Open Science Essentials

Wednesday, June 26, 2019

In a rapidly changing digital world, libraries are regularly re-assessing existing services and offering new ones to support research evolutions.

LIBER's Digital Skills for Library Staff and Researchers Working Group sketched the existing digital skilling and training practices available for library staff and researchers, with particular regard to those focused on Open Science.

Our aim is to share the many approaches being used across Europe — from mature programmes to emerging initiatives — through case studies.

By identifying and learning about the most relevant Open Science training programmes and initiatives in the current academic landscape, we can share best practices with our community.

Digital Skills WG

Which new skills are needed by library professionals? What training is required in order to better support research activities?

Skilling and training at LIBER

The WG participates to LIBER educational programme connected to digital skills of library staff members and researchers

We deliver

Webinars

Workshops

Open Science skilling and training selective landscape

Digital Skills List : an entry point to digital skills frameworks

15 members

https://libereurope.eu/strategy/digital-skills-services/digitalskills/members/

Taskforce
Open science skilling initiatives in Europe

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Taskforce
Digital Skills list

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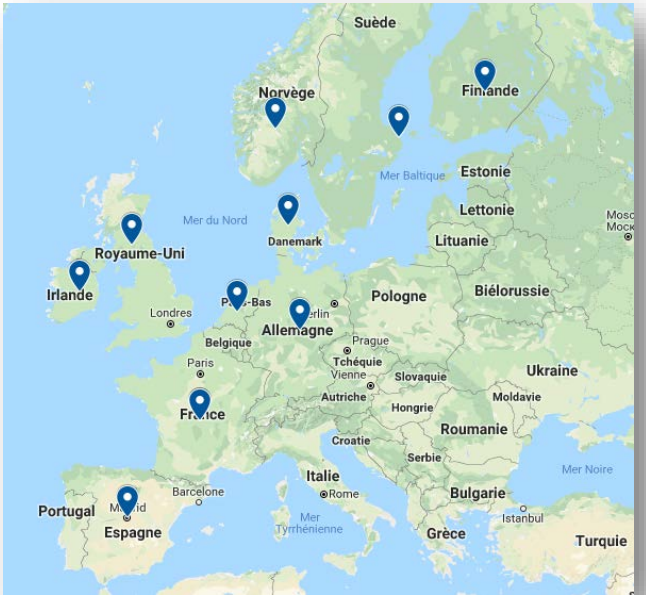
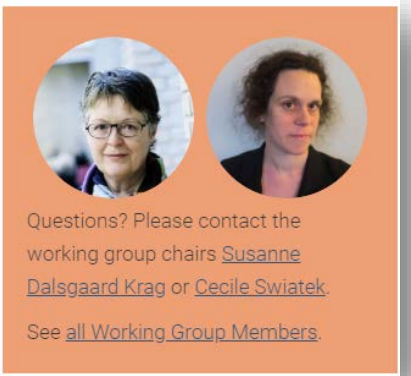


https://libereurope.eu/strategy/digital-skills-services/digitalskills/



After Belgrade, it will be time for YOU to take up the flag and propose LIBER new ideas and work trails !

Open Science skilling initiatives in Europe

Wednesday, June 26, 2019

2019 : Questionnaire

- Sketching the landscape
- Selecting cases – Europe + Norway + Switzerland

April 2019 Questionnaire

- Driving online interviews
- First **publications** & presentation **June 2019**

Austria
Belgium
Denmark
Hungary
Ireland
Luxembourg
Norway
Poland
Romania
Spain
The Netherlands
Switzerland

2020 : Deliverable published for everyone

- Going on collecting answers
- Publishing the whole
- Writing and publishing a global factsheet and analysis

Please send us your suggestions at cecile.swiatek@gmail.com

All WG member details and contacts : https://libereurope.eu/strategy/digital-skills-services/digitalskills/members/

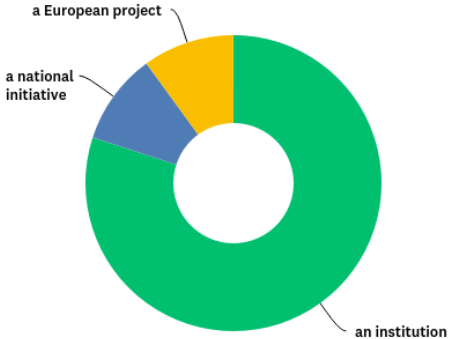
Useful links

LIBER Digital Skills Working Group: "Digital skills for Open Science References"
https://www.zotero.org/groups/2340674/liber_digital_skills_for_open_science

LIBER Digital Skills Working Group: Case Studies on Open Science Skilling and Training Initiatives in Europe
https://zenodo.org/record/3251731

