VETNET
European Research Network
Vocational Education and Training

Sgorla, A. F. (2026). Beyond AI skills: Generative artificial intelligence and work-based learning in craft and creative VET. In C. Nägele, P. Nokelainen, N. Kersh, & B. E. Stalder (Eds.), *Trends in vocational education and training research. Knowing and acting in vocational education and training* (Vol. 9, pp. 419–428). VETNET/OAPublishing. https://doi.org/10.21240/vetcon/2026/ecer/94

Beyond AI Skills: Generative Artificial Intelligence and Work-Based Learning in Craft and Creative VET

Sgorla, Andrey Felipe
andrey.sgorla@unisi.it, https://orcid.org/0000-0001-9268-0303, University of Siena, Italy

Abstract

Context: Current debates on Vocational Education and Training (VET) increasingly emphasise the need to equip learners and workers with artificial intelligence (AI) skills, particularly in cultural and creative sectors. European policy initiatives often frame this challenge through competence development, qualification reform, and employability agendas. While important at system level, such perspectives provide limited insight into how vocational learning is enacted in everyday work settings where knowledge is socially, materially, and historically situated. Research on work-based learning has long demonstrated that vocational competence develops through participation in occupational practice, mentoring relations, and engagement with workplace affordances (Billett, 2001; Lave & Wenger, 1991). This perspective is particularly relevant in artisanal and creative occupations, where learning relies on embodied judgement, tacit knowledge, and situated problem-solving (Sennett, 2008; Marchand, 2016). Against this background, the study examines how generative AI is entering work-based learning practices in Tuscany's craft and creative sector.

Approach: This first-stage study adopts a qualitative exploratory multi-source design with focused ethnographic elements. Over a twelve-month period (April 2025 – April 2026), data were drawn from one-day focused visits to four settings — Santa Chiara Lab – FabLab Siena, FabLab Conventino – Officina Creativa Florence, Manifattura Tabacchi Florence, and the Mostra Internazionale dell'Artigianato (MIDA) — combining workplace observation, informal conversational encounters with craft practitioners, and documentary and digital materials. A prior empirical mapping of hybrid craft and digital workplaces in Tuscany (Sgorla, 2025) provided the basis for purposive site selection. Data were analysed through iterative thematic coding informed by sensitising concepts from work-based learning, situated learning, and sociomaterial theory.

Findings: Early findings indicate that generative AI is being incorporated unevenly across craft settings, used more frequently for ideation, marketing and design support than for core manual production. Learning about AI occurs informally through self-directed experimentation and peer exchange rather than formal training. Tensions emerge between innovation narratives and concerns regarding authenticity, authorship, and occupational identity. The notion of «the hand» (la mano) functions as a boundary marker between tasks where AI may support the creative process and those where embodied execution remains non-negotiable. Craft practitioners evaluate AI-generated outputs through sensory, aesthetic, and practical judgement developed over years of material engagement, positioning AI as raw material to be filtered rather than as a replacement for craft knowledge.

Conclusions: The study contributes to VET research by moving beyond competence-based framings of AI and examining how technological change is mediated through situated vocational practice. Conceptually, it advances the notion of hybrid learning ecologies (Sgorla et al., 2025), understood as learning environments shaped through the interaction of embodied

Licensed under CC BY 4.0

workplace practice, mentoring and peer relations, institutional training arrangements, public sectoral networks and events, and AI-mediated knowledge resources. The Tuscan case suggests that a critical capacity for craft workers may reside not merely in the ability to use AI tools, but in the evaluative competence to contextualise and integrate AI outputs within situated practice.

Keywords

work-based learning; generative AI; craft work; creative industries; hybrid learning ecologies.

1 Introduction

Digital technologies are increasingly reshaping how work is undertaken and how workers interact with materials, clients, and one another. In the craft and creative sector, this transformation raises distinctive questions about the relationship between technological innovation and the embodied, situated forms of knowledge that have historically sustained artisanal practice. Current debates on Vocational Education and Training (VET) emphasise the need to equip learners and workers with artificial intelligence (AI) skills, and European policy initiatives — from the Digital Education Action Plan (2021–2027) to Cedefop and OECD frameworks on apprenticeships and digital transition — frame this challenge through competence development, qualification reform, and employability agendas. While important at system level, such perspectives provide limited insight into how vocational learning is enacted in everyday work settings.

