

Addressing the Disconnect Through Partnership-Driven Pedagogy

Across research-intensive universities, external partnerships often thrive in research but remain under-developed in teaching. While work-integrated learning offers clear benefits for employability, challenges related to equity, access, and coordination, particularly in engineering, limit its broader implementation (Vuoriainen et al., 2025). This work addresses this disconnect by developing a structured, partnership-driven approach that embeds industry engagement within the curriculum.

At the University of Leeds, this has led to a sustained programme of industry-linked activities within electrical engineering, including co-designed projects, guest lectures, and research-informed student work. The approach involves multiple stakeholders, i.e., students, alumni, academic staff, and industry partners, contributing to a shared educational ecosystem. Outcomes include publishable student projects and strengthened industry trust, reflected in the University's membership of the IET Power Academy since 2025. Importantly, this demonstrates how partnership-led pedagogy can scale beyond individual modules to programme and curriculum levels.

Design Thinking as a Replicable Framework for Practice

Design thinking provides the structure underpinning this approach, shifting emphasis from *solutioneering* to problem framing, stakeholder engagement, and iterative development (McLaughlin et al., 2022). In practice, four interconnected principles guide implementation. First, **empathy through dialogue** is developed through sustained engagement with students, alumni, and industry partners. This creates a community of learners where understanding is co-constructed. Second, **divergence and convergence thinking**, inspired by the double diamond, supports both problem framing and solution development. These processes are informed by multiple sources, including educator reflection, student feedback, literature, and shared institutional practice.

Third, **evaluation through effort–impact analysis** enables informed decision-making, helping prioritise interventions while maintaining feasibility. Continuous feedback supports iterative refinement. Finally, **authenticity is dynamically reframed**, not as replication of workplace tasks, but as the development of professional identity, ethical reasoning, and social responsibility (McArthur, 2022). This ensures alignment with institutional priorities, accreditation requirements, and changing employability needs, making the model adaptable across disciplines.

Reflection, Iteration, and Sustainable Impact

Structured reflection transforms experience into meaningful learning by supporting self-efficacy, critical thinking, and identity formation. In this work, reflection is embedded as an iterative and co-created process involving **both students and educators**. This avoids tokenistic practice and instead links reflection directly to decision-making, evaluation, and redesign. The integration of reflection with design thinking creates a continuous cycle of improvement, enabling teaching practices to evolve in response to feedback and contextual change. Co-creation further strengthens this process by promoting dialogue, agency, and shared responsibility among stakeholders (Omland et al., 2025).

To summarise, the approach establishes a scalable model for partnership-driven learning by making its mechanisms explicit: dialogue, structured iteration, evaluative judgement, and dynamic authenticity. By foregrounding these processes, academics across disciplines are welcome to apply the model as a practical and adaptable framework for seeking to embed meaningful, authentic learning in their own contexts.

References

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