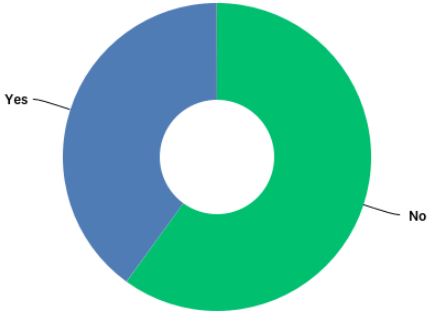
Complete answers (10)

Q1: You are answering this questionnaire as a representative of: *(only one choice)*



Answer Choices	Responses	
An institution	80%	8
A national initiative	10%	1
A European project	10%	1
Total		**10**

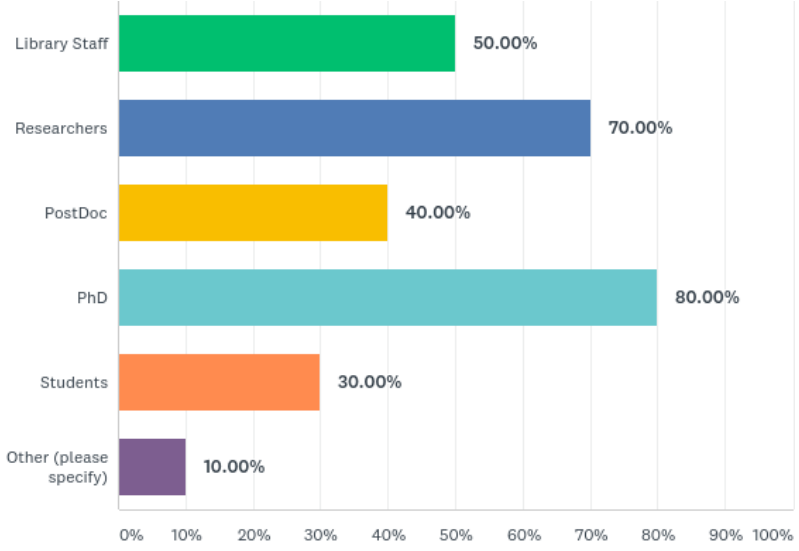
Q2: Have you heard about the LIBER Strategy "Powering Sustainable Knowledge in the Digital Age"?



Answer Choices	Responses	
No	60%	6
Yes	40%	4
Other (please specify)	0.00%	0
Total		**10**

Q8: Who is your target audience?

Answered: 10 Skipped: 0



Q8: Who is your target audience?

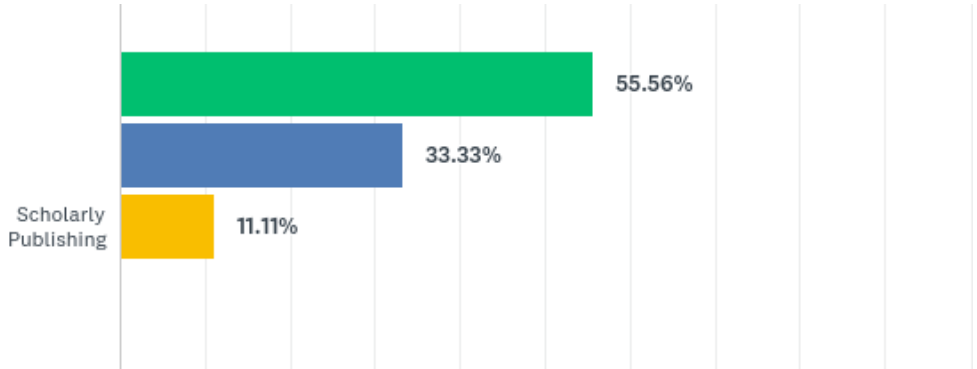
Answered: 10 Skipped: 0

ANSWER CHOICES	RESPONSES	
Library Staff	50.00%	5
Researchers	70.00%	7
PostDoc	40.00%	4
PhD	80.00%	8
Students	30.00%	3
Other (please specify)	10.00%	1
Total Respondents: 10		

Q9: What kind of skills are prioritised?

top priority | strong priority | moderate priority | not a priority | excluded

Answered: 10 Skipped: 0



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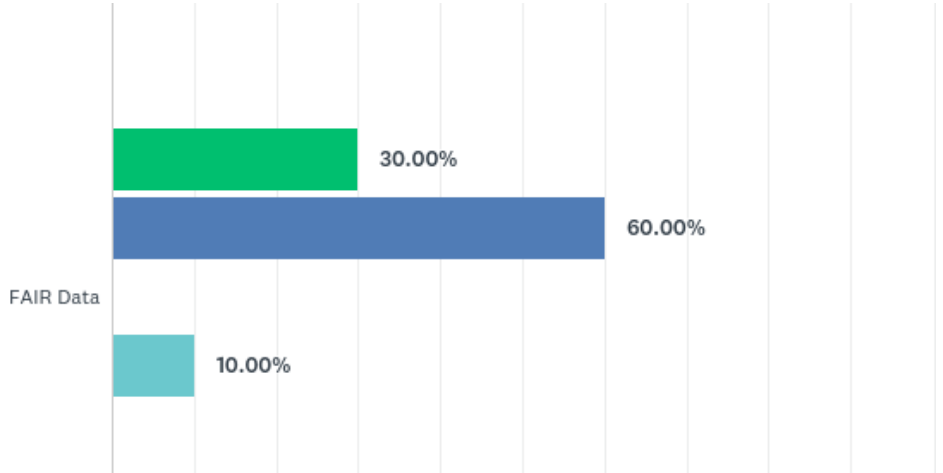

