

BLENDED INTENSIVE PROGRAMMES: PROMOTING INTERNATIONALIZATION IN HIGHER EDUCATION

Sonja Gögele, & Petra Kletzenbauer

Department of Software Design and Security, University of Applied Sciences FH JOANNEUM (Austria)

Abstract

International strategies are ranked as one of the core activities in the development plans of Austrian universities. This has led to numerous promising activities in terms of internationalization (i.e. development of international degree programmes, increased staff and student mobility, and blended international projects). The latest innovative approach in terms of Erasmus+ are so called Blended Intensive Programmes (BIP) which combine jointly delivered teaching and learning elements of at least three participating ERASMUS universities in a virtual and short-term mobility setup. Students who participate in BIP can maintain their study plans at their home institution and include BIP as a parallel activity. This paper presents the experiences of this programme on the topic of sustainable computing hosted by the University of Applied Sciences FH JOANNEUM. By means of an online survey and face-to-face interviews with all stakeholders (20 students, 8 professors), the empirical study addresses the challenges of hosting an international blended learning programme (i.e. virtual phase and on-site intensive phase) and discusses the impact of such activities in terms of internationalization and Englishization. In this context, key roles are assigned to the development of future transnational and transdisciplinary curricula by considering innovative aspects for learning and teaching (i.e. virtual collaboration, research-based learning).

Keywords: *Internationalization, Englishization, short-term mobility, international teaching and learning.*

1. Introduction

Taking a closer look at the tertiary educational landscape in Europe, their Development Plans (DP) address internationalization as a central topic in which mobility (student and staff), international research cooperation and international master's and PhD programmes should be encouraged including trans- and interculturality. This is further strengthened by initiatives such as internationalisation at home and the teaching of degree programmes in English (EMI) and thus stressing the predominance of English as a lingua franca. Similar developments are also true for Austria where DPs for universities see English as a central element of internationalization (Dannerer et al., 2021)

A recent initiative by the ERASMUS+ are so called BIPs (Blended Intensive Programmes) which combine jointly delivered teaching and learning elements of at least three participating ERASMUS universities in a virtual and short-term mobility setup. Students who participate in BIP can maintain their study plans at their home institution and include BIP as a parallel activity. This form of mobility seems to be particularly interesting as students have the possibility to gain international experience and to motivate them to increase their international activities in the long run. For university lecturers, the BIP offers the possibility to set up international teaching collaboration, offering the possibility to strengthen their international network and thus finding future partners for research cooperation (erasmusplus.at).

2. BIP objectives

BIPs provide teachers and learners with new and creative opportunities for international educational collaboration and participation in jointly designed courses. In other words, BIPs are designed to provide a short period of study or training abroad that is conducted as part of a jointly offered course. A key element of BIPs is the mandatory virtual component, which should provide content preparation, support, and follow-up for the short mobility period. The scope and frequency of the virtual component needs to be discussed and set up according to the needs of the BIP programme and thus universities have a certain leeway how the virtual component should look like (erasmusplus.at).

From the organizational point of view, there are defined roles in the partnership. All participating universities need to be awarded with an Erasmus Charter for Higher Education (ECHE) and must be so-called partner universities of the hosting university. The host university is usually the coordinating university for the BIP which means that the host coordinates the organization, receives, and manages the organizational support for the BIP. The campus of the host university is usually the venue for the BIP.

The physical stay of the participants must be financed by the sending institutions. The coordinating university applies for funds on behalf of all partners to support the organization and implementation of the BIP. These are granted for a maximum of 20 Erasmus+ participants (€6000 for 15 participant and €8000 for 20 participants). After the BIP programme, a final report (qualitative and quantitative) on the results needs to be submitted to the respective International Office. Students participating in the BIP will receive at least 3 ECTS in their LA (Learning Agreement) upon successful completion (erasmusplus.at).

3. BIP sustainable computing @ FH JOANNEUM

With the rising use of mobile devices and the desire to purchase the latest models of hand-held devices, we harm our environment. Our behavior leads, among other things, to an increased energy consumption, the exploitation of scarce raw materials, the need for new landfill space, the production of hazardous waste, etc. Prolonging the lifecycle of already existing devices will not only reduce the adverse effects on the environment, but also promote access to the devices for people with lower financial means and therefore bridge societal divides. So-called 'refurbished' devices (i.e. in form of a second life cycle) are becoming more and more popular and are finding their way into people's homes, companies and public institutions alike.

Thus, the BIP suggests a three-tier programme. Firstly, the exploration of the ethical and environmental aspects of the short life-cycles of mobile devices, and development of approaches to tackle the problem, with a special view on security, data protection and programming perspectives. Secondly, the establishment of hands-on workshop in which refurbishment of digital devices involving a discovery process of "efficient algorithms" and security vulnerabilities should play a central role. Finally, the development and implementation of a university-integrated refurbishment process benefiting the society and the environment, while at the same time honing entrepreneurial skills and promoting social entrepreneurship.

