Present and future FAIR competences in doctoral education

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**FAIRsFAIR project in a nutshell**

Time plan: 36 months
• Start: March 1, 2019
• 22 partners from 8 MS
• 6 core partners: DANS (project coordinator), CSC, DCC, Trust-IT, STFC, EUA

**MAIN OUTPUTS**

**COMPETENCE FRAMEWORK**
- Fair Competence Framework for Higher Education
- A Tested Framework for francising the data science schools
- Competence Centre core and knowledge base set-up
- 5 “Train-the-trainer” data science schools
- 2½ day workshops for mentors & new instructors
- Develop model courses & curricula
- FAIR Competences Adoption Handbook
- Good Practices in FAIR Competence Training
- Mapping existing FAIR data training offerings across high education institutions
- At least 1,500 person days of training
- > 200 HEIs participating in mapping FAIR data education landscape
- >100 HEIs introduced to FAIR competence framework and model courses in curricula

**REGISTRY FOR FAIR**
- Registry for FAIR compliant repositories
- Technical solutions for Interoperability requirements
- Training, support and guidance for repositories

**TOOLSET & REPOSITORIES**
- Provision of view and toolsets on certified repositories to researchers
- Core level certified repositories > 50 by M36
- Badges for end-users
- Deliver a Capability maturity model towards FAIR certification
- Build & Showcase a network of trusted digital repositories
- >50 Repositories engaged
- >10 Repositories implementing practical recommendations
- Metrics & Badging scheme for assessment of FAIRness of individual datasets in trusted repositories tested & applied to 100 datasets in 5
- CoreTrustSeal certified repositories
FAIRsFAIR workplan

- WP1: Certification (of Repositories)
- WP2: FAIR practices: semantics, interoperability, and services
- WP3: Data Policy and practice
- WP4: FAIR Competences
- WP5: FAIR Data Science Curricula & professionalisation

Activities cutting across Work Packages:
- Sustainability
- Landscape analysis, etc.
- FAIR repositories/services
- Knowledge base
- Engagement and uptake
- Competences
- Training

https://www.fairsfair.eu/the-project
Our work package objectives

- Map the integration of FAIR data principles in data science and other disciplines’ curricula at universities and **analyse the landscape of available FAIR data trainings** in Europe
- Deliver a **FAIR data competence framework** for higher education and professionals to support the development of a FAIR data culture and the uptake of FAIR data principles in data science and other relevant disciplines
- Translate the competence framework into **model curricula and university courses** for different disciplines (e.g. data science) and professional profiles (e.g. data stewards)
- Support **embedding FAIR data education in university programmes and doctoral training** through a series of workshops and knowledge-sharing activities
Work package progress

Through this work package higher education institutions will gain practical tools (D7.4 and 7.5), rooted in a comprehensive and up-to-date state-of-play survey (D7.1) and mapping of existing instruments (D7.2 and 7.3), helping them with the uptake of FAIR data competences in curricula at Bachelor, Master and Doctoral level.
Main deliverables & milestones

- **D7.1** FAIR in European Higher Education
- **D7.2** Briefing on FAIR Competences and Synergies
  - M7.4 stakeholder workshop (2nd half 2021, TBC)
- **D7.3** FAIR Competence Framework for Higher Education
- **D7.4** FAIR Competences Adoption Handbook for Universities (Dec 2021)
- **D7.5** Good Practices in FAIR Competence Training (Dec 2021)
  - M7.8 UMinho university workshop (26-27 May 2021)
  - M7.8 UvA university workshop (Sep 2021, TBC)
  - M7.8 UGoe university workshop (Oct 2021, TBC)
How familiar are you with the FAIR principles in relation to open data?

- I am familiar with the FAIR principles
- I have previously heard of the FAIR principles but I am not familiar with
- I have never heard of the FAIR principles before now

Source: Digital Science; Hahnel, Mark; McIntosh Borrelli, Leslie; Hyndman, Alan; Baynes, Grace; Crosas, Merce; et al. (2020): *The State of Open Data 2020*. Digital Science. Report. [https://doi.org/10.6084/m9.figshare.13227875.v2](https://doi.org/10.6084/m9.figshare.13227875.v2)
In which, if any, aspects of data management planning do you feel you would benefit from further skills training?

- Long-term storage and data management strategies
- Understanding and defining policies for access, sharing and re-use
- Metadata descriptions
- Costing and budget planning
- Defining the data to be produced and how it’s acquired
- None of the above

Bottlenecks

Doctoral education is where researchers learn the tools of the trade, how research is carried out, which tools and methods are applied, and which outputs are important.

- Normalise RDM in disciplinary and interdisciplinary practices and as part of the usual research process.
- Link it with disciplinary practices and research ethics and integrity.
- This is of course not a short-term shift. Doctoral training is a key to make enable long-term change.
- Fifty-six out of sixty-three universities (89%) that we surveyed in 2019 emphasised that there is a "high need" to strengthen the teaching of data management competencies at the doctoral level.

Thank you for your attention

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