



VOCATIONAL POLICY AND ENTREPRENEURSHIP: A MULTI-PARADIGM PERSPECTIVE

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Abstract

Vocational education and training (VET) policy is frequently justified on grounds of labor-market relevance, productivity, and social inclusion, yet its entrepreneurial consequences remain theoretically fragmented and empirically ambiguous. This study develops a multi-paradigm perspective on how vocational policy shapes entrepreneurship through interlocking mechanisms spanning capabilities, networks, incentives, and institutions. Integrating human-capital-informed views of skill formation, social-capital and network theories of opportunity access, institutional theories of legitimacy and rule-making, and policy-implementation perspectives emphasizing governance and translation, the study explains why policy instruments such as apprenticeship mandates, employer-partner incentives, quality assurance regimes, entrepreneurship curriculum standards, and start-up-support linkages may produce divergent entrepreneurial outcomes across contexts. The research also addresses confounding concerns—selection into vocational pathways, regional differences in entrepreneurial ecosystems, and endogeneity between policy adoption and local economic conditions. A mixed-methods research design is proposed: (1) a longitudinal quasi-experimental quantitative component using propensity-score weighting and difference-in-differences (where feasible) to estimate effects of vocational policy intensity on entrepreneurial intention and venture formation; (2) mediational modeling of capability, network exposure, and perceived feasibility; and (3) qualitative comparative case studies of policy implementation across regions and VET governance models to identify causal processes and boundary conditions. This study concludes with policy implications aimed at improving “entrepreneurship translation”—the conversion of vocational policy capacity-building into sustainable venture creation—by strengthening workplace learning interfaces, legitimacy infrastructures, and post-training entrepreneurial support.

Keywords: vocational policy, entrepreneurship, management, education

1. INTRODUCTION

Across many economies, governments treat entrepreneurship as a strategic lever for innovation, employment growth, and adaptive capacity in the face of technological change. Parallel to this, vocational policy—covering funding mechanisms, training standards, apprenticeship governance, employer incentives, and quality assurance—has remained central to workforce development strategies. Although it is intuitive to link vocational policy to entrepreneurship (because both concerning applied competence and labor-market agency), the policy-entrepreneurship relationship is not straightforward. Entrepreneurship is not simply an individual choice; it emerges where capabilities meet opportunities and where institutional environments reduce uncertainty. Vocational policy, similarly, is not merely a curriculum matter. It shapes incentives for employers to engage with training, determines learning architecture (school-based vs. work-based), signals social legitimacy of occupational pathways, and influences how training outcomes are recognized by markets. Consequently, vocational policy may affect entrepreneurship through multiple pathways: enhancing entrepreneurial competence and self-efficacy; generating networks and legitimacy through workplace learning; altering incentive



structures via tax, labor, and business-start regulations; and mediating translation of skills into business practice through governance and implementation quality. However, the literature often treats these pathways separately. Entrepreneurship studies may focus on entrepreneurial intention and venture creation without specifying which policy instruments plausibly generate relevant mediators. VET research may explain employment outcomes and skill acquisition but leave entrepreneurial outcomes as an under-theorized extension. Policy studies may characterize instrument choice and implementation failure without identifying the mechanism by which specific vocational provisions translate into entrepreneurial behavior.

The core problem is theoretical and empirical: vocational policy is commonly analyzed as a generic workforce tool, while entrepreneurship is treated as an individual-level outcome, leading to incomplete causal stories. Several gaps stand out: (a) Mechanism fragmentation: Existing accounts emphasize either skills (human-capital-like reasoning) or opportunities (institutional or market arguments) but rarely integrate mediating processes such as perceived feasibility, legitimacy, and network access into a coherent policy mechanism model; (b) Implementation and translation neglect: Policy may be adopted formally but executed unevenly across institutions and workplaces. Without studying governance and implementation quality, researchers risk attributing entrepreneurship outcomes to policy design alone; (c) Endogeneity and confounding: VET policy reforms often occur in contexts with changing economic conditions, labor demand, and entrepreneurship ecosystems. Without careful identification strategies, estimated effects may reflect local dynamism rather than policy causal impact; and (d) Heterogeneity across policy designs and contexts: The entrepreneurship impacts of apprenticeship policy, training standards, employer incentives, or entrepreneurship curricula likely differ by region, sector, and the institutional maturity of local entrepreneurial ecosystems.

This study's objective is to develop and justify an integrative, multi-paradigm framework explaining how vocational policy can foster entrepreneurship—and under what conditions it may fail. It proposes a testable mixed-methods research design to empirically examine the framework.

