

## **Designing a First Ever PhD Program on a Polytechnic HE Business School**

### **Desenhando um Primeiro Programa de Doutoramento numa escola de Negócios do Ensino Superior**

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**ABSTRACT:** This paper describes a complex challenge in pedagogical innovation within higher education, specifically the curriculum design of a new PhD program in Intercultural Studies for Innovation, taught in English, in a business school of the Portuguese polytechnic subsystem. The research undertaken for the creation of the program encompassed the identification, evaluation, and implementation of cutting-edge pedagogical strategies and mixed-methods, combining qualitative analysis of curriculum design processes, learning assessment and expected outcomes.

As globalization continues to reshape the academic landscape, the demand for professionals well-versed in intercultural competencies has intensified, especially within business companies. This study delves into the strategic integration of innovative pedagogical approaches to cultivate a learning environment that not only addresses the unique challenges of intercultural studies but also fosters critical thinking, collaboration, and adaptability with an actual impact in business and society.

Methodologically, the research that sustains the design of the PhD program involves extensive literature reviews, consultations with experts in intercultural studies, and iterative feedback loops with stakeholders, including business companies and associations, city councils, cultural foundations, partner overseas universities, and potential doctoral candidates. The integration of diverse pedagogical models – including tutorials, seminars, mentorships, case studies, practical application of knowledge in real settings, problem-based learning, and project-based learning, as well as immersion in business, institutional and R&D environments – under an interdisciplinary framework, is systematically explored.

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Main findings relate to the impact of cocreative practices, personalized curricula, assessment by portfolios and the production of theses on societal themes identified by stakeholders on the doctoral candidates' development of intercultural competencies for innovation.

**KEYWORDS:** Curriculum Design, Innovation, 3<sup>rd</sup> Cycle, Intercultural, Interdisciplinary.

**RESUMO:** Este artigo descreve um desafio complexo de inovação pedagógica no ensino superior, especificamente o desenho curricular de um novo programa de doutoramento em Estudos Interculturais para a Inovação, leccionado em inglês, numa escola de gestão do subsistema politécnico português. A investigação levada a cabo para a criação do programa englobou a identificação, avaliação e implementação de estratégias pedagógicas de ponta e métodos mistos, combinando a análise qualitativa dos processos de conceção do currículo, a avaliação da aprendizagem e os resultados esperados.

À medida que a globalização continua a remodelar o panorama académico, a procura de profissionais bem versados em competências interculturais intensificou-se, especialmente nas empresas. Este estudo aprofunda a integração estratégica de abordagens pedagógicas inovadoras para cultivar um ambiente de aprendizagem que não só aborda os desafios únicos dos estudos interculturais, mas também promove o pensamento crítico, a colaboração e a adaptabilidade com um impacto efetivo nos negócios e na sociedade.

Metodologicamente, a investigação que sustenta a conceção do programa de doutoramento envolve extensas revisões da literatura, consultas a especialistas em estudos interculturais e ciclos de feedback iterativos com as partes interessadas, incluindo empresas e associações empresariais, câmaras municipais, fundações culturais, universidades estrangeiras parceiras e potenciais candidatos a doutoramento. A integração de diversos modelos pedagógicos - incluindo tutoriais, seminários, tutorias, estudos de casos, aplicação prática de conhecimentos em contextos reais, aprendizagem baseada em problemas e aprendizagem baseada em projectos, bem como a imersão em ambientes empresariais, institucionais e de I&D - num quadro interdisciplinar, é sistematicamente explorada.

As principais conclusões dizem respeito ao impacto das práticas cocriativas, dos currículos personalizados, da avaliação por portefólios e da produção de teses sobre temas sociais identificados pelas partes interessadas no desenvolvimento de competências interculturais para a inovação por parte dos doutoramentos.

**PALAVRAS-CHAVE:** Conceção Curricular, Inovação, 3º Ciclo, Intercultural, Interdisciplinar.

## **1. Introduction**

As globalization continues to reshape the academic landscape, the demand for professionals well-versed in intercultural competencies has intensified, especially within business companies (Hmelo, 2018). The strategic integration of innovative pedagogical approaches should be directed towards the creation of a learning environment that not only addresses the unique challenges of intercultural studies but also fosters critical thinking, collaboration, and adaptability with an actual impact in business and society.

