Tor Vergata's Roadmap to Open Science

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"Open Data – Open Access: new frontiers for Archives and Digital Platforms dedicated to the Performing Arts"

Roma, Palazzo Massimo alle Terme, 6 giugno 2019

Tor Vergata aims at playing an active role in promoting Open Science

The **Openness** furthers the advancement of knowledge, increases its social impact by making the relationship between science and society stronger, fosters growth and innovation, and makes easier employability.

We are all experiencing Open Science as a complex and multidimensional process of transition that will take years to be effective.

The University intends to develop a realistic and affordable plan to better address changes of such great relevance
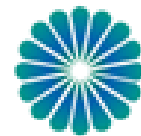
Tor Vergata's background

- In 2004 embraced Open Access principles signed *the Messina Declaration* adhering to *the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*
In order to implement the OA principles Tor Vergata chose to support the green road by creating the *Tor Vergata Open Archive* (DSpace) according to the international standard of reference, managed by the Library System
  - ➢ *focused on PhD Dissertations*

- From 2007 to 2013 TorVergata has been actively engaged in the CRUI OAWG to support implementation of OA in italian universities. Activities concentrated on the drafting of Guidelines and Recommendations, then adopted by several universities.

- In 2014 *The Open Archive* changed its focus: the University in order to create its own Research Registry adopted a new CRIS (by CINECA), fully integrated with DSpace, Open AIRE and CERiF compliant. The data are used for the assessment of research units, and evaluation campaigns within University
  - ➢ *Tor Vergata Research Archive – ART includes almost 66.000 publications of which 13% in OA*
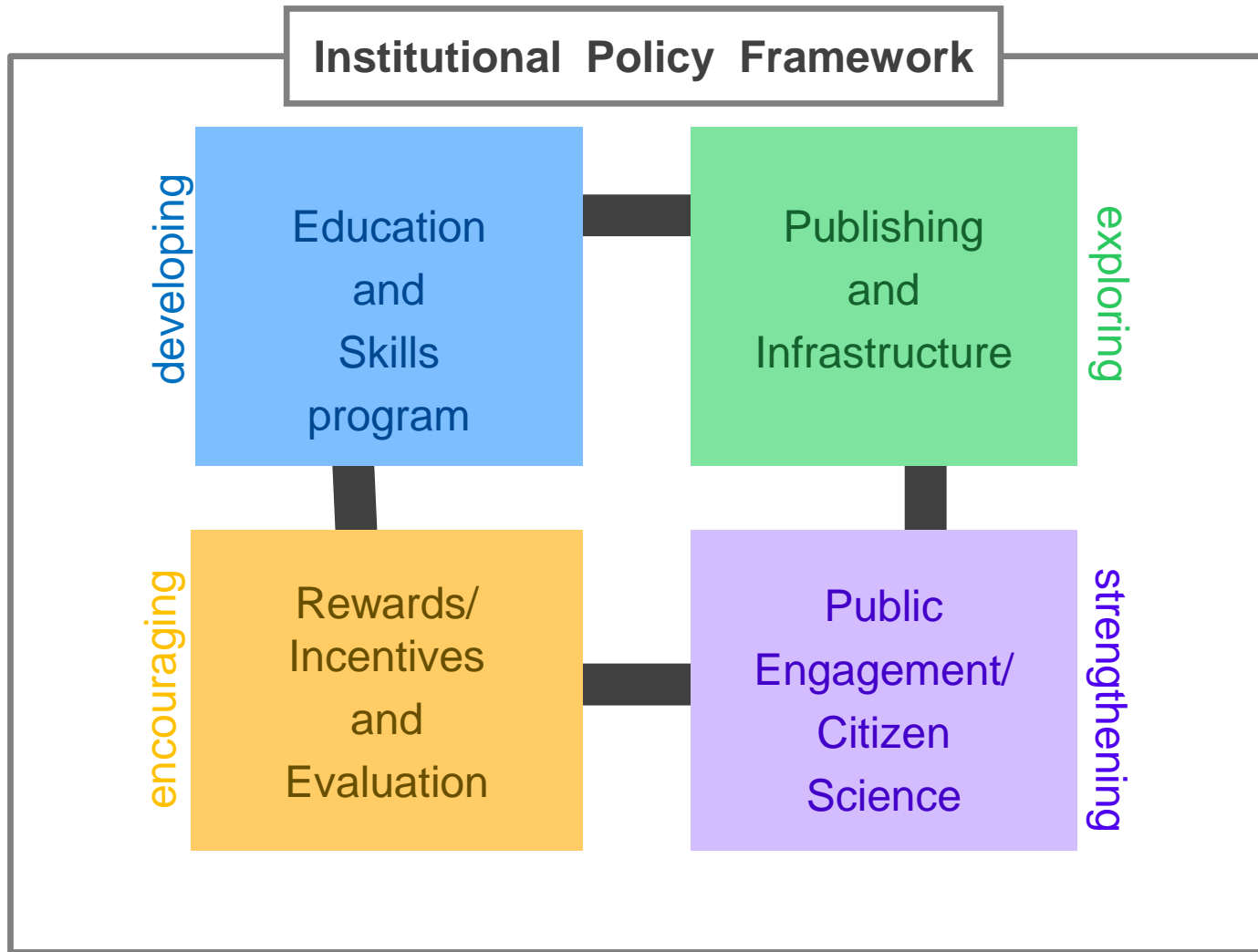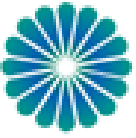 - ➢ *currently high majority of italian univerisities (70) have adopted* IRIS
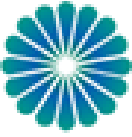
2018: Tor Vergata got on board YERUN OSWG!

