



FAIRSFair

Fostering Fair Data Practices in Europe

Good
Practices

Essential on Research Data Management MOOC

The University of Minho Documentation and Libraries Service (UMinho) developed an Open Online Course (MOOC) in Research Data Management Massive in 2019 commissioned by the General Secretariat for Education and Science from the Portuguese Ministry of Science, Technology and Higher Education. The course is open to doctoral candidates and other researchers from all Portuguese higher education institutions who are interested in acquiring a basic understanding and knowledge of practices related to RDM and FAIR data.

The case study shows the added value and mutual benefits of national and institutional-level actors working together to promote and support the uptake of RDM and FAIR data skills. The initiative to create the MOOC came from the Ministry for Science, Technology and Higher Education, who via the General Secretariat for Education and Science collaborated with the University of Minho to develop the content and implement the course in a new online platform aimed at fostering digital skills in Portugal. From the university's perspective, the objectives identified for the MOOC were in line with its strategic focus on Open Science. UMinho was therefore ready to take on this mutually beneficial project and use its experience in Open Science, RDM and FAIR data practices to contribute to the creation and delivery of a nationally available course.



Secretaria-Geral da Educação e Ciência



Universidade do Minho

uminho.pt

Use case: collaboration among national and institution actors to support the uptake of RDM and FAIR data skills

Type of initiative: Massive Open Online Course (MOOC)

Organiser of the initiative: Lead by the University of Minho and commissioned by the General Secretariat for Education and Science from the Portuguese Ministry of Science, Technology and Higher Education

Scope and objectives

The Essentials on Research Data Management MOOC is a 30-hour online course with six modules aimed at training doctoral candidates in the fundamentals of RDM practices, including writing Data Management Plans (DMPs), applying the FAIR data principles, identifying the right tools and the legal issues involved in sharing research data. The course is made available to all Portuguese higher education institutions in the online platform "NAU".

While developed by the University of Minho, the initiative to create the RDM MOOC came from the Secretariat of State of the Ministry of Science, Technology and Higher Education. Developing a MOOC focused on addressing RDM practices was seen as a way to feed into two different policy initiatives that the Ministry was working on at the time (2016-2018). First, the MOOC could provide support to the implementation at the institutional level of the objectives of the emerging national Open Science Strategy. Second, the MOOC could be integrated within the broader national strategy in support of the uptake of digital skills. With regards to this second aspect, **respondents from the University of Minho highlighted the importance of linking the promotion of RDM and FAIR data skills and practices with other priorities in the agenda of national governments.** This can be instrumental not only in finding additional financial and capacity resources for teaching those skills, but also in identifying new motivations and drivers to support their implementation.

The University of Minho agreed to develop the content of the RDM MOOC, recognising the potential that this could have in addressing internal institutional priorities on promoting Open Science skills and practices and in contributing to the objectives of the national strategies. At the national level, UMinho was also actively engaged in the Working Group (WG) responsible for defining the roadmap of the National Open Science Policy and developing new opportunities for training in data-related skills was among the recommendations identified by the WG. In addition, respondents underlined that a third driver for their engagement in the RDM MOOC was to be identified with the decision of Portugal's major national funder, the Foundation for Science and Technology (FCT), to update its policy data sharing and management, recommending the implementation of new training activities related to research data at the institutional level.



FAIRSFair "Fostering FAIR Data Practices In Europe" has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant Agreement No. 831558.

[@FAIRSFair_eu](https://twitter.com/FAIRSFair_eu)
[/company/fairstfair](https://www.linkedin.com/company/fairstfair/)

www.fairsfair.eu



FAIRSFair

Fostering Fair Data Practices in Europe

Good Practices

Implementation

The first edition of the RDM MOOC was held between December 2019 and June 2020. A second edition followed between November 2020 and June 2021.

The Secretary of State for Science, Technology and Higher Education gave the first impetus for the creation of a MOOC dedicated to RDM and then involved the General Secretariat for Education and Science. In particular, the course was conceived to feed into the new NAU initiative, a national online platform collecting MOOCs on different areas aiming to promote digital development, digital inclusion and literacy, education and qualification of the Portuguese population.

The **NAU platform** is a service developed and managed by the FCCN Unit of the Foundation for Science and Technology that allows the creation of courses in MOOC format produced by recognized and relevant entities in society. The UMinho MOOC from the Secretary of State for Science, Technology and Higher Education was one of the first courses made available in the NAU platform.

