
A Fresh-Air Window to Innovative Hospitality Education: A Case from Barcelona

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Abstract

In 2023, the tourism faculty of the University of Barcelona (CETT-UB) launched the Alimara University Hotel, first in Europe, merging academic learning with practical experience in a real hotel environment, inspired by the model of university hospitals. While hospitality education has advanced, a gap remains in balancing the fast-changing real-world challenges with critical thinking, beyond the technical focus of vocational training. As an answer, this case proposes a pedagogical methodology piloted through the 'Learning Alimara' initiative at CETT-UB as reference for future academic applications. Results indicate that clearly defined standard operating procedures are essential for organically scaling and sustaining pedagogical innovation across tourism and hospitality faculties. Additionally, the observations from the pilot suggest the effectiveness of co-creation principles in higher education in hospitality, highlighting the strategic importance of structured innovation processes for academic institutions, and offering a replicable model for educators aiming to continue modernising tourism and hospitality education.

Key Words Higher education, Hospitality innovation, Pedagogy, University hotel

Track Educational innovations

Focus of Paper Industry/Educational

Introduction

Hospitality education has traditionally incorporated various forms of practical learning due to its historical vocational character, but many remain fragmented or disconnected from the academic outcomes of higher education. In most cases, collaborations with industry happen through isolated internships or operational projects, rather than integrating students into strategic decision-making processes. The Learning Alimara (L.A.) initiative addresses this gap by embedding live hotel operations directly into the academic process, offering a structured and scalable methodology that allows students to engage with evolving business challenges as part of their learning journey. This case study presents the development, pilot implementation, and systematisation of L.A. at CETT-UB, contributing to the ongoing discussion on pedagogical innovation in hospitality higher education.

CETT-UB is a leading higher education institution specialising in tourism, hospitality, and gastronomy, affiliated with the University of Barcelona. The institution offers a wide range of undergraduate, postgraduate, and specialised programmes designed to bridge the gap between academic knowledge and professional practice. Through strong partnerships with leading hospitality and tourism companies, CETT-UB fosters an ecosystem where students, faculty, and industry professionals collaborate to drive innovation, research, and sustainable development in the sector. One of the aspects the faculty is committed to is fostering 'Responsible Talent', a concept that connects education and industry through synergies that optimise both. The University Hotel Alimara (UHA) emerged in 2023 as a comprehensive concept designed to consolidate and advance the integration between the Alimara Hotel, academia, and the CETT-UB campus. Although efforts to strengthen this connection had been underway since 2022 through various initiatives and projects, it was not until the introduction of UHA that a cohesive and strategic framework was established to guide this collaboration. The vision stems from the inspiration at University Hospitals, where the focus is on medical assistance, as well as teaching and applied research (Vargas et al., 2017). According to Didziulis (2016), this last makes them able to grant the highest quality standards, CSR, risk management and, most importantly, clinic security, technology and human talent. This vision has also become what the UHA aims to convey to its guests through its hospitality services and experience.

Since 2022, the ‘Learning Alimara’ methodology has been in a pilot and development phase but has yet to achieve full standardisation for implementation. From January to June 2025, this project is being firmly relaunched with the aim of consolidating it and aligning it with the current CETT-UB’s strategic objectives. Learning Alimara aspires to establish itself as an innovative pedagogical methodology for hospitality education, transforming learning into a formal and structured tool that benefits all stakeholders, students, the Alimara University Hotel, and the CETT-UB academic community. This case study’s main objective is to propose and implement an innovative pedagogical methodology, Learning Alimara, that integrates real-time industry collaboration into hospitality higher education curricula, enhancing academic learning through structured andragogical and experiential learning principles. It presents and reflects on its conceptualisation, pilot implementation, and systematisation for institutional integration.

