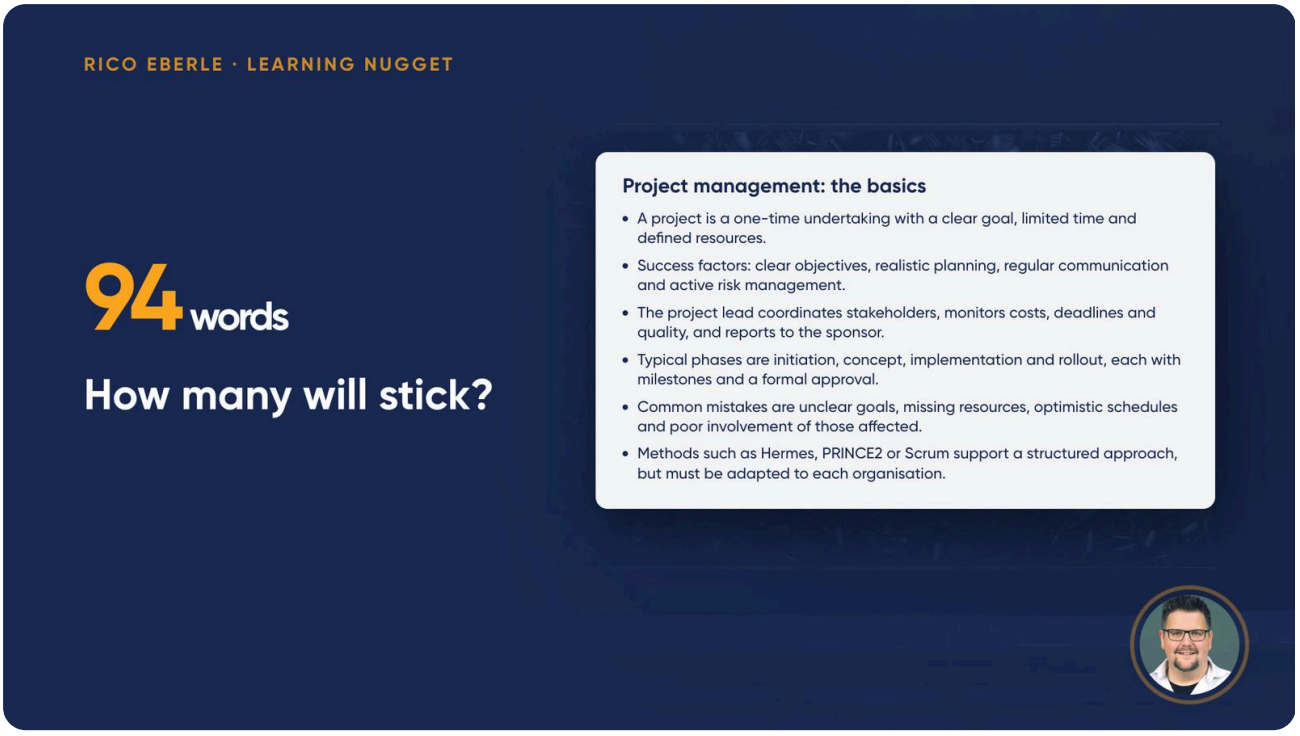
Rico Eberle · LEARNING NUGGETS

LEARNING NUGGET E-LEARNING & AI 24 SEPTEMBER 2026

Less on the slide, more room to think

Listening while reading a full slide means two streams of language at once, and that attention is then missing for understanding.

By Rico Eberle, e-learning expert for continuing education and municipal councillor in Dübendorf



Video for this post

This learning nugget is also available as a video with transcript (1:04 min). Scan the QR code or open the link:

