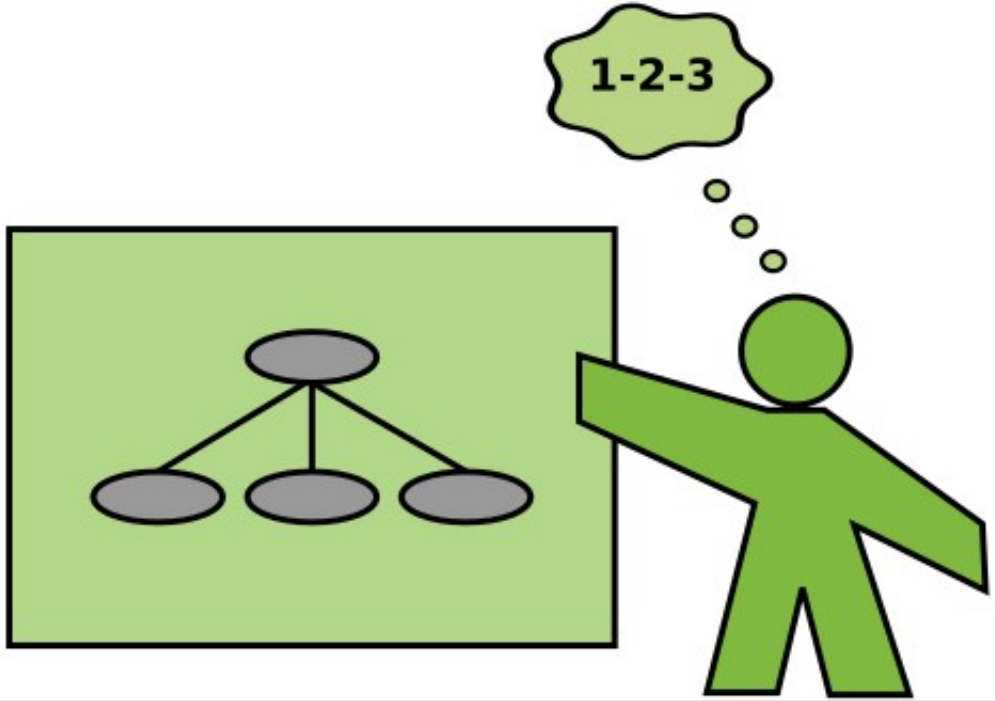
How to Teach Python

5 tips to prepare your next tutorial



Dr. Kristian Rother

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Confucius (孔夫子)

China, 500 BC

“If your plan is for one year, plant rice.

If your plan is for ten years, plant trees.

If your plan is for one hundred years,

educate children.”

Teaching is about helping people grow

help me to do
it on my own.

Maria Montessori, 1913

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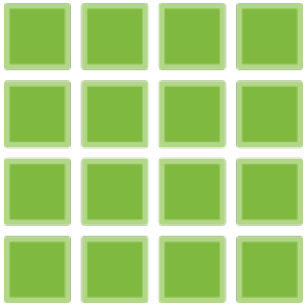


Goal:

design a 180’ Numpy tutorial

What challenges might we face when teaching Numpy?

Writing a Speech without an audience in mind
is like starting a love letter with
“to whomever it may concern”

John Zimmer
European Champion of Public Speaking
mannerofspeaking.org

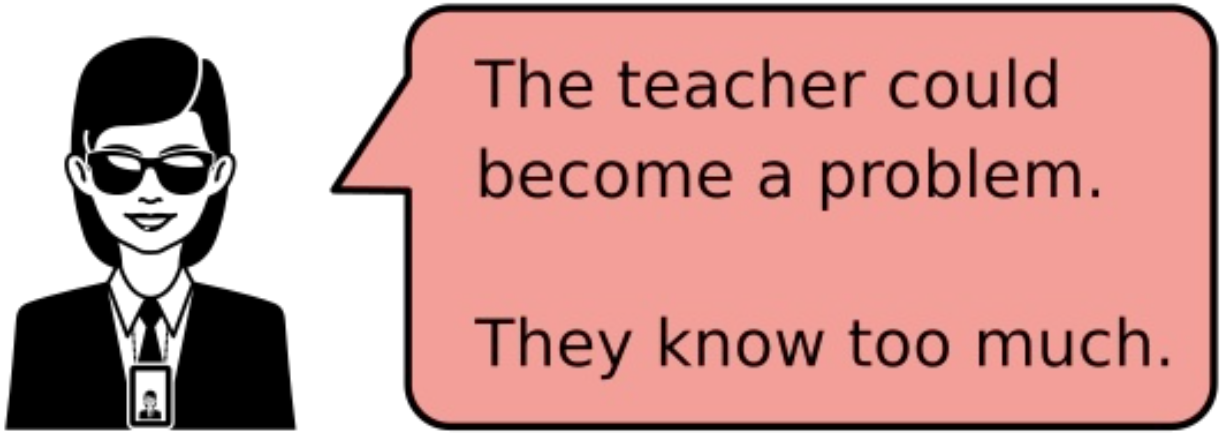
Hint #1:

Connect with your participants early

(1-2 weeks is usually sufficient)

What topics should a Numpy tutorial cover?