The major projects during the BIP have been developed jointly by all participating universities:

- 1) Mobile App Development
- 2) Data Analysis and Big Data
- 3) Start-up: Sustainable Computing

The objectives of the Mobile App Development projects are manifold. Students are expected to show commitment to the importance of creating accessible documents. This increased awareness is based on a detailed knowledge of accessibility of mobile devices. The course aims of the start-up project provide general ICT users with the knowledge and tools to fight against climate change and addressing digital transformation through development of digital readiness, resilience, and capacity. Specifically, the course has the main objective of awareness-raising of digital pollution. In contrast to physical and visible pollution, on which much remains to be done but where we are making progress at an increasing pace, digital pollution is virtually invisible. It is not visible to the naked eye and, moreover, there are very few news items about it. The main aim of the course is to raise awareness of the environmental impact of excessive data consumption and propose simple and accessible measures to reduce it. When it comes to the project Data Analysis and Big Data, the contents of the workshops and lecturers discuss data mining and machine learning algorithms with the emphasis on analysing large amounts of data (Big Data). Starting by describing the data mining pipeline and basic machine learning algorithms, this course will later elaborate on tools for creating parallel algorithms that can process very large amounts of data Topics include: CRISP-DM standard process model for data mining, data acquisition and pre-processing techniques, model evaluation techniques, decision trees, frequent item sets and association rules, nearest neighbour search (for high dimensional data), classification rules, locality sensitive hashing (LSH), various dimensionality reduction strategies, recommender systems, clustering, link analysis, data streams, web and text mining.

4. Methods

By means of an online survey and face-to-face interviews with all stakeholders (20 students, 8 professors), the empirical study addresses the challenges of hosting an international blended learning programme (i.e. virtual phase and on-site intensive phase) and discusses the impact of such activities in terms of internationalization and Englishization. The qualitative study included an online questionnaire (tool: Moodle quiz) with 5 open-ended questions allowing the participants to express their point of views. In addition, short face-to-face interviews (5 students and 5 professors) addressed the participants' attitude and perceptions in more detail. Both, students and professors volunteered for the study. Data from the interview and the online survey was collected and one round of coding was conducted based on the thematic analysis by Clarke and Brown (2016). The following 3 themes emerged from the data: English as a lingua franca, international collaboration and online learning and teaching.

5. Findings (short summary)

5.1. English as a lingua franca

According to Smit (2010, p. 16) is the internationalization of European tertiary education in full swing. Motivated by the Bologna Process and several Erasmus initiatives, the common language of communication is English. Thus, Englishization is a natural consequence of international processes established by universities in terms of mobility, research collaboration and international teaching and learning initiatives (see for example Lanvers & Hultgren, 2018). This development is also seen by the teachers interviewed. Teacher 3 mentioned in the interview that due to several internationalization activities at her university her classes have to be taught in English: “I am not a proficient user of English, but my job asks me to have my classes in English. For a short mobility project its fine but in the long run I see myself more in our local language.”

Students involved in the BIP programme embraced the opportunity to work in an international setting. Several students mentioned that they liked to discuss issues in English. They are used to operate in a globalized world, they are globally connected, and English has more or less become the norm.

5.2. International (online) collaboration

Internationalisation at Home has been defined as “...the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments” (Beelen & Jones, 2015). This is exactly what the BIP programme offers: teachers and students alike have the possibility to engage in an international setting where certain objectives have to be met by collaborating online and face-to-face:

“What I enjoyed most about the BIP was the idea of working together in a team consisting of people from Finland, Spain, Slovenia, France and Austria. It was a challenge indeed – culturally but also from the content point of view” (Student 1, online survey). Labelling BIP as a challenging endeavor was also mentioned by several professors. Teacher 5 mentioned that “[he] was used to collaborate a lot due to [his] job at university, but the BIP was a different set-up. It needed a lot of time and preparation. We had numerous online meetings, but it took a while to get things sorted out.” (Teacher 5, interview).

5.3. Online learning and teaching

An important goal of the BIP is to engage and encourage faculty members to design learning units with colleagues abroad who have had (little) experience with this form of collaboration. Several professors mentioned that everyone was really thrilled about the idea of the BIP in the first run but when realizing how much workload it puts on the organization and additional teaching, the motivation was decreasing, and it needed a lot of commitment to get back on track. As expressed by Teacher 3 (online survey) “it was good that we did not opt for being the coordinating university. It was already stressful to set up the teaching units. Everyone has different ideas, different approaches, uses different teaching tools.”

Similar concerns were raised by the participating students: “Since the BIP is an additional programme, it also needed some space for learning. The prep-phase was very exhausting, we all had different schedules, exam weeks – finding slots to collaborate online was always a challenge – but we managed and meeting then f2f was simply great (Student 12, online survey).

6. Discussion: What the BIP can do for internationalization & Englishization

The BIP does not only encourage local and international participants to deal with cultural diversity actively and consciously, but also helps to adopt an international perspective. Promoting exchange and cooperation may foster synergy effects in terms of teaching quality and student collaboration:

References

- Beelen, J., Jones, E. (2015). *Redefining Internationalization at Home*. In: Curaj, A., Matei, L., Pricopie, R., Salmi, J., Scott, P. (eds) *The European Higher Education Area*. Springer, Cham. https://doi.org/10.1007/978-3-319-20877-0_5
- Clarke, V. and Braun, V. (2016) *Thematic analysis*. In E. Lyons and A. Coyle (eds) *Analysing Qualitative Data in Psychology* (2nd edn) (pp. 84–103). Newbury Park, CA: Sage.
- Dannerer, M., Gaisch, M., & Smit, U. (2021). 13 Englishization ‘under the radar’. *The Englishization of Higher Education in Europe*, 281.
- Lanvers, U., & Hultgren, A.K. (2018). *The Englishization of European education*: Foreword. *European Journal of Language Policy*, 10(1), 1-11. <https://www.muse.jhu.edu/article/690795>.
- Smit, U. (2010). *English as a lingua franca in higher education: A longitudinal study of classroom discourse* (Vol. 2). Walter de Gruyter.