



# Routes for the dissemination of Geosciences under the new vision of the post-pandemic society

## Presentation

Throughout 2021 we were focused on selecting and editing the 56 papers that compose the volume 17 of *Terræ Didática*, with the hope that one day there will be greater control over the Covid-19 pandemic and its terrible effects, but it is worth mention that the challenge of fighting against the virus will still demand efforts of researchers, authorities and the population. The magazine's pages were permeated by research results on the effects of the pandemic for geoscientific education, as well as for science dissemination, with an emphasis on innovative proposals that reveal the potential contribution of Earth Sciences to the collective effort to face the catastrophe. We've gathered examples along the year, as well as experimental results and remarkable evidence, that "human societies need to relearn how to relate to nature" (Presentation by *Terræ Didática*, 2021). No one can think about the development and well-being of a society without establishing direct links with the role that science plays there.

Strictly speaking, we can say that science, by means of its research methods and theories, acts on society in two distinct spheres: as a productive force (technological invention and work organization) and as a source of ideas (cultural sphere) (Lima, 1999).

Seeds of innovation are planted when a researcher-educator contextualizes aspects of the local reality in order to work with his students on controversial issues about the relationship between human societies and nature. Before starting work in the classroom, however, it is necessary to broaden and reformulate points of view to problematize themes about the complex and intricate web-of-life on Earth. Each educator needs to train and deepen knowledge about environmental dynamics. The themes of Geoethics and Geoconservation inspire uninterrupted research, while case studies are accumulated on significant problems of environmental degradation that can be better understood based on the elementary – and extremely unequal – difficulties experienced by the communities.

These are not new issues; these are themes that have been studied and debated for a long time. However, after the critical event of the pandemic, concepts related to the Earth's dynamics and the impacts of human interference in natural processes will emerge into the surface and may show that the current model of society is no longer effective; on the contrary, it is fragile and aggressive to terrestrial environments and ecosystems. Small good changes may come, and education will play an important role in changing paradigms.

## Vaccines

Decades of government action in the field of hygiene and public health and research in the field of Health Sciences have laid the foundations for modern vaccination campaigns, but these only happened thanks to investment in research and the accelerated development of new vaccines against Covid-19, in Brazil and abroad. The combination of mass vaccination with sanitary and social control measures allowed the negative consequences of the pandemic to be vigorously contained.

Vaccines, developed in record time, together with their remarkable degree of efficiency, are the most relevant fact in nearly two years of the pandemic, which directs human societies towards a new world, in addition to showing the existence of an enormous potential for resilience and survival. In certain media outlets, but especially on the internet, however, "fake news" continue to appear, incorporating absurd theses, beliefs, conspiracy theories and outright lies, despite the barriers that have been raised against this type of criminal action. One of the plausible effects is the attempt to sow fear and discredit science and scientists. It is unfortunate, but in 2022 the false news will continue to be present, like a ghost.

## Commodity Price Fluctuations

A recurrent theme in 2021 is related to the issue of inflationary effects, in the domestic market, of the continuous rise in international prices of fuels and petroleum products. In a country endowed

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with strategic oil and gas reserves, in addition to a vast distribution network and enormous refining capacity, the continuous rise in prices has left most of the population perplexed, demanding more effective action from the control bodies. The issue is, however, much more complex, as pointed out by Ladislau Dowbor (2017), when recording the inexistence of rules or market mechanisms capable of controlling the circulation of products that make up the ‘blood’ of the economy: food, minerals and energy. The author recalls that there is no planning system capable of thinking and solving “the problems of resource depletion or environmental impacts”, to the exact extent that formal regulation laws, agreements and similar measures do not interfere in a world market, because “there is no world government. Individual countries cannot face the process” (Dowbor, 2017, p. 101):

The view we have, largely the result of uninformed or interested commentary in the economic press, is that commodity price fluctuations result from variations in supply and demand. In other words, market mechanisms. In reality, one cannot imagine that a commodity with such broad and balanced levels of production and consumption as oil would vary between 17 and 148 dollars a barrel in a few years, when it is always the same 95-100 million barrels a day, with minimal variations. It is a trade that deals with goods that are vital to the world economy, but whose prices and flows essentially result from mechanisms of economic speculation and political power (Dowbor, 2017, p. 101). (...) Schneyer’s study [2013] quotes Chris Hinde, editor of the London Mining Journal: “Most of the world’s commodity buyers are price takers. The biggest trading companies are price makers. This puts them in a tremendous position [of power]” (Dowbor, 2017, p. 101).