Recent research on the digital transformation of vocational education and training underlines that the modernisation of apprenticeships to meet digital skill needs requires not only technical upskilling but also attention to how learning processes are reconfigured in technology-mediated environments (Cedefop & OECD, 2024). Billett (2021) has shown that digitalisation mediates worklife learning in ways that do not replace but reorganise workplace affordances, demanding new forms of discretion and reflexivity from workers. In the craft and creative sector specifically, studies on digital fabrication technologies (Song, 2022), platform-mediated artisanal production (Gandini & Gerosa, 2025), and AI-driven design processes (Filimowicz, 2023) have begun to document how emerging technologies reshape occupational practices without necessarily displacing embodied knowledge. However, most of this literature addresses either the technical dimension of AI adoption or its labour-market effects, with limited attention to the situated learning processes through which craft practitioners appropriate, evaluate, or resist generative AI in everyday work.

Research on work-based learning has long demonstrated that vocational competence develops through participation in occupational practice, access to tasks, mentoring relations, and engagement with workplace affordances rather than through formal instruction alone (Billett, 2001, 2021; Lave & Wenger, 1991). This perspective is particularly relevant in artisanal and creative occupations, where learning relies on embodied judgement, tacit knowledge, sensory evaluation, and situated problem-solving that are difficult to codify or formalise (Sennett, 2008; Ingold, 2013; Marchand, 2016). As Billett (2025) demonstrates in the healthcare sector, workers engaging with digital technologies exercise high levels of discretion, engage in both routine and non-routine problem-solving, and learn through their work at high frequency. These dynamics have direct resonance with how artisans encounter, appropriate, or resist generative AI within their everyday practice.

In the craft sector, the convergence between artisanal practice and digital technologies has attracted renewed scholarly attention. Recent work has examined how digitisation reshapes craft techniques, identity, and cultural transmission (Song, 2022; Gandini & Gerosa, 2025), and how sustainable learning ecologies may balance tradition and innovation (Sgorla et al., 2025). A prior study of the Tuscan artisanal landscape (Sgorla, 2025) identified a distinctive ecosystem of hybrid learning spaces — including fab labs, artisan workshops linked to universities, and

innovation residencies — where traditional making and digital fabrication coexist, generating what was characterised as «expanded manual skill» (manualità espansa), in which algorithms, data and digital visualisations become extensions of the intelligence of the hand. That study also revealed how digital platforms create new forms of distributed learning and professional socialisation, while introducing risks of aesthetic standardisation, «two-speed digital ecologies» (Flanagan & Xue, 2024), and new dependencies on algorithmic visibility.

Conceptually, the study builds on the notion of hybrid learning ecologies, defined here as learning environments constituted through the dynamic interaction of five analytically distinguishable components: (a) embodied workplace practice, where knowledge is produced through gesture, perception, and material engagement; (b) mentoring and peer relations, through which tacit knowledge is transmitted, evaluated, and contested; (c) institutional training arrangements, including VET pathways; (d) public sectoral networks and events, where innovation narratives circulate and are negotiated; and (e) AI-mediated knowledge resources, which introduce new sources of design, information, and creative stimulation (Sgorla et al., 2025). This concept is related to but distinct from two other notions developed in prior work on the Tuscan craft landscape: expanded manual skill (manualità espansa), which refers to the individual competence whereby the artisan integrates digital capabilities into manual dexterity without losing embodied grounding (Sgorla, 2025); and expanded embodiment, which denotes the process through which this integration occurs — the artisan's sensory field extends through digital interfaces while maintaining its connection to bodily making (Sgorla et al., 2025). Hybrid learning ecologies is thus the ecological and contextual concept describing the learning environment; expanded manual skill is the individual competence that develops within it; and expanded embodiment is the mediating process through which such competence is enacted.

