


Chapter 5

Digitally–Enabled Green Adult Education in the Public Sector: Training the Workforce, but... Not in the Workforce?

Mary Viterouli

 <http://orcid.org/0000-0001-6505-1659>

University of Thessaly, Greece

Athanasios Koustelios

University of Thessaly, Greece

Nikolaos Tsigilis

Aristotle University of Thessaloniki, Greece

ABSTRACT

The intersection of digital transformation and green adult education presents a vital opportunity for public sector institutions to advance sustainability goals while modernizing lifelong learning services. This chapter explores how digital tools can be leveraged to design and deliver adult education programs focused on developing green competencies, particularly within public organizations and public-facing education services. Drawing on theoretical frameworks such as transformative learning theory and sustainability competency models, the chapter examines case studies, policy initiatives, and institutional practices that integrate digital innovation with environmental education. By focusing on the public sector,

DOI: 10.4018/979-8-2600-0246-9.ch005

Copyright © 2026, IGI Global Scientific Publishing. Copying or distributing in print or electronic forms without written permission of IGI Global Scientific Publishing is prohibited. Use of this chapter to train generative artificial intelligence (AI) technologies is expressly prohibited. The publisher reserves all rights to license its use for generative AI training and machine learning model development.

the chapter investigates the role of government agencies, employment services, and local authorities in leading green transitions through inclusive, scalable, and accessible digital education for adults.

1. INTRODUCTION

In the face of intensifying climate crises and rapid digitalization, public sector institutions across Europe are under unprecedented pressure to reform (Sun et al., 2025). These dual demands (environmental sustainability and digital modernization) are not simply policy priorities; they represent deep structural shifts that require transformed ways of thinking, working, and learning (Papademetriou et al., 2025a). Central to navigating these transitions is the lifelong education of adults, particularly those working within or supported by public organizations (Alkaraeen, 2021). However, despite widespread recognition of the importance of adult education in vocational settings, there remains a striking and unresolved contradiction: Adult Education (AE) principles are acknowledged in theory but underutilized in practice (Viterouli & Belias, 2021), especially within public sector workplaces themselves.

On one hand, governments actively promote adult educators in vocational schools and lifelong learning centers to train citizens for employment, green jobs, and digital competencies. On the other hand, within actual public institutions, the learning processes of adult employees, especially civil servants, caseworkers, and frontline administrators, are typically governed by bureaucratic training systems that prioritize compliance, knowledge transfer, or procedural updates (Rossidis, 2021). These systems rarely integrate the transformative, critical, and self-directed learning principles that underpin adult education theory. This is especially ironic given that public servants are increasingly called upon to lead the digital and green transitions on behalf of their communities (Viterouli et al., 2024).

This contradiction reveals a systemic undervaluation of adult learning within the workplace, where education is treated not as a strategic and developmental function (Belias et al., 2017a, 2017b), but rather as a tick-box exercise. The result is a missed opportunity: rather than using Adult Education as a lever to reshape workplace culture, enhance motivation, and support transformation, many public institutions treat it as peripheral – relevant only to “educational” contexts but not to organizational learning or workplace development. As a result, public sector organizations become arenas of learning avoidance, even as they claim to be champions of continuous development.

This oversight becomes even more critical in the current era, where public sector reforms are increasingly tied to digitally-enabled and ecologically sustainable transitions. Digital transformation is no longer limited to infrastructure upgrades

46 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/digitally-enabled-green-adult-education-in-the-public-sector/404563

Related Content

Barriers Impeding Knowledge Management Practices in the Public Sector: The Case of Devolved Governments in Kenya

Patrick Kanyi Wamuyuand Joshua Rumo Ndiege (2019). *Handbook of Research on Implementing Knowledge Management Strategy in the Public Sector* (pp. 303-321). www.irma-international.org/chapter/barriers-impeding-knowledge-management-practices-in-the-public-sector/233062

Model Driven Integration of Heterogeneous Software Artifacts in Service Oriented Computing

Eric Simonand Jacky Estublier (2015). *Public Affairs and Administration: Concepts, Methodologies, Tools, and Applications* (pp. 825-854). www.irma-international.org/chapter/model-driven-integration-of-heterogeneous-software-artifacts-in-service-oriented-computing/127883

The Impact of Web 2.0 on Public Engagement in the Israeli Home Front (From the 2006 Lebanon War to the 2014 Israel-Gaza Conflict)

Galit Margalit Ben-Israel (2018). *International Journal of Public Administration in the Digital Age* (pp. 52-63). www.irma-international.org/article/the-impact-of-web-20-on-public-engagement-in-the-israeli-home-front-from-the-2006-lebanon-war-to-the-2014-israel-gaza-conflict/201152

Data Analytics for Better Branding of E-Governance and E-Business Systems: Case of "Digital India" Campaign

Rajan Gupta, Saibal Kumar Paland Sunil Kumar Muttoo (2020). *Leveraging Digital Innovation for Governance, Public Administration, and Citizen Services: Emerging Research and Opportunities* (pp. 51-78). www.irma-international.org/chapter/data-analytics-for-better-branding-of-e-governance-and-e-business-systems/238950

Twenty Years After the Hype: Is e-Government doomed? Findings from Slovenia

Alois Paulin (2015). *International Journal of Public Administration in the Digital Age* (pp. 1-21).

www.irma-international.org/article/twenty-years-after-the-hype/121533