Thus, this paper describes one of those complex challenges in pedagogical innovation within higher education, specifically the curriculum design of a new PhD program in Intercultural Studies for Innovation, taught in English, in a business school of the Portuguese polytechnic subsystem. Research aims encompass the identification, evaluation, and implementation of cutting-edge pedagogical strategies and mixed-methods, combining qualitative analysis of curriculum design processes, learning assessment and expected outcomes (Green, 2018).

## **2. Framework**

The design of a “first ever PhD program in a polytechnic higher education business school” of the title refers to the PhD in Intercultural Studies for Innovation of ISCAP-P.PORTO, the Polytechnic of Porto (P.PORTO) Business School (ISCAP), as a pioneering project in institutional and educational innovation. The design of this PhD course is rooted in P.PORTO's mission and strategic plan of teaching not only knowing how to know, but also knowing how to do and knowing how to be. The general objectives of the course are aligned with the common global strategies of P.PORTO and ISCAP, which consist of creating and disseminating culture and knowledge in a socially responsible way, training citizens with professional, scientific and technical competence in a diversity of job profiles and qualifications, while contributing to the sustainable development of the territory (Erbguth, Schöring, Birt et al., 2022).

The design of the PhD in Intercultural Studies for Innovation complies with ISCAP's specific mission of educating culturally, scientifically and technically within the three cycles of higher education, in this case in the specialized fields of interculturality and business sciences. The PhD program responds to the general need for highly specialized professional profiles, within an international reference framework, capable of responding to the demands of the global market. In this way, the program contributes to ISCAP's mission in the areas of knowledge, teaching and research, impacting the socioeconomic and territorial context where the school operates; encourages collaborative interdisciplinary work; increases the range of action and learning for teachers and students respectively; fosters critical thinking, tolerance, diversity and inclusion (Blackmore & Kandiko Howson, 2018). The offer of English taught courses at the 3<sup>rd</sup> cycle (doctorate) level

prefigures an institution in tune with the rapid evolution of economy and society and their need for transversal, interdisciplinary and international training, adapted to the reconfiguration and requirements of different sectors, activities and technologies (Taylor, Beasley & Swabey, 2019; Golde & Walker, 2020). As ISCAP is a polytechnic higher education school in the area of Business Sciences, the pedagogical practice of this PhD is designed as the result of an interdisciplinary research work applied to the business environment, both at the national and international level.

### **3. Objectives**

The design of the PhD in Intercultural Studies for Innovation is multidisciplinary and transversal, aimed at 3<sup>rd</sup> cycle students, with the purpose of providing them with advanced knowledge in Intercultural Studies, in their intersection with Business Sciences and in their application to development with a high social and business impact.

More specifically, and in tune with P.PORTO's mission and strategic plan, the objectives designed for this PhD program are: 1. Stimulating the development of collaborative ecosystems between the community, companies, R&D centers and higher education institutions; 2. Disseminating knowledge about interculturality, development and innovation among the local business and community; 3. Transferring knowledge generated by research for inclusion, innovation and socioeconomic development; 4. Creating differentiated capacities that understand interculturality as a complementary value to inclusion and regeneration policies, as a driver of development, and as a factor in valuing territories and their products; 5. Enhancing the development of applied research and the writing of theses related to societal themes identified by stakeholders.

The ultimate goal of this pedagogical project is to educate early-career scientists and professionals in interdisciplinary team-based research, so they might develop the skills and tools necessary for tackling problem-focused questions, within the multitude of societal challenges experienced globally as much as locally (Zepke & Leach, 2019; Lee, 2019). This transition from individual researchers to collaborative teams ensures that science produced in polytechnic higher education institutions remains effective in the application of knowledge as well as in the face of the rapidly accelerating complexity of the problems it must address in the contemporary globalized world (Mann, 2018).

The design of this PhD program is described as a pioneering project in educational innovation because it intends to provide skills in interdisciplinary teamwork and in interdisciplinary communication, as well as abilities to address problem-focused questions and to engage stakeholders, along with a strong epistemological understanding. It is also considered a pioneering project in institutional innovation because it is designed to produce actual effects on the faculty and culture of graduate education in P.PORTO, as well as to extend and apply its own model to other institutions.

