

BLENDING INTENSIVE PROGRAMS IN HIGHER EDUCATION: AN OPPORTUNITY TO ENGAGE STUDENTS, IMPROVE KNOWLEDGE AND SKILLS

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Abstract

Introduction: Blended Intensive Programmes (BIPs) are innovative, short-term educational initiatives under the Erasmus+ framework, combining physical mobility with virtual learning components. These programmes are designed to promote interdisciplinary learning and introduce innovative teaching methods, making them accessible to students and staff across various academic fields and study cycles. They provide valuable mobility opportunities, particularly beneficial for students unable to commit to traditional long-term exchanges such as semester or year-long programmes. BIPs promote transnational and transdisciplinary collaboration, often focusing on global challenges and emergent topics, aligned with the United Nations' Sustainable Development Goals. This study investigates the self-reported impacts on students participating in five BIPs conducted over three years.

Methodology: Several higher education institutions from different European countries collaboratively organised five BIPs involving a total of 156 students and more than 50 teachers and facilitators. Typically, each BIP spanned approximately two months, consisting of at least two online sessions complemented by one intensive in-person week, awarding students three ECT credits upon completion. Programme topics included Global Health and Social Challenges, Digital Health and Emerging Technologies in Healthcare, Artificial Intelligence (AI) and its Applications in Learning, Research, and Clinical Practice, and Respiratory Physiotherapy for Chronic Obstructive Pulmonary Disease (COPD) patients. Student feedback regarding their experiences, perceived impacts on knowledge and future professional roles, and the overall quality of the programmes were collected via an online questionnaire featuring Likert-scale and open-ended questions.

Results: From the 156 student participants, 111 completed the survey. Responses indicated predominantly positive feedback, with participants acknowledging substantial contributions to their knowledge enhancement and professional development. A majority selected "Agree" or "Strongly Agree" regarding these aspects, with fewer participants remaining neutral or expressing disagreement. Lectures and interactive activities were particularly appreciated for promoting knowledge acquisition and skill development, described as informative and beneficial by most respondents. Educators received favourable feedback for their supportive roles during lectures and practical sessions. Overall programme quality was highly rated, with most participants indicating ratings of "Good" or "Very Good." Furthermore, a substantial majority of respondents would recommend the BIPs to peers, reflecting the perceived success and positive impact of these programmes.

Conclusions: The study could suggest that these kinds of programs enhance students' knowledge, skills, and professional competencies while fostering engagement and interdisciplinary collaboration. The positive feedback highlights the importance of combining online and in-person learning experiences, suggesting that BIPs could represent a valuable alternative to traditional mobility programmes. Their alignment with global challenges and sustainability further emphasises their potential as an innovative educational tool within higher education institutions. The findings may support the implementation and expansion of such programmes, recommending their broader integration into curricular activities across Europe.

Keywords: Blended Intensive Programs, Education, Internationalisation.

1 INTRODUCTION

Exchange programmes between Higher Education Institutions (HEIs) have played a significant role in promoting international academic collaboration, leading to a steady increase in students and professionals engaging in cross-border partnerships [1], [2]. In health and physiotherapy education, these exchanges have increasingly included structured international components that may also fulfil clinical education requirements [3], [4]. Such initiatives aim to broaden students' exposure to innovative

health practices, diverse healthcare systems, and technological advancements, thereby contributing to improved patient care and enhancing professional competencies, including cultural and technological literacy [5], [6].

One emerging format that supports this form of educational exchange is the Blended Intensive Programme (BIP), introduced under the Erasmus+ framework [7]. BIPs combine short-term physical mobility with a virtual learning component, providing a hybrid model that supports flexible and inclusive participation [2]. This format is particularly relevant for students who may not be able to engage in longer-term mobility programmes, such as semester or year-long exchanges [8]. By enabling both online collaboration and face-to-face engagement, BIPs facilitate structured learning while promoting intercultural exchange and international cooperation [1], [7].

BIPs also offer opportunities for joint curricular development and interdisciplinary project work among students, teachers, and staff from different HEIs [2]. These programmes have been designed to encourage innovation in teaching and learning, foster active knowledge construction, and support the development of practical and transferable skills [6], [4]. In physiotherapy and health education more broadly, BIPs may serve as a platform for integrating digital health technologies into academic and clinical training, helping to bridge theoretical knowledge with practical application [5], [3].