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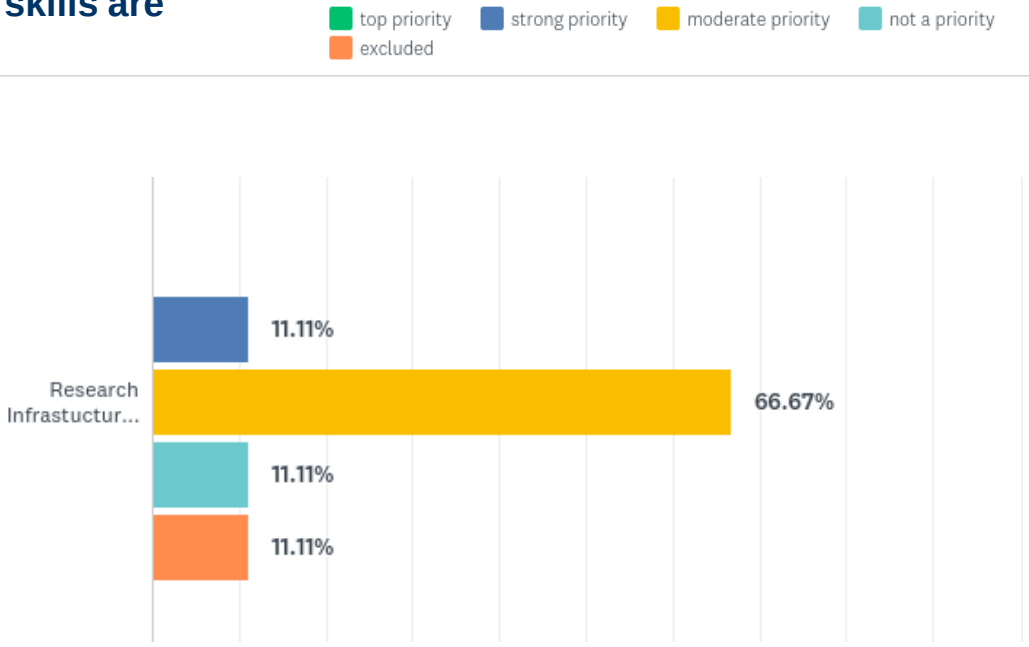

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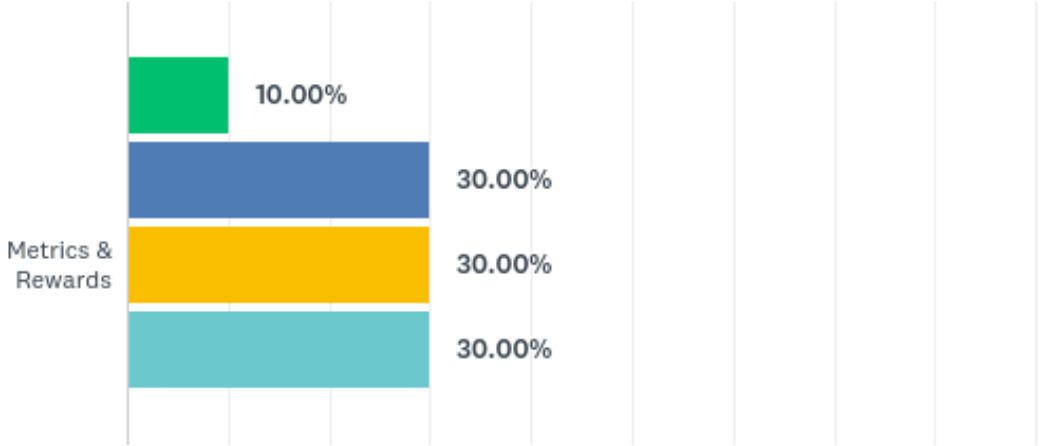