Research questions:

- a) Capability channel: Through what vocational-policy mechanisms (e.g., training standards, workplace learning design, entrepreneurship modules) does policy enhance entrepreneurial competence and perceived feasibility?
- b) Network and legitimacy channel: How do policy-incentivized employer partnerships and workplace learning structures produce networks and legitimacy that support venture formation?
- c) Institutional incentive channel: How do the broader institutional environment and governance arrangements moderate the policy's translation into entrepreneurship (e.g., business regulation ease, bankruptcy regimes, entrepreneurship ecosystem strength)?
- d) Implementation channel: How does policy implementation quality (selection of partner employers, quality assurance, mentoring capacity, governance coherence) mediate entrepreneurial outcomes?
- e) Causal identification: What research strategies can credibly address selection, endogeneity, and measurement bias in studying policy effects on entrepreneurship?

2. LITERATURE REVIEW

Human capital and competency-building mechanisms

Human capital theory argues that education and training enhance economic productivity by increasing knowledge and skills. Applied to entrepreneurship, education may increase entrepreneurial effectiveness by improving operational competence, managerial decision-making, and problem-solving in uncertain environments. A broader entrepreneurship education literature suggests that learning processes can shape opportunity recognition and entrepreneurial self-efficacy, especially when pedagogy is experiential and project-oriented (Fayolle & Gailly, 2008; Martin, McNally, & Kay, 2013). Vocational policy becomes relevant here because it can regulate and fund the acquisition of practical competencies. Policy instruments include training standards specifying occupational competence, certification frameworks affecting recognition by employers and markets, and workplace learning requirements that ensure competence is built through practice rather than solely classroom learning. Policy implication from this tradition: entrepreneurship effects should be stronger where vocational policy strengthens “transferable practice skills” and where it embeds entrepreneurship-relevant competencies (e.g., pricing, customer acquisition, compliance, basic business planning) into vocational learning outcomes rather than leaving entrepreneurship solely to optional add-ons.

Social capital, networks, and opportunity access

Entrepreneurship depends on access to information and resources—often obtained through relationships. Social capital theory suggests that networks provide resources and reduce costs of action (Bourdieu, 1986; Coleman, 1988). Granovetter’s “weak ties” argument highlights that bridging connections often help individuals discover novel opportunities (Granovetter, 1973). In entrepreneurship, such ties can inform opportunity recognition, market access, and investor/customer trust. Vocational policy may generate social capital via structured employer engagement. Apprenticeship policies and incentives for workplace learning can connect learners to workplace mentors, peer networks, suppliers, and customers. Moreover, employer participation can yield legitimacy signals: graduates with recognized credentials and workplace experience may be perceived as more reliable or competent. Policy implication from this tradition: entrepreneurship effects should depend on the network architecture induced by policy. Policies that broaden workplace placements across multiple firms, sectors, and regional networks may yield higher entrepreneurial benefits than policies constrained to single-firm training pipelines.

Institutional theory: incentives, legitimacy, and “rules of the game”

Institutional theory argues that formal rules, informal norms, and legitimacy structures shape economic behavior. Entrepreneurship is sensitive to institutional environments: business regulations, administrative burden, insolvency rules, and norms about entrepreneurship risk and legitimacy (Hall & Soskice, 2001; Spigel, 2017). Vocational policy is itself an institutional arrangement. It can signal which occupational paths are valued, define credible credentials, and shape employer commitment. When vocational policy aligns with broader institutional frameworks—e.g., when self-employment is legitimate, business formation is administratively feasible, and vocational credentials are recognized by relevant markets—entrepreneurship translation should strengthen. Conversely, misalignment can weaken entrepreneurship even if skills develop. Policy implication from this tradition: the same vocational policy design can generate different entrepreneurial outcomes depending on local institutional conditions (regulation, ecosystem strength, cultural norms, and governance capacity).

Learning-by-doing, situated learning, and vocational pedagogy

While human capital theory emphasizes skills as assets, learning-by-doing and situated learning perspectives explain how competence develops through participation in real practice environments. Situated learning and legitimate peripheral participation argue that knowledge is constructed through participation in communities of practice (Lave & Wenger, 1991). Workplace learning studies emphasize that learning outcomes depend on participation structures and guidance (Billett, 2001). Vocational policy shapes learning architecture: when it mandates apprenticeships, requires quality standards for workplace mentoring, or sets rules for workplace learning contracts, it influences the conditions under which competence becomes embodied and usable. Entrepreneurship similarly requires action under uncertainty; therefore, vocational policy that strengthens practice intensity, feedback, and real-world task autonomy may promote entrepreneurial readiness.

