


# Chapter 4


## Digital Pedagogy and Vocational Teacher Identity: Specifically, Reimagining Educators' Roles Within Technology-Enhanced Learning (TEL) Ecosystems

**Archan Mitra**

 <http://orcid.org/0000-0002-1419-3558>

*Amity University, Mumbai, India*

**Sayan Mondal**

 <http://orcid.org/0009-0007-5111-4322>

*Amity University, Mumbai, India*

### ABSTRACT

*Technology-enhanced learning (TEL) is central to keeping vocational education aligned with industry, yet how TEL reshapes teacher identity and roles remains under-theorized. This study proposes and tests an ecosystem model in which tools, rules, community, and division of labor drive digital pedagogy engagement, identity growth, and role reconfiguration. Using an explanatory sequential mixed-methods design (N≈450–600 teachers across 8–12 TVET institutions), we combine survey scales, LMS analytics, interviews, observations, and document analysis. Structural models show institutional support, professional development quality, and culture–identity fit predict engagement; engagement in turn predicts commitment and*

DOI: 10.4018/979-8-3373-5865-9.ch004

*self-efficacy. Role reconfiguration is associated with platform usability, analytics transparency, team-based work, and lower workload pressure; industry partnership intensity amplifies the engagement identity link.*

## **1. INTRODUCTION**

### **1.1 Context: Why TEL Matters in Vocational Education and How it Aligns With Industry Skills**

In this era of new technology and continuing automation, Vocational Education and Training (VET) is under immense pressure to try and adapt itself to workplaces, constantly evolving at a fast pace, that are inhabiting technology, data, and hybrid forms of organization. Here is where Technology-Enhanced Learning (TEL)—the intentional design, facilitation, assessment, and continuous improvement of learning through digital tools, data, and networked practices— can perhaps play a role as a bridge to recognition: it makes it possible for curricula to sustain with the market's own supply of skill by carrying out authentic simulations, real work-based exposure in projects, and flexible, worklike pathways. Here unfolds a common sense from international policy and strategy documents, pointing out how digital technologies can reimagine learning experiences, enable personalization, and cultivate the abilities demanded across sectors by humans and technology respectfully (King & South, 2017; Thomas, 2016). TEL infrastructures, including virtual and blended environments at the very least, amplify the opportunities for access and continuity to learners and teachers previously isolated within various learning locations, a phenomenon that most recently enforces the conception of virtual and connected universities and platforms (Sankey, Huijser, & Fitzgerald, 2023). The affordances of these processes, such as open and digital pedagogies on the higher and vocational sectors, tend to embrace flexible design accommodating diverse cohorts, particularly against the backdrop of global production sites (Carloni, 2020; Sclater & Lally, 2018). The provocations from the first twenty years of TEL operation observe that TEL implementation is, at present, well past the peripheral innovation phase and more into mainstream institutional praxis, though still uneven in its institutional maturity (Panda & Mishra, 2020; Tammets, Sosnovsky, Mello, Pishtari, & Nazaretsky, 2025.) Teacher professional development is increasingly organically shaped around these “digital realities,” such as platforms, data flows, and communities that both enable and demand new forms of expertise (Trevisan et al., 2024).

34 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/digital-pedagogy-and-vocational-teacher-identity/408475](http://www.igi-global.com/chapter/digital-pedagogy-and-vocational-teacher-identity/408475)

## Related Content

---

### Pairing Leadership and Andragogical Framework for Maximized Knowledge and Skill Acquisition

Viktor Wangand Kimberley Gordon (2023). *International Journal of Technology-Enhanced Education* (pp. 1-14).

[www.irma-international.org/article/pairing-leadership-and-andragogical-framework-for-maximized-knowledge-and-skill-acquisition/330981](http://www.irma-international.org/article/pairing-leadership-and-andragogical-framework-for-maximized-knowledge-and-skill-acquisition/330981)

### Competitive Advantage and Student Recruitment at a Namibian University: A Case Study

Booyesen Sabeho Tubulingane (2020). *International Journal of Technology-Enabled Student Support Services* (pp. 1-19).

[www.irma-international.org/article/competitive-advantage-and-student-recruitment-at-a-namibian-university/270260](http://www.irma-international.org/article/competitive-advantage-and-student-recruitment-at-a-namibian-university/270260)

### Teachers' Knowledge, Beliefs, and Perceptions About Mathematics Teaching: How Do They Relate to TPACK?

Adem Ekmekci, Anne Papakonstantinou, Richard Parrand Miten Shah (2019). *Handbook of Research on TPACK in the Digital Age* (pp. 1-23).

[www.irma-international.org/chapter/teachers-knowledge-beliefs-and-perceptions-about-mathematics-teaching/215493](http://www.irma-international.org/chapter/teachers-knowledge-beliefs-and-perceptions-about-mathematics-teaching/215493)

### Pairing Leadership and Andragogical Framework for Maximized Knowledge and Skill Acquisition

Viktor Wangand Kimberley Gordon (2023). *International Journal of Technology-Enhanced Education* (pp. 1-14).

[www.irma-international.org/article/pairing-leadership-and-andragogical-framework-for-maximized-knowledge-and-skill-acquisition/330981](http://www.irma-international.org/article/pairing-leadership-and-andragogical-framework-for-maximized-knowledge-and-skill-acquisition/330981)

### Playful Transition: Serious Games for the Middle School Years

Anne Elizabeth Snyderand Victoria Van Voorhis (2018). *Gamification in Education: Breakthroughs in Research and Practice* (pp. 369-396).

[www.irma-international.org/chapter/playful-transition/195865](http://www.irma-international.org/chapter/playful-transition/195865)