From International Mobility to Global Employability: Eighteen Years of Developing the BlendEd Pedagogical Paradigm

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Abstract—Preparing higher education students for an increasingly global labour market requires more than disciplinary knowledge. It requires opportunities to develop transversal competences, international awareness and the ability to collaborate across cultural and disciplinary boundaries. Since 2008, the BlendEd initiative has explored how innovative learning environments can integrate these dimensions into regular higher education without requiring major curricular restructuring or extensive additional resources. This paper presents an 18-year evolution of this pedagogical work, from the initial Multinational Undergraduate Team Work (MUTW) project to the current Africa BlendEd Course (ABC BlendEd) initiative. Across successive editions, the model evolved from homogeneous, teacher-defined projects to international and multidisciplinary teams addressing authentic challenges proposed by companies, with increasing integration of blended mobility, entrepreneurship, intercultural learning and cooperation with external stakeholders. More than 500 students and over 30 companies have participated in the European implementation, while the approach has progressively expanded beyond Europe. The paper analyses the main pedagogical developments, the rationale behind each evolutionary step, and the lessons emerging from sustained implementation. ABC BlendEd represents the latest stage of this process, adapting the accumulated experience to African higher education and agriculture. The experience suggests that international, challenge-based and multidisciplinary project learning can provide a practical pathway for embedding employability development within existing curricula while simultaneously widening access to meaningful international exposure.

Keywords—blended mobility; employability; internationalisation; challenge-based learning; multidisciplinary teamwork; intercultural learning; higher education; BlendEd

I. INTRODUCTION

Higher education institutions are increasingly expected to prepare graduates not only with specialised disciplinary knowledge but also with the competences required to operate in complex, international and rapidly changing professional environments. Communication, teamwork, problem solving, collaboration, adaptability, intercultural awareness and the capacity to work across disciplinary and geographical boundaries have become important dimensions of graduate employability.

International mobility can make an important contribution to this development [1]. Studying or working in another country exposes students to different educational, cultural and professional environments and can stimulate the development of personal and professional competences [2, 3, 4, 5]. However, traditional physical mobility remains inaccessible to a significant proportion of students. Financial constraints, family responsibilities, employment, health conditions, disabilities, anxiety about long periods abroad, visa and geopolitical restrictions, and the risk of disrupting local studies or employment can all limit participation. Environmental considerations also increasingly call for alternatives that reduce unnecessary travel.

These challenges motivated the development of the BlendEd pedagogical approach. Beginning in 2008, the initiative explored how international and intercultural learning could be integrated into existing higher education programmes through a combination of physical and virtual collaboration. Rather than treating mobility as an activity separate from the curriculum, the approach embeds international collaboration within project-based learning. Students from different institutions work together on a common challenge, combining periods of face-to-face interaction with sustained online teamwork.

The concept builds on the broader notion of blended mobility. Virtual mobility can be understood as using information and communication technologies to obtain some of the educational benefits associated with physical mobility without requiring travel, while blended mobility combines physical and virtual approaches for a specific educational purpose. In the BlendEd model, this combination is not merely a technological solution for delivering content: it constitutes the learning environment itself.

Over 18 years, the approach has progressively evolved from the Multinational Undergraduate Team Work (MUTW) model to Blended-AIM and, more recently, to the Africa

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BlendEd Course (ABC BlendEd). This paper describes that evolution and examines the pedagogical logic underlying the successive developments.

II. From Multinational Teamwork to Blended Mobility

The initial model, Multinational Undergraduate Team Work (MUTW), was designed around the idea that students could develop professional and interpersonal competences by working collaboratively with peers from other countries. The target group was primarily final-year undergraduate students undertaking capstone project work. This was strategically important because project and internship activities provide a natural context for developing employability while allowing students to work on problems with a professional dimension.

The original approach established a basic principle that has remained central to BlendEd: internationalisation should be integrated into learning activities rather than treated as an additional activity available only to mobile students.

Students from participating institutions were organised into multinational teams and worked on common projects. Over time, the model moved beyond homogeneous student groups and teacher-defined academic assignments towards multidisciplinary teams working on authentic challenges. External organisations and companies increasingly became sources of challenges, introducing a professional context and creating a direct relationship between academic learning and the workplace.

This evolution changed the nature of the student experience. Instead of simply collaborating with international peers on an academic assignment, students had to understand a real problem, negotiate its interpretation within a culturally diverse team, distribute responsibilities, communicate across institutional and disciplinary boundaries, develop a solution and present it to external stakeholders. The project therefore became a vehicle for simultaneously developing disciplinary and transversal competences.

The model also progressively incorporated entrepreneurship, intercultural learning, professional communication and cooperation with external stakeholders. The objective was not simply to produce an international project but to create an authentic environment in which students would practise behaviours and competences relevant to their future professional lives.

