Shared Access for Items, Scripts and Streaming-Data

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Technology-based Assessment

Group of

- Psychometricians
- Computer-Scientists

Actively working on

- Digital assessments
- Analyzing log/streaming data
- Software for evaluation
Researchers get access to

- **Codebook / Documentation**
  - Usually only for humans
  - Zero to none automation

- **Items**
  - Restricted access (contract needed)
  - Local server setup

- **Logs / Streaming-Data**
  - Raw information
  - Partly aggregated
Data from logs

- Must be converted (codebook)
  - Scripts (R, SPSS, ...)
- Needs to be checked with the items
  - Manual lookup of data
- Must be assigned variables
  - More scripts (R, SPSS, ...)
Current State

Error prone

- Coding based only on technical ids
- Interpretation of variables

Repeated actions

- Tedious
- Time-consuming

With high probability, this has been done multiple times within the research community!
No easy way

- To find these scripts (currently out-of-scope for RDCs)
- To publish these safely
  - GitHub requires public access
  - Possible peer pressure!!
- To connect them with logdata, survey statistics and items
  - Different stakeholders
  - Possibly different RDCs (if at all!)
Example:

- Items have been hosted by ACER
- No longer participating in PISA
  - Recently took down the hosting activity
- OECD provides link list
  - Mostly dead links now
Ideas

Provide a „safe space“ for researchers
- Store Ideas
- Access data for research
- Upload and provide scripts
- Link publications
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Ideas

Partially addressed by current NFDI proposal (KonsortSWD)
Ideas and Tasks

- Create space
  - Connect data with research proposals
  - Ensure findability
- Allow selective sharing
  - Define access policies
  - Embargos?
- Take care of provenance / versioning
  - Allow for research changes
  - Provide history of ideas
- Make it citeable
  - Publications are just the tip of the iceberg
  - Towards FAIR
Ideas and Tasks

Note

RDCs have not to provide these spaces but should allow such usage!

Important aspects:

- Automated exchange/access within RDCs
- User Experience
  - User first!!
- Sharing of information and access rights
  - Scripts, Data, Items
  - Reusability!
- Metrics and Measurements