Literature review

History of Education in Hospitality

Multiple studies have addressed the need for pedagogical innovation in hospitality higher education. Historically, hospitality education was rooted in vocational training models (Zhang, 2024), emphasizing operational hard skills over strategic thinking and critical analysis (Tribe, 1997). This understanding of the field’s academic origins helps explain why elements of vocational training, such as internships, continue to represent the main, almost exclusive, practical component within contemporary curricula, primarily focused on developing operational hard skills rather than the soft skills addressed at university level. Therefore, while hospitality higher education seeks to adopt a more strategic and critical perspective, its strong vocational roots continue to fully shape practical learning, challenging institutions to ensure that students develop not only operational skills but also the capacity to navigate the broader industry ecosystem (Airey & Tribe, 2001), as well as broader competencies with international applicability (Coll-Ramis et al., 2023)

Higher Education; From Pedagogy to Andragogy

In this sense, as hospitality education aims to better align with real-world challenges, understanding how young adults, who represent most students, learn becomes essential for designing new but meaningful learning pathways. However, authors such as Carvalho et al. (2020) point out significant research gaps in the application of andragogy, or adult learning theory, within higher education, especially when compared to the more extensive body of research on child pedagogy, highlighting the need to address these gaps to improve quality in the field. In fact, talking about andragogy rather than pedagogy becomes essential (Chavan & Khandagale, 2022; Castillo, 2018), given that the adult brain benefits from methodologies that foster autonomy, relevance, problem-solving, and intrinsic motivation (Park University, 2025) operating at distinct developmental stages from children, with different cognitive needs and learning drivers (Chaparro, 2017; National Institute of Mental Health, 2023; Burnett, 2024). Given that andragogy remains barely unexplored as a framework in hospitality education (Knowles et al., 2015), the following section reviews existent explorative studies on innovative methodologies at university level and their reported outcomes, evidencing and fostering a dynamic landscape of andragogical innovation across higher education, with universities in the tourism and hospitality fields not leading, but increasingly joining this scenario.

Innovation in Higher Education Andragogy

Firstly, Fernandes et al. (2024) emphasise that innovation in this field should be seen as a systemic transformation, advocating for methodologies like Collaborative Online International Learning (COIL), which promote teamwork and intercultural competition (W. K. Ma, 2024). Project-based Learning (PBL), Challenge- Based Learning (CBL), Massive Open Online Courses (MOOCs), co-creation, and even Montessori adaptations to university levels stand out for promoting active engagement, real-world learning and critical thinking. The latter highlights the need to avoid passive learning, positioning students as co-constructors of their own learning, fostering deeper cognitive and emotional involvement, skill development, and better alignment with global, technological and social challenges (Fernandes et al., 2024). Importantly, their findings stress that both student agency and faculty perspectives are central to success, requiring institutional alignment and support (Fernandes et al., 2024). W.K. Ma (2024) also highlights adopted methods like gamification (enhancing student commitment), flipped classrooms (theory outside class, practice in class), and emerging technologies for their motivational potential, accessibility, personalisation, and adaptability. Their applicability in hospitality education reflects a collective move towards flexible, student-centered and meaningful learning experiences (W.K. Ma, 2024; Fernandes et al., 2024).

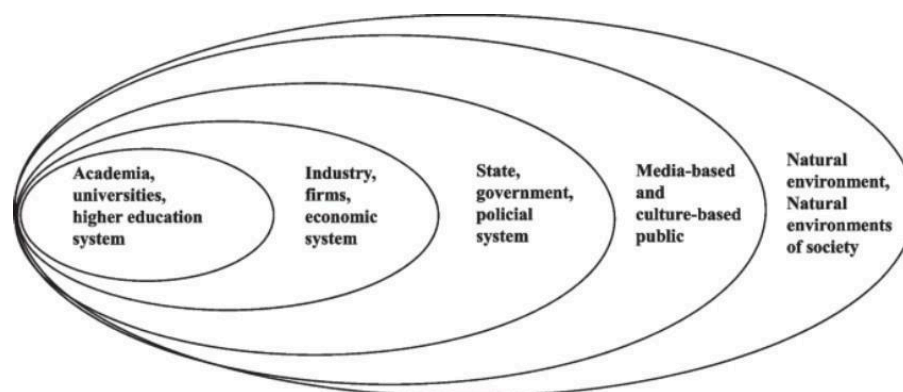
Before moving beyond PBL, several studies highlight the added value of technology integration; Hou et al. (2023) incorporated PBL with Virtual Reality (VR), to address underrepresented curricular areas such as green building, not due to their lower importance, but because limited curriculum space often constrains their inclusion, allowing for a more efficient and solid knowledge transfer within the available instructional time. Their model combined lectures, VR site visits, physical ones and PBL to quickly transfer essential knowledge, though they identified scalability and resource limitations, especially for institutions with fewer resources. Lee & Ho (2023) blended PBL with the metaverse in hospitality education. Interestingly, students valued not the technology itself, but the immersive, collaborative experience, which improved learning, teamwork and class engagement (Lee & Ho, 2023). This last becomes even more interesting if we glance at other authors like Marete et al. (2024) or Ciolan & Manasia (2024), who recognise that engaging through emotions via affective learning methodologies and human connection is key for student's performance in higher education.

