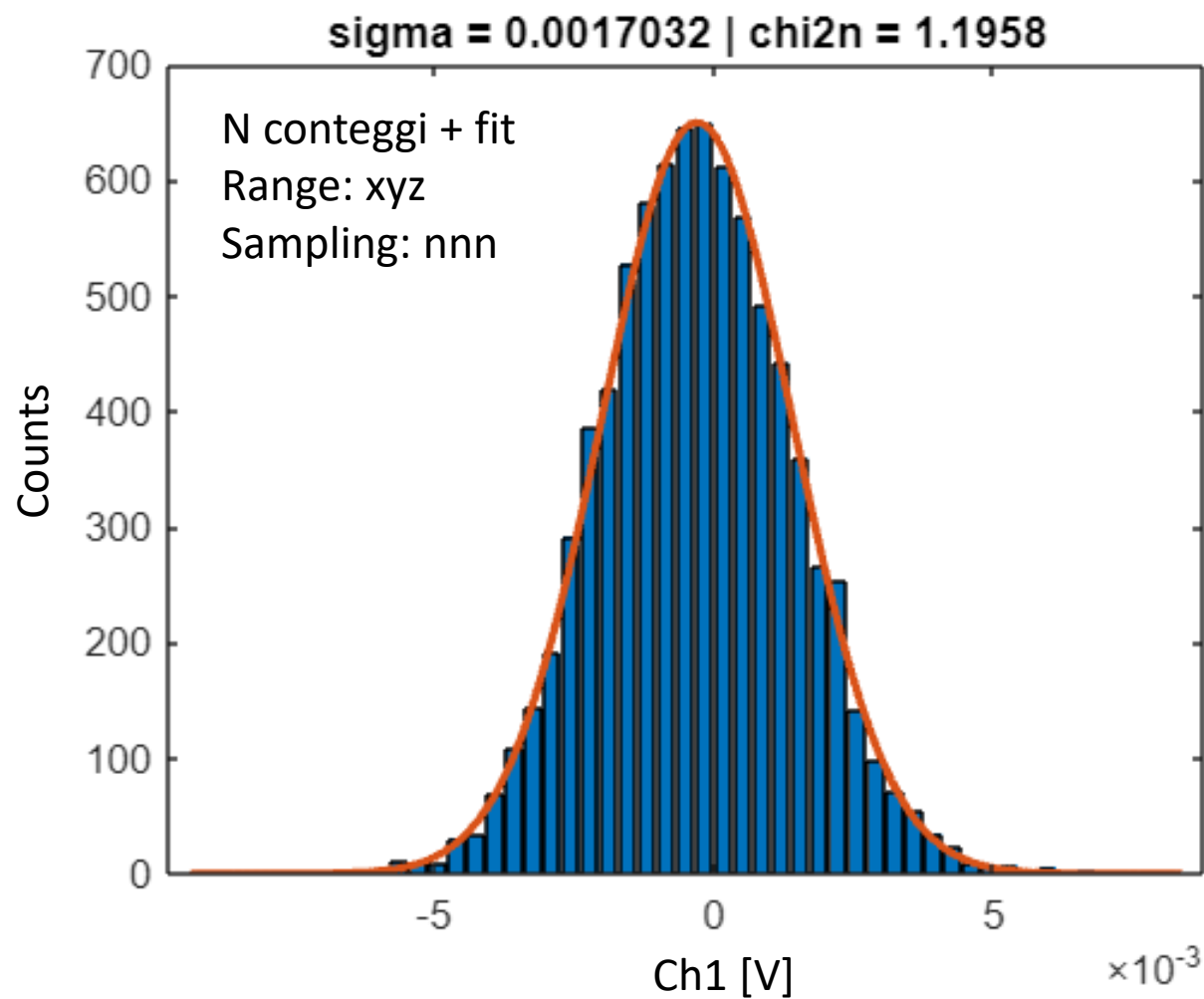- Che mi potrebbero chiedere?

