## EDITORIAL – FROM CHALLENGES TO ACHIEVEMENTS IN SCIENCE COMMUNICATION AND SCIENCE OUTREACH

### EDITORIAL – DOS DESAFIOS À BUSCA DE CONQUISTAS NA COMUNICAÇÃO CIENTÍFICA E NA DIVULGAÇÃO DA CIÊNCIA

# EDITORIAL – DE LOS RETOS A LA BÚSQUEDA DE LOGROS EN LA COMUNICACIÓN CIENTÍFICA Y LA DIVULGACIÓN DE LA CIENCIA

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Scientific communication and dissemination, in this technological age, with the primacy given to the internet, represents the dissemination of information and knowledge, being a symbology for the processing of scientific data, since the data itself is not enough, being necessary the implementation of communication processes (SANTOS CRUZ, 2020, p. 59, our translation).

In a world of transformations and accelerated experience by digital communications, science also sees itself in a situation of renewal and adaptation to new digital social media. The great technological expansion experienced in recent decades and the consolidation of Technologies and Information and Communication (ICT), as a means of disseminating information and knowledge, scientific or not, allowed an unprecedented approximation to take place both between the academic community itself and between this community and a non-specialized audience, modifying not only the form of knowledge presentation, but also its dynamism and the constancy of its modifications, increasingly reducing the construction strategies of hard-to-review solid knowledge, in favor of knowledge more liquid, more

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malleable and subject to being constantly seen and revised through the immediacy made possible by virtual communication (VALÉRIO; PINHEIRO, 2008; SANTOS CRUZ, 2020).

In this digital world, academic journals gain more and more relevance, constituting a manifestation of great efficiency of this principle of constant changes and updates advocated by the Digital Era. But these journals still face challenges on how to adapt to this new mode of scientific dissemination, not only in terms of dynamism, but in matters of their own management, demanding the construction of a specialized team capable of taking on the demands of a continuous editorial work, almost uninterrupted, granting the possibility of following the great productive and communicative dynamism that exists, in this sense, editorial management and knowledge management strategies become constant challenges.

In addition to dealing with the challenges of how to manage journals, the editorial staff and the information and knowledge that will be disseminated and socialized through continuous publications, it is also necessary, for an efficient dissemination, to be aware of the impact indicators, which can be understood as factors that contribute to the qualification of journals and, consequently, validation of the data published in them (SANTOS CRUZ, 2020). Thus, in an era of great influx of information and knowledge, the qualification of the journals responsible for this dissemination also becomes a relevant factor that must be observed, as the search for visibility of what is published is of great importance for the consolidation of a means of scientific dissemination today. With this, the development of scientific dissemination strategies that focus on an online presence, seeking greater visibility for journals, become frequent among editors of scientific journals (SANTILLÁNALDANA, 2018 apud SANTOS CRUZ, 2020, p. 65-66).

Therefore, when considering scientific dissemination through the use of high-speed technological resources, so that knowledge is accessible to both the specialized and lay public, it is also necessary to consider the speed at which transformations occur in the very process by which information are measured, considering that the advance can be faster than the capacity to completely adapt, on the part of journals, editorial teams and even generators of scientific knowledge, to the times before a new demand and capacity for transformations is consolidated. In the internet age, data that could, a few years ago, be measured in mega or gigabytes, can be transformed into petabytes and so on, posing new challenges for this disclosure to occur efficiently (SANTOS CRUZ, 2020).

In addition to these demands on agility and fluidity arising from the reality experienced today, for the process of disseminating scientific information, it is necessary the existence of a validation of the knowledge disseminated, this work is done by a team responsible for editing

the journals, something that is done by indexing journals in reliable databases, in addition to being subject to an evaluation system (Qualis, h-index, etc.).

Even with all the challenges imposed by the new reality that is experienced and changes every day, journals have become the most used form of scientific dissemination. In this role, they also stand out in facing a reality that, in addition to the challenges posed by issues of management and technological adequacy, has imposed a situation of social isolation that determined the suspension of on-site work in universities and schools around the world, caused by new coronavirus pandemic.

In a situation such as that generated by Covid-19, online scientific dissemination, especially through periodicals, is an efficient instrument, capable of helping to face the isolation and prohibition of face-to-face activities in universities, something that in past moments could have meant a major obstacle to scientific production, it was seen as a challenge to be overcome and not an almost insurmountable barrier. Based on the possibility of remote access and the presence of the internet, both researchers and editorial teams kept the work of disseminating scientific knowledge flowing and enabling communication, almost in real time, between the various places in the world that studied as fight the spread of the pandemic.

Faced with a health crisis of global proportions, the adequacy of scientific dissemination and communication to the molds of the digital society proved to be efficient in maintaining the principles of knowledge generation, showing that despite the various challenges faced by journals, they have the ability to follow the society and adapt to new and more malleable ways of reviewing and disseminating scientific knowledge, enabling them to face difficult and unforeseen situations more efficiently, further valuing the work of researchers and editorial teams who are both in the spotlight and behind the scenes of scientific production in this century.

Despite having already shown the conditions and capacity to overcome the challenges that present themselves beyond those imposed by the pandemic of covid19, there are still many uncertainties and barriers that need to be overcome, so that scientific dissemination takes place in an honest, accessible and efficient way, since one of the counterpoints that can be indicated about open access to scientific information and information in general is the ability to generate unreliable, even false, information, such as fake news. Something that, in principle, might seem insignificant has proved capable of contesting information and scientific knowledge validated over centuries, such as the effectiveness and importance of vaccination.

At a time that has the greatest reach and dynamism in the dissemination of scientific knowledge - understood as knowledge that is distinguished by having a high degree of certainty

and which is validated by theories, methods and techniques that can be verified and approved by others researchers (CHIBENI, 2020 *apud* SOUZA CRUZ, 2020, p. 47) -, it is also possible to observe a greater questioning of this type of knowledge and even a denial of this knowledge as a whole. To what extent should the dissemination of scientific knowledge be concerned with the accessibility of that knowledge by the lay public in the "democratized" online environment? (NAVAS *et al.* 2020). Challenges, questions, answers, adaptations and work are faced by researchers and editorial teams in adapting this fluidity that questions modern times, while access to knowledge expands by the thematic breadth with which the subject is dealt with and becomes complex, with great speed, by the necessary requirement of logic and meaning in a universe of great existential diversity.

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