

Use of Cartography in Promoting Education for Sustainable Development

About the author:

Catherine Njore has a Higher Diploma in Cartography. Catherine is a seasoned Cartographer with over 18yrs experience specializing in children's cartography and has recently designed a Cartography: Fun with Maps Program(CFMP); a program that assists children to learn how to draw, read and use maps effectively. She has also authored map books to promote map use in children. She is currently the National coordinator for Kenya in the Barbara Petchenik Children's World Map Drawing Competition in the International Cartographic Association (ICA). Catherine has been a member of the Jury and full member in the ICA Commission on Cartography and Children (CCC).

She has worked at Kenya National Bureau of Statistics, Ministry of Lands and Physical Planning, Kenya Institute of Surveying and Mapping and Dedan Kimathi University of Technology.



Easy Ways to Incorporate Cartography as an Educational Tool

With the devolved system of government in Kenya, there has been an increasing demand for mapping products, driven by counties' need to efficiently plan and manage resources. However, the capacity to produce standard cartographic maps remains limited due to the minimal emphasis placed on cartography within government institutions. Encouraging interest in cartography by introducing maps to children at an early age can position cartography as a powerful tool for planning and policy formulation.

Since 2017, I have focused on equipping young learners with map skills, having successful contributions to two schools with pupils as young as four years old, and as well through my role as the National Organiser of the Barbara Petchenik International Competition since 2019. Two publications highlight the progress of this initiative, and more schools and teachers have been reached through workshops in various forums. Before using cartography for Education for Sustainable Development (ESD), learners must first understand what a map is, its key elements, and its significance. This foundational knowledge has been successfully imparted through engaging activities, including games.

Introducing basic mapping concepts has been highly effective, especially through educational materials such as the *Mappy Maria* book series I developed. *Mappy Maria* presents map work in a fun and friendly way, explaining essential map elements through storytelling and real-life applications. The learning process includes drawing exercises where students map their classrooms, schools, and neighbourhoods. This step-by-step approach familiarises pupils with maps and enhances their ability to correctly interpret cartographic content.

Graphic maps, which depict the distribution of various phenomena, provide more clarity than textual descriptions. Visual representation of information enables decision-makers to collaborate virtually, plan, and execute projects with greater accuracy. Given the current climate crisis, there is an urgent need for solutions and innovations that can drive positive environmental change. One activity engaging schools and environmental clubs involves tree planting during rainy seasons. A documented project effectively employed maps to illustrate land cover changes in a section of the Aberdare National Park, Kenya, from 1990 to 2020.

The urgency to integrate quality cartographic representation in education and climate action cannot be overstated. Recognizing the power of maps in decision-making, planning, and execution is crucial. During the Climate Summit held in Nairobi in September 2023, children ambassadors advocated for their inclusion in decision-making processes. Like women and youth, children are among the most affected by adverse climatic conditions, and the adaptation strategies discussed are crucial for their future. Maps play a significant role in achieving these goals by providing clear, visual insights that support informed decision-making.

References:

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