

Open Science-related transferable skills are important for Early Career Researchers

Nicola Dengo, Maja Dolinar,
Irina-Mihaela Dumitru, Giulia Malaguarnera,
Ana Slavec, Emanuele Storti

Open Science FAIR, September 2021

eurodoc

The European Council of Doctoral
Candidates and Junior Researchers

info@eurodoc.net
<http://www.eurodoc.net>



Project Skills

Technical
Knowledge

Teamwork

Transferable Skills

Communication

Time
Management

Research

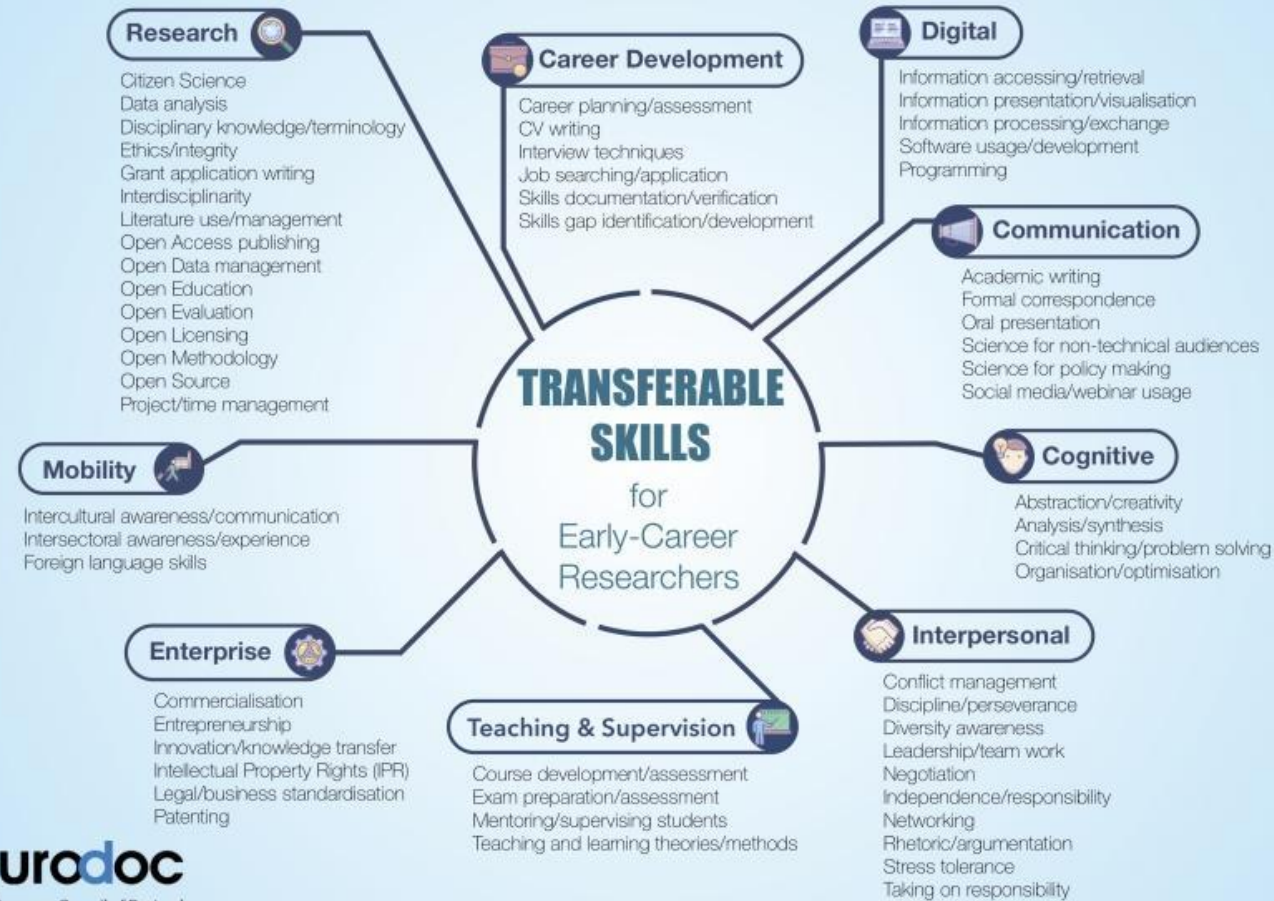
eurodoc

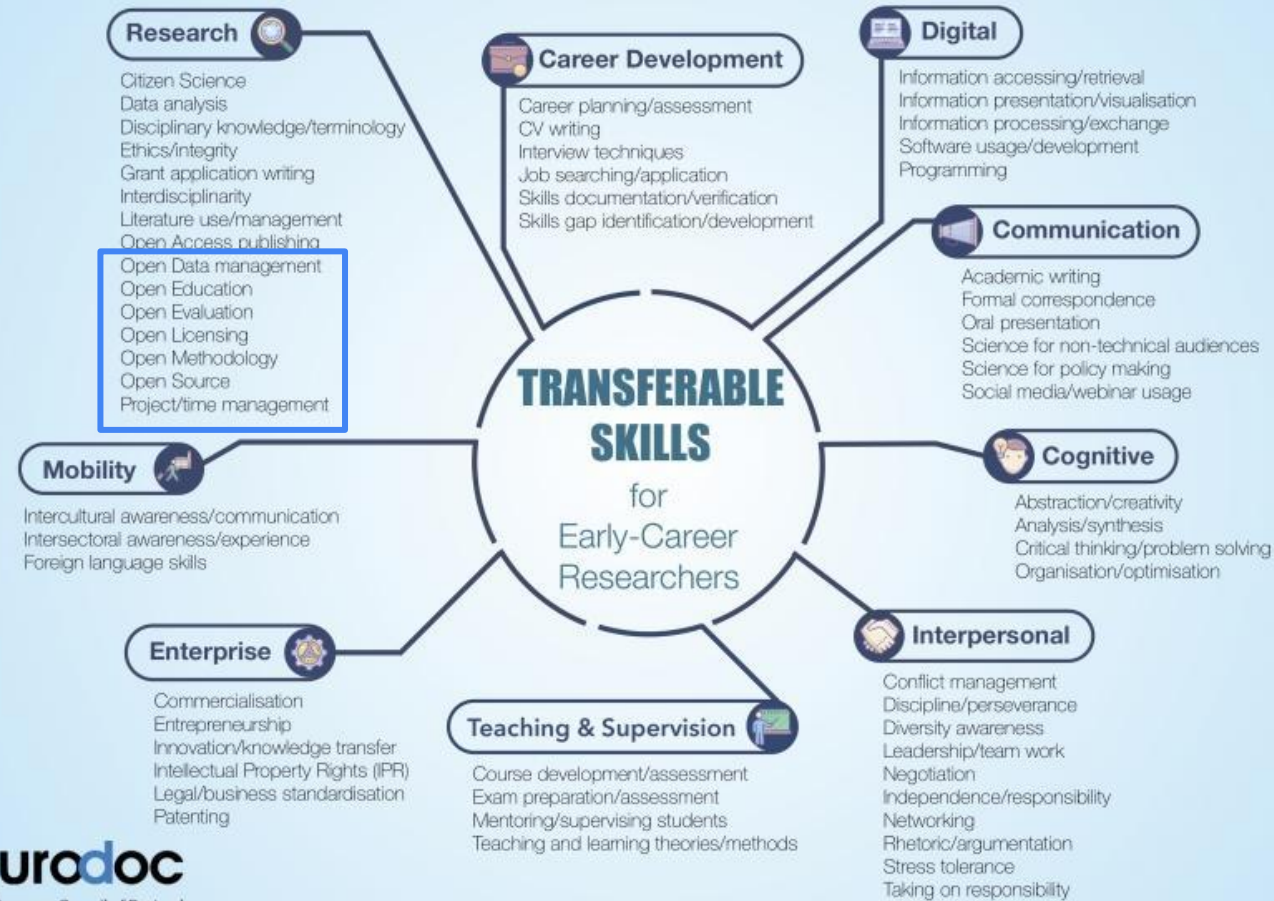
The European Council of Doctoral
Candidates and Junior Researchers

info@eurodoc.net

<http://www.eurodoc.net>









Open Science Skills

eurodoc

The European Council of Doctoral
Candidates and Junior Researchers

info@eurodoc.net

<http://www.eurodoc.net>





<https://www.fosteropenscience.eu/>

**OPEN
SCIENCE
MOOC**
FREE | OPEN | LEARNING

<https://opensciencemooc.eu/>



ESCO skills



Occupations

Qualifications

Skills/competences

ESCO skills



Occupations

Qualifications

Skills/competences

ESCO skills



S1 - communication, collaboration and creativity

S2 - information skills

S3 - assisting and caring

S4 - management skills

S5 - working with computers

S6 - handling and moving

S7 - constructing

S8 - working with machinery and specialised equipment

ESCO skills



S1 - communication, collaboration and creativity

S2 - information skills

S3 - assisting and caring

S4 - management skills

S5 - working with computers

S6 - handling and moving

S7 - constructing

S8 - working with machinery and specialised equipment



Table 1: Example of classification of skills from the Foster course.

