

Developing a framework for training and education in open research practices

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We propose the development of a new Open Science Massive Open Online Course (MOOC), designed to equip students and researchers with the knowledge and the skills they need in order to excel in a modern Web-based research environment. It will bring together the efforts and resources of hundreds of researchers who have all dedicated their time to making research more efficient and transparent. The MOOC is aimed at researchers at all levels, but especially students at the undergraduate and postgraduate level. As an open educational format, the MOOC aims at fostering students' agency over their self-representation and identity on the Web, as well as the ability to collaborate openly, both of which seem crucial for the participation of future scientists in modern research environments. The content of the MOOC is distilled into 10 core modules that complement existing aspects of research training programs. Each module will comprise a complete range of resources including videos, research articles, dummy datasets and code to ensure that students are equipped to perform high quality research. 'Homework' tasks also reinforce learning by doing. All content will be openly licensed (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0>), and developed by the global community, for the global community. As such, we will also seek to translate the MOOC into multiple non-English languages to make it as accessible as possible.