Topics addressed in BIPs often reflect current global and professional priorities, including areas such as global health, artificial intelligence in clinical practice, and digital transformation in healthcare [5], [2]. Many of these themes align with the United Nations' Sustainable Development Goals and respond to the evolving needs of healthcare systems and professional education [9], [7].

Although BIPs are becoming more widely implemented across European higher education institutions, evidence regarding their educational outcomes remains limited [8], [4]. This study aims to contribute to this area by examining self-reported perceptions of students who participated in five BIPs delivered over a three-year period. The programmes involved participants from multiple European HEIs and covered a range of thematic areas. The analysis focuses on student-reported outcomes related to knowledge development, skills acquisition, relevance to professional practice, and overall programme quality and satisfaction.

2 METHODOLOGY

Five BIPs were collaboratively organised by higher education institutions from various European countries under the Erasmus+ framework. A total of 156 students and over 50 academic staff, including teachers and facilitators, participated in the initiative. The programmes involved students from a range of academic disciplines and levels of study.

Each BIP was delivered over a period of approximately two months and included a minimum of two online sessions—delivered either synchronously or asynchronously—and one intensive in-person week hosted by a partner institution. This format aimed to combine the flexibility of virtual learning with the benefits of face-to-face interaction. Students who completed the programme were awarded three ECTS credits, in accordance with local institutional recognition procedures. The selected themes addressed current topics in health and education: (i) Global Health and Social Challenges, (ii) Digital Health and Emerging Technologies in Healthcare, (iii) Artificial Intelligence (AI) and its Applications in Learning, Research, and Clinical Practice, and (iv) Respiratory Physiotherapy for individuals with Chronic Obstructive Pulmonary Disease (COPD). The BIPs were designed to encourage interdisciplinary perspectives and to provide students with exposure to subject areas relevant to their future professional contexts.

To assess the outcomes of the programmes, student feedback was collected using an online questionnaire administered after the completion of each BIP. The survey included closed-ended items based on a Likert scale, as well as open-ended questions to capture individual reflections. Areas covered included perceptions of knowledge development, skills acquisition, relevance to professional practice, and overall quality of the experience. The responses were aggregated for descriptive analysis.

3 RESULTS

Out of the 156 students who participated in the programme, 111 completed the survey, representing approximately 71% of the total participants. In figure 1 is described the distribution of participants by country of origin. Spain recorded the highest number of participants (n=24), followed by the Netherlands and Portugal (n=18 each), and Finland (n=15). Austria (n=11) and Germany (n=9) also showed some participation.

Belgium and Czechia contributed five participants each, while Norway accounted for four. The data indicate a varied level of involvement across participating countries in the Blended Intensive Programmes.

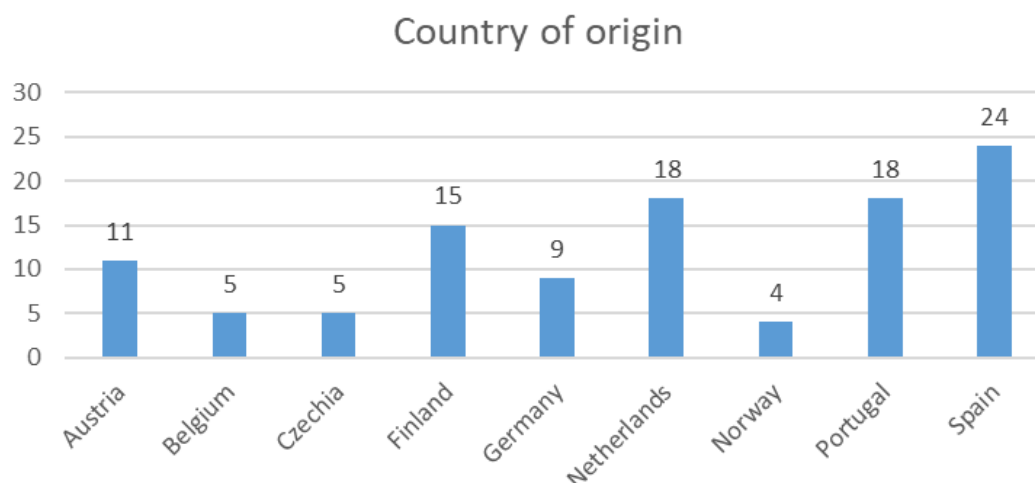


Figure 1. Distribution of participants by country of origin.