Source	Name of course	Skills (implicitly described) in the course syllabus	Corresponding ESCO classification
Foster	Best Practices	Developing an open research workflow	S4.2 - organising, planning and scheduling work and activities
Foster	Managing and Sharing Research Data	Writing a data management plan	S4.2 - organising, planning and scheduling work and activities
Foster	Managing and Sharing Research Data	Understand FAIR principles	S2.0 - information skills
Foster	Managing and Sharing Research Data	Select data for retention	S2.7 - analysing and evaluating information and data
Foster	Managing and Sharing Research Data	Maximize impact of data	S1.6 - promoting, selling and purchasing



Conclusion

We find conclusive evidence that Open Science training enables early career researchers to develop skills that meet the ESCO definition of skills. This evidence adds to the list of arguments in favor of Open Science training.



Outlook

ESCO's classification of skills is due for revision this year, and the next step for our report is to compare our results against the revised ESCO classification. We also intend to publish a recommendation of FOSTER open science courses, encouraging institutions to include open science training into their activity.



Eurodoc's report on transferable skills:

<http://www.eurodoc.net/news/2018/press-release-eurodoc-report-on-transferable-skills-and-competences>

The European Skills, Competences, Qualifications and Occupations

<https://ec.europa.eu/esco/portal/home>



eurodoc

The European Council of Doctoral
Candidates and Junior Researchers

info@eurodoc.net

<http://www.eurodoc.net>