Challenges for developing Open Science Policy: Gap and Diversity to Transform Science

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Open Science is a current important issue for policy makers which is expected to lead a new knowledge basis for innovation by transforming science. Currently policies are aiming to share research outputs focusing on research article and data as much as possible to advance Science, to recognize contributors more precisely, and to make social impacts more efficiently. In addition, one of the extreme goals of Open Science policy is fostering a new culture for researchers based on digital native infrastructure, which needs social change by researchers themselves. For that goal, some gaps have been already observed in the transition state of transforming science. Gaps are classed as 1) a gap of research area, 2) a gap of researchers' attitude, 3) a gap among stakeholders (between researchers and librarians), and 4) a gap between incremental and discontinuous methods for the future of publishing and sharing. Those gaps heavily affect to setting and implementation of open science policy, such as data policy development, data management, and defining asset of research data to manage, share and preserve. Perusing a digital native media for publication or even intending a whole digital research platform from getting ideas to make research outputs public, Open Science policy should be designed with multivariable decisions observing ICT advancement and industry development, generation transfer of researchers, changes of research evaluation, and acceptance of changes by researchers. Then it is reasonable to think that current stakeholders must analyze core-competence as meta-level with recognition of social changes. It is to transform its function, not its organization itself, to digital native paradigm developing a new framework of stakeholder, which mitigate gap significantly.

Keywords: Open Science, Transition gap, Social Change, Reframing Stakeholders

