Tactile Maps Presenting SDG 6 : Clean Water and Sanitation

Diploma Thesis

NTRODUCTION

6 CLEAN WATER AND SANITATION

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Providing students who are blind or visually impaired with cartographic teaching aids not only promotes their educational autonomy but also ensures equitable access to geographic and environmental education. Tactile maps enable students who have visual impairment to develop spatial awareness and orientation skills crucial for independent navigation. Additionally, accessible cartographic information facilitates a more comprehensive understanding of societal, cultural, and global issues, enhancing rehabilitation and the ability to adapt to living without sight. Integrating tactile maps into educational curricula is imperative for promoting inclusivity, enhancing learning outcomes, and empowering individuals with visual impairments to actively participate in global initiatives such as the Sustainable Development Goals (SDGs).

Educational materials and information in various formats tailored to their specific needs are essential for fostering autonomy among individuals with visual impairment. This inclusion extends to understanding global challenges such as those outlined in the SDGs, which impact everyone regardless of visual ability. Unfortunately, **there's a notable scarcity of educational programs and materials addressing SDGs, particularly those accessible to individuals with visual impairments**. This imbalance in educational coverage disproportionately affects goals like SDG 6, despite its paramount importance as water is fundamental for human survival and achieving other SDGs. The fulfillment of SDG 6 supports all other SDGs, particularly those related to health, education, food, gender equality, energy, and climate change. There is a clear need for tactile maps on the Sustainable Development Goals, a gap that this thesis aims to narrow with **a focus on developing a series of maps on just one SGD, SGD 6: Clean Water and Sanitation, in order to provide a template and methodology for creating tactile maps for the environmental education of people with visual impairment.**

METHODOLOGY



OBJECTIVES

- Analyze existing environmental teaching materials and maps for people with severe visual impairment
- Create a series of maps on SDG 6 for people with severe visual impairment
- Produce and make openly available complementary materials for the environmental education of students with severed visual impairment
- 4 Create a methodology to implement the creation and teaching of environmental tactile maps in classrooms

USER TESTING



2. Website

- User testing was conducted to verify the accuracy of the proposed maps and cartographic features.
- Participants expressed enthusiasm about the potential for studying environmental issues using the maps.
- Feedback from user testing resulted in a redesign of the maps.



Including all materials made available for download

Text and Audio File Creation and Distribution

OUTCOMES

1. SDG 6 Map Series

Including 23 maps, diagrams, and charts, and 33 texts and audio files





Palacký University Olomouc



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Author: Madeline MULDER UPOL Supervisor: Dr. Alena Vondráková PLUS Supervisor: Dr. Josef Strobl Department of Geoinformatics, Faculty of Science, Palacký University Olomouc May 2024 Appendix to diploma thesis no. 2