International perspectives and initiatives on "third spacers"

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OECD Global Science Forum Expert Group on Digital Workforce Capacity for Data Intensive Research



Recommendations to policy makers on how to facilitate the digital workforce capacity needed for data-intensive research, based on analysis of best practice.

Members from 15 countries, lit review, 13 case studies, international expert workshop.

Report out mid-year.









Sustainability











Software

Institute







OECD report identifies change needed in 5 areas:

Integrate digital workforce capacity development into broader science policy frameworks and actions, e.g. for open science and research integrity.

Identify the key competencies, skills and roles required for data-intensive science in different contexts.

digital skills,

Implement changes in academic evaluation and reward systems in order to attract and retain diverse digitally skilled staff.

Community development

reward structures

Enablers for digital workforce

capacity

development

foundational digital skills and more specialized skills for scientists and research support professionals.

Support training in

Support development of communities for new professional roles, learners and trainers.

frameworks and

Provision of

training

roles

OECD report: Recommendations for universities

- Develop and adopt frameworks to employ digital research support professionals in stable positions with opportunities for career advancement.
- Implement systemic institutional change around careers paths and alternative metrics to recognise a broader range of research contributions.
- · Recognise datasets and software as valued research outputs.
- Incentivise collaborations between domain researchers and digital support staff with metrics that recognise the contributions of all members of research teams.
- Promote collaboration and exchange across industry and academia and recognise non-academic success for people wishing to re-enter academia.
- Encourage and support cross-sectoral digital skills initiatives .

Some evidence of the challenges



Australian research sector (2019)

1 EFT per 65 researchers

1 EFT per 90 researchers

1 EFT per 100 researchers

Collection and analysis of research data

Stewardship of research data

Software-engineering support

1 EFT per 200 researchers

1 EFT per 250 researchers

Software training/advice

Training/advice on research data

Other international initiatives (& with thanks to)

• Sorbonne Declaration on Research Data Rights - Go8 signed

... the development of appropriate recognition for researchers who make their data FAIR and share it with appropriate open data licenses.

- San Francisco <u>Declaration on Research Assessment</u> (DORA) UoM signed
- ... recognises the need to improve the ways in which outputs of scholarly research are evaluated.
- Society of Research Software Engineering

- Australia/NZ RSE

- RDA Professionalising Data Stewardship IG
- EOSC Executive Board Working Group: Skills and Training
- Open Science Policy Platform
- Academic Data Science Alliance (US)
- US NSF grant proposal guidelines (2013): Biosketch can include products