The study addresses the following research question: How is generative artificial intelligence being integrated into work-based learning practices in the craft and creative sector, and how may this reshape learning processes, expertise, and knowledge transmission? This question responds to three gaps in current research: limited empirical understanding of how vocational learning is organised in everyday craft work; insufficient evidence on how craft practitioners appropriate, negotiate, or resist generative AI in practice; and underdeveloped conceptual models linking AI adoption with work-based learning processes.

In this short paper, the method and procedures used for the data gathering are presented, followed by discussion of early findings and considerations about the implications for work-based learning and the development of hybrid learning ecologies in craft and creative VET.

2 Method

The approach adopted for this first-stage study can best be described as qualitative exploratory, drawing on multiple complementary sources of data to generate early empirical insights into the integration of generative AI within work-based learning in craft and creative settings. Unlike large-scale survey designs, the intention is not to establish generalisable patterns, but to identify emergent processes, tensions, and learning dynamics as they unfold in situated practice. The study aligns with traditions of workplace learning research that prioritise close observation of how knowledge is enacted, negotiated, and transmitted in occupational contexts (Billett, 2001; Lave & Wenger, 1991), while remaining attentive to the material and technological conditions that increasingly mediate those processes.

2.1 Sample

The study focuses on artisanal and creative settings connected to VET pathways in Tuscany. This regional focus is analytically motivated: Tuscany concentrates a density of heritage industries, design-oriented small enterprises, and established vocational training arrangements that make it a productive site for examining how generative AI enters occupational practices

where embodied judgement, tacit knowledge, and sensory evaluation remain central. A prior empirical mapping (Sgorla, 2025) identified key hybrid learning spaces across the region, providing an informed basis for purposive site selection.

Four settings were included in this first-stage study, selected according to three criteria: documented connection to VET pathways or vocational learning, evidence of hybrid craft-digital practices, and sectoral diversity within the artisanal ecosystem. The selected settings encompassed different forms of craft, creative, and vocational activity in Siena and Florence. In Siena, Santa Chiara Lab – FabLab was included as a setting combining cultural heritage and digital fabrication. Empirical engagement consisted of a one-day focused observation of workspace organisation, tools in use, and visible learning dynamics. In Florence, FabLab Conventino – Officina Creativa was selected for its activities related to digital artisan training and co-making. Here, a one-day focused observation similarly concentrated on the organisation of the workspace, the tools being used, and observable learning dynamics.

Two additional settings in Florence broadened the empirical scope beyond dedicated fabrication and training spaces. Manifattura Tabacchi Firenze, characterised by design residencies and interdisciplinary innovation, was examined through a one-day focused observation complemented by informal conversational encounters. MIDA – Mostra Internazionale dell'Artigianato, a sectoral exhibition and networking environment, was likewise included through a one-day field observation and informal conversational encounters. At these two sites, conversations with craft practitioners, exhibitors, and visitors provided contextual insight into their awareness of, engagement with, or resistance to generative AI tools.

The selection of these four settings is not intended to be representative of the Tuscan craft sector as a whole. Rather, it was designed to provide analytical diversity across different types of artisanal, creative, and vocational environments, consistent with the exploratory character of this first-stage study and its aim of identifying emergent processes and tensions surrounding the incorporation of generative AI into craft-related practices and learning environments.

2.2 Procedure

Fieldwork was conducted between April 2025 and April 2026. Each of the four settings was visited once for a full day. At Santa Chiara Lab and FabLab Conventino, focused observations concentrated on specific episodes involving workspace layout, tool use, the coexistence of traditional and digital fabrication, and the presence or absence of AI-mediated resources. Fieldnotes were recorded during and immediately after each visit using a structured observation template capturing the activity setting, practitioners present, tools and materials in use, the nature of any learning episode observed, and the visibility of AI-related practices.

At Manifattura Tabacchi and MIDA, focused observation was complemented by informal conversational encounters with craft practitioners and, at MIDA, with exhibitors and visitors. These were not structured interviews but situated exchanges initiated in the flow of observation, consistent with the focused ethnographic strategy outlined by Knoblauch (2005). At Manifattura Tabacchi, conversations arose during or after observed activities in the residency and workshop spaces. At MIDA, the concentrated exhibition setting enabled encounters with a broader range of artisans in a single day, and the distinction between formal exhibition discourse and the more cautious, selective accounts offered in informal exchanges proved analytically productive.

