**John Hornby – Researcher and Lecturer at NHL Stenden**

John Hornby is a researcher-lecturer at NHL Stenden University of Applied Sciences, working within the university’s Center for Entrepreneurship. The center’s mission is to support students in entrepreneurial activities and education, particularly in the Northern Netherlands. Hornby’s research focuses on how the educational environment influences the development of the **Entrepreneurial Mindset (EM)**, which is considered a key driver of entrepreneurial intentions.

Hornby grounds his study in the well-established **Theory of Planned Behavior (TPB)**, which explains entrepreneurial intentions through attitudes, subjective norms, and perceived ability. At the heart of the research is EM, which acts as a mediating mechanism—or “black box”—between the educational environment and entrepreneurial intentions.

**Levers in the Educational Environment**

The study focuses on three key factors derived from the mARC model (Radovic et al.):

* **Authenticity**
* **Reflection**
* **Collaboration**
1. **Authenticity**: Defined as tasks, constraints, and feedback that mirror real-world practice (real clients, real data, real consequences). Its purpose is to enhance task value and foster professional identity. Hornby notes that authenticity requires students to perceive real consequences beyond grades or learning outcomes.
2. **Reflection**: A structured process that transforms experiences into insights and capabilities. It is essential for building metacognitive and evaluative skills.
3. **Collaboration**: Intentional teamwork aimed at co-constructing knowledge and competence. It is believed to especially enhance students’ networking and mobilization abilities.

At NHL Stenden, approximately 50% of the bachelor’s program is delivered through live-case projects—real consulting assignments with business partners—designed to activate these levers.

**Key Findings and Conclusions**

The study used a sample of 793 students and applied fully latent **structural equation modeling (SEM)**.

* **EM as a Mediator**: The study confirmed its central hypothesis: the educational factors (Authenticity, Collaboration, Reflection) had no direct significant relationship with entrepreneurial intentions. Instead, EM served as a necessary mediator that transforms educational practices into intentions.
* **Reflection as the Backbone**: Reflection was the most consistent and strongest predictor of EM—and thus of intentions—across all study years (Y1–Y4). The pathway Reflection → EM → Ability → Intentions proved most effective.
* **Collaboration Works in Cycles**: Collaboration was a significant driver only in years 1 and 3, particularly through perceived ability. It showed no significant effects in years 2 or 4, suggesting it operates in “short bursts.”
* **Authenticity Needs Tuning**: Authenticity (as a context setter) showed no significant indirect effects on intentions via EM or TPB at any stage. Hornby suggests that while authenticity sets the context, institutions may not fully leverage it, and its outcome-related dimension needs to be made clearer to students.
* **Gender Differences**: Overall, there were no major gender differences in learning pathways. However, EM was a significantly stronger predictor of intentions for female students than for males. Women also favored collaboration more than men.
* **Attitude vs. Intention**: In the Dutch context, attitude toward entrepreneurship and entrepreneurial intention were statistically almost indistinguishable (high correlation of 0.85). Hornby suggests this may be due to the Netherlands’ advanced economy and low perceived risk, but warns it could also reflect an overly romanticized view of entrepreneurship or an underestimation of its challenges (Dunning–Kruger effect).

**Recommendations**

Hornby recommends that institutions **double down on reflection**, ensuring clear criteria and coaching. He also advises fine-tuning authenticity so that consequences align with structural support and assessment. Collaboration should be strategically targeted at years 1 and 3 for maximum impact.