A high proportion of participants reported that the BIP contributed positively to their knowledge of the topic addressed. As illustrated in figure 2, 57 respondents (51.4%) selected "Strongly Agree" and 38 (34.2%) selected "Agree" with the statement "Participating in this BIP increased my knowledge about the topic of the BIP." Ten participants (9.0%) indicated a neutral response, while 3 (2.7%) disagreed and 1 (0.9%) strongly disagreed. Overall, 85.6% of respondents acknowledged the BIP as beneficial in enhancing their understanding of the subject area.

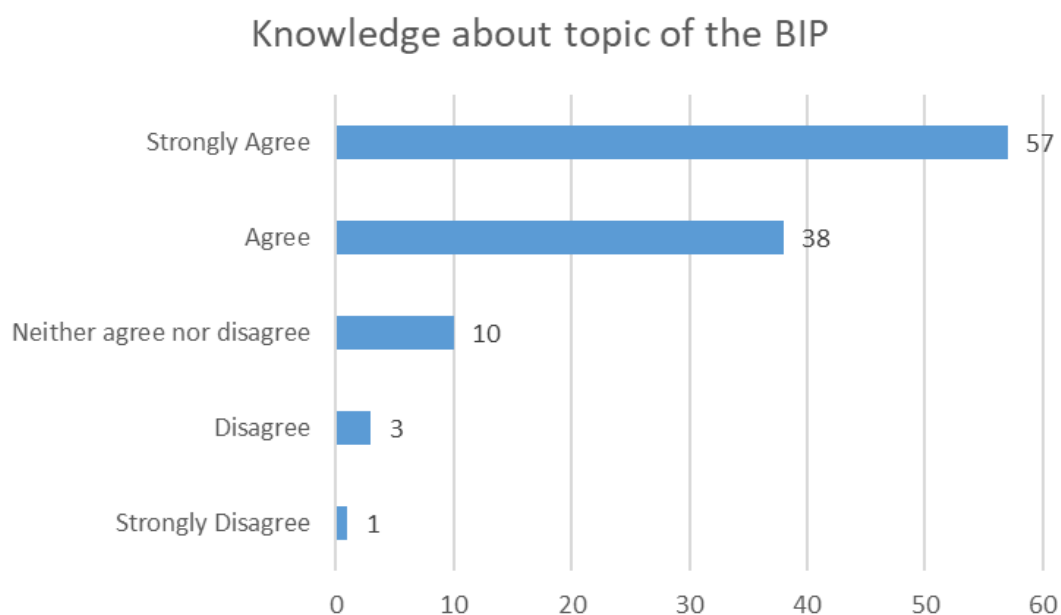


Figure 2. Participating in this BIP increased my knowledge about the topic of the BIP.

Participants were asked to evaluate whether participating in the BIP facilitated their understanding of its relevance for future professional practice. As shown in Figure 3, 44 respondents (39.6%) selected "Strongly Agree" and 43 (38.7%) selected "Agree". Sixteen participants (14.4%) chose "Neither agree nor disagree", while 5 (4.5%) selected "Disagree" and 1 respondent (0.9%) selected "Strongly Disagree". These results suggest that 78.3% of participants perceived the BIP as relevant to their future professional roles.