Additionally, co-creation, design thinking and microlearning also appear in recent proposals. Rafael & Fonseca (2023) present a co-creation project where students, alongside a company, developed new accommodation products, facing real market challenges while building industry-ready skills. Design thinking fosters higher-order thinking and cross-functionality, though a holistic approach tailored to hospitality curricula is still needed (Assen et al., 2023). Microlearning, meanwhile, enhances knowledge, reasoning, understanding, and interest, as evidenced by Dolasinsky & Reynolds (2021) in a hospitality faculty context.

Building Long-lasting Innovation

Altogether, innovation in higher education andragogy is increasingly shaped by new methodologies that foster different skills. Nonetheless, while the classroom remains a powerful transformation site for the industry, innovation cannot be developed in isolation. Therefore, once innovative ideas begin to emerge, the most relevant aspect becomes understanding how to ensure that innovation itself can be sustained in time, resources and impact, which is through broader, interconnected systems that involve not only students and educators, but also external stakeholders, communities, or even the environment as suggested by the popular Quadruple and Quintuple Helix Models (Carayannis et al., 2012).

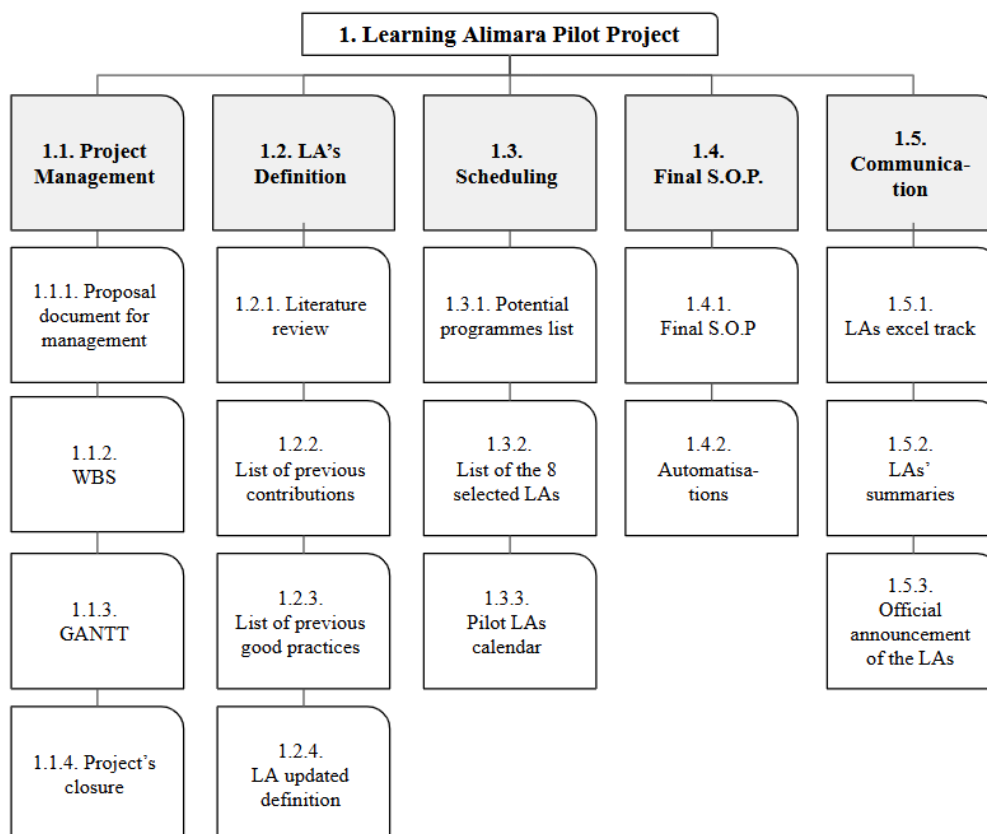
Figure 1. The Quintuple Helix Model (Carayannis et al., 2012)



