Special Issue Education for Information

https://www.iospress.nl/journal/education-for-information/

Engaging with Open Science in Learning and Teaching

Technology has impacted almost all aspects of our lives today, and education is no exception. Technology enhanced learning and teaching (TELT) has changed the way universities, in general, and learning and teaching specifically, operate today. The increasing adoption of TELT coupled with emerging philosophies of openness have brought additional opportunities and challenges to learning and teaching around the world. Openness is an overarching concept or philosophy that is characterized by an emphasis on transparency and free, unrestricted access to knowledge and information, as well as collaborative or cooperative management and decision-making rather than a central authority (Peters, 2014).

This new philosophy has encouraged the development of an open culture that is reaching scales never imagined before. Today, many stakeholders in education, such as governments, researchers, educators and students, have engaged in developing open initiatives, including open policies, open content, open education, open source software and so forth. Educators and learners have access to a large volume of open resources. Researchers have also benefited from having access to large volumes of data available in open access repositories all over the world – data that was previously held by only a few, now can reach anyone interested in manipulating them and thus making new discoveries not only in science, medicine, but also in learning and teaching.

One important element of openness is open science, which is the movement to make scientific research, data and dissemination accessible to all levels of an inquiring society, amateur or professional. It encompasses practices such as publishing open research, campaigning for open access, encouraging scientists to practice open notebook science, and generally making it easier to publish and communicate scientific knowledge (Wikipedia, 2018). Although open science is frequently seen as related to research, its philosophical foundations and dilemmas are very similar to other aspects of openness closely associated to learning and teaching, such as open education (Schuwer, 2017). However, recent developments and studies have realised the potential of open science to enhance many aspects of learning and teaching (some examples are Open Data as OER, Study on Open Science, Open access scholarly publications as OER, Open science, open access and open educational resources: Challenges and opportunities, Data in Education, Open Data in Schools. Despite the examples above, the application of open science in learning and teaching is still very limited. In addition, most of the work conducted in open science is focused on data, infrastructure and publications rather than practices. This the main rational for this call for contributions to a Special Issue on **Engaging with Open Science in Learning and Teaching**.

In this Special Issue we call for contributions that explore and discuss the impact of open science on learning and teaching, including new pedagogical approaches, strategies and policies, capacity building, and what opportunities and challenges it brings for educators, students and learning

institutions. We invite papers from the Information and Communication Disciplines (ICD)[1] and beyond, from diverse educational systems, including higher education, schools and technical vocational education and training (TVET). Submissions will be double-blind peer reviewed and can include literature discussion and analysis, conceptual and empirical papers, case studies, quantitative and qualitative research, related to the following topics.

Topics include, but are not restricted to:

- Philosophical and theoretical approaches to openness and open science in teaching and learning
- Students' perspectives on and students' roles in open science
- Ethics and practicalities of open science in educational systems, including higher education, schools and TVET
- Examples of implementation of open science in learning and teaching within ICD disciplines, and beyond.
- The impact of openness and/or open science in curriculum design and development
- Policies and the politics of open science in education
- Open science and the scholarship of learning and teaching
- Assessing learning supported by openness and open science
- Perspectives and theories on student learning through open science
- Capacity building for open science in education

The special issue will be free of charge. It is co-edited by Tamara Heck (Information Centre for Education, DIPF Frankfurt – German Institute for International Educational Research) and Carina Bossu (Tasmanian Institute of Learning and Teaching, University of Tasmania).
Questions, comments and inquiries can be directed to either heck@dipf.de or carina.bossu@utas.edu.au.

Style guidelines for Education for Information are available here:
http://www.iospress.nl/journal/education-for-information/?tab=submission-of-manuscripts

Submissions are due **Dec 15th** 2018. They can be submitted via the journal's submission system: https://mstracker.com/submit1_dev.php?jc2=efi&SubmitType=N. Please **state** in the cover letter that your submission is a contribution to the Special Issue on **Engaging with Open Science in Learning and Teaching.** Submissions will be double-blind peer-reviewed.

Founded in 1983, *Education for information (EFI*) is a quarterly refereed academic journal publishing research articles on issues related to the teaching and learning of information scientists and professionals for an information society. EFI welcomes a broad perspective on issues related to pedagogy and learning in the information and communication disciplines (ICD) such as Library and Information Science, Communication and Media studies, Journalism, Archival studies, Museum studies, Psychology, Cognitive science and Digital Humanities.

[1] Information and Communication Disciplines include Library and Information Science, Communication and Media studies, Journalism, Archival studies, Museum studies, Psychology, Cognitive science and Digital Humanities.