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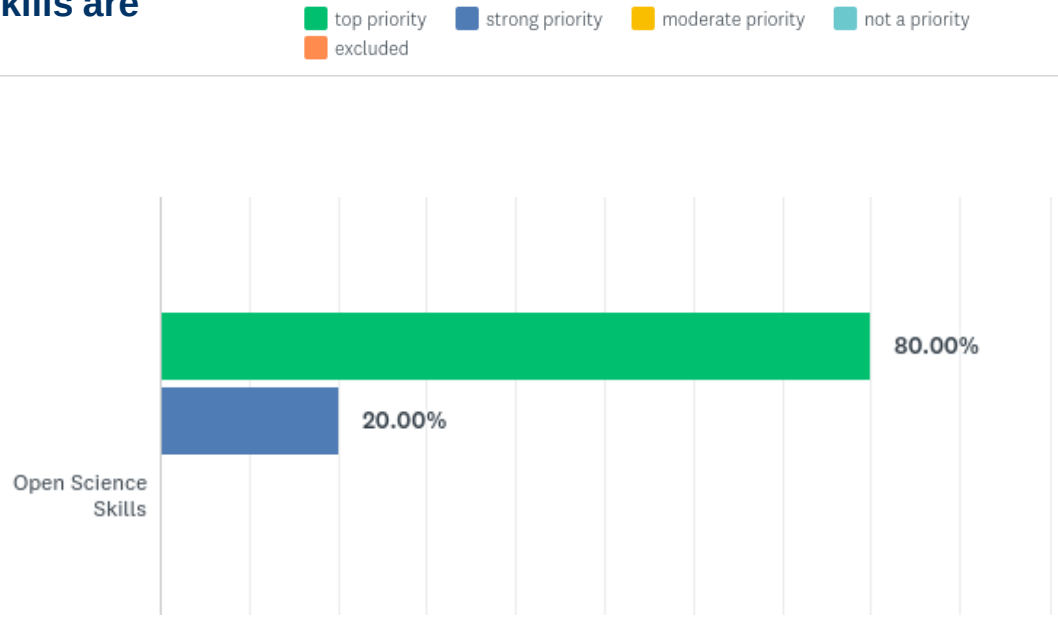

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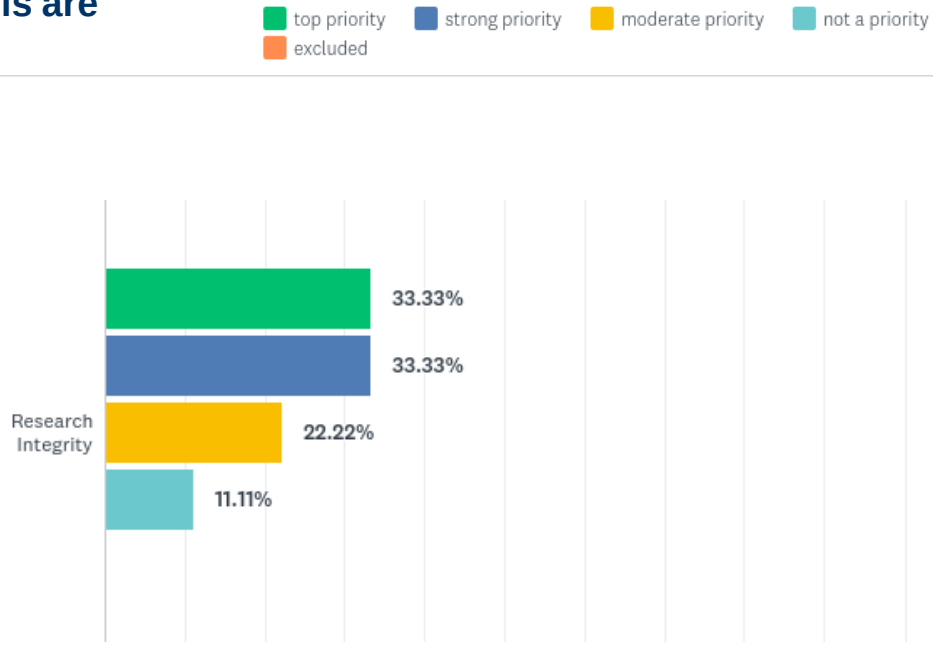

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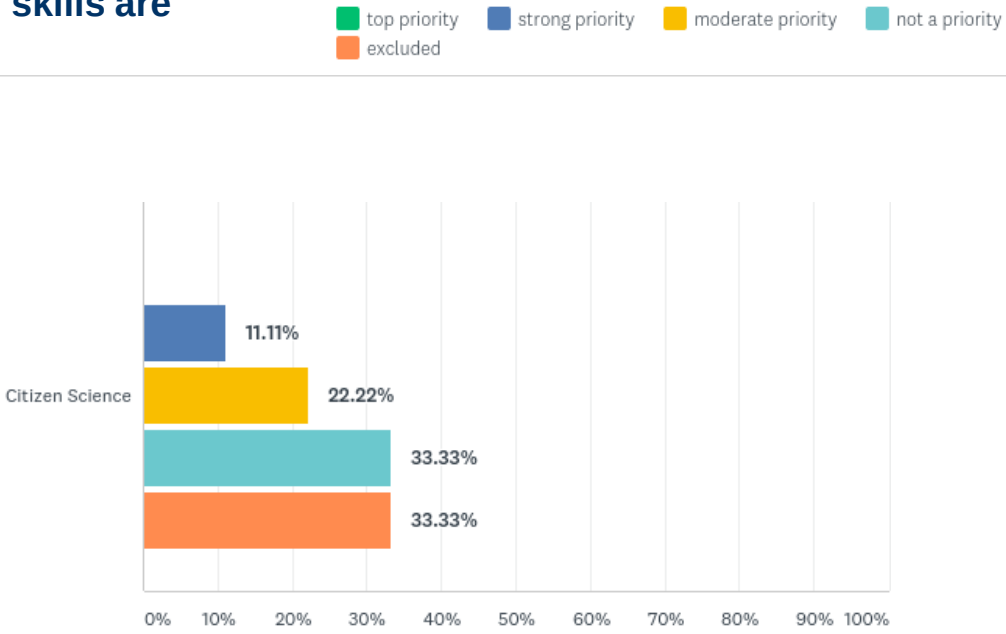