Documentary and digital materials were selected according to three criteria: (a) public availability; (b) relevance to AI adoption or digital innovation in the Tuscan artisanal sector; and (c) production by or in connection with the settings observed or by relevant sectoral networks. These included VET training resources, institutional communications, sector reports, and publicly accessible examples of AI-related practices.

Data were analysed through iterative thematic coding. Coding was conducted manually by the author using analytical tables organised by site and data source. The process followed an iterative logic: an initial round of open coding identified recurrent patterns in the field notes and conversational data; these were then interrogated against sensitising concepts from the literature. From the work-based learning literature, the concepts of workplace affordances and individual engagement (Billett, 2001, 2015) oriented attention to how craft workers encounter, appropriate, or decline AI-mediated resources. From situated learning theory (Lave & Wenger, 1991), the concept of legitimate peripheral participation informed the analysis of mentoring dynamics and whether AI reconfigures pathways through which novices move toward fuller participation. From sociomaterial perspectives (Fenwick et al., 2011), attention was directed to the entanglement of human actors, material artefacts, and digital tools. Additionally, four conceptual dimensions derived from a prior study of Tuscan craft workplaces (Sgorla, 2025) — expanded manual skill, human–machine co-authorship, situated learning, and educational sustainability — served as an interpretive lens. Observational data, conversational insights, and documentary materials were combined through an iterative process of cross-referencing: emerging themes identified in field observations were interrogated against the accounts offered in informal exchanges and the representations present in documentary sources. As a single-researcher first-stage study, no multiple-coder procedures were employed. Reflexivity was pursued through analytical memos recorded during and after observation sessions, and through interpretive discussions with colleagues familiar with workplace learning research. Subsequent phases will incorporate inter-coder reliability procedures.

The limited scale of the empirical engagement — one-day visits and informal conversational encounters rather than sustained ethnographic immersion — is a deliberate feature of this first-stage design, conducted over a twelve-month period (April 2025 – April 2026). The aim is to identify emergent processes and generate analytical propositions, not to establish saturated findings. Subsequent phases will involve extended observation, purposive interviewing, and inter-coder reliability procedures.

3 Findings

The early data reveal four analytically distinguishable dimensions of how generative AI is entering work-based learning in the craft sector.

AI Adoption Patterns Across Craft Settings

Generative AI is being incorporated unevenly across the artisanal and creative settings observed. Craft practitioners were observed using AI tools — particularly image generation, text-based assistants, and design software with AI-integrated features — more frequently for ideation, marketing, communication, and design exploration than for core manual production processes. In several workshops, AI-generated images were used as starting points for client conversations or as visual references for new product lines, but the transition from digital suggestion to material execution remained firmly governed by embodied skill and material judgement. In one workshop, a practitioner was observed using an AI image generator to produce visual references for a client meeting. The generated images were displayed on a tablet and discussed as starting points for a new product line. However, when the practitioner moved to the workbench, the transition from digital suggestion to material execution was governed entirely by manual judgement: the form, texture, and proportions of the final piece departed significantly from the AI-generated reference. The digital output functioned as a conversational resource rather than a production template (fieldnote, FabLab Conventino, October 2025). The use of AI for design-adjacent tasks coexists with a clear reluctance to extend it into the domain of manual making, where sensory perception and material responsiveness are considered essential. Table 1 summarises the observed patterns.