#### **4. Methodologies**

The educational methodologies of the PhD in Intercultural Studies for Innovation are designed to prepare the students for interdisciplinary, collaborative team-based research, capable of addressing problem-based questions and engaging stakeholders.

Thus, the two curricular semestres of the PhD were designed to include the following course units and respective methodologies:

##### **1. Methodologies of Intercultural Studies for Business.**

This course develops the students' understanding, critical analysis and application of intercultural theories. Pedagogical methods include interactive seminars to discuss foundational texts and case studies on contemporary research in Intercultural Studies for Business, encouraging active participation and practical application of theoretical concepts. The focus on real case studies in global contexts allows students to apply learned theories, promoting problem-solving and informed decision-making. Applied research works enable students to deepen their knowledge in specific areas (Beaufort, 2019), contributing to the construction of knowledge at the intersection between culture and business. Collaboration with international projects and individualized guidance enrich the experience, preparing students for globalized business environments (Aitchison & Lee, 2018). Regular presentations and discussion sessions promote effective communication and the constructive exchange of ideas, while continuous assessment through portfolios monitors progress, encourages self-reflection and the practical application of concepts (Bannister & Cullen, 2022).

##### **2. Innovation, Co-creation and Sustainability.**

This course is based on active, problem- and project-based learning methodologies and cross-participation, also using collaborative and reverse storytelling. Methods include future workshops, surveys, tests, evaluation and validation, through techniques such as personas, scenarios, mockups, image boards, interviews, focus groups, questionnaires, diaries, thinking out loud (Svensson et al., 2010), contextual investigation, “why-why-why” technique, cultural inquiry (Gaver et al., 2004), and dialogue café (Halas, 2021). To generate concepts and ideas, different stakeholders will be involved, through workshops, walkshops, brainstorming, “6-3-5 brain-writing”, experimentation with prototypes and ideas' competition. These methods can also be applied at other stages of the process, such as, for example, in the evaluation of the solutions developed by students (Ansell, Sørensen & Torfing, 2022).

##### **3. Impacts Oriented to Business and Society.**

The course operates in an immersion model, on an individual path under tutorial guidance, through: 1. Presentation of communications in conferences. 2. Attendance of accredited workshops, producing reflective reports. 3. Short-term courses subject to practical assessment. 4. Publication of scientific articles that contribute for knowledge in the area. 5. Short-term immersion periods in

national or international companies or institutions (Hmelo-Silver & DeLeeuw, 2021). Despite the diversity of possible themes and the individualization of each research path, there are transversal contents aligned with the general objectives of the program, namely: analyze and implement international business strategies and involve local communities in social impact initiatives; explore the intersections between sustainable development, interculturality and inclusion; understand the functioning of non-profit organizations and corporate social responsibility (Topping, 2021). At the end of the semester, the presentation and discussion of the results obtained take place during group orientation sessions, synchronized with the final presentations of the course unit “Thesis Project”.

#### 4. Thesis Project.

The methodologies of this course are articulated with the seminar and tutorial pedagogical models that guide the whole program. At the beginning of the course, a series of seminars are delivered by researchers, executives, business leaders and national and international stakeholders, as well as by community representatives and alumni. Throughout the academic year, tutorial sessions address research planning, methods, practices and tools, namely bibliographic research, selection and referencing; writing, reviewing and publishing; ethics; project management; dissemination of results and communication of science (O'Grady, 2022). At the end of the 2<sup>nd</sup> semester, group orientation sessions comprehend presentations of the students' research projects, state-of-the-art analysis and thesis plans, synchronized with the final presentations of the course “Impacts Oriented to Business and Society”.

In the subsequent semesters, the production of the thesis will develop a broad argument that addresses topics and problems resulting from an in-depth study and analysis of Intercultural Studies for Innovation. The thesis constitutes an extensive reflection of critical applied research that may include the creation of a patent, company or NGO, illustrating in practice the impact of the program's theoretical framework.

Overall, the teaching methodologies designed for the PhD program include theoretical-practical, seminar, tutorial and group guidance contact hours, based on research tasks, analysis of case studies, application of knowledge in real environments, problem-based learning, project-based learning, and immersion in national and international business, institutional and research environments (Deserti, Real & Schmittinger, 2022). This allows students a direct contact with contemporary realities and an in-depth awareness of the importance of the intercultural dimension in business ventures and in socioeconomic development. Depending on the curricular units, assessment will be carried out through the design of individual work plans and reporting on their compliance, portfolios with the outputs produced, team work projects, peer-assessment, advanced research projects, case studies, public presentation and discussion of projects, written assignments, and public examination before a jury.