Cose da fare

PIANIFICARE/PENSARE
- **Quale è il mio messaggio/messaggi?**
- **Perché è interessante?**
- **Chi mi ascolta che ne sa?**
- **Modo migliore per far passare il messaggio? ➔ piano logico**
- **Che evidenze, dataset, analisi ho da mostrare? ➔ figure**

AUTOCRITICA/IMMEDESIMAZIONE
- **Ma si capisce?!**
- **Che mi potrebbero chiedere?**

INTRO / MOTIVAZIONE

SVILUPPO
(logico, possibilmente)

CONCLUSIONE / PROSPETTIVE

EVENTUALI SLIDES DI SCORTA…
(domande, approfondimenti, ecc, ecc)

Cose da fare

sigma = 0.0017032 | chi2n = 1.1958

N conteggi + fit
Range: xyz
Sampling: nnn

Consiglio generale… >> guidate voi <<
Non state leggendo la lista della spesa

Prime osservazioni sulla forma scritta

PIANIFICARE/PENSARE
- Quale è il mio messaggio/messaggi?
- Perché è interessante?
- Chi mi legge che ne sa?
- Modo migliore per far passare il messaggio? ➜ piano logico
- Che evidenze, dataset, analisi ho da mostrare? ➜ figure

AUTOCRITICA/IMMEDESIMAZIONE
- Ma si capisce?!
- Che mi potrebbero chiedere?

INTRO / MOTIVAZIONE

SVILUPPO
(logico, possibilmente)

CONCLUSIONE / PROSPETTIVE

Prime osservazioni sulla forma scritta

TESTO:
- **Non è una chat di Whatsapp**
- **Idealmente, ogni affermazione**
  - ➤ **o è ovvia**
  - ➤ **o la spiegate**
  - ➤ **o ci vuole una citazione**

Paragrafo:
Spiega che è la resistenza interna con un esempio

examples in the chapters ahead. This high-resistance condition ideally characterizes measuring instruments such as voltmeters and oscilloscopes.

A word on language: you frequently hear things like "the resistance looking into the voltage divider" or "the output sees a load of so-and-so many ohms," as if circuits had eyes. It's OK (in fact, it's a rather good way of keeping straight which resistance you're talking about) to say what part of the circuit is doing the "looking."[16]
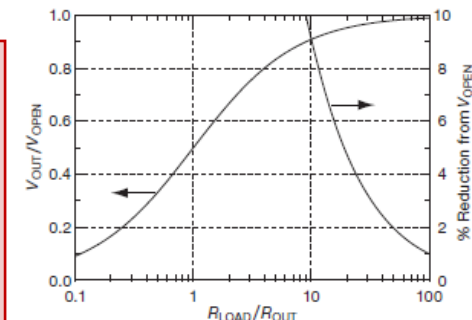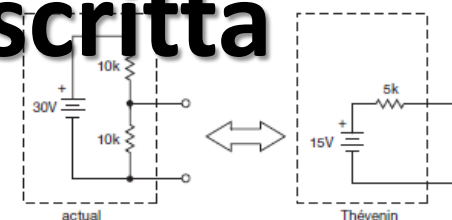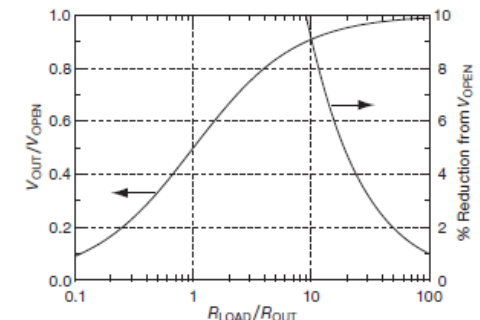
Figure 1.13. Voltage divider example.

in series with a resistor. For example, the output terminals of a 10k–10k voltage divider driven by a perfect 30 volt battery are precisely equivalent to a perfect 15 volt battery in series with a 5k resistor (Figure 1.13). Attaching a load resistor causes the voltage divider's output to drop, owing to the finite *source resistance* (Thévenin equivalent resistance of the voltage divider output, viewed as a source of voltage). This is often undesirable. One solution to the problem of making a stiff voltage source ("stiff" is used in this context to describe something that doesn't bend under load) might be to use much smaller resistors in a voltage divider. Occasionally this brute-force approach is useful. However, it is usually best to construct a voltage source, or power supply, as it's commonly called, using active components like transistors or operational amplifiers, which we will treat in Chapters 2–4. In this way you can easily make a voltage source with internal (Thévenin equivalent) resistance as small as milliohms (thousandths of an ohm), without the large currents and dissipation of power characteristic of a low-resistance voltage divider delivering the same performance. In addition, with an active power supply it is easy to make the output voltage adjustable. These topics are treated extensively in Chapter 9.