Frequent problem when experts teach:



Brains have a limited working memory

7 ± 2

Hint #2: limit the number of new concepts per lesson

Hint #3: Theme your Lessons

to engage your students

use **exactly one**

business case or fun theme

A song of the dwarves:

gold gold gold gold
gold gold gold gold
gold gold gold gold
mine mine mine mine

D&D dwarf Image by LadyofHats - Own work, CC0, Wikimedia Commons
https://commons.wikimedia.org/w/index.php?curid=53722671

A song of the dwarves:

gold gold gold gold
gold gold gold gold
gold gold gold gold
mine mine mine mine

very different words in the original but details lost in translation

place verb owner security measures

Hint #4: Turn Code Examples into exercises

- replace words and phrases by ...
- shuffle the lines
- Introduce bugs

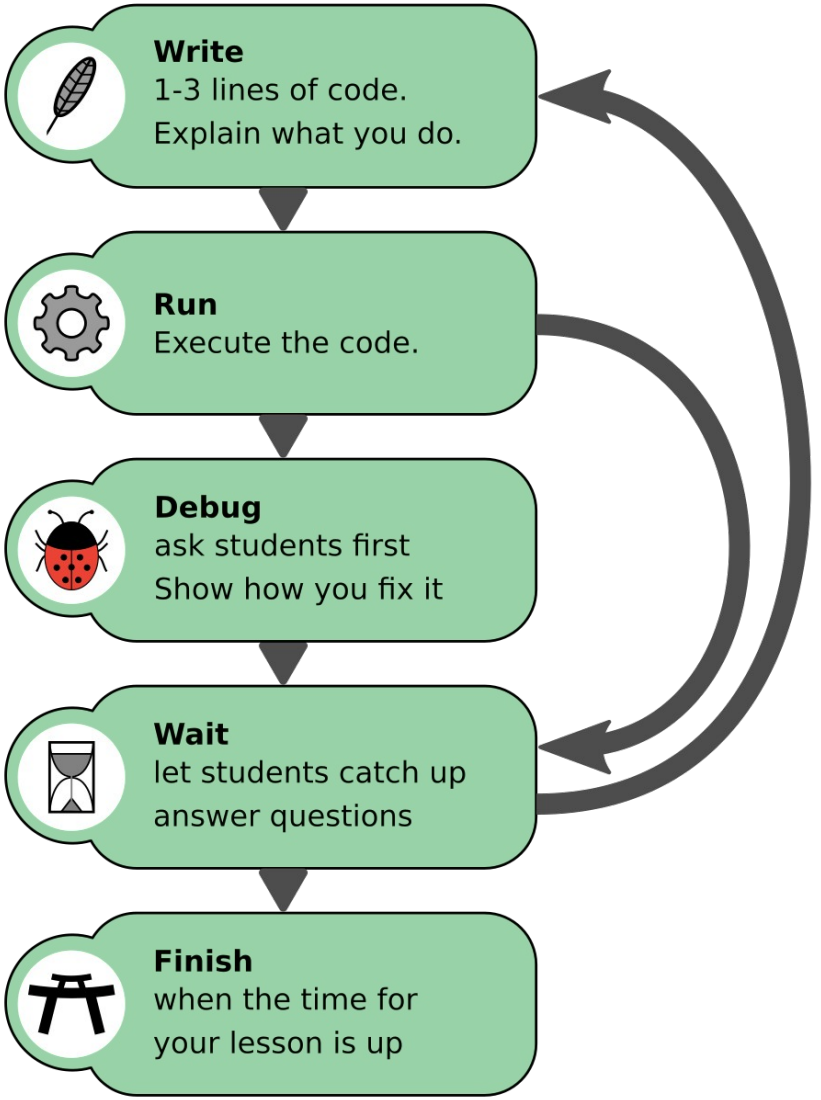
  ...

see “faded examples” by Greg Wilson”

https://teachtogether.tech/en/index.html#s:architecture-load

Hint #5:

Live Coding works



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