Table 1
AI Adoption Patterns Across Craft Settings

Domain of use	Observed engagement	Characteristic stance
Ideation and design exploration	Frequent; AI-generated images used as initial references for client dialogue and product development	Selective appropriation; outputs treated as raw material for further embodied evaluation
Marketing and communication	Moderate; text-based assistants used for product descriptions, social media content, translation	Pragmatic adoption; viewed as time-saving without affecting craft identity
Core manual production	Minimal; production processes remain governed by embodied skill and material judgement	Resistance or boundary-setting; «la mano» as non-negotiable domain
Knowledge preservation	Emerging; some use of digital tools to document techniques and processes for transmission	Cautious interest; seen as ally for intergenerational knowledge transfer

Informal Learning and Peer Exchange

Learning about AI occurred predominantly through informal channels: self-directed experimentation, peer exchange within craft networks, social media communities, and occasional exposure at sector events such as MIDA. None of the craft practitioners observed reported having participated in formal training specifically focused on generative AI. The learning process was iterative and exploratory, characterised by trial-and-error engagement with free or low-cost AI tools, followed by evaluative conversations with peers or family members involved in the enterprise. At MIDA, several exhibitors described their engagement with AI tools as entirely self-taught. One craftsman recounted having experimented with multiple free applications over a period of weeks, eventually retaining only one for preliminary sketching. The learning process was characterised as iterative and evaluative: practitioners tried tools, assessed their usefulness against the demands of their craft, and shared their conclusions with peers at sector events or through digital networks (conversational notes, MIDA, April–May 2025). Digital platforms such as Instagram and Instructables function as expanded communities of practice (Wenger, 1998), in which the learning is collaborative, distributed, and multimodal. Table 2 summarises the learning pathways observed.

Table 2
Learning Pathways for AI Engagement

Learning pathway	Frequency	Characteristics
Self-directed experimentation	Reported or observed across all settings visited	Trial-and-error with free tools; iterative and exploratory
Peer exchange and craft networks	Present in settings where conversational data were gathered	Evaluative conversations; sharing of tips, failures, and adaptations
Sector events (e.g. MIDA)	Observed at MIDA	Tension between public innovation narratives and cautious workshop practice
Formal AI-specific training	Not reported in any of the settings visited	Absent from current VET provision in the settings observed

Note. In the settings visited, learning about AI appeared to occur through informal channels — self-directed experimentation, peer exchange, and occasional exposure at sector events —

rather than through formal training provision. This pattern was consistent across the four settings, though the one-day visit design precludes claims about its generality beyond the observed occasions.

Tensions Between Innovation and Authenticity

A recurring theme across both workplace and field observations was the tension between public enthusiasm for AI and more cautious orientations in everyday workshop practice. In informal exchanges during observation, craft practitioners expressed concern that AI-generated design elements might compromise the perceived authenticity and authorship of their work. Across settings where conversational data were gathered, practitioners consistently distinguished between tasks where digital tools were considered acceptable — design exploration, marketing, client communication — and tasks where manual execution was viewed as non-negotiable. The expression «la mano» (the hand) recurred in these exchanges as a boundary marker, signifying the domain of embodied skill and material judgement that practitioners were unwilling to cede to technological mediation (conversational notes, Manifattura Tabacchi, February 2026; MIDA, April–May 2025). This finding resonates with what Gandini and Gerosa (2025) characterise as «neo-craft work,» where the symbolic value of manual labour coexists with the logics of visibility and commercialisation mediated by digital platforms. The artisan's identity is simultaneously that of a tradition custodian and an agent of innovation — a condition that creates productive but unresolved tensions around authorship and the cultural meaning of making.

Embodied Judgement in Evaluating AI Outputs

Across settings, the continued importance of embodied and tacit judgement was evident. When AI-generated outputs — images, patterns, text — entered the workflow, craft practitioners evaluated them not through formal criteria but through sensory, aesthetic, and practical assessment developed over years of material engagement. During an observation at Santa Chiara Lab, a practitioner was seen evaluating an AI-generated design by handling a printed prototype of the proposed pattern. The evaluation was conducted through tactile and visual assessment — feeling the weight and drape of the material, examining how the pattern would behave in three-dimensional form — rather than through formal criteria. The practitioner's commentary indicated that the algorithmic output was judged against sensory knowledge developed through years of material engagement: the capacity to anticipate how a design would perform physically, a form of evaluative competence that no digital rendering could substitute (fieldnote, Santa Chiara Lab, July 2025). This evaluative capacity, which Marchand (2016) characterises as craftwork-as-problem-solving, functioned as a filter through which AI suggestions were accepted, modified, or rejected. The craft worker’s body and trained perception thus operated as a mediating instance between the algorithmic output and the material reality of production. In this sense, the «human touch» does not disappear with AI; rather, it manifests in the choice of parameters, in decisions regarding texture, rhythm, material, and scale — a form of expanded embodiment (Sgorla et al., 2025) in which the artisan’s sensory field extends through digital interfaces without severing the connection to bodily making.

