Towards a community-centric approach to designing institutional support for open science

Emmy Tsang
Community Engagement Manager (Open Science)
TU Delft Library
f.tsang@tudelft.nl | twitter @emmy_ft

June 8, 2021
The Technical University of Delft

- 6000+ personnel
  - ~1100 FTE Faculty
  - ~2000 PhD candidates
  - ~1100 FTE other scientific staff

- 8 Faculties:
  - 4 x Engineering (Aerospace; Civil; Electronic, maths & computation; Maritime, mechanical & materials)
  - 2 x Design (Architecture & Built Environment; Industrial design engineering)
  - 2 x Science (Applied Sciences; Technology, Policy & Management)

- 44 departments
A brief history of Open Science at TU Delft

- **2007**: Conversations began
- **2015-16**: Open science roadshow
  - Tour of faculties and departments
- **2018**: Data champions established
- **2020-24**: Strategic Programme
  - Open Science
Open Science Strategic Programme 2020-24

https://doi.org/10.4233/uuid:f2fa07-408f-4cde-bd87-0919c9e4c26f
Programme outputs

Together with:
- ICT
- Research integrity & ethics
- Legal
- HR
- Communications
- Graduate school
- Faculty staff

- Processes
  - Policies & guidelines
  - Training
- Organisation Structure
  - Support personnel
  - Partnerships
- Technology
  - Infrastructures (tool, platforms & networks)
  - Services
- Information
  - Know-how & resources
  - Research
  - (success) stories
Example 1: Policies

- Open Access
  - Also funders’ mandate and national developments
- Faculty-specific research data policy
- Research software policy
- Open Education Resource Policy (coming soon)

Example 2: Training

- **Software & Data Carpentries Workshops**
- **Research Data Management:**
  - Faculty-specific training
  - Research Data Management 101
- **Open Science MOOC**
- **Informed researcher**
- **Open hardware mentorship programme**

Vision for RD & Software Management training – TU Delft Library

- **Ad-hoc RDM training**
  - RDM elements and reproducible workflows, data analysis and data publication applied within a specific field/discipline.
- **RDM workflows**
  - Hands-on sessions exploring tools and RDM best practices applied to research workflows when working with specific data types.
- **Basics**
  - Essential knowledge on different aspects within RDM which are necessary when commencing a research project.
- **Introduction**
  - Research Data Management is presented in a general context such as information skills and open science.

[Link to DOI](https://doi.org/10.5281/zenodo.3516873)
Example 3: Support personnel

- (Faculty Data Stewards)
- Digital Competence Center (DCC)
- Copyright Helpdesk
- Publishing Team
Challenges & Opportunities
“Lack of awareness”?

- How do we know how much awareness there is currently?
- What type(s) of engagement are we looking for?
- Who should be aware, and to what extent?
- Where do they usually get their information from?
- What is our goal, and how do we know if we have reached it?
“This project ‘You share, we take care’ sounds like a good idea... I think my colleagues will be interested to join as well. Would it be possible to get some additional info?”

Researcher, Faculty of Civil Engineering and Geosciences

“It was clear that the process is new - sometimes it takes 3-4 emails before there’s an actual answer.”

Student assistant, Faculty of Aerospace Engineering
Make it easy to be open

Overview of the session
- Discipline specific data management support
- 4TU.ResearchData
- Digital Competence Center
- Open access funding & support
- TU Delft OPEN Publishing
- New Media Centre

Questions?
Please ask in MS Teams chat – or upvote (thumbs up 🌟) other questions!
Competing priorities

“Writing and publishing papers is still the most important - it’s hard to find time to tidy up code and share software.”

Final year PhD candidate, Faculty of Aerospace Engineering

“Our dean just started and at the moment she is very busy with education arrangements for the next academic year.”

Faculty secretary
Influencing leadership

Jan-Dirk Jansen  
Dean, the Faculty of Civil Engineering and Geosciences  
OS Programme Steering Committee

Franklin van der Hoeven  
Director of Research, Faculty of Architecture and the Built Environment  
OS Programme Manager

Rob Mudde  
Vice Rector Magnificus/ Vice-President Education  
OS Programme Portfolio Holder

Portraits from the TU Delft website, all rights reserved.
Support & equip change managers
Support & equip change managers

“The news bulletin could then focus on a particular topic and also tie it back to the developments at the national (maybe international) level.”

Faculty secretary

“... they publish monographs (books), which may not be covered by the Taverne amendment.”

Data steward
“I strongly believe that democratization of knowledge is a key enabler for empowerment development. However, some of the forefront scientific production remains inaccessible to many worldwide. That must change. Open science has the power to change it.”

Juan Carlo Intriago Zambrano
Open Science Community Delft member and TU Delft Global Fellow, Faculty of Civil Engineering and Geosciences
Co-create open initiatives & tools

osc-delft.github.io | @OSCDelft
startyourosc.com

Anton Akhmerov
@AkhmerovAnton

Thanks to the new policy (tudelft.nl/2021/library/r...), any @tudelft employee may author open source research software without red tape. Excited to do so legally :)

It was a long road—my personal involvement in discussions started in July 2015 with an email to our legal office.
Recognise & rewards efforts towards open
Putting it together
Building an architecture for participation

Design principles:

- Tailored
- Rewarding -> Sustainable

Empowering individuals
Competing priorities
Lack of awareness
Open Science Community Engagement Strategy

**Empowering individuals**
- Co-creation
- Recognition & reward

**Competing priorities**
- Influence leadership
- Equip change managers

**Lack of awareness**
- Make it easy
- Meet them where they are

Future plans

- Service optimisation
- Discipline-specific engagement
- Recognition & rewards
- Impact valuation
Thank you!

Emmy Tsang
f.tsang@tudelft.nl
Twitter @emmy_ft
openworking.wordpress.com

Except where otherwise noted, these slides are licensed under CC BY 4.0