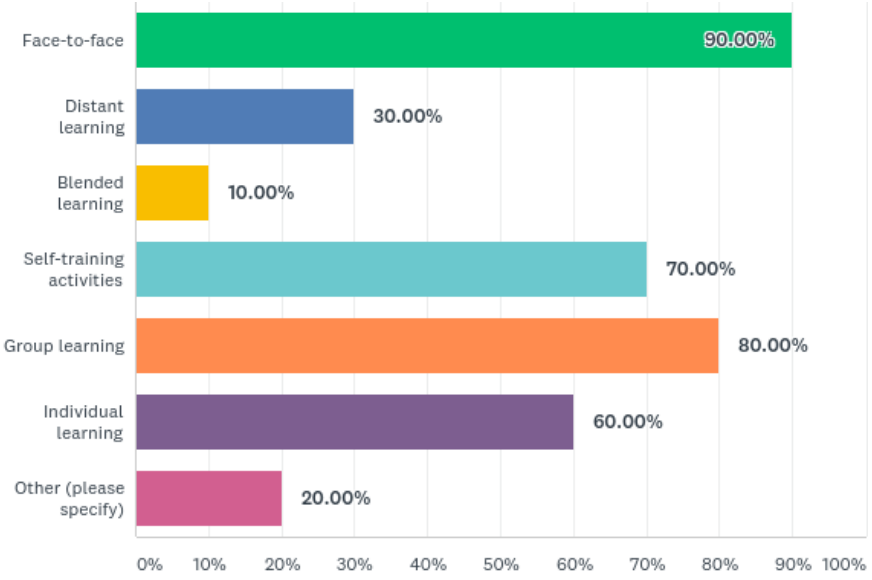
Q9: What kind of skills are prioritised?

Answered: 10 Skipped: 0

	TOP PRIORITY	STRONG PRIORITY	MODERATE PRIORITY	NOT A PRIORITY	EXCLUDED	TOTAL RESPONDENTS
Scholarly Publishing	55.56% 5	33.33% 3	11.11% 1	0.00% 0	0.00% 0	9
FAIR Data	30.00% 3	60.00% 6	0.00% 0	10.00% 1	0.00% 0	10
Research Infrastuctures and the EOSC	0.00% 0	11.11% 1	66.67% 6	11.11% 1	11.11% 1	9
Metrics & Rewards	10.00% 1	30.00% 3	30.00% 3	30.00% 3	0.00% 0	10
Open Science Skills	80.00% 8	20.00% 2	0.00% 0	0.00% 0	0.00% 0	10
Research Integrity	33.33% 3	33.33% 3	22.22% 2	11.11% 1	0.00% 0	9
Citizen Science	0.00% 0	11.11% 1	22.22% 2	33.33% 3	33.33% 3	9

Q12: Which channels and learning types are used?

Answered: 10 Skipped: 0



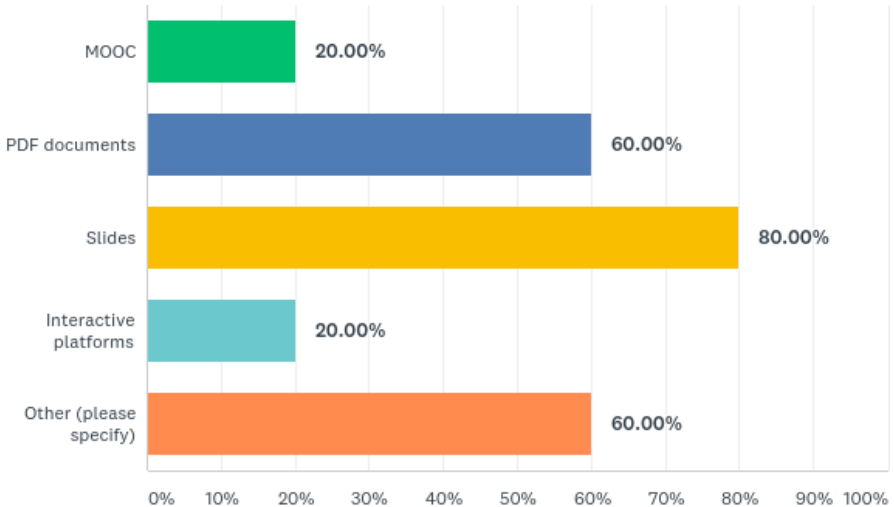
Q12: Which channels and learning types are used?