※ Being part of YERUN represents the opportunity for Tor Vergata to design an extensive approach to open scholarship

※ The University has recently established an **internal working group on OA/OS** to develop **a Roadmap based on our own specificities, on the italian context and on the framework of YERUN/Europe**

※ Tor Vergata Working Group includes people by the System Library (3), the International Research units (2), the IT services (1), together with (14) and Researchers PhD students (3) representing all disciplinary areas of our academic community

The Roadmap pillar

Institutional Policy Framework

developing

exploring

Education and Skills program

Publishing and Infrastructure

encouraging

strengthening

Rewards/ Incentives and Evaluation

Public Engagement/ Citizen Science
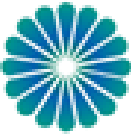
Institutional policy framework

- Institutional policy on full OA publications (by 2020?) and research data (underlying data) resulting from publically funded research
  - ➢ also including internal incentives and a reward system - *motivators of will*!

- Draw up a Code of Conduct for Research Integrity (RRI) that makes reference to OS practices and values, based on the principles suggest in the ALLEA Code for RI - reliability, honesty, transparency, full unbiased way…RI in the whole research cycle
  - ➢ full trust in science!
  - ➢ relevant in the current context of data intensive research (reproducibiliy)

- Inclusion of OS dimension in the University Strategic Plan. Reference areas
  - ➢ Research, Education (OS should become an indicator in the Quality Assurance System)
  - ➢ 3rd Mission / Public Engagement / UN SDGs : enhance actions for social, cultural and economic development
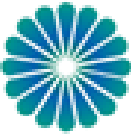
- Make OS Literacy obligatory for PhD students programs

* **Advocacy programme** on benefits of OA/OS approach along its various dimension, tailored on a variety of audience (teachers, staff, PHD…) aimed at **promoting OS culture**, **with a special focus on Early Career Researchers**.

  - ✓ seminars in all departments
  - ✓ F2F meetings
  - ✓ workshop and conference
  - ✓ brief videos and tutorials
  - ✓ experiences by way of a game
  - ✓ LibraryOpenLab… but also BiOpenLab, LawOpenLab.…

* **Specific training** course to develop skills **share&re-use,** with regard to scholarly publishing and research data mangement from basic skills (i.e. how to retain copyright, how to publish with CC licenses,how to submit a contribution to the IR), to the ones needed to implement research data curation and management (i.e. how to draft a DMP required by all European research projects)

  - ✓ Tor Vergata International Research Unit, together with Elena Giglia, UniTO, is translating the eLearning course on «Research Data Management» developed by the Danish Universities within the framework of the Danish National Forum for Data Management

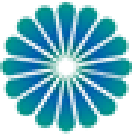# OS skills in the Study courses (pilots)

Starting with the next academic year **two new experimental projects** will be started in our undergraduate and graduate courses of study:

* the first is scheduled as part of the extra activities in the **MSc** in ***Business Administration***: a 24 hour – 3 credits introductory course on Open Science and Open Access, with compulsory attendance

* the second concerns the BA in ***Economic and Finance***. **The short bachelor thesis will be substituted** by a final paper where the student describes his **documentary work** in his chosen topic. The report, supported by the librarians, will be **focused on the use of reliable Open Access resources.**
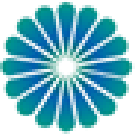
Using language across disciplines

> ## *" Why should we go beyond the impact factor? "*

To this question, posed to librarians by one of our PhD students in economics, I've tried to answer using a language with which he is supposed to be particularily familiar:

Moving from a quantitative-bibliometrical measurement of research output to a qualitative-substantial assessment is similar to moving from the standard 'commercial' measurement of economic development in terms of *Gross Domestic Product (*GDP*)* to the more qualitative-substantial measurement in terms of the *Human development index (*HDI*).* When more people get sick, or more crimes are being committed, GdP increases because more is spent on drugs and security, but actual social welfare decreases.

Adapting the title of a recent lecture by Paul Fitoussi, 'Mis-measurement of our lives', we could say of the present bibliometrical indicators of research performance that they can be a 'Mis-measurement of our research advances'.