Case Description

The development of the case of Learning Alimara as a pilot project at CETT-UB followed a multi-phase process. The first phase involved reviewing previous attempts to develop similar methodologies at the faculty and identifying gaps based on the literature review. The second phase focused on defining the model's structure and aligning andragogical principles with hospitality operational contexts. Following this, eight pilot implementations were conducted across multiple academic programmes, including bachelor's and master's degrees, integrating students directly into real-time hotel challenges through defined projects and visits. After the pilot phase, a procedural framework and Standard Operating Protocols (SOPs) were developed ensuring consistency and scalability for full standardised implementation at CETT-UB starting in the 2025-26 academic year.

Figure 2. Work Breakdown Structure (WBS) of the project (Own elaboration, 2025)



When it comes to deliverables, five main work blocks structured the initiative. First, Project Management includes tools such as the WBS and the Gantt chart, as well as the preparation of the proposal document for CETT Group's direction team and the final report. Secondly, regarding the Learning Alimara definition, several smaller deliverables are identified such as the list of contributions made by the previous team, the updated definition of what a Learning Alimara is, and the initial literature review. Then, the Scheduling block covers the list of possible programmes, the eight selected Learning Alimara cases for the pilot phase, and the pilot calendar itself, which frames the period between January and June 2025.

The final two blocks refer to the Final S.O.P. and the communication efforts. The first one includes the final S.O.P. proposal and automatization suggestions (with free online tools) for certain parts of the process like tracking efforts. Lastly, Communication deliverables include the elaboration of summaries for each L.A., an Excel file to track their evolution, and the preparation of the final official announcement presenting Learning Alimara as a stable proposal to the staff, supporting continuity, reporting and transparency for the UHA's internal communication. All pilot activities were embedded within regular coursework under CETT's institutional framework, ensuring ethical compliance and the absence of individual data collection.

Findings

During the pilot phase, Learning Alimara was implemented in eight courses across different academic levels, programmes, subjects, languages and study fields. Students actively engaged in real and specific strategic challenges for the hotel demonstrating their ability to transform theoretical knowledge into real strategic contexts, transitioning from guided tasks to more autonomous project ownership, reflecting the application of andragogical principles. Hotel staff collaborated closely, allowing real-time feedback and alignment between academic and corporate goals. The successful pilot suggested the feasibility of Learning Alimara and generated valuable insights for standardisation, adoption and inspiration in the field of hospitality higher education.

In the first project, students tackled the optimisation of the hotel's online reputation management, proposing improvements to the current review-handling process that directly impact guest satisfaction and marketing effectiveness. The second challenge focused on redesigning the foyer space, given that some research at the living lab had highlighted its underuse, to enhance its function, profitability and comprehension by guests. The

third group addressed the hotel's need to promote a new cultural product that was going to be launched the following summer, developing targeted social media and growth hacking strategies to bring up more ideas to its online positioning campaign. In the fourth activity, students reimagined the current breakfast offer, balancing operational efficiency with evolving guest expectations. The fifth project involved analysing the restaurant's physical space, identifying design adjustments to elevate the cognitive and emotional dining experience through neuroanalysis principles. Moreover, the sixth initiative centred on creating meaningful guest experiences around a key local festivity (Sant Jordi), aligning community and cultural identity with guest engagement. In the seventh project, students conducted a full guest journey analysis, detecting service gaps and proposing targeted improvements to both operations and marketing. Finally, in the eighth challenge, students engaged in on-site data collection, identifying operational problems and developing concrete, data-informed solutions to support management decisions. Each project allowed students to work on real hotel needs, offering applicable solutions while directly connecting academic learning with professional practice and providing the hotel with several reports and opportunities for growth and optimisation.