Answered: 10 Skipped: 0

ANSWER CHOICES	RESPONSES	
Face-to-face	90.00%	9
Distant learning	30.00%	3
Blended learning	10.00%	1
Self-training activities	70.00%	7
Group learning	80.00%	8
Individual learning	60.00%	6
Other (please specify)	20.00%	2
Total Respondents: 10		

Q13: Which formats are used?

Answered: 10 Skipped: 0



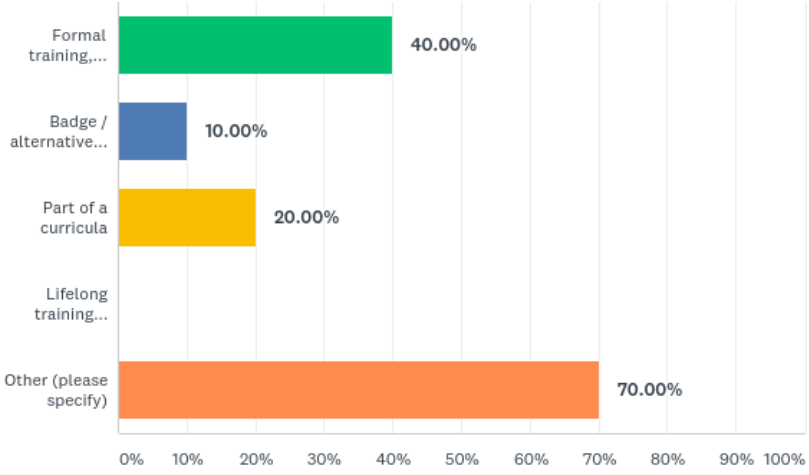
Q13: Which formats are used?

Answered: 10 Skipped: 0

ANSWER CHOICES	RESPONSES	
MOOC	20.00%	2
PDF documents	60.00%	6
Slides	80.00%	8
Interactive platforms	20.00%	2
Other (please specify)	60.00%	6
Total Respondents: 10		

Q14: Is there formal recognition ?

Answered: 10 Skipped: 0



Q14: Is there formal recognition ?

Answered: 10 Skipped: 0

ANSWER CHOICES	RESPONSES	
Formal training, certificate of attendance	40.00%	4
Badge / alternative recognition	10.00%	1
Part of a curricula	20.00%	2
Lifelong training certificate	0.00%	0
Other (please specify)	70.00%	7
Total Respondents: 10		

Digital Skills list

Focus on Open Science

Wednesday, June 26, 2019

Context and Frameworks

Skills list

Three classes of skills:

- Discipline specific knowledge (DSK)
- Generic skills (GS)
- Personal competencies (PC)

Two skills levels:

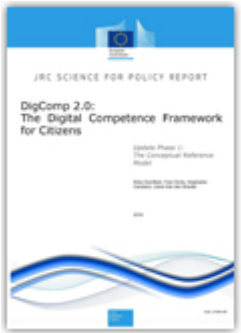
1. Awareness & broad understanding
2. Indepth knowlege

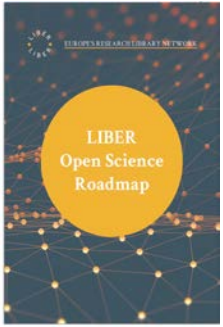
Type : DSK, GS, PC	Skills Level 1: awareness & broad understanding	Skills Level 2: indepth knowledge	For Library Staff	For Researchers
DSK	***Scholarly communication / Open Access Publishing***		✓	✓
DSK		OA policies - institutional/funder/national	✓	✓
DSK		Development and management of current research information systems	✓	
DSK		Institutional repositories	✓	✓
DSK		e-research methods	✓	✓
DSK		Knowledge on Open Publication options (green, gold, hybrid)	✓	✓
DSK		New open publication strategies (contracts, relations with publishers, new funding models	✓	✓
DSK		Licensing, Copyright and Intellectual property in the digital environment	✓	✓
DSK		Bibliometrics and research impact reporting	✓	✓
DSK		OA Advocacy	✓	

Existing frameworks

DigComp from European Commission (poster)
LIBER OS Roadmap (brochures)
JISC (posters)
Foster+ Open Science Learning (Taxonomy poster + https://zenodo.org/record/1308131
“Let's build the skills !” LIBER Digital Skills WG 2018 Workshop)