"The prevalence of 'fake news' and society's distrust of expert opinion underlines the need for universities to make themselves even more open and relevant to Society "

(*Open Science and its role in universities: a roadmap for cultural change*, LERU 2018)

Public engagement: BiblioVerifica Blog

BIBLIVerifica — TOR VERGATA UNIVERSITÀ DEGLI STUDI DI ROMA — Biblioteca Vilfredo Pareto

@IFLA INFO VERIFICHE FONTI STRUMENTI STRATEGIE EVENTI BLOG BIBLIOVOLONTARI TUTORIAL QUORA MEETUP

BIBLIOGRAFIA DICONO SLIDE FAQ TUTOR REDAZIONE ACCEDI

The BiblioVerifica blog is an attempt by librarians **to fight misinformation** by using media and data literacy, **engaging citizens** as awareness users of the social networks, chats and blogs.

BiblioVerifica aims to be a **public engagement project to support public understanding of science,** based on MIL practices, implementing tips and tricks about search tools, reliable sources, verification strategies. This initiative **promotes factchecking based on open resources as data, journals, and tools**.

HOW TO SPOT #FAKENEWS @IFLA

RICONOSCERE LE FALSE NOTIZIE

CONSIDERA LA FONTE
Clicca al di fuori della storia e indaga sul sito, i suoi scopi e le info di contatto.

APPROFONDISCI
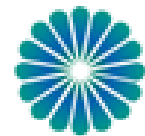I titoli possono venire esagerati per attrarre click. Qual è la vera storia?

VERIFICA L'AUTORE
Fai una breve ricerca sull'autore. È plausibile? È reale?

FONTI A SUPPORTO?
Clicca su quei link. Determina se l'informazione data sostiene davvero la storia.

VERIFICA LA DATA
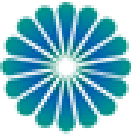Le notizie vecchie ri-postate non sono per forza rilevanti per l'attualità.

E' UNO SCHERZO?
Se è troppo stravagante potrebbe trattarsi di satira. Fai una ricerca sul sito e sull'autore.

11

Publishing and infrastructures

from «publish or perish» to «knowledge sharing»

- Exploring new ways of publishing

  - Gold road (DOAJ - No hybrid OA)

  - E-publishing platform. Set up Tor Vergata OA publishing platform (OJS).
    - Include original publications - journals and book series published by the Departments

- Including OA principles in negotiations with commercial academic publishers, in primis for Tor Vergata publications (priority legal framework)

- Costs analysis on subscriptions and publishing on traditional journals, with special focus on Article Processing Charges (APCs)
  - survey on how many articles Tor Vergata produces yearly, how much Tor Vergata spend on publishing - double dipping…

- Tor Vergata institutional repositories '2.0': more research-centric, more functionalities, more levels of interoperability

- Open Data repository – pilot with Dataverse (?)
  - making research data '*as open as possible, as closed as necessary*' in line with FAIR principles for research data management
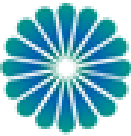
Under discussion

Changing rewards system and assessment evaluation in the scholarship

- Integrating OS in the HR career in recruitment, performance evaluation, so that researchers are properly recognized and rewarded for practicing OA/OS

- The internal research assessment should consider
  - ➤ value and impact of all research outputs (including datasets and software) in addition to research publications
  - ➤ a range of impact measures including qualitative indicators (next generation of metrics/open peer review) of research impact (not just JIF, SNIP,) such as influence on policy and practice.
    New measurement could counteract the dominant position of commercial academic publisher, also weakening the adaptive behavior of researches.

Critical aspects and opportunities!

These main critical issues take us back to the Italian context

Italy is lagging behind the majority of European countries (and even outside Europe) on OA/OS

- The **mechanism of evaluation** system based on bibliometrics indicators
- The **braking effects of the current copyright** law with strong restrictions to access and use of publications
- The **combined effect** of our legal framework together with evaluation research system chain our researchers and institutions to local and global publishing oligopoliy

GOOD NEWS:
- MIUR has recently established a Committee for designing an OS National Plan
- Senate is discussing a "new" copyright legislation pertaining OA to publications and data publicly funded research
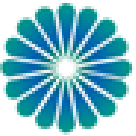
We are aware that in order to successfully become an "**Open Science" university** we need:

✹ **Dialogue**: we can't be alone on this journey. We have to cooperate with the Italian academic system, Yerun network and the European institutions, also participating in projects funded on the subject

✹ **Resources**: we need to allocate funds to the Open Science in the University budget and we have to look for EU funded project on this area

✹ **People**: we have to acquire/develop new professionals in the university, with expertise on data management (data steward), also in view of Italy's participation in EOSC

✹ **Involvement**: we need to develop a bottom-up approach, focusing on the training of doctoral students and young researchers, who represent the future of research

Thank you very much!

By Anton Khrupin

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