## Ghosts of an Old World: Barriers in Education

In Brazil, as if the aforementioned problems were not enough, the disastrous events in relation to the environment and the disastrous decisions by the federal government in the field of health – with hundreds of thousands of deaths registered –, harmful decisions were also registered in the field of education. The *Public Notice 05-2021*, released on September 24, 2021 by the National Forum of Research and Graduate Deans (Foprop, 2021), highlights a concern about the process of evalua-

ting the national graduate system. The organization points out that a very dynamic, “robust, efficient and transparent” National Postgraduate System (SNPG) has been built in Brazil, in addition to being internationally recognized.

Attentive, the scientific community is following with concern the developments of initiatives that seek to hamper and restrict the postgraduate assessment process in the current stage (quadrennial 2017-2020), which involves all national postgraduate programs. We hope that the common sense and public spirit of the authorities will prevail and that barriers will be removed as soon as possible.

## Call for papers

*Terræ Didatica* is open to the dissemination of unpublished contributions of excellent quality, in multidisciplinary fields of research and/or educational application, always with a focus on Geosciences. The journal has consolidated itself before the national and international community of Earth Sciences, being chosen by both younger and more experienced researchers to disseminate remarkable results of their research. We hope to surpass the numbers in 2022 and reiterate our confidence in the invaluable value of disseminating good quality Science. In order to properly conduct the continuous flow of manuscripts in an OJS (Open Journal Systems) environment, manuscript authors are requested to consult the submission rules – with due attention to the insertion of metadata for each work in three languages, as stated in the guidelines to authors. It is mandatory for each author to register in the ORCID system, either when entering the first data in the OJS process or reviewing his/her registration data with the journal.

The capacity to process new contributions has expanded, but the response does not always occur at the expected speed. The editors are grateful for the generous cooperation of dozens of highly skilled experts from Brazil and abroad who lead a demanding peer-review system. It is always worth mentioning the important educational role of editorial work with young new authors.

## Useful rules about co-authoring

One issue to be considered critically refers to the authorship of each manuscript. The inclusion of other names as co-authors of a scientific work must evidently respond to the pressure to increase

the numbers of intellectual production (“to publish or perish?”), but to this factor, other interests can sometimes be added. What would be the objective criteria and requirements to define an authentic co-production in the field of Science? Huaillani-Chavez (2019) points out that being a co-author does not only consist in appearing in the list of credits, but in assuming “responsibility for the content of the work or the scientific quality and ethical transparency” of the study. Petroianu (2012) proposes a scoring table, with values between 6 and -5, to measure whether the inclusion of a co-author is relevant or not. The list can also help to establish the order of co-authorship, depending on the weights assigned to each item. The maximum values include “creating the idea that originated the paper and elaborating hypotheses” (6 points), or “structuring the method of work (6 points), descending to the category of simply “presenting smaller suggestions incorporated into the work” (1 point), or even “participate upon specific payment” (-5 points).

## References

*Terræ Didactica* exclusively uses the American Psychological Association bibliographic reference standard (known as APA), one of the most common in high penetration journals. The publication manual is not free (<https://www.apastyle.org/products/4200066>), but there are several websites<sup>1</sup> with detailed instructions.

The link [www.ige.unicamp.br/terraedidactica](http://www.ige.unicamp.br/terraedidactica) has been maintained on the IG-Unicamp Portal, but all visitors to that address will be redirected to the link to the Scientific Electronic Journals Portal (PPEC) of the State University of Campinas:

<https://periodicos.sbu.unicamp.br/ojs/index.php/td>

1 Useful sources:  
 APA Style Blog referencing DOI objects: <https://blog.apastyle.org/apastyle/2017/03/doi-display-guidelines-update-march-2017.html>  
 A Guide to APA Referencing Style: 6th Edition: [student.ucol.ac.nz/library/onlineresources/Documents/APA\\_Guide\\_2017.pdf](http://student.ucol.ac.nz/library/onlineresources/Documents/APA_Guide_2017.pdf).  
 American Psychological Association (APA) Guide Sixth Edition, 2010: <http://www.eiu.edu/edadmin/pdf/9%2027%202010%20American%20Psychological%20Association%20Guide%20Revised.pdf>