Zotero





Skills list in context of existing frameworks

Mapping the skills list with existing frameworks

Dimension 1: Competence Area Dig. Comp. 2.0	Area	Competence	Maps to OS roadmap
3. Digital content creation	**Digital collections management**	Creation and management of metadata records	Scholarly publishing/content creation
3. Digital content creation	**Digital collections management**	Digital curation	Scholarly publishing/content creation
3. Digital content creation	**Digital collections management**	Creation of an online exhibition of a special collection or archive	Scholarly publishing/content creation
4. Safety	**Computer literacy**	XX	?
3. Digital content creation	**Digital collections management**	Database development and management	?
3. Digital content creation	**Digital collections management**	Digitization, digital library architecture and software	Scholarly publishing/content creation
1. Information and data literacy	**Coding and standards**	Technical standards, quality standards	Scholarly publishing/content creation
1. Information and data literacy	**Coding and standards**	Web mark-up languages such as HTML, XML	Scholarly publishing/content creation
2. Communication and collaboration	**Communication**	Web development and design	Scholarly publishing/content creation
3. Digital content creation	**Open Access policies**	Knowledge of OA policies - institutional/funder/national	Open science skills
1. Information and data literacy	**Research assessment**	Development and management of current research information systems	Scholarly publishing
3. Digital content creation	**Open Access infrastructures**	Institutional repositories	Scholarly publishing
1. Information and data literacy	**Research methods**	e-research methods	??
3. Digital content creation	**Open Access**	Knowledge on Open Publication options (green, gold, hybrid)	Scholarly publishing
3. Digital content creation	**Open Access**	New open publication strategies (contracts, relations with publishers, new funding models	Scholarly publishing
4. Safety	**IPR**	Licensing in the digital environment	Scholarly publishing
4. Safety	**IPR**	Copyright and Intellectual property in the digital environment	Research integrity

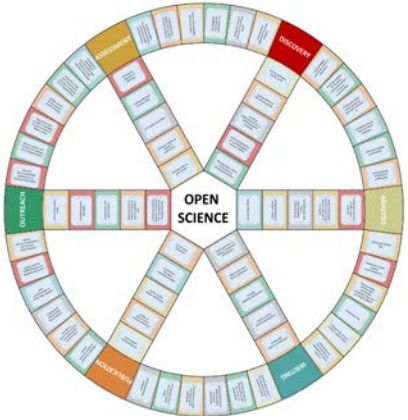
Concentrating on open science skills - visualisation

Innovations in scholarly communication

Bianca Kramer b.m.r.kramer@uu.nl | @MsPhelps
Jeroen Bosman j.bosman@uu.nl | @jeroenbosman