The concept of equivalent internal resistance applies to all sorts of sources, not just batteries and voltage dividers. Signal sources (e.g., oscillators, amplifiers, and sensing devices) all have an equivalent internal resistance. Attaching a load whose resistance is less than or even comparable to the internal resistance will reduce the output considerably. This undesirable reduction of the open-circuit voltage (or signal) by the load is called "circuit loading." Therefore you should strive to make $R_{load} \gg R_{internal}$, because a high-resistance load has little attenuating effect on the source (Figure 1.14).[15] We will see numerous circuit

Figure 1.14. To minimize the attenuation of a signal source below its open-circuit voltage, keep the load resistance large compared with the output resistance.

B. Power transfer

Here is an interesting problem: what load resistance will result in maximum power being transferred to the load for a given source resistance? (The terms *source resistance*, *internal resistance*, and *Thévenin equivalent resistance* all mean the same thing.) It is easy to see that either $R_{load}=0$ or $R_{load}=\infty$ results in zero power transferred, because $R_{load}=0$ means that $V_{load}=0$ and $I_{load}=V_{source}/R_{source}$, so that $P_{load}=V_{load}I_{load}=0$. But $R_{load}=\infty$ means that $V_{load}=V_{source}$ and $I_{load}=0$, so that again $P_{load}=0$. There has to be a maximum in between.

Exercise 1.11. Show that $R_{load} = R_{source}$ maximizes the power in the load for a given source resistance. Note: skip this exercise if you don't know calculus, and take it on faith that the answer is true.

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[16] The urge to anthropomorphize runs deep in the engineering and scientific community, despite warnings like "don't anthropomorphize computers … they don't like it."

Prime osservazioni sulla forma scritta

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- **Non è una chat di Whatsapp**
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Generalizza, il concetto si applica a n sorgenti… e dice perché è importante

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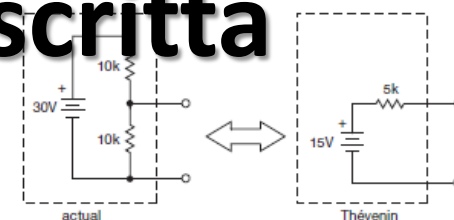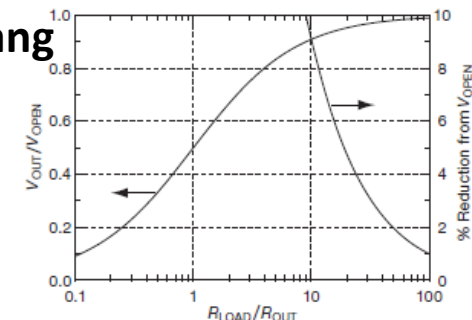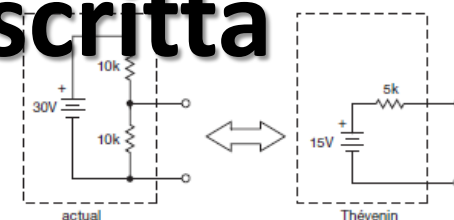**Figure 1.13.** Voltage divider example.

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Spiega lo slang

Prime osservazioni sulla forma scritta

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Next topic, impatto della resistenza di ingresso sul trasferimento di potenza

Figure 1.13. Voltage divider example.

