

Chapter 9

Enabling Education for Sustainable Development Through Digital Storytelling

Vassilios Makrakis

University of Crete, Greece & Frederick University, Cyprus

Nelly Kostoulas-Makrakis

University of Crete, Greece

ABSTRACT

Digital storytelling and participatory video (PV) are closely linked since they share common objectives, development tools, and methodologies. They are not just informative but purposefully aim to empower, educate, and activate people toward building a more sustainable and just society. This chapter describes both digital storytelling as a tool and as a teaching and learning methodology applied in an Erasmus+ project in Southeast Asia. It has been revealed that the interaction between digital technology and education for sustainability creates new opportunities to address sustainability, as well as new challenges. The teachers trained produced digital storytelling/PV applications that can be categorized as “authentic” learning activities addressing issues in the “real world.” It was widely assumed that teachers involved in this process learned to view teaching and learning from alternative ways, feeling ownership and control of their own learning and experiencing a sense of contribution to society and the environment.

INTRODUCTION

Storytelling is a powerful way that enables students and adults to communicate experiences and to explore ideas (Skouge & Ra, 2009). Digital storytelling can be seen both as a teaching method and a learning resource that has been applied in many creative and innovative ways at all levels of education (Rahiem, 2021; Ketelle, 2017). Digital storytelling merges a number of media such as image, video, sound and music to contextualise a story that may convey messages cutting across the four pillars of sustainable development (Makrakis, 2018; Makrakis & Kostoulas-Makrakis, 2012a). Humanity is living in a crisis

DOI: 10.4018/978-1-7998-5033-5.ch009

of sustainability that reflects not only environmental issues such as climate change and biodiversity loss, but also economic and social issues, pertaining to poverty, social exclusion, violation of human rights, unequal trade, gender inequalities, and so forth.

Education for Sustainable Development (ESD) or Education for Sustainability (EfS) is usually used interchangeably across all education levels and types from formal to non-formal and informal. It represents a new vision of teaching and learning, a vision that helps people reconnect with nature, by addressing the complexity and interconnectedness of sustainability issues facing humanity. Education for sustainability is described as “overtly transformative” (Huckle & Sterling, 1999, p.1) whereby student learning moves from a focus on “doing things better [to] doing better things [to] seeing things differently” (Sterling, 2004, p. 56). Participatory video/digital storytelling has been used extensively as a pedagogical tool for empowerment and emancipation (George et al., 2021; Lunch & Lunch, 2006). In general, PV (Participatory Video) is an activity that is used with disadvantaged or vulnerable groups for empowerment, visibility and raising critical awareness.

ESD themes could provide a worthwhile context for ICTs and digital tools in teaching, learning and curriculum development across all educational levels and types (Makrakis & Kostoulas-Makrakis, 2017). For example, social, economic, and environmental issues can provide meaningful and challenging contexts for developing a wide range of ICT/Digital skills.

- ESD methods are conducive to constructivist and transformative learning theories, which can provide a context and rationale for using ICT-based learning tools such as concept mapping, modeling, and social networking.
- When considering areas such as cultural diversity and intercultural understanding, health, governance, natural resources, climate change, rural development, sustainable urbanisation, poverty reduction, corporate responsibility and accountability, there is potential to assess the impact of ICTs in these key sustainable development areas.

The telling of stories provides the context within which they convey meaning while the beneficiaries of digital storytelling can simultaneously acquire and cultivate digital skills. Digital storytelling is considered a strategy for meaningful learning that can be contrasted to surface learning as following (cf. Makrakis & Kostoulas-Makrakis, 2020; Makrakis, 2018):

- **Reflective:** Learning that involves students in a process to a self-critical assessment of their learning experiences, identifying areas that require improvement and proceeding in constructing new knowledge that makes a difference.
- **Active:** Learning that involves students in a process that requires them to play an active role to construct knowledge and understanding.
- **Experiential:** Learning that involves students in a process whereby they reflect on, learn from, develop new knowledge, and take new action based on experience.
- **Constructive:** Learning that involves students in a process of experiencing things and reflecting on those experiences to constructing understanding, knowledge and meaning of the world.
- **Transformative:** Learning that involves students in a critical self-reflecting process of deconstructing, constructing, and reconstructing themselves and social realities.
- **Collaborative:** Learning that involves students constructing meaning and knowledge collectively and collaboratively.

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/enabling-education-for-sustainable-development-through-digital-storytelling/322124

Related Content

Social Technologies as a Social Sustainability Practice

Fernanda Salvador Alves, Eduardo De-Carli, Andrea Paula Segatto and Luiz Aurélio Virtuoso (2022). *International Journal of Social Ecology and Sustainable Development* (pp. 1-17).

www.irma-international.org/article/social-technologies-as-a-social-sustainability-practice/288531

Trends in Management of Tropical Forests: Application of Remote Sensing and Geographic Information System

Jacinta U. Ezenweny and Onyekachi Chukwu (2020). *Handbook of Research on the Conservation and Restoration of Tropical Dry Forests* (pp. 284-305).

www.irma-international.org/chapter/trends-in-management-of-tropical-forests/240122

A Case Study on Intelligent Engineering Applications for Sustainability Using AI and ML Approaches

Rakesh Nayak and Umashankar Ghugar (2023). *Intelligent Engineering Applications and Applied Sciences for Sustainability* (pp. 443-455).

www.irma-international.org/chapter/a-case-study-on-intelligent-engineering-applications-for-sustainability-using-ai-and-ml-approaches/329591

Enlightened Self-Interest and Globalizing India Through Social Entrepreneurship

Nisha Ashish Pandey (2022). *International Journal of Social Ecology and Sustainable Development* (pp. 1-19).

www.irma-international.org/article/enlightened-self-interest-and-globalizing-india-through-social-entrepreneurship/282758

Determinants of the Tuition Fees and Their Impact on Financial Value: Field Study on Private Primary Schools in Damascus

Roshan kabtool (2020). *Global Approaches to Sustainability Through Learning and Education* (pp. 171-199).

www.irma-international.org/chapter/determinants-of-the-tuition-fees-and-their-impact-on-financial-value/237445