Capacity

Funding for the development of the NAU platform, which hosts the RDM MOOC, came from the European Regional Development Fund 2014-2020 and the COMPETE 2020 Community Operational Programme, as part of the Portugal 2020 Framework. The NAU platform is also part of the INCoDe.2030 initiative, aimed at promoting the uptake of digital skills in Portugal.

Regarding the sustainability of the course, respondents from the University of Minho highlighted that the funding received was only to create the RDM MOOC for one edition. However, given the high attendance numbers and the impact that the course achieved among the Portuguese higher education community, a second edition was delivered at the end of 2020. Small updates were applied to the first edition based on comments and feedback received, without additional costs needed.

Respondents are looking for ways to build on the results of the RDM MOOC and, recognising the strategic importance given to Open Science and digitalisation in the national agenda, they are confident that new opportunities for funding will arise to deliver a third edition of the MOOC or to integrate the course material in other training initiatives.

Impact

The RDM MOOC was among the most attended courses of the NAU platform, with almost 3500 registered participants across the first and second editions and over 1100 certificates issued to those who have completed all the 6 course modules. In the survey sent after the completion of the MOOC, the majority of participants evaluated the course as very or highly useful for their professional performance as researchers.

Reasons behind the broad reach of the course were identified by interviewees in the shared recognition across Portuguese higher education institutions of the strategic importance that new training activities have in fostering data-related skills. In recent years, universities have been putting in place new institutional strategies and plans to drive the transition towards Open Science. Ensuring that researchers and their support staff are equipped with the skills needed to take on these ambitions is therefore crucial to support the implementation of Open Science practices at the institutional level. Leaders from several Portuguese universities were therefore keen on promoting the RDM MOOC among their research staff.

Good results in the turnout and evaluation of the MOOC are not the only indicators taken in consideration to measure the impact of the course within the Portuguese higher education community. **Respondents underlined how the course contributed to renew a debate at the national and institutional levels on the need for more training activities of this kind, with the Council of Rectors of Portuguese Universities (CRUP) proposing to re-establish a WG dedicated to Open Science.** The RDM MOOC has also been discussed within the context of the Research Data Management Forum, where participants appreciated its role in preparing doctoral candidates to comply with funding requirements and new policies related to research data. At the same time, the need for discipline-specific training was identified as the next step to take towards a strategy that fully supports the uptake of RDM and FAIR data related skills at the doctoral level.

While appreciating the results reached by the course, respondents highlighted how **the RDM MOOC should be considered only as a piece of a broader puzzle represented by the national strategy for Open Science.** By providing training for RDM and FAIR data skills, the RDM MOOC is indeed an important component of the picture, but more elements need to be fostered at the institutional level to ensure the success of the strategy in the long term. In particular, training should be complemented with the right infrastructures to manage, store and share research data, as well as with institutional policies providing a framework for RDM and FAIR data skills and practices to emerge as the standard way of producing scientific knowledge.





FAIRsFAIR

Fostering Fair Data Practices in Europe

Good
Practices

Essential on Research Data Management MOOC



Capture the QRcode
with your smartphone

About this use case

This use case is part of a collection describing how FAIR education is being embedded in educational programmes and presented in the [“Good Practices in FAIR Competence Education” report](#).

FAIRsFAIR - Fostering FAIR Data Practices in Europe

European Commission Grant Agreement No 831558 H2020-INFRAEOSC-2018-4
www.fairsfair.eu - support@fairsfair.eu

Acknowledgements

This report has been produced by the FAIRsFAIR (GA No. 831558) project, which received funding from the European Union’s Horizon Programme call H2020-INFRAEOSC-05-2018-2019.

Disclaimer

The content of this document does not represent the opinion of the European Commission, and the European Commission is not responsible for any use that might be made of such content.

December 2021



FAIRsFAIR “Fostering FAIR Data Practices In Europe” has received funding from the European Union’s Horizon 2020 project call H2020-INFRAEOSC-2018-2020 Grant Agreement No. 831558.

[@FAIRsFAIR_eu](https://twitter.com/FAIRsFAIR_eu)
[/company/fairsfair](https://www.linkedin.com/company/fairsfair)

www.fairsfair.eu