

Waste Education in Schools – Insights From Country Overviews

Environmental education is key to foster change towards more sustainable waste and resource management. Five country overview studies were conducted to assess the status, success factors and barriers to integrating waste education in school curricula. Adeline Mertenat¹, Christian Zurbrügg¹

Introduction

Education has long been recognised as critical to address environmental and sustainability challenges. The “Towards Zero Waste at Schools” (ZW@S) project fosters innovative solutions at schools that enhance circular systems. Learning and practice teaches students to become agents of change of sustainable behaviour. The ZW@S project conducted national overview studies in Burkina Faso, Ghana, Ivory Coast, Nepal and Peru to assess the current status of environmental and waste education strategies and initiatives. The studies were based on the “whole-institution approach” of UNESCO [1]: Governance & Policy, Curriculum & Teaching, Operation & Facilities, and Community Partnerships & Interaction, and this article summarises the main outcomes of the five country studies.

Governance & Policy

To mainstream solid waste management (SWM) in schools, SWM must be endorsed as a priority at the national level. In addition, strategies for environmental education must be in place to guide schools on how to tackle this in their teaching and operations. A good example is the national education strategy in Peru, where emphasis is given to environmental education (including SWM – see Photo) with different regulatory frameworks developed accordingly. One is the National Environmental Education Plan (PLANEA, 2016) set in motion by the Ministries of the Environment and Education. It gives guidance on how to “mainstream an environmental focus” in schools. In contrast, Burkina Faso did not include SWM in its national education strategy because it places emphasis on access to safe drinking water and sanitation.

Curriculum & Teaching

SWM education can ideally be incorporated into different subjects of the existing curricula, going beyond only science subjects. Yet, the country overviews showed that SWM was mostly absent in school curricula or only taught in natural science classes that focused on knowledge and comprehension, but lacked teaching about practical elements. Time constraints and lack of knowledge of how and what to teach were mentioned as barriers. These could be overcome through formal integration of SWM education in the national curricula, accompanied by teacher training and appropriate teaching materials, as promoted in Peru.

Operation & Facilities

Basic SWM facilities and services at schools are a prerequisite to promote good SWM practices and to foster experiential learning. Country overviews showed a main deficit in this area. In most cases, waste management at schools was characterised by dispersed litter and/or waste openly burned or dumped close to school premises. The lack of financial resources was mentioned



Clean up Nepal

Photo: Students training on waste segregation.

as an overall problem. Involving student clubs as an approach to induce change, decrease littering, increase the sale of recyclables and/or initiate school gardens using compost was often promoted.

Community Partnerships & Interaction

To ensure that knowledge, practices and attitudes learned about SWM go beyond the school into homes and the community, the interaction between schools and communities is important. Although acknowledged as such, promotion of these interactions were not found in any of the overview studies.

Conclusion

Our analysis found that although there is increasing interest to address waste management and recycling in schools, these are not considered as priorities until basic water, sanitation and hygiene (WASH) services are ensured. School success stories described in the overviews include initiatives promoted by school staff, by NGOs, or facilitated by national regulatory frameworks. Sharing such best practices among countries and schools can be a good way to strengthen SWM education and make it globally widespread. •

References

- [1] UNESCO, *Issues and Trends in Education for Sustainable Development*, (Paris: UNESCO Publishing, 2018).

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Country studies performed by: Ciudad Saludable (Peru), 500B solutions Pvt. Ltd. (Nepal), Water Aid (Burkina Faso), University of Education Winneba (Ghana), and CSRS (Ivory Coast). Funding was provided by the Swiss Agency for Development and Cooperation (SDC).

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