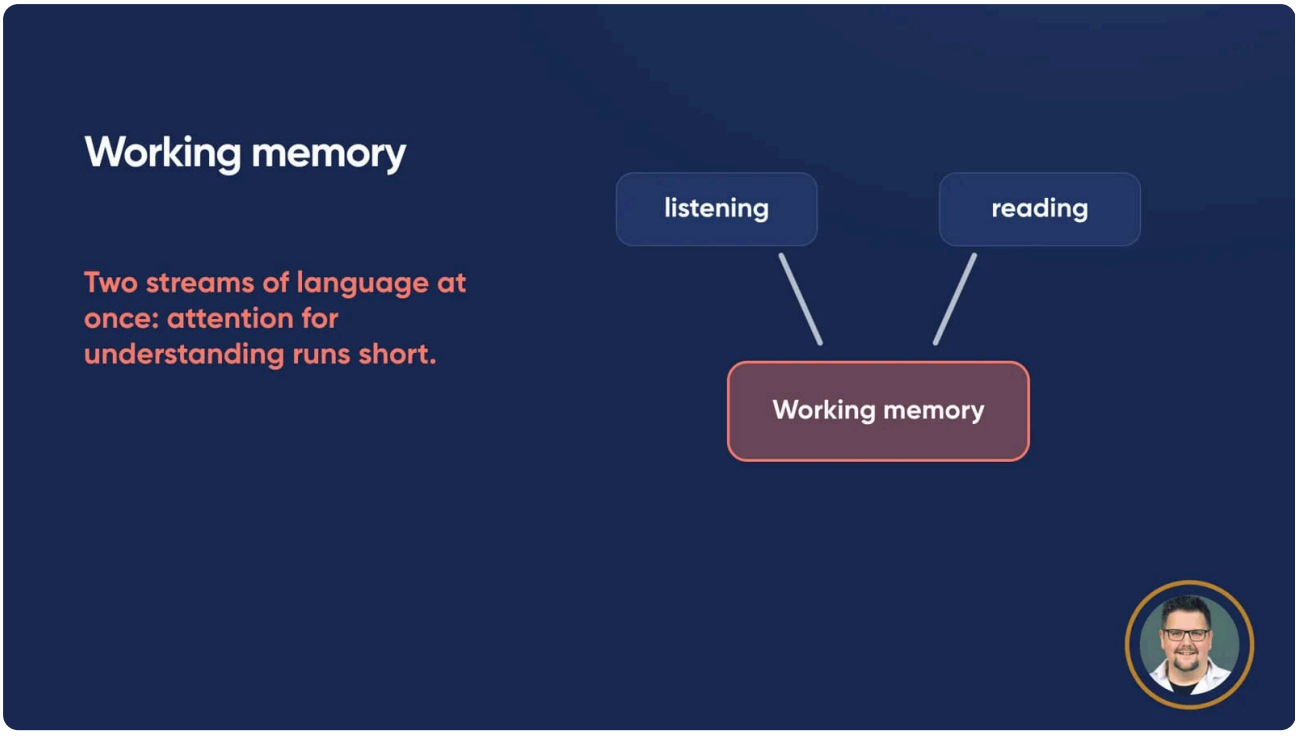
ricoeberle.ch/en/blog/less-on-the-slide/

94 words on one slide. How many of them will stick?

You have probably seen slides like the one in the video in training sessions and meetings: a title, six bullet points. Well meant, because everything important is on it. But your audience reads while you speak. And doing both at once works worse than we think.

The bottleneck is working memory

Cognitive load theory goes back to John Sweller. Our working memory is tightly limited. Anything we want to understand has to pass through this bottleneck.

