

OPEN ACCESS TO INFORMATION SOURCES, SUSTAINABLE SCIENTIFIC DEVELOPMENT

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Abstract: *This paper aims to treat the sensitive subject of open access to academic information sources, from the perspective of the concept of sustainable development. In this sense, the paper will briefly present some points of view regarding open access to academic information sources, definitions of open access and what free source or open source means. Defining the objectives of sustainable development as well as the role of universities in the context of the current world is essential in order to form the correct opinion among the beneficiaries of academic information sources. The objectives of Angeda 2030 for sustainable development and their application to the academic world will be defined and solutions will be proposed for general access to academic information, without costs or risks of intellectual property infringement. We all know that in creating a research content, the main challenge is to document yourself, without the risk of violating intellectual property and its principles. Last but not least, the work will also offer some recommendations regarding the methods of verifying the veracity of the sources as well as the authenticity of the information.*

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JEL classification: M12, M15, M38

Introduction

In a world that seems to have all possible resources but in which access to these resources is increasingly restricted by regulations regarding the protection of intellectual property, the role of universities in mediating access to sources becomes essential. Universities are the ones who understand and have the ability to properly manage access to information for research, but also those who can guarantee the quality of the sources and the veracity of the information. Because another problem of information from open sources is, of course, that of authenticity and correctness.

Thus, assuming the role of public educator, universities will be increasingly motivated to reach the general public through archives and open access academic journals, thus reconnecting directly with community members and ensuring the future of learning.

The current convergence among various open approaches to intellectual property represents a common commitment to a larger public sphere. These approaches extend well beyond the university and yet it remains the primary institutional force in sustaining this open economy. Still, its commitment to this openness has come into question, with talk of campus commercialization of knowledge. You can hear the ambiguity (if not temptation) around these issues, if you listen closely, in the recent words of Lee C. Bollinger, President of Columbia University and a First Amendment scholar: "We are now at a new period where universities are re-entering the world. If we don't understand issues like poverty, modern communications and how the world looks from Nairobi and Bombay [Mumbai], we will not serve the world"¹

The first and most important role of universities is to draw the framework of open sources correctly and to define their access limits concretely and precisely.

1. What is the context? What is an open source?

A publication is defined 'open access' when there are no financial, legal or technical barriers to accessing it - that is to say when anyone can read, download, copy, distribute, print, search for and search within the information, or use it in education or in any other way within the legal agreements.

¹ Andrew Abbott, 2002. "The disciplines and the future," In: Steven Brint (editor). The future of the city of intellect: The changing American university. Stanford, Calif.: Stanford University Press, pp. 205–230.

Open access is a publishing model for scholarly communication that makes research information available to readers at no costs, as opposed to the traditional subscription model in which readers have access to scholarly information by paying a subscription (usually via libraries).

The main regulation that lead the protection of intellectual rights but also one of the obstacles that actually stand in the way of the free diffusion of technologies is constituted by the rules protecting intellectual property rights (Intellectual Property Rights, IPR).

Intellectual property rights are customarily divided into two main areas:

(1) Copyright and rights related to copyright

The rights of authors of literary and artistic works (such as books and other writings, musical compositions, paintings, sculpture, computer programs and films) are protected by copyright, for a minimum period of 50 years after the death of the author.

Also protected through copyright and related (sometimes referred to as “neighbouring”) rights are the rights of performers (e.g. actors, singers and musicians), producers of phonograms (sound recordings) and broadcasting organizations. The main social purpose of protection of copyright and related rights is to encourage and reward creative work.

(2) Industrial property

Industrial property can usefully be divided into two main areas:

One area can be characterized as the protection of distinctive signs, in particular trademarks (which distinguish the goods or services of one undertaking from those of other undertakings) and geographical indications (which identify a good as originating in a place where a given characteristic of the good is essentially attributable to its geographical origin).

Copyright and industrial property, however, presuppose intellectual property rights, which are rigidly regulated and which limit the access of interested parties to information sources.

In order to meet the problems related to the limitation of access to free information, the European Union has developed various rules to facilitate access, at least in the online space. An example of excellence in this sense is the declaration from Berlin, from 2003, which provides for free access to academic information in the virtual space, and wich declare that:

„The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the

Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access.

We, the undersigned, feel obliged to address the challenges of the Internet as an emerging functional medium for distributing knowledge. Obviously, these developments will be able to significantly modify the nature of scientific publishing as well as the existing system of quality assurance.

In accordance with the spirit of the Declaration of the Budapest Open Access Initiative, the ECHO Charter and the Bethesda Statement on Open Access Publishing, we have drafted the Berlin Declaration to promote the Internet as a functional instrument for a global scientific knowledge base and human reflection and to specify measures which research policy makers, research institutions, funding agencies, libraries, archives and museums need to consider.”²

However, today's society also faces another problem, in its generous approach to use intellectual heritage for the purpose of saving: the unequal access to information sources and the impossibility of the real beneficiaries to access the fundamental information to save themselves.