III. The Blended-AIM Pedagogical Model

The subsequent development of Blended-AIM formalised blended mobility as a course unit. Its central goal was the sustainable promotion of students' employability, with three complementary objectives: promoting employability through learning activities that do not require curricular restructuring; providing international experience despite barriers to physical mobility; and developing professional competences such as teamwork, communication, international cooperation, collaborative learning and systemic thinking.

The model combines physical meetings with extended periods of virtual teamwork. A typical course edition is organised in three broad stages: preparation, development and closure.

During the preparation stage, participating institutions organise the edition, identify potential challenges from companies or other external stakeholders, select challenges according to the intended learning outcomes and available competences, recruit students and teachers, establish teams and organise the logistics for the physical meetings.

The development stage begins with preparatory activities followed by an intensive physical kick-off meeting. Students become acquainted with their team members, the client and the challenge, clarify expectations and organise their work. Workshops may address topics such as agile development and intercultural teamwork. Teams discuss their initial proposals with the client and undertake an initial peer-evaluation activity.

After the kick-off, most of the development work takes place virtually at the students' home institutions. Teams maintain regular online meetings and use collaborative platforms and distributed development environments. This period is particularly important pedagogically because students must manage the practical difficulties of geographically distributed teamwork. Communication, coordination, task allocation, time management and conflict resolution become integral parts of the learning process.

The course concludes with a second physical meeting in which teams finalise their deliverables and present them to teachers and client representatives. Depending on the challenge, outputs may include a product or prototype, business plan, marketing campaign or other professional deliverable. A final peer-evaluation process contributes to assessment, followed by a debriefing in which students and teachers identify aspects for improvement.

The structure therefore deliberately alternates between intensive face-to-face interaction and sustained virtual collaboration. Physical meetings provide opportunities for team formation, trust building, intensive communication and direct interaction with stakeholders. Virtual periods provide the context in which students practise distributed collaboration and develop the autonomy required to manage a project over an extended period.

IV. Why Blended Mobility?

The development of BlendEd was driven by both pedagogical and inclusion-related considerations. The presentation identifies multiple barriers that may prevent students from undertaking conventional international mobility, including its financial cost, family circumstances, student employment, anxiety associated with long periods abroad, disability and health-related constraints, visa and geopolitical restrictions, and public-health crises.

Blended mobility does not eliminate the value of physical mobility; rather, it changes the relationship between physical and virtual mobility. By reducing the amount of travel required, students can obtain sustained international exposure without having to relocate for an entire semester. This creates opportunities for students who would otherwise be unlikely to participate.

The environmental dimension is also relevant. Data presented in the BlendEd work compare the travel requirements of conventional Erasmus mobility with those of Blended-AIM. A survey involving 612 Erasmus students from 47 countries reported an average of 2.5 trips home during a standard Erasmus mobility. In the Blended-AIM model, the corresponding figure was 1.8 trips for teams involving ten universities and 1.7 for teams involving six universities. The

presentation estimates the resulting carbon footprint of Blended-AIM at approximately 70% of that associated with traditional physical Erasmus mobility [6].

Consequently, the rationale for blended mobility extends beyond convenience. It represents an approach to internationalisation that seeks to combine equity, employability, environmental sustainability and resilience. The approach can also be adapted to different fields of study, particularly where project-based course units already form part of the curriculum.

The experience of the COVID-19 pandemic provided an important test of this resilience. During the 2019/20 edition, the course was affected by the pandemic, yet the course was not interrupted and all participating students successfully completed it. Most Erasmus students returned home and cancelled their physical mobility. In the following academic year, physical meetings were replaced by online meetings, with kick-off, mid-term and final meetings conducted virtually. This experience demonstrated that the underlying pedagogical structure could survive the removal of physical mobility, even though physical interaction remained an important element of the preferred model.

V. Eighteen Years of Evolution

The history of BlendEd can be understood as a sequence of responses to limitations identified in previous versions of the model.

The first stage established the value of multinational teamwork. The next stage introduced blended mobility to overcome the limitations of requiring students to be physically present abroad for extended periods. Subsequent iterations increased the authenticity of the learning experience by introducing challenges from companies and other external stakeholders. Multidisciplinarity was strengthened, allowing students with different backgrounds to contribute complementary perspectives.

The model also became more flexible in response to different geographical and institutional contexts. In addition to the conventional pattern of physical meetings involving international travel, new configurations emerged, including hybrid meetings in which students participated physically within their own countries while plenary interaction took place online. Cooperation between neighbouring countries also provided possibilities for lower-cost cross-border collaboration.

This evolution illustrates an important characteristic of the BlendEd approach: the model itself is not regarded as fixed. Instead, its underlying principles remain stable while the implementation is adapted to technological, institutional, financial and geographical circumstances.

