

Community-based learning and knowledge sharing

Teaching R within an organisation using **edu**-package

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The Social Insurance Institution of Finland (KELA)

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How this differs from other presentation on learning R

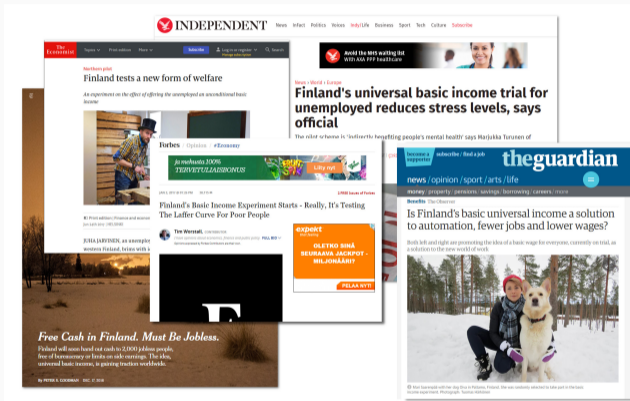
1. Discusses teaching R for professionals with knowledge in statistics and data analysis, but new to R and modern computation
2. Not a platform, but a low-level tool for creating and summarising assignments locally
3. To supplement the learning platforms/textbooks/webinars/Q&A-sites etc. with tailored exercises for ones domain (field of science / industry), it-infrastucture (databases etc.) and (human) language
4. Primarily a tool to make my own life easier

- **We are** loose community of R enthusiasts from academia, business and government
- **We work** to build and maintain tools for their own work
- **We aim** at building community to develop and maintain tools collaboratively
- ropengov.github.io

See talk by [Leo Lahti](#) **today 5:50pm - 5:55pm room 3.02**

The Social Insurance Institution of Finland (KELA)

- Backbone of Finnish welfare state, distributes social benefits worth of 15 billion euros for 4 million Finns
- Register data on many aspects of all Finnish individuals and families
- First Finnish SAS customer in 1984, now migrating into R after major data warehousing reform
- Need to integrate R for research, IT and statistics production



Known for running **basic income experiment** in 2017-2019

- Introduction to applied data analysis with focus in *tidyverse* for data analysis, *ggplot2* for visualisations and *zeligverse* for an overview of statistics (R for data science as text book)
- Two introductory classroom lectures and ten thematical online lectures (material from webinars, video lectures, text book chapters, learning platforms, QA-sites, r-packages etc.) with homework assignments followed by feedback session
- targeting experienced and very busy researchers (from economy, sociology, statistics, biomedicine) with strong statistical background, but less in modern computation or R
- Aiming at providing a “working knowledge” of R and integrating R into daily work and doing that as quick as possible

With **edu** you can create, distribute and summarise assignments with customised exercises. You only need R, shared folder and perhaps an email. Steps are:

1. Creating assignments

Package provides an Rstudio addin for creating assignments for students with simple R exercises. See vignette: [creating assignments](#).

2. Assessing assignments

Package also provides a simple script for processing the completed assignments collected from students. Answers are processed into a single R-script with correct answers. See vignette: [assessing assignments](#)

3. Manipulating existing and adding new exercises

You can use the pre-existing exercises covering multiple themes or you can create your own specific to your domain as a simple .yml-file. Package also has a simple support for different languages. See vignette: [manipulating exercises](#)

From students

- more about basics of coding (vs. point and click) and R
- more, easier and better tailored exercises solving well-known problems using well-known datasets
- less ideological bs

From instructors

- know your students better, discuss in detail how they work with data
- language is important, many it-terms unclear in your own language, not to mention in English
- teaching professional (colleagues) vs. students different, ie
 - time constraints, critical attitude
 - unlearning prior/while learning (R for Stata/SAS/SPSS users)
 - direct benefits (if colleagues) for you as scaling up productivity etc.
- different target levels (more advanced you are, the less support you need)
- package developers could add exercises for their packages
- contributions for new exercises & translations welcome!

Questions?

ropengov.github.io/edu

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