

Climate Change Education across the Curriculum

TROP ICSU: Trans-disciplinary Research Oriented Pedagogy for Improving Climate Studies and Understanding

(https://tropicsu.org)

Policy Document for TROP ICSU Website and Teaching Resources

The TROP ICSU (https://tropicsu.org) project aims to provide a suite of digital teaching resources that integrate climate studies with curriculum in various disciplines, including Science, Mathematics, Social Sciences, and Humanities.

These resources can be used by teachers at high school and undergraduate levels across the world to not only enhance the conceptual understanding of a topic in a discipline, but also improve awareness and understanding of climate change while helping students develop necessary skills for climate change adaptation and mitigation.

To achieve this objective, we

- collate and curate existing digital, ICT-based teaching tools (models/simulators, visualizations, classroom/laboratory activities, games, online reading material, e-learning courses, etc.) to teach a topic in a discipline by using a climate-related example, activity, or case study
- create some new digital tools (such as video lectures and micro-lectures)
- create meta-data, descriptions, and questions to describe a digital teaching tool and its possible usage in the classroom
- create detailed lesson plans (step-by-step guides) with a suggested flow and guidelines for using two or more teaching tools in a recommended sequence to teach a topic in a discipline using climate-related examples, activities, or case studies

Detailed methodology including modes of validation and authentication is provided <u>here</u>.

TROP ICSU Copyright Practice Standards

- 1. For all existing tools that are recommended on the TROP ICSU site, the project respects the ownership rights of the creators and duly acknowledges their contribution.
- 2. The team selects and analyzes the tools that align with the overall objective of the TROP ICSU project and provides the corresponding links.
- 3. Typically, the team selects tools that are clearly stated as available under a Creative Commons license, and/or are freely downloadable by teachers, and/or are freely downloadable for non-commercial purposes.
- 4. TROP ICSU does not claim ownership of or responsibility or liability for any of the listed tools created by others.
- 5. For tools developed by other creators/authors, the team only provides a link to the tool; no downloaded copies of the tool are provided on the TROP ICSU website, unless explicit permission is obtained from the original creator/author.
- 6. For each tool recommended on the website, the name(s) of the owner(s)/creator(s) and the host website are clearly specified.
- 7. The individual copyright and ownership details for each tool can be viewed by following the individual links provided on the TROP ICSU website.



- 8. Copyrights for all images remain with the respective owners.
- 9. Typically, the team selects and displays images from repositories that are available in the public domain and that clearly specify terms permitting the free use of content. All sources and authors are duly attributed through citations.
- 10. Any content (text, teaching tool, or lesson plan) that is created by the TROP ICSU team and is made available on the TROP ICSU website is free for access to all users.
- 11. All content that is created, or suggested/recommended on the TROP ICSU website is typically available for open use and free access.

Policy-related Recommendations for TROP ICSU Users/Contributors

(points below have been adapted from the <u>WMO Global Campus Learning Resource Policy v</u> 2.1 and modified for the TROP ICSU project)

- 1. All users of TROP ICSU website and its teaching resources should respect copyright and ownership statements of the project (overall) and of the teaching resources (specifically).
- 2. All contributors to the TROP ICSU project must ensure that there is no violation of copyright within the teaching tools or lesson plans that they create or share. Third party, licensed material may be included only if proper attribution is made.
- 3. All teaching tools and lesson plan contributions should be made available for free and should allow open access (possibly using a Creative Commons license).
- 4. When adapting or customizing shared resources, users/contributors must be careful not to misrepresent the intentions of the creator. The intended meaning of the original should be preserved through the adaptation, and changes or additions that expand on the work should be indicated. Work inspired by shared resources, but not using original elements such as words or images, should be considered a new resource. In this case, citation may be a better way of acknowledging the original. If in doubt, users should request review by the original creators for proper attribution.
- 5. The use of hyperlinks to websites is not considered infringement of copyright.
- 6. It is the responsibility of a contributor to determine the license that is applicable for a new/adapted work.