Hence the idea of lack of sustainability that derives from:

1. the difference between the high level reached by many technologies
2. the fact that most of them are simply not accessible to the majority of people³

Table 1: Historically prominent inequality-generating resources

* Coercive means, including weapons, jails, and organized specialists in violence;
* Labour, especially skilled and/or effectively coordinated labour;
* Land, including natural resources located in and upon it;
* Commitment-maintaining institutions such as religious sects, kinship systems, patron-client networks, and trade diasporas;
* Machines, especially machines that convert raw materials, produce goods or services, and transport persons, goods, services, or information;
* Financial capital—transferable and fungible means of acquiring property rights;
* Information, especially information that facilitates profitable, safe, or coordinated action;
* Media that disseminate such information;
* Scientific-technical knowledge, especially knowledge that facilitates intervention—for good or evil—in human welfare.

Source: Giorgio F. Signorini Open Access, Open Science per una scienza sostenibile

² Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities

³ [Tilly, 2007]”Unequal Access to Scientific Knowledge”

One of the obstacles that actually stand in the way of the free diffusion of technologies consists of the rules protecting property rights intellectual property rights (IPR). In particular:

- copyright, regarding access to knowledge
- patents, regarding the use of innovative technologies

Figure 1: Intellectual Property Rights (IPR)

This waste of human life could be prevented by known (to humanity as a whole) technologies, many of which are simply not available to those that need it. Availability is restricted by both the cost of access (such as pay-to-view articles on renewable electricity generation under copyright by the IEEE)² and by companies wielding patent law to maximize profit at the cost of human lives (e.g. restricting the sale of antiretroviral drugs to treat HIV in Africa)

[Pearce, 2012]

Source: Joshua M Pearce. The case for open source appropriate technology. Environment, Development and Sustainability, 14(3):425–431, 2012.

2. THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

Fortunately, however, the European Union has devised a plan for sustainable development, providing within the 2030 Agenda for Sustainable Development, precise objectives regarding general access to essential information.

In order to support the implementation of the Sustainable Development Goals, assumed in the Agenda 2030, it was implemented the HESI Partner Programme, which involves the role of academic and university world in our sustainable future.

For the implementation of the Sustainable Development Goals (SDGs) to have the greatest impact, they have to be interwoven and mainstreamed into national policies, plans and strategies. This notion also applies to programmes, curricula, and strategies of Higher education institutions (HEIs), which act as hubs for innovation and critical thinking, nurturing each generation of leaders, policy makers, entrepreneurs, scientists, researchers, and educators. HEIs also play a crucial role in fostering better understanding about the SDGs and their interconnectedness; all key elements of making progress towards implementing the 2030 Agenda for Sustainable Development.

Launched in 2022, the HESI Partner Programme (HPP) initiative aims to connect higher education institutions, networks, and student organizations,

fostering a community of shared learning in support of integrating the SDGs into curricula, research programs, and campus practices. Its purpose is to facilitate the transfer of knowledge and draw from the diverse expertise and experiences of individuals working in various circumstances, believing that everyone has something valuable to offer in the process of SDG integration, regardless of their stage in doing so.

The initiative began by conducting a mapping of expertise and needs analysis within the higher education community regarding the integration of the SDGs through an open online application process. This was completed in early 2023, resulting in 59 members joining the programme, representing 32 countries from all regions. The needs depicted in the applications helped identify three priority areas: 1) curricula 2) research, development, and innovation and 3) student and campus action.

On 18 April 2023, a Curricula Workshop was conducted, featuring a presentation on good practices by Rollins College. Participants were then divided into small groups for "speed partnering," allowing them to meet with other members and establish networking connections to lay the groundwork for future partnerships. The initiative plans to host additional curricula workshops and workshops for the remaining focus groups throughout 2023, both in-person and virtual as resources allow.

To further strengthen relationships and knowledge sharing, the initiative will continue to foster deeper collaboration among higher education institutions to advance SDG integration.

Conclusion

There is a legal framework that protects our work and supports us in our daily activity.

This legal framework can prevent the free dissemination of information, but we have at our disposal "tools" with the help of which we can open free access to information.

The sustainable development strategy imposes responsibility and involvement and ensures free access to the immense knowledge heritage that humanity has stored online, in safe conditions and economic profitability.

There are three principles on which the functionality of free information in the scientific world is based:

1. collaboration
2. sharing of resources and results between contractually/geographically/creativity
3. incentive to follow their own inclinations and needs; and projects
4. modularity the production of specialized instruments is combinable between them

The application of the three principles produces important advantages:

- a) efficiency
- b) avoid "reinventing the wheel" several times
- c) quality
- d) flexibility
- e) assistance
- f) low costs
- g) avoid forced loyalty ("vendor lock-in")

Last but not least, for a sustainable development of the scientific world, responsibility and involvement are needed. The information freely disseminated and received must be verified and certified, so that the resources made available for free circulation are part of a real patrimony of knowledge and do not constitute a simple transfer of data.

To verify information online, the article or information must always answer three questions:

1. Who, references about the author, name, academic references
2. When it was posted, the validity of the information, data about the publication of the article and the collection of data used in the elaboration of the article
3. type of article, personal opinion or proven facts supported by official information. Documented articles must contain a bibliography, which thus becomes an operational and useful tool and not a "chore".

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