Innovating Entrepreneurship Education through Lived Practice: A Self-Study of Professional Practice Using the 4Ps of Innovation

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Abstract

*Entrepreneurship education in higher education increasingly emphasises innovation, authenticity and experiential learning, yet limited research has examined how educators' own entrepreneurial practice informs innovation pedagogy. This paper presents an innovation-focused self-study of professional practice that explores how the author's dual role as a micro-entrepreneur and business educator enriched student learning and supported ongoing business development through the application of the **4Ps of Innovation framework** [3]. Drawing on reflective self-inquiry, professional teaching artefacts and curriculum design decisions, the study examines how product, process, position and paradigm innovation were modelled through lived micro-enterprise practice and embedded within entrepreneurship teaching. The findings suggest that using the 4Ps as a reflexive bridge between theory and practice enabled students to engage with innovation as an accessible, iterative and sustainable activity, while simultaneously informing continuous improvement within the micro-business. While context-specific, the study offers analytically transferable insights and a practice-informed framework that other entrepreneurship educators and practitioner-researchers can adapt.*

Keywords: *self-study of professional practice; innovation education; 4Ps of innovation; micro-enterprise; entrepreneurship education*

1. Introduction

Innovation is positioned as a core pillar of entrepreneurship education within UK higher education, aligned with sector priorities around employability, enterprise capability and real-world relevance [1],[5]. Yet innovation is frequently presented in ways that privilege technological disruption, scalability and high-growth start-up cultures. Such representations risk narrowing students' conceptual understanding and obscuring the incremental and multidimensional nature of innovation that characterises the majority of UK enterprises, particularly micro-businesses [4].

The 4Ps of Innovation framework conceptualises innovation across four domains:

- **Product innovation** – changes in goods or services
- **Process innovation** – changes in creation and delivery methods
- **Position innovation** – changes in market context or framing
- **Paradigm innovation** – changes in underlying mental models or business logic [3]

This framework provides a broader lens through which innovation can be understood beyond technological novelty. However, while widely cited in innovation management literature, its pedagogical operationalisation within entrepreneurship education remains underexplored. Many entrepreneurship educators simultaneously engage in entrepreneurial activity. The potential of this dual professional identity to model multidimensional innovation for students has received limited scholarly attention. This paper addresses that gap by examining how the author's micro-enterprise practice was analysed and enacted through the 4Ps framework and embedded within entrepreneurship teaching through a self-study of professional practice.

2. Micro-enterprise, and the Multidimensionality of Innovation

Micro-enterprises, defined as businesses employing fewer than ten individuals, constitute the dominant form of enterprise within the UK economy [4]. Operating under constrained resources, such businesses rarely engage in radical innovation. Instead, innovation emerges incrementally and pragmatically across multiple dimensions.

Within micro-enterprise contexts:

- **Product innovation** may involve adaptation, bundling, or refinement rather than invention.
- **Process innovation** often centres on efficiency, customer interaction models or digital integration.
- **Position innovation** may involve reframing services to reach new markets or alter perceived value.
- **Paradigm innovation** may require rethinking the fundamental assumptions underpinning value creation.

Entrepreneurship education has historically privileged product-focused narratives of innovation. This emphasis risks reinforcing a narrow understanding of entrepreneurial success. The 4Ps framework challenges this by foregrounding innovation as systemic and interconnected, aligning more closely with micro-enterprise realities and offering a more inclusive and attainable conception of innovation for students [3]. Bessant and Tidd [3] argue that innovation should be understood as a multidimensional process extending beyond product development to include changes in processes, positioning and organisational paradigms. This broader conceptualisation is particularly relevant within entrepreneurship education, where students may otherwise develop narrow understandings of innovation associated primarily with technological invention or high-growth business models. While alternative innovation frameworks such as Design Thinking [8] and Lean Startup approaches [9] emphasise iterative problem-solving, customer feedback and rapid experimentation, these models often focus primarily on product development and venture creation processes. In contrast, the 4Ps of Innovation framework offers a broader conceptualisation of innovation by recognising that innovation can occur simultaneously across products, processes, positioning and organisational paradigms. This multidimensional perspective is particularly valuable within entrepreneurship education because it enables students to identify innovation opportunities beyond technological invention or high-growth start-up cultures. The framework therefore aligns closely with experiential and reflective pedagogies by helping students analyse innovation within authentic, resource-constrained and practice-based contexts.