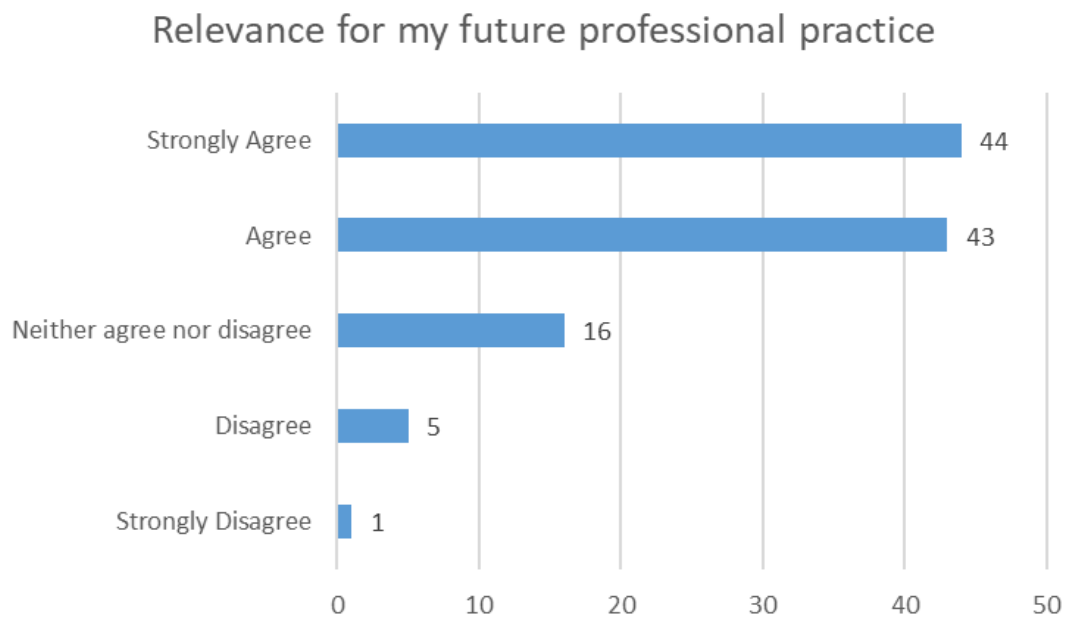


Figure 3. BIP helped clarify its relevance to their future professional practice.

Also, participants were asked to evaluate whether the lectures, both online and in-person, provided relevant information to increase their knowledge about the BIP topics. As shown in figure 4, 51 respondents (45.9%) selected "Agree" and 35 (31.5%) selected "Strongly Agree". Fifteen participants (13.5%) expressed a neutral stance, while 7 (6.3%) selected "Disagree" and 1 respondent (0.9%) selected "Strongly Disagree". These results suggest that 77.4% of participants found the lectures effective in supporting their learning within the BIP.

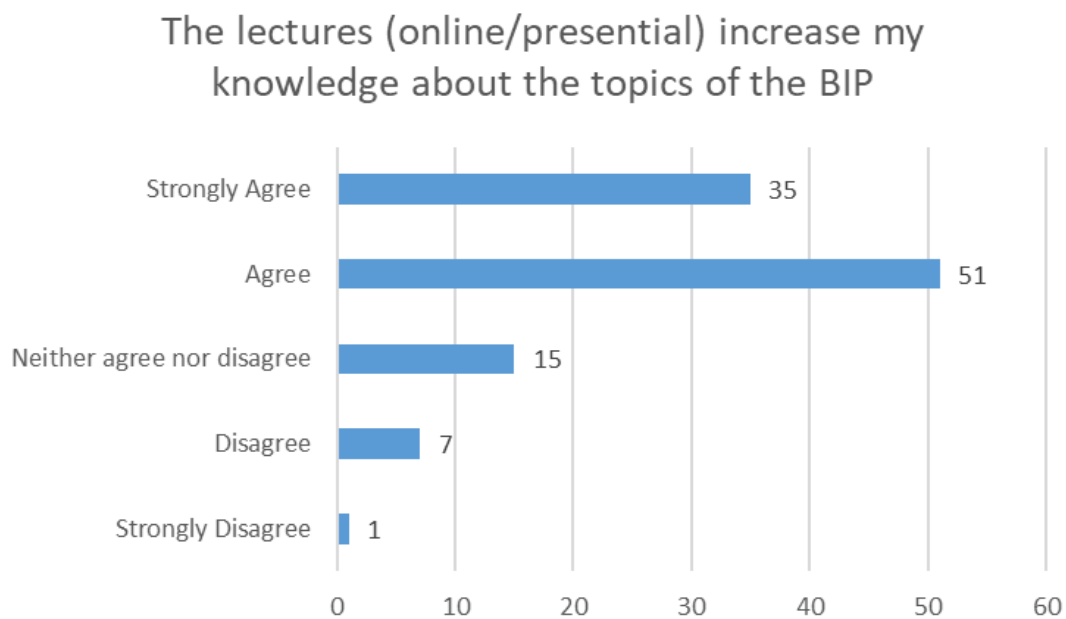


Figure 4. Lectures provided relevant information to increase their knowledge about the BIP topics.