## **5. Expected Results**

The design of the PhD in Intercultural Studies for Innovation expects to achieve the following results: 1. Train professionals capable of transferring strategic knowledge to companies, public entities and the socio-cultural sector, in order to support them in sustainable innovation processes within the context of a global economy in permanent intercultural mobility; 2. Understand intercultural theories applicable to global business, with awareness of current research themes in intercultural studies and innovation in academia, industry, business and society; 3. Analyze the impacts of intercultural studies from a perspective of change, innovation and internationalization of business, as well as of social integration and cohesion; 4. Understand business companies' approaches to sustainable innovation; 5. Develop co-creation tools for the scientific, social and economic impact of research; 6. Recognize and develop positive elements of interculturality in business; 7. Optimize the benefits of culture and cultural production; 8. Emphasize cultural assets as factors of business success and sustainability (Grunwald, 2022).

## **6. Discussion**

From the onset, and bearing in mind the established framework, objectives, methodologies and expected results, the design of the PhD in Intercultural Studies for Innovation is aware that this program implies: a) constant collaboration with academic, business and institutional partners supported by networks and collaboration protocols at the regional, national and international level; b) interdisciplinary training based on tutorial and seminar pedagogical models, focused on the student's profile and their contribution to society and the economy; c) strategic knowledge for the expansion, involvement and social responsibility of companies; d) teaching in English, with the respective diversity of geographic and academic origins of the target audience; e) transfer of knowledge to the business sector, immersion of students in companies/institutions and development of theses articulated with real contexts and needs.

Possible questions that are still open for analysis are: a) probable heterogeneity in the students' linguistic abilities; b) lack of awareness by the community in general about the relevance of research applied to cultural and societal issues; c) lack of sensitivity on the part of companies when hiring professionals with a PhD degree; d) fears regarding interculturality caused by ongoing migratory waves and international conflicts.

In general, this PhD program is designed to have an impact in contexts such as: a) international expansion of the Portuguese economy; b) attraction of international talent and cooperation; c) engagement of students in research activities within the community and the business sector; d) boosting of the regional business activity, especially within small and medium-sized companies; e) promotion of intercultural inclusion in companies.

## **7. Conclusions / Final Considerations**

The sustained and interdisciplinary application of intercultural studies for innovation in the curriculum design of the PhD program here described intends to play a fundamental role at different levels in socioeconomic development, namely by:

1. Understanding cultural nuances, which allows companies to approach and reach global markets more effectively, notably by adapting products, services and strategies to the cultural preferences of consumers in different contexts.
2. Facilitating the formation of strategic partnerships with companies from different parts of the world, while understanding the role of diverse business practices and cultural values in the promotion of success.
3. Contributing to the generation of creative, comprehensive and adaptable solutions through the innovation generated by cultural diversity, different perspectives, co-creation and intercultural teams.
4. Retaining international talent through the promotion of an inclusive culture in companies. Cultural diversity in the workplace encourages the exchange of ideas and experiences, contributing to innovation and creative problem solving.
5. Building business practices based on mutual understanding and respect, which promotes sustainable partnerships, as intercultural competence helps to avoid conflicts arising from cultural differences.
6. Equipping culturally competent companies, willing to adapt to unpredictable changes in the global business environment. Cultural flexibility is a competitive advantage in a world where business dynamics are constantly evolving.
7. Promoting cultural diversity in local areas, which contributes to socioeconomic development. Companies that respect and incorporate local cultures are more accepted by the community, which results in positive social impacts.
8. Training highly skilled decision makers who are capable of increasing effectiveness in intercultural business settings, while contributing to a more productive work environment.

Overall, it may be said that the curriculum design of the PhD in Intercultural Studies for Innovation of ISCAP-P.PORTO serves as a resource for academics seeking to build similar doctoral programs with the goal of fostering the next generation of researchers and professionals possessing the skills necessary to assess and provide solutions for the increasingly complex problems faced by business and society.



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