3. Methodological Framework: Self-Study of Professional Practice

This study adopts a self-study of professional practice methodology, positioning the educator's entrepreneurial and pedagogical activities as the primary site of inquiry. Self-study approaches are well established in teacher education and the scholarship of teaching and learning, where they facilitate systematic interrogation of professional knowledge-in-practice [6], [7]. Entrepreneurial decision-making was not treated as an anecdotal illustration but as analytically interrogated data. Innovation decisions within the micro-enterprise were retrospectively and contemporaneously mapped against the 4Ps framework. These reflections were then traced into curriculum design, assessment construction and classroom dialogue. The purpose was not statistical generalisability but analytical transferability, generating conceptual insights that may inform similar educator-practitioners operating within entrepreneurship education contexts.

4. Conceptual Framework: the 4Ps of Innovation as Pedagogical and Reflexive Framework

The conceptual framework integrates dual professional identity with the 4Ps of Innovation as both:

1. **Analytical Lens** – to examine innovation within the micro-enterprise
2. **Pedagogical Scaffold** – to structure innovation teaching
3. **Reflexive Tool** – to interrogate underlying entrepreneurial assumptions

Within the micro-enterprise, innovation was mapped systematically:

Product Innovation
Refinement of service offerings, bundling strategies and experience design were analysed not as routine adjustments but as deliberate innovation activity.
Process Innovation
Operational systems, client onboarding, digital tools and workflow redesign were examined as forms of value-creating innovation rather than administrative necessity.
Position Innovation

Market reframing and shifts in target audience communication illustrated how repositioning altered perceived value without altering core offerings.

Paradigm Innovation

Most significantly, underlying assumptions concerning value, growth, and entrepreneurial success were critically interrogated. This level of innovation challenged taken-for-granted entrepreneurial narratives and reshaped both business strategy and teaching philosophy.

Embedding these dimensions into curriculum design allowed innovation to be presented as layered and systemic rather than singular or product driven.

5. Methodology: Innovation-focused Self-study Process

The research process mirrored innovation itself: iterative, reflective and recursive.

Professional artefacts analysed included:

- Module learning outcomes
- Assessment briefs
- Teaching slides and case materials
- Student innovation analyses

These artefacts were examined to trace how the 4Ps framework increasingly structured:

- Classroom questioning
- Assessment rubrics
- Student business analysis tasks
- Feedback language

Thematic analysis identified recurring shifts:

- Movement from product-centric examples toward multidimensional innovation mapping
- Increasing emphasis on paradigm questioning
- Greater student ability to identify interconnections across innovation types

Literature on experiential learning and innovation management provided a critical interpretive frame [3],[10]. Reflexivity formed an important component of the research process, particularly given the author's dual role as educator and micro-entrepreneur. Ongoing reflective journaling and iterative revisiting of teaching artefacts enabled assumptions, biases and professional positioning to be critically interrogated throughout the study. Rather than attempting to eliminate subjectivity, the study acknowledged practitioner perspective as a valuable source of insight, consistent with established principles of self-study research [6].

6. Findings: The Pedagogical Power of the 4Ps

The findings reveal that the 4Ps of Innovation framework functioned as more than a conceptual model for analysing business activity. Within this study, the framework became a pedagogical scaffold that enabled students to engage with innovation as a multidimensional, iterative and accessible process grounded in authentic entrepreneurial practice. Three interrelated pedagogical insights emerged from the analysis.

6.1 Making Innovation Accessible through Micro-enterprise Practice

Framing innovation through lived micro-enterprise practice made innovation more accessible and less intimidating for students. Initially, many students associated innovation primarily with technological disruption, invention or large-scale entrepreneurial ventures. However, engaging with authentic examples drawn from a functioning micro-enterprise enabled students to reconceptualise innovation as incremental, contextual and achievable.

At the level of **product innovation**, students began to recognise that innovation does not necessarily involve creating entirely new products or services. Instead, innovation was understood through adaptation, refinement and recombination. Incremental changes to service offerings, customer experience and delivery methods demonstrated how innovation could emerge through continuous improvement rather than radical invention. This reduced student anxiety surrounding innovation and broadened perceptions of what entrepreneurial creativity might involve.