Policy implementation and governance: translation as a causal step

A recurring challenge in policy research is distinguishing policy design from policy delivery. Implementation studies show that instrument effects depend on administrative capacity, alignment across agencies, and cooperation among stakeholders (employers, training providers, regulators). Vocational policy—especially apprenticeship governance and workplace learning requirements—requires coordination. If incentives do not induce employer participation, or if quality assurance is weak, entrepreneurial-relevant learning may not occur. Entrepreneurship outcomes may thus depend on whether vocational policy creates the conditions for effective learning and not just the formal right or requirement to learn. This is consistent with policy implementation perspectives emphasizing that governance affects “implementation fidelity” and therefore downstream outcomes.

Research gaps in the integrated literature

Despite promising theoretical connections, the literature lacks: (a) integrated mechanism models linking specific vocational policy instruments to mediators relevant to entrepreneurship (feasibility, networks, legitimacy); (b) rigorous causal identification of policy effects on entrepreneurship outcomes over time; and (c) cross-case evidence on how implementation quality modifies policy impact, systematic attention to heterogeneity and boundary conditions.

3. METHODS

Research Design

The study uses a qualitative comparative case studies to identify implementation mechanisms, governance translation processes, and boundary conditions that explain quantitative heterogeneity. As for the units of analysis and sampling, this study’s qualitative unit is VET institutions and their employer-partner networks across selected regions.

Variables and Measures

Dependent variables: (1) Entrepreneurial intention after training (survey scales aligned with entrepreneurial self-efficacy and perceived behavioral control); (2) Entrepreneurial behavior: venture start-up, self-employment registration, co-founding activity, or transition to running a micro/small enterprise within a specified follow-up window; (3) Venture characteristics (where data exist): formality (registered vs. informal), opportunity vs. necessity orientation, and survival proxies (e.g., continued operation after 12-24 months).

Qualitative Comparative Case Studies: Mechanism Identification

Qualitative sampling should include: VET policymakers or agency officials, training providers (VET directors, curriculum designers), workplace mentors and employer partners, vocational learners at different stages (pre-graduation; post-graduation

entrepreneurs; post-graduation wage workers). As for the data collection: semi-structured interviews, document analysis of training standards, apprenticeship governance rules, and quality assurance protocols, where possible, observation of workplace learning processes.

Integration Logic: Triangulating Mechanisms

If the results show that policy intensity increases venture formation mainly via network exposure, qualitative evidence should describe how employer incentives and workplace learning routines create bridging ties and legitimacy signals. Whereas, if the results show weak or inconsistent effects, qualitative evidence should identify implementation barriers (e.g., low mentor quality, employer noncompliance, lack of post-training entrepreneurship pathways).

Ethical Considerations

Entrepreneurship-related outcomes can include sensitive information about business failures or informal operations. Ethics procedures must ensure confidentiality, voluntary participation, and careful handling of financially sensitive narratives.

4. ANALYSIS AND DISCUSSION

Mechanism 1: Vocational Policy as A Capability-Building Infrastructure

If the capability channel is correct, policy instruments that strengthen practice intensity and credential-relevant competencies should increase entrepreneurial feasibility and intention.

- a) Stronger vocational policy intensity → improved competence proxies (certification attainment; applied-task performance) → higher self-efficacy and intention → higher venture formation.
- b) Policy must ensure that training standards lead to real competency development rather than box-ticking. Qualitative cases should reveal whether workplace learning tasks include entrepreneurial-relevant practice (client-facing communication, costing, compliance) or remain narrowly occupational.
- c) Entrepreneurship should be treated as an applied competence embedded into vocational learning—not merely taught as a theoretical module. This is consistent with entrepreneurship education evidence that experiential learning better supports outcomes (Fayolle & Gailly, 2008; Martin et al., 2013).

Mechanism 2: Employer Partnerships as Network and Legitimacy Engines

Workplace learning structures are likely central to entrepreneurship translation. Policy that incentivizes employer engagement and allows repeated contact across firms can generate networks.

- a) Policy intensity → network exposure measures → legitimacy perceptions and opportunity recognition → entrepreneurial behavior.
- b) Institutional theory suggests external stakeholders evaluate credibility. Vocational policy can confer credibility through recognized certification and employer endorsements. Entrepreneurs often require trust from customers and lenders; credibility is a “social credential” produced partly by institutional arrangements.
- c) If employer partnerships are concentrated within a single firm or within low-opportunity local markets, networks may not bridge to diverse opportunities. In those cases, policy may produce competent workers but not necessarily entrepreneurs.

Mechanism 3: Institutional Incentives as Moderators

Even if VET builds competence and networks, entrepreneurship depends on institutional incentives and ecosystem conditions.

