

**PAIR PROGRAMMING
WITH ONLINE
DISTANCE LEARNERS:
LESSONS FROM
TEACHING R AND
PYTHON**

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THE CONTEXT



TRADITIONAL



lecture



homework
activities

FLIPPED



lecture



classroom
activities



WHAT WORKED

and why... in some cases, why not



REFLECTIONS

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COMMUNICATION

- Weekly announcement with necessary content for tutorials
- Release materials just ahead of tutorial, not before

WRITING TASKS

- Break down into subtasks
- Reinforce good coding practice
- Use hints to prevent quitting
- Open-ended questions later on
- Share code as a task

GROUP SIZE

- 2 very effective in person
- Online with part-time student across the world, 3 is better (1 driver, 2+ navigators)

SWITCHING ROLES

- Difficult online when students are working locally
- Do not switch
- Switch as a task, but ensure task does not rely on previously created data objects (new file best)

TUTOR SUPPORT

- Crucial especially for online introductory courses
- Tutors play a key role in students' engaging
- Number of pairs/breakout rooms based on tutors

THANK YOU

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