Similarly, **process innovation** helped students recognise forms of innovation that are frequently overlooked within entrepreneurship education. Operational systems, workflow redesign, client communication practices and digital integration were initially perceived as administrative or routine activities rather than innovation. Mapping these practices explicitly against the 4Ps framework made visible how value is created and delivered within resource-constrained contexts. Students subsequently demonstrated greater awareness of the strategic importance of operational innovation within small businesses.

The study also highlighted the pedagogical value of **position innovation**. Students demonstrated increasing sophistication when analysing how identical services could be repositioned for different audiences, contexts or value propositions without fundamentally altering the core offering itself. This challenged assumptions that innovation must involve changing the product or operational structure and instead highlighted the importance of communication, perception and market framing.

Together, these dimensions repositioned innovation as an ongoing and multidimensional activity embedded within everyday entrepreneurial practice rather than as an exceptional or distant achievement. This broader conceptualisation appeared particularly valuable for students who did not initially identify with high-growth or technology-driven entrepreneurial narratives.

6.2 Bridging Innovation Theory and Practice through the 4Ps Framework

The 4Ps of Innovation framework provided a shared conceptual language that effectively bridged academic theory and lived entrepreneurial experience. Students engaged more deeply with innovation concepts when they could observe how product, process, position and paradigm innovation operated simultaneously within a real micro-enterprise context.

The framework supported movement beyond surface-level understandings of innovation by encouraging students to identify interconnected forms of change within a single business example. Rather than viewing innovation as isolated acts of product development, students increasingly recognised the systemic relationships between operational processes, market positioning and underlying business assumptions. This multidimensional perspective aligned more closely with the realities of contemporary micro-enterprise practice.

The consistent application of the 4Ps framework across teaching activities, case discussions and assessment tasks also provided coherence within the curriculum. Students became more confident in applying innovation theory critically to their own entrepreneurial ideas and analyses. The framework therefore functioned not only as a descriptive model but as a cognitive scaffold that structured analytical thinking and supported deeper engagement with entrepreneurship concepts.

Importantly, the framework also enabled innovation to be discussed in more inclusive and realistic terms. By foregrounding incremental and context-specific innovation rather than exclusively disruptive or technological models, the teaching approach validated diverse entrepreneurial pathways and experiences. This appeared to strengthen students' confidence in recognising innovation opportunities within familiar and constrained contexts.

6.3 Paradigm Innovation and Reciprocal Reflection

The most transformative pedagogical insight emerged at the level of **paradigm innovation**, where both students and educator engaged in deeper questioning of underlying entrepreneurial assumptions. Students began critically examining dominant narratives surrounding business growth, success and innovation, exploring alternative entrepreneurial logics and definitions of success aligned with sustainability, lifestyle entrepreneurship, wellbeing and community impact. Paradigm innovation therefore extended beyond business operations into the formation of entrepreneurial identity and values. At the same time, the process of teaching innovation prompted ongoing reflection within the micro-enterprise itself. Preparing teaching materials, articulating innovation concepts and facilitating classroom discussion encouraged critical interrogation of existing business assumptions and practices. Teaching became a reflexive space in which entrepreneurial decisions were reconsidered and opportunities for further innovation identified.

This reciprocal relationship between teaching and entrepreneurial practice became one of the most significant findings of the study. Pedagogical reflection informed business development, while lived entrepreneurial experience continually reshaped curriculum design and classroom dialogue. The 4Ps framework therefore functioned simultaneously as an analytical lens, a pedagogical scaffold and a professional reflexive tool.

The findings suggest that innovation pedagogy can extend beyond supporting student learning to become a mechanism for ongoing professional learning and business development for educator-practitioners themselves. In this way, innovation emerged not as a linear outcome but as a cyclical and reflective process operating across both educational and entrepreneurial domains.

7. Contribution and Usefulness of the Study

This study contributes to entrepreneurship education literature by extending understandings of how innovation pedagogy can be authentically enacted through educators' own entrepreneurial practice. While entrepreneurship education research frequently emphasises student learning experiences, less attention has been given to how educators' dual professional identities shape the teaching of innovation. This study therefore foregrounds the educator not simply as facilitator of entrepreneurial learning, but as an active site of innovation practice and reflective inquiry.

