Learn to teach, for goodness sake.

How RStudio certification is changing my teaching methods.

Mike K Smith, Pfizer R&D UK Ltd

#### This talk is for **YOU**...

 If you are looking for an R trainer and want to know what "RStudio certification" means

If you are interested in becoming an RStudio certified trainer

If you are creating training materials for others

### An analogy: learning R and teaching others R is a bit like training for and running a marathon



I can DO this! (first 100 yards)



OMG, why is it SO HARD?? (miles 8 - 26)

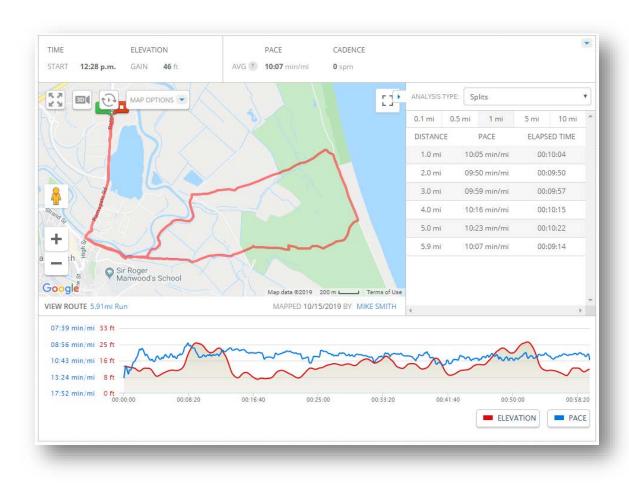


I DID IT!! (last 100 yards)

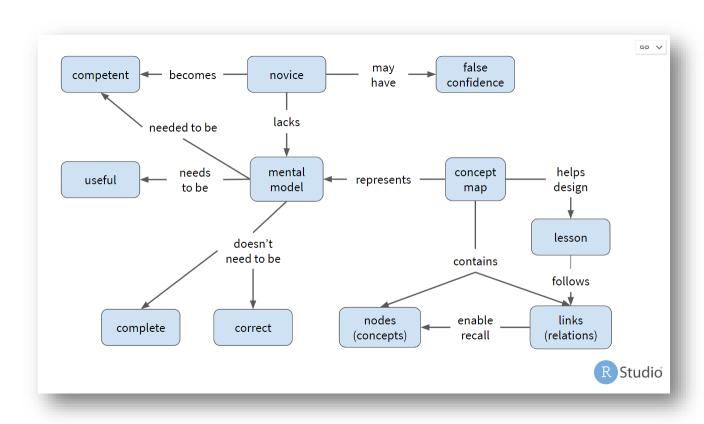
There's more to teaching R than "simply" telling others how *YOU* do R...

## Certification training has changed how I approach training others...

Plan your route: how far you are going, how long it will take.



## Plan your training: how many topics are you covering, how concepts relate to each other.



## Structure training to build on earlier training sessions...

| Week 1 | 15<br>minutes<br>jogging. | Rest | <b>20 mins</b> jogging. | Rest | Rest | <b>25 mins</b> jogging.          | 1 hour ramble                            |
|--------|---------------------------|------|-------------------------|------|------|----------------------------------|--|
| Week 2 |                           |      | <b>35 mins</b> jogging  |      |      | <b>30 mins</b> jogging           |  |
| Week 3 | 30 mins jogging           | Rest | <b>40 mins</b> jogging  | Rest | Rest | <b>35 mins</b> jogging           | 90-min ramble                            |
| Week 4 |                           |      | <b>45 mins</b> jogging  |      |      | <b>35 mins</b> jogging           |  |
| Week 5 | 20-min<br>run             | Rest | <b>50 mins</b> jogging  | Rest | Rest | Timed run<br>over a 2M<br>course | 90-min ramble, or run in a 10K road race |

## Allow learners time to assimilate what you've taught and prepare for the next topic ...

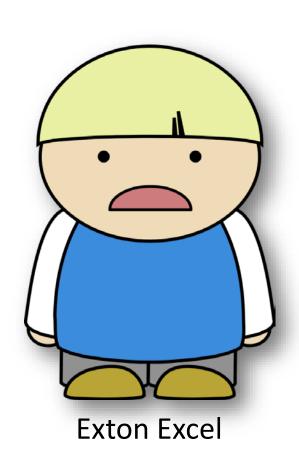
| Week 1 | 15<br>minutes<br>jogging. | Rest | 20 minutes jogging. | Rest | Rest | 25 minutes jogging.              | 1 hour ramble                            |
|--------|---------------------------|------|---------------------|------|------|----------------------------------|--|
| Week 2 |                           | Rest |                     | Rest | Rest |                                  |  |
| Week 3 | 30 mins jogging           | Rest | 40 mins jogging     | Rest | Rest | 35 mins jogging                  | 90-min ramble                            |
| Week 4 |                           | Rest |                     | Rest | Rest |                                  |  |
| Week 5 | 20-min<br>run             | Rest | 50 mins jogging     | Rest | Rest | Timed run<br>over a 2M<br>course | 90-min ramble, or run in a 10K road race |

#### ... and use planned assessments to check progress.

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|--------|---------------------------|------|---------------------|------|------|--------------------------------|--|
| Week 2 |                           |      |                     |      |      |                                |  |
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| Week 4 |                           |      |                     |      |      |                                |  |
| Week 5 | 20-min<br>run             | Rest | 50 mins jogging     | Rest | Rest | Timed run over a 2 mile course | 90-min ramble, or run in a 10K road race |

## Each training session should help individuals attending towards achieving *their* goal.







https://github.com/rstudio-education/learner-personas

# The first time you run a mile is a BIG deal.

# It's easy to forget what it feels like to be a complete novice at R.

But by the time you can run for 6 miles, 3 miles is an "easy session".

Things that seem "trivial" to some are likely to seem "impossible" to others.

#### The journey - IDEAL



Achieve THEIR goals

As quickly as possible



I can DO this!

I DID IT!!

#### Find out more

- Find a certified trainer near you:
  - https://education.rstudio.com/trainers#people

- Become a certified trainer:
  - https://education.rstudio.com/trainers#info
  - Instructor training in February 2020. Contact Greg Wilson or Carl Howe at RStudio.

- RStudio Education material (CC-BY-SA license)
  - https://github.com/rstudio-education