Utrecht University Library

https://101innovations.wordpress.com/

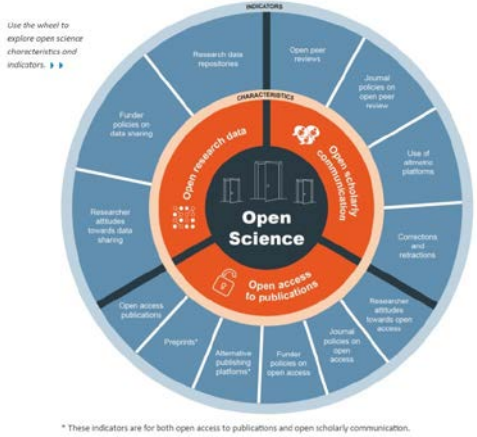


Wheel of Open Science practices

Bianca Kramer & Jeroen Bosman

"Innovations in Scholarly Communication" project

https://doi.org/10.6084/m9.figshare.4628014.v2



Open Science Wheel

European Commission

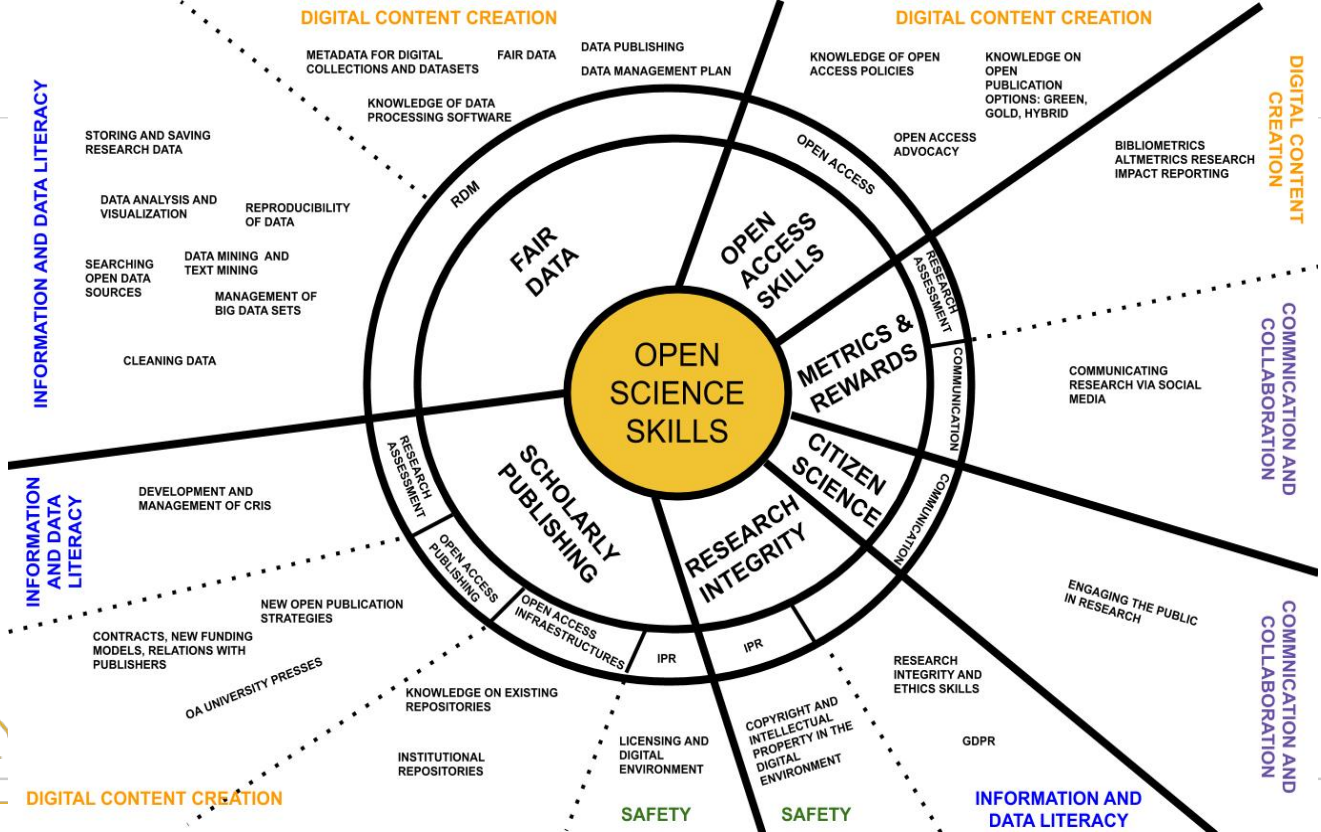
Open Science monitor (2015)

LIBER 2019 DUBLIN 26 - 28 JUNE

#liber2019

Open science skills

Type	Dimension 1: Competence Area Dig. Comp. 2.0	Area	Maps to OS roadmap	Competence
DSK	1. Information and data literacy	Research data management	FAIR data	Storing & saving research data
DSK	3. Digital content creation	Research data management	FAIR data	Metadata for digital collections & datasets
DSK	3. Digital content creation	Research data management	FAIR data	Data publishing
DSK	1. Information and data literacy		FAIR data	Data analysis & visualization
DSK	1. Information and data literacy		FAIR data	Management of big data sets
DSK	1. Information and data literacy		FAIR data	Reproducibility of data
DSK	1. Information and data literacy		FAIR data	Data mining/text mining
DSK	3. Digital content creation		FAIR data	Data Management Planning
DSK	3. Digital content creation		FAIR data	FAIR data
DSK	1. Information and data literacy		FAIR data	Searching open data sources
DSK	1. Information and data literacy		FAIR data	Cleaning data
DSK	3. Digital content creation		FAIR data	Knowledge of data processing software
DSK	3. Digital content creation	Research assessment	Metrics & rewards	Bibliometrics, altmetrics and research impact reporting
DSK	2. Communication and collaboration	Communication	Metrics & rewards	Communicating research output via social media
DSK	3. Digital content creation	Open Access policies	Scholarly publishing	Knowledge of OA policies - institutional/funder/national
DSK	3. Digital content creation	Open Access	Open access skills	OA Advocacy
DSK	3. Digital content creation	Open Access infrastructures	Scholarly publishing	Knowledge on existing repositories
DSK	4. Safety	IPR	Research integrity	Copyright and Intellectual property in the digital environment
DSK	1. Information and data literacy		Research integrity	Research integrity and ethics skills, GDPR
DSK	1. Information and data literacy	Research assessment	Scholarly publishing	Development and management of current research information systems
DSK	3. Digital content creation	Open Access infrastructures	Scholarly publishing	Institutional repositories
DSK	3. Digital content creation	Open Access	Open access skills	Knowledge on Open Publication options (green, gold, hybrid)
DSK	3. Digital content creation	Open Access	Scholarly publishing	New open publication strategies (contracts, relations with publishers, new funding models
	4. Safety	IPR	Scholarly publishing	Licensing in the digital environment
DSK	3. Digital content creation	Open Access publishing	Scholarly publishing	OA University Presses
DSK	3. Digital content creation	Open Access	Scholarly publishing	Negotiating with publishers for OA - Pay to read/Pay to publish



Draft - Created by LIBER Digital Skills WG, 2019 – visualiation by Clara Riera Quinteros

Thank you

“Social Sciences & Humanities Open Cloud – What’s in it for Research Libraries?”
10:30 - 12:00

Same room, here !

Image by Catkin on Pixabay