- a) Cases in supportive ecosystems should show more venture formation, faster transitions from training to self-employment, and stronger post-training mentoring linkages. In less supportive contexts, entrepreneurs may emerge in informal or necessity-driven forms, or learners may prefer wage employment.
- b) Spigel's ecosystem framework highlights interdependence among support components (e.g., access to finance, markets, and talent). Vocational policy may therefore need to coordinate with business-support institutions to reduce "translation gaps."

Mechanism 4: Implementation Quality as The Hidden Variable

A multi-paradigm policy analysis must treat implementation fidelity as a causal step. Two policy designs may be identical on paper yet differ in realized opportunity structures.

- In high-performing cases, employers participate because incentives are meaningful and compliance burdens are manageable. Mentoring quality is high due to training-provider support and mentor standards.
- Quality assurance enforces genuine workplace learning rather than superficial participation.
- Effects will be larger where governance capacity is higher and where provider-employer cooperation is sustained over time.

Addressing Alternative Explanations and Methodological Threats

Even with quasi-experimental designs, threats remain, which are:

- 1) Selection bias: Students entering VET may differ in entrepreneurial disposition. The proposed design uses pre-treatment controls and weighting, and it should incorporate baseline entrepreneurial intention where possible.
- 2) Endogeneity of policy adoption: Regions adopting stronger vocational policies may already have stronger economic dynamics. DiD/event-study designs and region fixed effects should mitigate this.
- 3) Measurement bias: Entrepreneurship outcomes vary in definition. Consistent operationalization is critical, distinguishing intention from behavior and formal from informal venture formation.
- 4) Temporal mismatch: Skills and networks may affect entrepreneurship with lags. Longitudinal follow-up windows should be chosen accordingly.

Synthesizing Implications: "Entrepreneurship Translation"

Across paradigms, the recurring concept is translation: the transformation of policy capacity (training standards, apprenticeship governance, employer incentives) into entrepreneurial action.

A synthesis model can be stated as:

Vocational policy intensity and design

- (capabilities + network exposure + legitimacy signals + feasibility beliefs)
- moderated by institutional incentives and ecosystem conditions
- contingent on implementation quality
- entrepreneurship outcomes (intention and venture formation)

This synthesis implies that policy failure should often be diagnosable. If venture creation does not rise, it may be because one of the mediating components is absent: e.g., competence is built but networks are not; legitimacy is not signaled externally; regulatory barriers block action; or implementation fidelity is weak.

Policy Recommendations (Derived from The Framework)



1. Embed entrepreneurship-relevant tasks into occupational standards.
Ensure entrepreneurship translation through applied learning elements (customer practice, compliance awareness, costing).
2. Incentivize employer participation in ways that expand networks rather than lock learners to single-firm pipelines.
Use policy to encourage cross-firm mentoring and broader partner ecosystems.
3. Create institutional bridges to entrepreneurship support after graduation.
Provide coaching and start-up services linked to vocational credentials (business registration assistance, microfinance navigation, mentoring from entrepreneurs).
4. Strengthen quality assurance and mentor capacity.
Policy should fund mentor training and enforce meaningful workplace learning.
5. Coordinate with broader institutional reforms.
Where entrepreneurship is discouraged by regulation or high start-up friction, vocational policy alone cannot deliver entrepreneurship outcomes.

5. CONCLUSION AND RECOMMENDATION

This study examined vocational policy and entrepreneurship through a multi-paradigm perspective. It argued that vocational policy should not be treated as a generic labor-market instrument whose entrepreneurship effects are assumed. Instead, entrepreneurship outcomes emerge through multiple mechanism pathways: capability formation and self-efficacy (human-capital-informed and learning-by-doing traditions), network and legitimacy production (social-capital and institutional traditions), and context-sensitive incentive structures (institutional and ecosystem perspectives). Crucially, policy translation depends on implementation quality: governance arrangements, employer participation, mentor capability, and quality assurance determine whether vocational policy actually creates entrepreneurship-relevant learning and opportunity structures. Furthermore, methodologically, this study proposed a mixed-methods research design that combines longitudinal quasi-experimental quantitative inference with qualitative comparative process tracing. This design addresses key identification challenges—selection and policy endogeneity—while enabling mechanism validation and explanation of heterogeneity. The central contribution is a framework for diagnosing why vocational policy succeeds or fails in producing entrepreneurship. The practical implication is that policymakers should focus on the links between vocational learning design and entrepreneurial action: competence must translate into business practice, networks must bridge to opportunity, legitimacy must be recognized by external stakeholders, and institutional barriers must be reduced. Future research should refine measurement of entrepreneurship translation mediators, improve identification strategies, and test policy packages that integrate VET governance reforms with post-training entrepreneurship support and regulatory alignment.

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