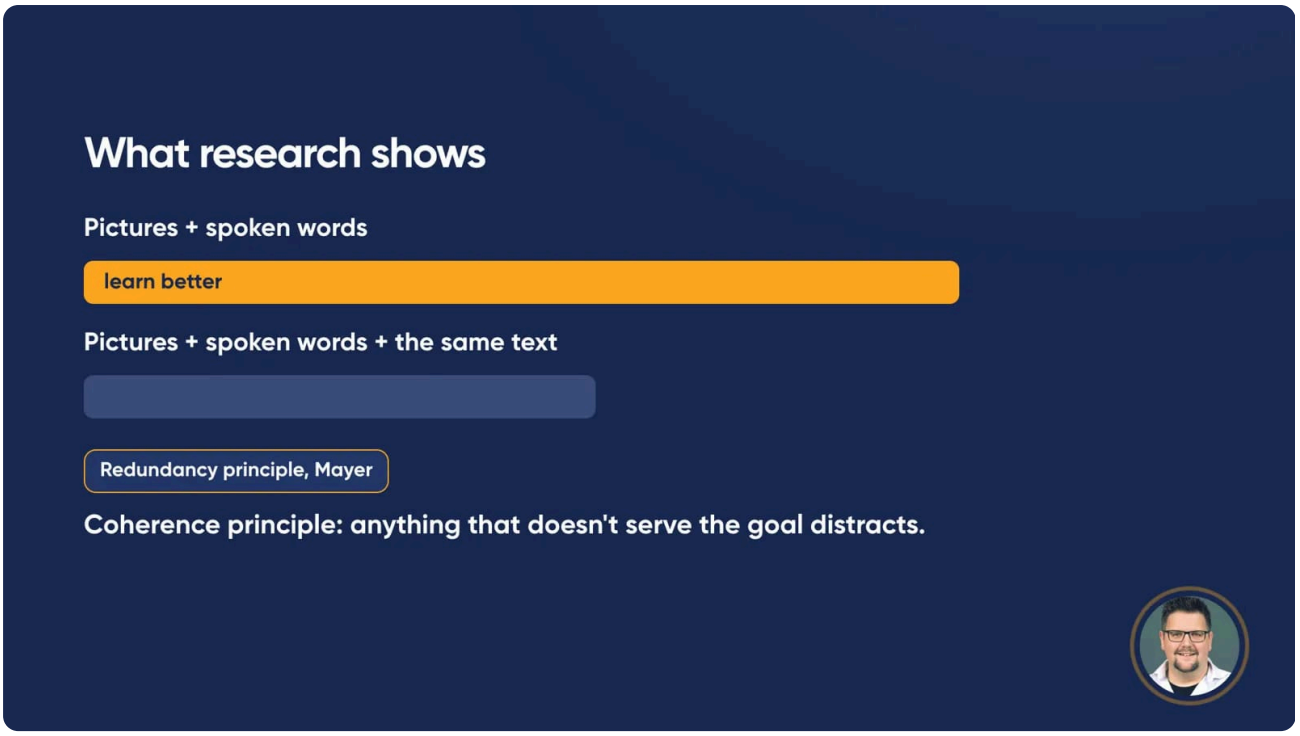


If you listen and read a full slide at the same time, you push two streams of language through it. Mayer and Moreno described in 2003 how this duplication creates an additional, unnecessary load. That attention is then missing for understanding.

What you say doesn’t need to be on the slide as well

In 2017, Richard Mayer translated the research into design guidelines for e-learning. Two of them apply directly to slides:

- **Redundancy principle:** people learn better from pictures and spoken words than from pictures, spoken words and the same text on screen. Mayer puts it as a rule: do not add on-screen text to narrated graphics.
- **Coherence principle:** anything that doesn’t serve the learning goal distracts. So leave out extraneous material.



That doesn't make text on slides forbidden. But text which only repeats what you are saying anyway gets in the way more than it helps.

What about the subtitles in this video?

Fair question, since the nuggets also show text alongside the voice. The redundancy principle refers to learning situations with sound, such as slides being read aloud. I still chose to use subtitles. They make a short video understandable without sound, and they help when watching in a foreign language or with a hearing impairment.

Three things for your next presentation

1. **One message per slide**, as a short sentence.
2. **A picture or diagram instead of bullet points.**
3. **What you say doesn't need to be on the slide.** The details belong in the handout.

The fullest slide first

Take your last presentation and find the fullest slide. Count the words. Then write the one message that should stick as a single sentence on a new slide. Think of a picture or diagram that shows this message. Everything else goes into your speaker notes or the handout.

Next time you give the talk, look at your audience. Are they looking at you or at the screen?

Less text.
More room to think.

Less text doesn’t mean less content, it means more room to think.

Sources

1. Sweller: Cognitive Load During Problem Solving: Effects on Learning, Cognitive Science (1988)
https://doi.org/10.1207/s15516709cog1202_4
2. Mayer & Moreno: Nine Ways to Reduce Cognitive Load in Multimedia Learning, Educational Psychologist (2003)
https://doi.org/10.1207/S15326985EP3801_6
3. Mayer: Using multimedia for e-learning, Journal of Computer Assisted Learning (2017)
https://onlinelibrary.wiley.com/doi/abs/10.1111/jcal.12197

ABOUT ME

Rico Eberle

I work in e-learning, hold a degree in business economics (FH) and sit on the municipal council of Dübendorf, Switzerland. I also chair the foundation board of WBK Dübendorf, a continuing education foundation. I make the learning nuggets on my own: topic, research, text and video. Questions and disagreement are welcome.

Contact: ricoeberle.ch · LinkedIn: linkedin.com/in/rico-eberle

LICENCE

Text, transcript and video by Rico Eberle are licensed under CC BY 4.0 (music and sound effects in the video excluded). You may share and adapt the content, including for teaching, as long as you credit the source. creativecommons.org/licenses/by/4.0/

SUGGESTED CITATION

“Less on the slide, more room to think”, Rico Eberle, ricoeberle.ch, 2026, https://ricoeberle.ch/en/blog/less-on-the-slide/, CC BY 4.0