Regarding the statement "The activities (online/in person) allow me to develop further knowledge and skills related to the topics of the BIP", most respondents reported positive outcomes. As shown in Figure 5, 49 participants (44.1%) selected "Agree" and 44 (39.6%) selected "Strongly Agree". Ten respondents (9.0%) expressed neutrality, while 5 (4.5%) selected "Disagree" and 1 (0.9%) selected "Strongly Disagree". In total, 83.7% of participants perceived the activities as effective in supporting their knowledge and skill development.

The activities (online/presential) allow me to develop knowledge and skills related the topics of the BIP

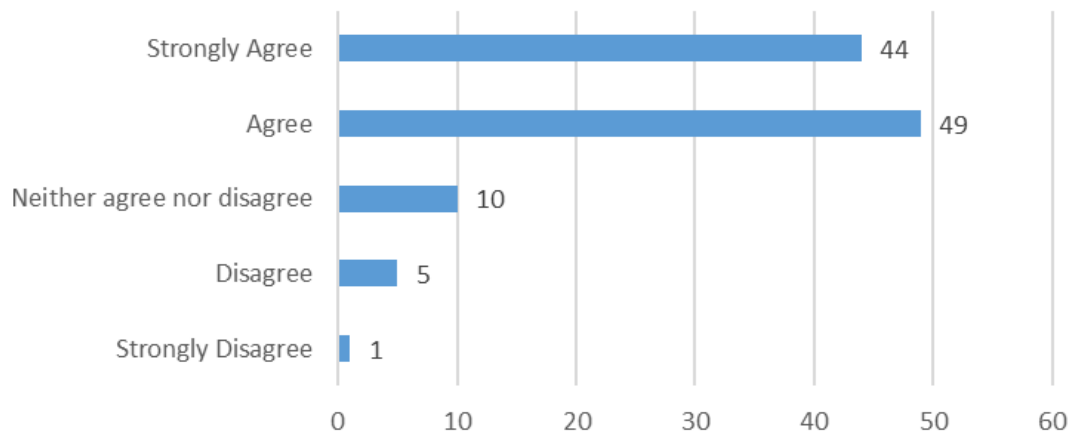


Figure 5. The activities developed further knowledge and skills related to the topics of the BIP.

Participants were asked to evaluate the extent to which the teachers involved in the online and in person sessions supported their learning process. As depicted in Figure 6, 58 respondents (52.3%) selected "Strongly Agree" and 38 (34.2%) selected "Agree". Nine participants (8.1%) chose "Neither agree nor disagree", while 3 (2.7%) selected "Disagree" and 1 (0.9%) selected "Strongly Disagree". These results indicate that 86.5% of respondents perceived the teaching staff as supportive of their learning throughout the BIP.