## Indexing Sources

There are some portals and services indexing *Terræ Didactica*. Some national and international indexes include the magazine, as well as the respective disseminators:

- EZB – Electronic Journals Library
- Google Scholar
- Latindex
- Portal de Periódicos Eletrônicos Científicos (PPEC-UNICAMP)
- Portal de Periódicos Eletrônicos em Geociências (PPEGeo)
- PKP – Public Knowledge Project
- SciLit

## Dissemination in Catalogs, Virtual Libraries and Metric Indexes

- Catálogo Acervo (Unicamp)
- Catálogo Coletivo Nacional (IBICT)
- Google Scholar – Métrica (Índice H)
- WorldCat (OCLC)

We intend to expand the indexers in order to increase the magazine’s penetration and visibility. Regarding the Qualis/CAPES system, we inform that the magazine’s classification strata are very good. The 2020–2022 trend is to improve them more and more in the magazine’s areas of activity. The general picture is as follows:

### Qualis Strata/CAPES (2013-2016)

Stratum	Evaluation Area
A2	TEACHING
B3	GEOGRAPHY
B4	ENVIRONMENTAL SCIENCES
B4	GEOSCIENCES
B4	INTERDISCIPLINARY

To all who help us and will help to produce each page of the volume 17, we would like to express our thanks. Good reading.

The Editors  
 Campinas, January, 2022.

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## References

- Carneiro, C. D. R., Pereira, S. Y., Gonçalves, P. W., & Ricardi-Branco, F. S. T. (2021). O desafio da divulgação das Geociências em tempos de pandemia e movimentos anti-Ciência. (Apresentação). *Terræ Didática*, 17(Publ. Contínua), e021001. doi: 10.20396/td.v17i00.8663971.
- Dowbor, L. (2017). *A era do capital improdutivo: Por que oito famílias tem mais riqueza do que a metade da população do mundo?* São Paulo: Autonomia Literária. 320p. ISBN: 978-85-69536-11-6. URL: <https://dowbor.org/2017/11/2017-06-l-dowbor-a-era-do-capital-improdutivo-outras-palavras-autonomia-literaria-sao-paulo-2017-316-p-html.html>. Access 19.12.2021.
- Fórum Nacional de Pró-Reitores de Pesquisa e Pós-Graduação (2021). *Nota Pública 05-2021*. Brasília, Foprop. 24.09.2021. URL: [http://www.foprop.org.br/uploads/downloads/2021\\_09\\_24/NOTA-05\\_FOPROP\\_24\\_09\\_2021.pdf](http://www.foprop.org.br/uploads/downloads/2021_09_24/NOTA-05_FOPROP_24_09_2021.pdf). Acesso 23.12.2021.
- Huaillani-Chavez, S. D. R. (2019). Publica o parecerás: éser coautor? Santa Clara: Edumecentro, 11(2). URL: [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S2077-28742019000200192&lang=pt](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2077-28742019000200192&lang=pt). Access 19.12.2021.
- Lima, J. C. V. de. (1999). *Divulgação científica e sociedade*. São Paulo, SP: *Pesquisa FAPESP*, (45), ago/1999. URL: <https://revistapesquisa.fapesp.br/divulgacao-cientifica-e-sociedade/>. Acesso 29.12.2021.
- Petroianu, A. (2012). Critérios para autoria de um trabalho científico. *DST-Jornal brasileiro de doenças sexualmente transmissíveis*, 24(2), 99-103. URL: [http://ole.uff.br/wp-content/uploads/sites/303/2018/02/r24-2-2012-7\\_Criterios-para-Autoria-de-um-Trabalho-Cientifico.pdf](http://ole.uff.br/wp-content/uploads/sites/303/2018/02/r24-2-2012-7_Criterios-para-Autoria-de-um-Trabalho-Cientifico.pdf). Acesso 23.12.2021.
- Schneyer, J. (2013). *Commodity Traders: the Trillion Dollars Club*. URL: <http://dowbor.org/2013/09/joshua-schneyer-corrected-commodity-traders-the-trillion-dollar-club-setembro-201319p.html/> or [www.reuters.com/assets/print?aid=USTRE79R4S320111028](http://www.reuters.com/assets/print?aid=USTRE79R4S320111028).