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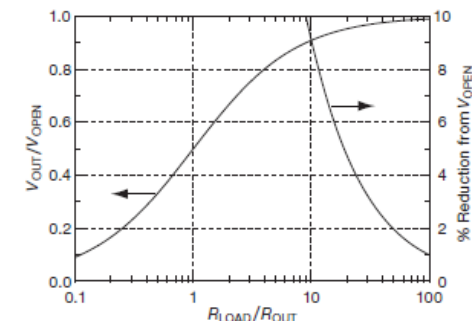

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Prime osservazioni sulla forma scritta

FIGURE:
- **Sempre citate (non sono decorative)**
- **Posizione incerta, ma non troppo distante**
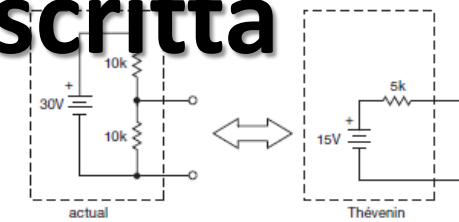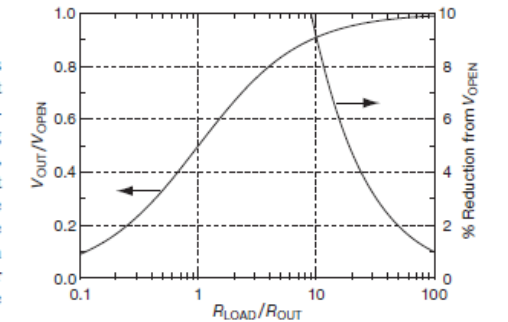- **USATELE!! Come si vede in Fig…**

Prime osservazioni sulla forma scritta

EQUAZIONI:
- **Sono semplicemente evidenziate e (forse) numerate…**
- **Sono parte della frase.**
- **Tutti i simboli vanno definiti, SEMPRE.**

A. Decibels

How do you compare the relative amplitudes of two signals? You could say, for instance, that signal X is twice as large as signal Y. That's fine, and useful for many purposes. But because we often deal with ratios as large as a million, it is better to use a logarithmic measure, and for this we present the decibel (it's one-tenth as large as something called a bel, which no one ever uses). By definition, the ratio of two signals, in decibels (dB), is

$$dB = 10\log_{10}\frac{P_2}{P_1}, \qquad (1.11)$$

where P_1 and P_2 represent the *power* in the two signals. We are often dealing with signal *amplitudes*, however, in which case we can express the ratio of two signals having the same waveform as

$$dB = 20\log_{10}\frac{A_2}{A_1}, \qquad (1.12)$$

where A_1 and A_2 are the two signal amplitudes. So, for instance, one signal of twice the amplitude of another is $+6\,dB$ relative to it, since $\log_{10}2 = 0.3010$. A signal 10 times as large is $+20\,dB$; a signal one-tenth as large is $-20\,dB$.

Prime osservazioni sulla forma scritta

COME SI IMPARA ?

*Leggendo, leggendo ma soprattutto
leggendo articoli scientifici (in inglese)*

Prime osservazioni sulla forma scritta

e le AI/LLM ?

OpenAI

Gemini

deepseek

Claude

Prime osservazioni sulla forma scritta

e le AI/LLM ?

Legittimo farsi aiutare ma:

- *a questo livello non ci si può fidare al 100% dei contenuti*
- *a volte danno più importanza allo stile che al rigore scientifico*

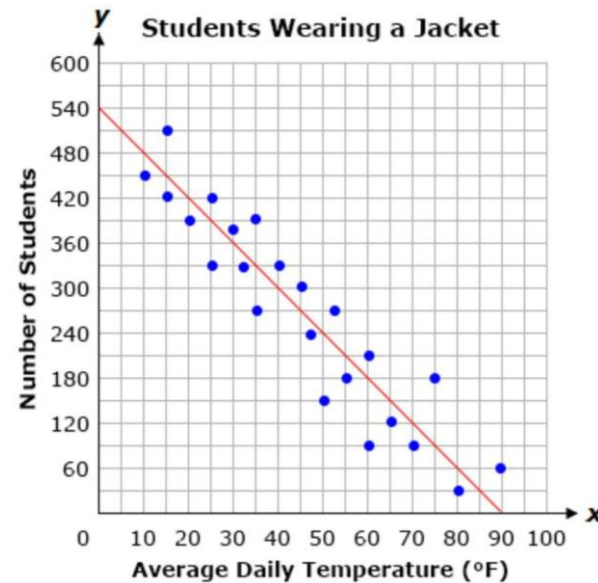**GOOD PRACTICE: scrivere un testo e farlo "aggiustare" dal LLM**

...anche nelle presentazioni

Best fit of experimental data

Prime osservazioni sulla forma scritta

Domande?