A key contribution of the study lies in demonstrating how the 4Ps of Innovation framework can operate simultaneously as an analytical lens, pedagogical scaffold and reflexive professional tool. Rather than presenting innovation as primarily technological or product-driven, the study illustrates how product, process, position and paradigm innovation can be embedded within everyday micro-enterprise activity and translated into authentic and practice-oriented entrepreneurship teaching. In doing so, the paper extends existing applications of the 4Ps framework by illustrating its pedagogical usefulness within higher education contexts and its relevance to small-scale, resource-constrained entrepreneurial environments.

The findings also contribute to wider debates concerning inclusivity within entrepreneurship education. By repositioning innovation as incremental, multidimensional and contextually situated, the study challenges dominant high-growth and disruption-oriented narratives that can unintentionally alienate students who do not identify with traditional entrepreneurial archetypes. The pedagogical approach presented here therefore supports broader and more accessible understandings of entrepreneurial capability and innovation practice.

Methodologically, the study demonstrates the value of self-study of professional practice as an approach for examining innovation pedagogy within higher education. The integration of reflective inquiry, professional artefacts and lived entrepreneurial experience enabled the development of analytically transferable insights into the relationship between teaching, professional identity and innovation. In particular, the study highlights the significance of reciprocal reflection, where teaching informs entrepreneurial development while entrepreneurial practice simultaneously reshapes pedagogy.

While context-specific, the conceptual framework and reflective processes developed through this study may offer a useful model for other entrepreneurship educators and practitioner-researchers seeking to integrate innovation theory, authentic practice and reflexive teaching within their own educational contexts.

8. Limitations and Ethical Considerations

As a self-study of professional practice, the findings are context-specific and are not intended to be statistically generalisable. Instead, the study seeks to provide analytically transferable insights that may resonate with and inform the practice of other entrepreneurship educators operating within similar contexts. The interpretations presented are shaped by the author's dual role as educator and micro-entrepreneur, which inevitably introduces elements of subjectivity into the research process. However, within self-study methodology, such positionality is not viewed solely as a limitation but as a valuable source of professional insight and reflexive understanding [6],[7].

The dual-role nature of the study also required ongoing reflexivity to mitigate the potential for uncritical self-representation or confirmation bias. Critical reflection was therefore embedded throughout the research process, particularly during the interpretation of professional experiences and teaching artefacts. Engagement with relevant literature and systematic interrogation of recurring themes supported analytical rigour and helped situate personal reflections within broader educational and entrepreneurship debates.

Ethical considerations were addressed through anonymisation of teaching contexts and a focus on professional learning rather than evaluation of students or colleagues, in line with established ethical guidance for practitioner research [2]. No student data were used directly within the study, and reflective analysis centred primarily on curriculum design, pedagogical practice and professional experience.

A further limitation relates to the scale and specificity of the micro-enterprise context examined. The innovation practices discussed may not fully reflect the realities of larger organisations or different disciplinary settings. Nevertheless, the study's focus on micro-enterprise offers an important contribution to entrepreneurship education, given the prevalence of small and resource-constrained businesses within contemporary economies.

9. Conclusion

This paper has demonstrated how the integration of lived micro-enterprise experience with the 4Ps of Innovation framework can enrich entrepreneurship education by bridging innovation theory and authentic professional practice. Through a self-study of professional practice, the research illustrated how product, process, position and paradigm innovation can be enacted within everyday entrepreneurial activity and translated into meaningful pedagogical experiences for students. The findings suggest that the 4Ps framework offers more than a model for analysing business innovation; it can also function as a pedagogical scaffold and reflexive professional tool that supports deeper engagement with entrepreneurship learning. By reframing innovation as multidimensional, incremental and contextually situated, the study challenges narrow representations of entrepreneurship that privilege technological disruption and high-growth ventures. Instead, innovation is positioned as an accessible and ongoing process embedded within real-world entrepreneurial practice.

A particularly significant insight concerns the role of paradigm innovation and reciprocal reflection. The study demonstrated how teaching innovation can simultaneously reshape entrepreneurial practice, while lived entrepreneurial experience continually informs curriculum design and pedagogical decision-making. In this way, dual professional identity emerges not simply as background experience, but as a valuable source of innovation knowledge, reflexive inquiry and authentic learning.

While context-specific, the study contributes analytically transferable insights into how entrepreneurship educators may integrate innovation theory, professional practice and reflective pedagogy to create more inclusive, grounded and practice-oriented approaches to entrepreneurship education.

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