4 Discussion

The early findings presented above resonate with broader patterns identified in research on digital work and learning. Billett's (2025) analysis of healthcare workers demonstrates that professionals engaging with digital technologies exercise high levels of discretion, engage in both routine and non-routine problem-solving, and learn through their work at high frequency. The craft workers observed in this study display comparable dynamics: they exercise discretion in deciding when, how, and whether to engage with AI tools; they encounter non-routine problems

when translating AI-generated outputs into material form; and they learn informally and continuously through experimentation with these technologies.

However, the craft context introduces distinctive dimensions. Whereas healthcare workers' engagement with digital artefacts is largely institutionally structured, craft workers' engagement with generative AI is predominantly self-initiated, informally mediated, and shaped by cultural-aesthetic concerns about authenticity and authorship that have no direct equivalent in clinical settings. Moreover, the craft sector is uniquely exposed to the dynamics of digital platforms, where algorithmic visibility — through metrics of engagement on platforms such as Instagram, Etsy, and TikTok — increasingly mediates the symbolic and economic circulation of artisanal production (Gandini & Gerosa, 2025). The digital artisan is not only a maker but also a data manager, an image curator, and a communicator of meaning, operating within an economy of attention that reshapes occupational identity and learning demands.

The concept of hybrid learning ecologies provides a framework for interpreting these findings. In the Tuscan case, the learning environment of craft workers is constituted through the interaction of five analytically distinguishable components: (a) embodied workplace practice, where knowledge is produced through gesture, perception, and material engagement; (b) mentoring and peer relations, through which tacit knowledge is transmitted, evaluated, and contested; (c) institutional training arrangements, including VET pathways; (d) public sectoral networks and events, such as MIDA, where innovation narratives circulate and are negotiated; and (e) AI-mediated knowledge resources, which introduce new sources of design, information, and creative stimulation into the learning ecology.

The notion of expanded embodiment is particularly productive for understanding how craft workers relate to generative AI. The craft practitioners observed do not treat AI as a replacement for embodied skill, nor do they reject it as external to their practice. Rather, they position AI outputs as raw material to be filtered, refined, and transformed through the same evaluative capacities they apply to physical materials. Generative AI enters the learning ecology not as a substitute for craft knowledge but as an additional affordance — one whose value is determined by the worker's embodied competence to evaluate and transform its outputs.

These early findings have preliminary implications for VET policy and curriculum design. Rather than framing AI adoption through the lens of competence gaps, a work-based learning perspective suggests that a critical capacity for craft workers may reside not merely in the ability to use AI tools, but in the evaluative competence to contextualise and integrate AI outputs within situated practice. This evaluative capacity is itself a form of vocational knowledge — developed through experience, mentoring, and sustained engagement with materials — that cannot be reduced to formal instruction in digital literacy. These preliminary observations point towards a challenge for VET systems: the development of hybrid curricula that articulate practical knowledge, reflexivity, and technological mastery as inseparable dimensions of professional development — what the prior Tuscan study characterised as a «pedagogy of care, experimentation, and interdependence» (Sgorla, 2025). This proposition, derived from a first-stage exploratory study, should be understood as a conceptual direction to be tested and refined in subsequent phases of research.

At the same time, the transition is not without risks. The formation of «two-speed digital ecologies» (Flanagan & Xue, 2024), in which technological innovation remains inaccessible to many artisans in peripheral contexts, constitutes a real contradiction. AI systems trained on geographically and aesthetically biased datasets may reproduce dominant perspectives at the expense of peripheral artisanal expressions, converting the promise of technological democratisation into a new form of global homogenisation. Additionally, the precariousness of artisanal work within the platform economy — where algorithmic visibility progressively replaces community reputation — exposes workers to new regimes of dependency and instability.