Teacher's support

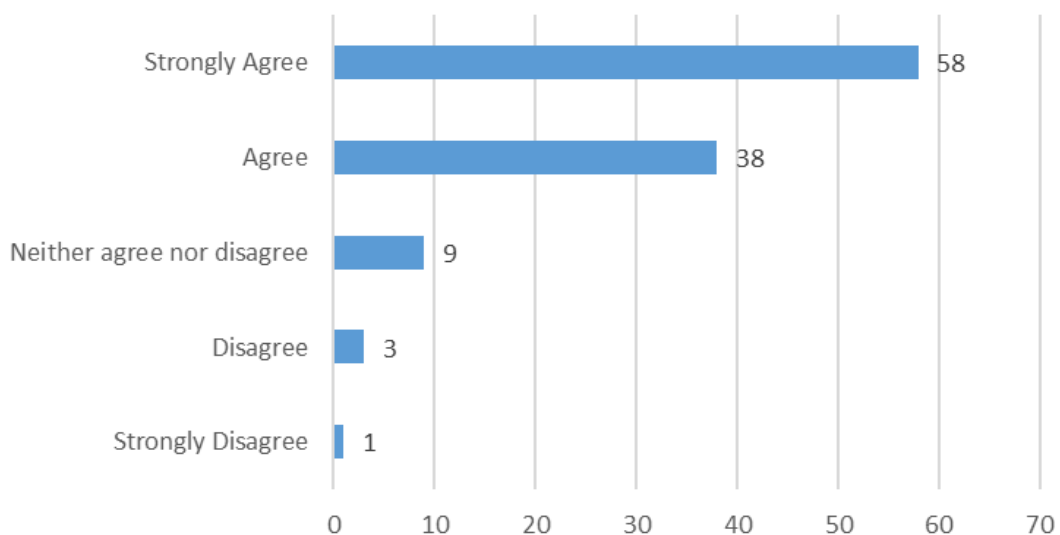


Figure 6. Teachers involved in the online and in person sessions supported their learning process.

Participants were also invited to rate the overall quality of the BIPs. As shown in Figure 7, 54 respondents (48.6%) rated the programme as "Very Good" and 50 (45.0%) as "Good". A small number rated the programme as "Fair" (n=4; 3.6%) or "Poor" (n=1; 0.9%). These findings suggest that 93.7% of participants perceived the BIP as being of good or very good quality.

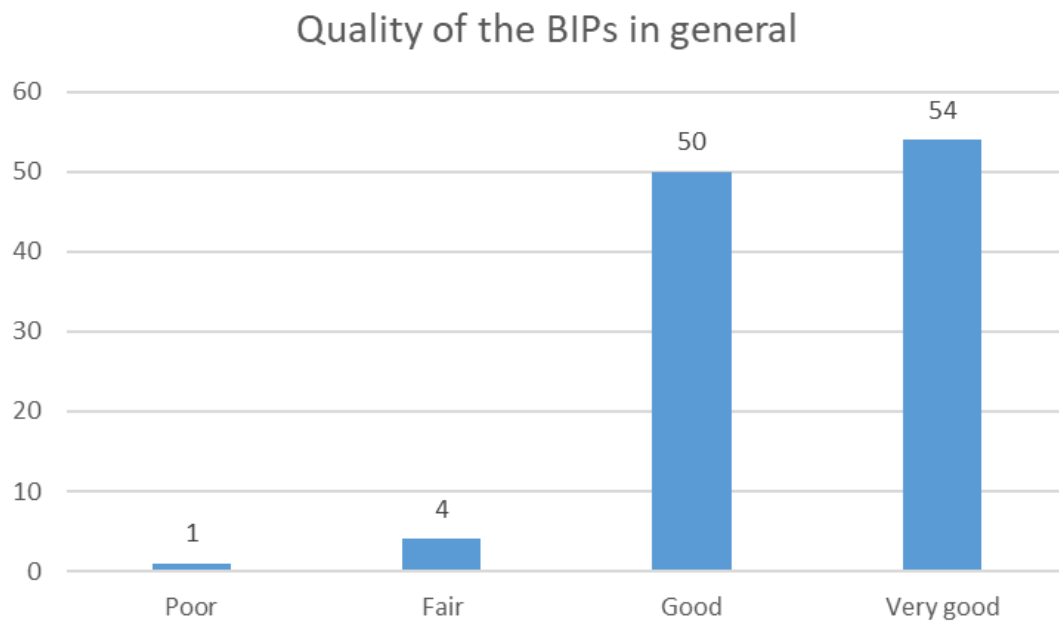


Figure 7. Overall quality of the Blended Intensive Programme (BIP).

Finally, participants were asked whether they would recommend the BIPs to other students. As illustrated in Figure 8, 71 respondents (64.0%) selected "Strongly Agree" and 33 (29.7%) selected "Agree". A small number chose "Neither agree nor disagree" (n=3; 2.7%), "Disagree" (n=1; 0.9%), or "Strongly Disagree" (n=1; 0.9%). In total, 93.7% of respondents expressed a willingness to recommend the BIP to their peers, indicating a high level of overall satisfaction and perceived value.