Regarding applicability, observations show that 62,8% of the pilots occurred within the Bachelor's framework, while 48,2% of them were inside the Master's. Hospitality-related studies were more suitable, despite all of them (Hospitality, Tourism and Gastronomy) hosting at least 25% of the pilot projects per field. Logistically, all Learning Alimaras made the students pass by one of the labs (including the gastronomic Lab at CETT) except for online programmes. In fact, every Learning Alimara was selected by the project manager to ensure every characteristic of the definition of an L.A. was met, and at least integrated one of the following: feedback from the Alimara team on the outcomes (50%), on-site session/s in one of the labs (87,5%), physical visit and observation within the hotel areas (75%), or contact with the Alimara staff during the activity (87,5%). Moreover, 75% of these Learning Alimaras were part of the assessed activities of the subject, suggesting that both graded and not graded L.A.s became valuable educational options. Moving on to the challenges, these were mainly found regarding the compatibility between students and hotel staff, since both academic classes and hotel staff schedules are rigid and complex.

For this, one of the main pillars was ensuring that students did not intervene with the guest's experience, hence why Learning Alimaras with mobility of the group outside of the labs, needed material or spaces were informed in advance to the reception, restaurant team or most affected department for them to plan ahead or advise for any need for rescheduling, for instance, in case of a big group checking in that day or special event at the restaurant making staff need to be fully focused on the hotel's operation. Integrating the reality of the hotel and its staff during the organisation of the activities in terms of logistics, dates, spaces and addressed challenges was key to ensuring not only the success of the class but also the added value for the hotel and continuity of the co-creative campus.

Discussion

The Learning Alimara pilot shows the potential of integrating real operational and strategic challenges into hospitality education through structured andragogical principles. By shifting from theoretical simulations to real applied projects within the hotel's daily reality, students engaged with authentic business scenarios that enhanced both academic performance and operational relevance. The projects allowed students to progressively assume ownership of problem-solving tasks, reflecting key andragogical elements such as autonomy, experiential learning, and goal-oriented approaches. Collaboration with hotel staff enabled real-time feedback, promoting continuous alignment between academic and corporate expectations. Moreover, the variety of challenges addressed, ranging from guest experience and operational optimisation to marketing strategies, illustrates the model's versatility across different academic levels and study fields. Unlike traditional experiential models, Learning Alimara operates at a strategic level within an institutional framework, systematically linking learning outcomes to hotel performance and long-term innovation capacity. Despite logistical challenges related to aligning academic schedules with hotel operations, careful coordination ensured that activities respected both student learning and guest experience. These observations highlight the institutional value of university hotels as living laboratories, capable of bridging the gap between education and industry demands when systematically organised. The Learning Alimara experience not only confirms the feasibility of co-creation models in hospitality education but also offers a scalable and replicable framework for institutions seeking to modernise curricula while contributing directly to industry performance in a fast-changing sector. This case aligns with current approaches to Work-Integrated Learning, Living Labs, and Critical Hospitality Education (Tribe, 1997), illustrating how academic-industry ecosystems can evolve through structured co-creation.

Conclusions and Implications

This case contributes to the ongoing discussion on andragogical innovation in hospitality higher education by presenting and piloting the Learning Alimara (L.A.) model at CETT-UB. While hospitality education

traditionally integrates various practical learning forms due to its historical vocational character, many remain disconnected from the academic outcomes of higher education. L.A. embeds the university hotel's reality and goals directly into academic programmes, offering a structured methodology that allows students to engage with evolving business challenges. The model applies adult learning theory and concepts from alternative methodologies such as co-creation, challenge-based learning, project-based learning and design thinking, enabling students to progressively move from guided experiences to autonomous problem-solving while contributing to hotel operations. The pilot phase confirms the model's feasibility and readiness for institutional scaling. Theoretically, this case contributes to the limited literature on andragogy in hospitality education, addressing gaps identified by Carvalho et al. (2020) and Knowles et al. (2015). The procedural systematisation through SOPs also contributes to discussions on managing educational innovation institutionally.

From a managerial perspective, Learning Alimara offers a practical model for strengthening academia-industry collaboration without compromising hotel operations. It shows how live business environments, especially in fast-changing fields like hospitality, can serve as learning laboratories while preserving service quality and benefiting from updated and applicable solutions to their real challenges. Involving hotel staff fosters internal development and creates knowledge transfer opportunities within the hotel itself. Nevertheless, its successful exact replication depends on institutional alignment, access to active industry partnerships, and flexible operational structures. Moreover, further research is needed to evaluate long-term learning outcomes, scalability beyond CETT's context, and the model's applicability in diverse institutional or more resource-limited environments, while formalising continuous feedback loops with industry partners will also be key to maintain adaptability as industry needs evolve.

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