A key caveat is that the study's first-stage design is based on one-day focused visits to four settings: two involving observation only (Santa Chiara Lab, FabLab Conventino) and two combining observation with informal conversational encounters (Manifattura Tabacchi, MIDA). This design provides focused but temporally limited access to workplace dynamics and does not permit claims about the consistency of practices over time or the representativeness of the patterns observed across the Tuscan craft sector as a whole. The findings are intended as early analytical insights and conceptual propositions — preliminary in character — to be tested and refined through extended observation and systematic interviewing in subsequent phases. Additionally, the Tuscan context, with its distinctive concentration of heritage industries and innovation infrastructure, may not be representative of craft work in other European regions.

References

Billett, S. (2001). *Learning in the workplace: Strategies for effective practice*. Allen & Unwin.

Billett, S. (2015). Work, discretion and learning: Processes of life learning and development at work. *International Journal of Training Research*, *13*(3), 214–230. https://doi.org/10.1080/14480220.2015.1093308

Billett, S. (2021). Mediating worklife learning and the digitalisation of work. *British Journal of Educational Technology*, *52*(4), 1580–1593. https://doi.org/10.1111/bjet.13115

Billett, S. (2025). Digital work, workers and learning: The case of healthcare. In C. Nägele, B. E. Stalder, F. Kaiser, M. Malloch, & N. Kersh (Eds.), *Trends in vocational education and training research* (Vol. 8, pp. 42–49). VETNET/OAPublishing. https://doi.org/10.21240/vetcon/2025/ecer/12

Cedefop & OECD. (2024). *Apprenticeships and the digital transition: Modernising apprenticeships to meet digital skill needs*. Publications Office of the European Union.

Fenwick, T., Edwards, R., & Sawchuk, P. (2011). *Emerging approaches to educational research: Tracing the sociomaterial*. Routledge.

Filimowicz, M. (2023). *AI and the future of creative work: Algorithms and society*. Taylor & Francis.

Flanagan, P., & Xue, R. (2024). After the digital – Re-materialising digital ecologies of craft. In *Proceedings of the International Symposium of Electronic Art (ISEA 2024)*. https://isea-archives.siggraph.org/

Gandini, A., & Gerosa, A. (2025). What is «neo-craft» work, and why it matters. *Organization Studies*, *46*(4), 577–595. https://doi.org/10.1177/01708406231213963

Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. Routledge.

Knoblauch, H. (2005). Focused ethnography. *Forum: Qualitative Social Research*, *6*(3), Art. 44. https://doi.org/10.17169/fqs-6.3.20

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Marchand, T. H. (Ed.). (2016). *Craftwork as problem solving: Ethnographic studies of design and making*. Ashgate.

Sennett, R. (2008). *The craftsman*. Penguin.

Sgorla, A. F. (2025). Dal tradizionale al digitale: Tecnologie emergenti, apprendimento e la trasformazione del settore artigianale. *Professionalità Studi*, *8*(4), 101–127.

Sgorla, A. F., Melacarne, C., & Banchetti, C. (2025). Tradition and innovation: Ecologies of sustainable learning in contemporary craft work. IntechOpen. https://doi.org/10.5772/intechopen.1011844

Song, M. J. (2022). Craftspeople's new identity: The impact of digital fabrication technologies on craft practices. *International Journal of Technology and Design Education*, *32*(4), 2365–2383. https://doi.org/10.1007/s10798-021-09687-1

Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge University Press.

Biographical Notes

Andrey Felipe Sgorla is a researcher in Didactics and Educational Research at the University of Siena, Italy. He holds doctorates in Social Sciences and in Learning and Innovation in Social and Work Contexts. His research explores professional learning, craft practices, career guidance, and the construction of educational and professional trajectories. His current work focuses on vocational imagination and on how educational mediation and institutional recognition make imagined futures credible and actionable.

AI use statement

AI-supported tools were used for linguistic revision and for reviewing the consistency of the manuscript. All data collection, analysis, interpretation, argumentation, and substantive content are the sole responsibility of the author.