

Key note Geography Education

Dre. Marianne Milano

University of Teacher Education Vaud



Teaching geography in (higher) education under global changes

Geographical sciences offer a critical and nuanced interpretation of today's global transformations using a variety of tools. The resulting educational perspective goes beyond the mere transmission of factual knowledge about land-use planning and development. It encourages the development of critical spatial thinking and problem-solving among scholars and school students. This presentation will explore three main dimensions that shape geography education today based on geographical research projects and courses conducted in schools and universities.

First, geography is a heuristic and holistic discipline for understanding the complexity of today's world. It bridges natural sciences with social and political sciences to analyze the different scales of a given phenomenon. Studying and mapping controversies, such as the remediation of polluted soil, for example, introduces (school) students to public debates revealing group of actors and power dynamics (Latour, 2007; Simonneaux et al., 2017). It goes beyond a simple "pros and cons" interpretation of today's issues and is a relevant tool for analyzing and understanding complexity (Hertig, 2018; Pache et al. 2016). Geography hence develops analytical skills that foster an active and resilient generation (Fabre and Chauvigné, 2025).

Second, education in geography benefits from being closely linked to territorial realities and ongoing transformations. Spaces in geography are considered as areas shaped by dynamic human interactions, tensions and projects. Reading landscapes and exploring practices highlight these dynamics and supports land-use planning, management and protection (e.g., Milano et al., 2018). This calls for the promotion of teaching methods focused on investigation and field observation (Gavin et al., 2024).

Third, geography relies on the idea of interdependent spaces. Projects on the analysis of hydrological risks highlighted that geographical spaces can be considered as a series of open systems interacting with global dynamics and supported the contribution of systemic approaches to understanding future possible evolutions (Milano & Bédouret, 2025). These are additional tools supporting (school) students' engagement to understanding the complexity of contemporary issues from retrospective and prospective point of views.

Therefore, teaching geography in (higher) education institutions today aims at providing robust conceptual and analytical tools to interpret our changing world (Maurice et Leininger-Frézal, 2024). It aims at developing critical, reflective and situated skills to make global dynamics, their impacts and their uncertainties intelligible to our Students.

Références

- Fabre, M., & Chauvigné, C. (2025). *Vous avez dit écocitoyenneté ? Repères pour une éducation au politique*. Le Bord de l'eau.
- Gavin, A.-S., Pache, A., Milano, M., & Reynard, E. (2024). Élaboration collaborative d'un dispositif d'enseignement sur l'aménagement des cours d'eau en géographie et éducation à la durabilité (Suisse). *VertigO*, 24-1, 1-22. <https://doi.org/10.4000/13a5j>
- Hertig, P. (2018) . Géographie scolaire et pensée de la complexité. *L'Information géographique*, Vol. 82(3), 99-114. <https://doi.org/10.3917/lig.823.0099>.
- Latour, B. (2007). *Reassembling the social: an introduction to Actor-Network-Theory*. Oxford University Press.
- Maurice, J. & Leininger-Frézal, C. (2024) faire de la géographie ce n'est pas qu'apprendre les lieux. Dans Leininger-Frézal, C., & Genevois, S. (dirs), *9 idées reçues sur l'enseignement de la géographie*. (pp. 41-58). Adapt Editions, Paris.
- Milano, M., & Bédouret, D. (2025). Les pratiques universitaires et didactiques de la géographie, un voyage de conserve. Dans L. Gomes & C. Naudet (Éds.), *Unité et diversité des approches empiriques et théoriques des recherches dans les didactiques (histoire, géographie et l'éducation à la citoyenneté)*. HAL Open Science. <http://hdl.handle.net/20.500.12162/8273>
- Milano, M., Reynard, E., Muniz-Miranda, G., & Guerrin, J. (2018). Water Supply Basins of São Paulo Metropolitan Region: Hydro-Climatic Characteristics of the 2013–2015 Water Crisis. *Water* 10(11), Article 1517. <https://doi.org/10.3390/w10111517>
- Pache, A., Curnier, D., Honoré, É. et Hertig, P. (2016). Penser l'avenir de manière créative : un enjeu central de l'éducation en vue du développement durable. *Revue française de pédagogie* 197(4), 51 62. <https://doi.org/10.4000/rfp.5152>.
- Simonneaux, J., Simonneaux, L., Hervé, N., Nédélec, L., Molinatti, G. et al. (2017). Menons l'enquête sur des questions d'Education au Développement Durable dans la perspective des Questions Socialement Vives. *Revue des Hautes écoles pédagogiques et institutions assimilées de Suisse romande et du Tessin*. La problématisation et les démarches d'investigation scientifique dans le contexte d'une éducation en vue d'un développement durable, Vol. 22, 143-160. <https://hal.science/hal-01897074v1>