By 2025/26, the initiative had developed both European and African implementations. The presentation identifies a broad network of participating universities and organisations across Europe, Africa and other regions, including universities in Portugal, Germany, Belgium, Greece, Slovenia, the United Kingdom, Bulgaria, Lithuania, France, Spain, Poland, Austria, Croatia, Mozambique, Uganda and Nigeria. The network also includes companies, start-ups, professional organisations and other stakeholders.

The European implementation has involved more than 500 students and over 30 companies. This accumulated experience provided the basis for extending the approach beyond its original European context.

VI. ABC BlendEd: Extending the Paradigm to Africa

The Africa BlendEd Course (ABC BlendEd) represents the latest stage of the pedagogical evolution. Rather than simply exporting the European model, ABC BlendEd adapts the accumulated experience to African higher education, with a particular focus on agriculture.

This transition is significant because it shifts the initiative from an internationalisation model primarily connecting European institutions towards a broader approach to global collaborative learning. The same pedagogical principles—international teamwork, blended mobility, authentic challenges, multidisciplinary collaboration and employability—can be used to connect institutions operating in different higher education contexts.

The African implementation also reinforces the role of external stakeholders and authentic challenges. The presentation identifies cooperation with African universities and organisations, including Zambeze University, Soroti University, Eduardo Mondlane University, Federal University of Technology Minna, Makerere University and RUFORUM. It also identifies cooperation with African companies and other organisations.

The ABC BlendEd experience therefore represents both a geographical expansion and a conceptual development. The ultimate ambition is not simply to increase the number of participating institutions but to establish a sufficiently large network in which student teams can be dynamically formed according to students' interests, competences and available challenges.

The medium-term ambition presented is a consortium of approximately 50–60 universities running the course, with student teams dynamically created according to interests and challenges available through a shared pool. Such an ecosystem would transform BlendEd from a course implemented through relatively stable institutional partnerships into a scalable international learning environment.

VII. Lessons Learned

The 18-year development of BlendEd provides several lessons for the design of international employability-oriented learning.

First, internationalisation can be embedded within existing curricula. The experience demonstrates that meaningful international exposure does not necessarily require the creation of new degree programmes or extensive curriculum restructuring. Project and capstone courses already provide a suitable pedagogical space.

Second, employability is strengthened when learning is authentic. Working on challenges proposed by companies or other external stakeholders changes the nature of the student task. Students must communicate with non-academic stakeholders, interpret requirements, negotiate priorities and produce outputs that have a purpose beyond assessment.

Third, international collaboration itself is a learning activity. Students do not merely acquire international experience by travelling. They develop intercultural and professional competences through sustained collaboration

with peers from other countries, particularly when the project requires them to coordinate work and make collective decisions.

Fourth, blended mobility can widen participation. Reducing the requirement for prolonged physical mobility addresses several barriers that prevent students from accessing international experiences. The model therefore provides a mechanism for moving from internationalisation opportunities available to a relatively limited group of mobile students towards more inclusive international learning opportunities.

Fifth, resilience is an important characteristic of the model. The experience during COVID-19 showed that the course could continue despite the interruption of physical mobility. This suggests that the combination of physical and virtual learning can provide greater robustness than a model dependent exclusively on one mode.

Finally, scalability requires an ecosystem rather than simply more partnerships. The ambition to involve 50–60 universities and dynamically form teams implies the development of shared mechanisms for challenge identification, team formation, communication, supervision and quality assurance. The BlendEd Community of Practice is part of this broader strategy. It is intended to bring together educators, researchers, practitioners, students and industry partners, supporting networking, collaboration, dissemination, fundraising and joint publication.

VIII. Conclusions

The BlendEd experience demonstrates an 18-year process of pedagogical development rather than the implementation of a single fixed educational model. Starting with multinational undergraduate teamwork in 2008, the approach progressively incorporated blended mobility, multidisciplinary collaboration, authentic company challenges, intercultural learning, entrepreneurship and external stakeholder engagement.

The central evolution has been from international mobility as an experience added to education towards international collaboration as an integral component of education. This distinction is important. Students can develop international, intercultural and professional competences through sustained collaboration even when they cannot participate in conventional long-term mobility.

The accumulated experience also suggests that employability, internationalisation and inclusion do not necessarily have to be addressed through separate initiatives. A well-designed project course can provide a common environment in which students develop disciplinary knowledge while practising teamwork, communication, problem solving, systemic thinking and intercultural collaboration.

ABC BlendEd represents the current extension of this work into African higher education and agriculture. It also points towards a broader ambition: a global, scalable learning ecosystem in which universities, students and external organisations collaborate through authentic challenges and flexible combinations of physical and virtual mobility.

After 18 years, the most important outcome of BlendEd is therefore not a particular course format, but a pedagogical paradigm: using international, multidisciplinary and challenge-based collaboration to make employability development a natural part of higher education while widening access to meaningful international experience.

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