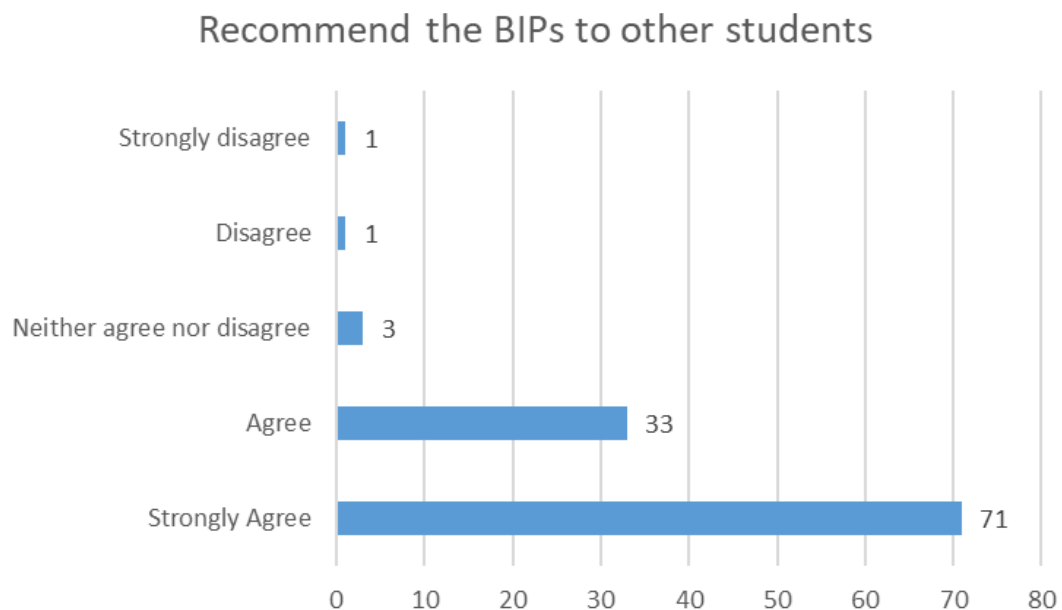


Figure 8. Recommend the Blended Intensive Programme to other students.

4 CONCLUSIONS

The findings of this study suggest that Blended Intensive Programmes (BIPs) could enhance students' knowledge, skills, and professional competencies while also promoting engagement and interdisciplinary collaboration. Participants across diverse European institutions reported positive experiences, particularly in relation to increased topic-specific knowledge, the relevance of content to future professional roles, and the quality of support provided by teaching staff.

The combination of online and in-person learning activities was especially valued, contributing to both theoretical understanding and practical skill development. The high levels of satisfaction and willingness to recommend the BIPs further reinforce their perceived value as an educational experience.

These results highlight the potential of BIPs to serve as a meaningful and accessible alternative to traditional mobility approaches. Their structure supports flexible participation while maintaining academic rigour and intercultural exchange. Moreover, their alignment with global challenges and sustainability objectives positions BIPs as an innovative educational tool in higher education. The evidence presented may support the continued implementation and expansion of such programmes and recommend their broader integration into curricula across Europe.

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REFERENCES

- [1] O. Bracht, C. Engel, K. Janson, A. Over, H. Schomburg, and U. Teichler, *The Professional Value of ERASMUS Mobility*, International Centre for Higher Education Research (INCHER-Kassel), Kassel, Germany, 2006.
- [2] European Commission, "Blended Intensive Programmes (BIPs)," 2023. [Online]. Available: <https://erasmus-plus.ec.europa.eu/opportunities/opportunities-for-organisations/innovation/blended-intensive-programmes>
- [3] World Confederation for Physical Therapy, "Policy Statement: Education," 2018. [Online]. Available: <https://world.physio/policy/ps-education>
- [4] G. O'Donoghue, C. Doody, and T. Cusack, "The Impact of International Placements on Physiotherapy Students' Personal and Professional Development: A Systematic Review," *Physiotherapy Theory and Practice*, vol. 38, no. 2, pp. 153–165, 2022.
- [5] World Health Organization, *Global Strategy on Digital Health 2020–2025*, 2021. [Online]. Available: <https://www.who.int/publications/i/item/9789240020924>
- [6] U. M. Kinnunen et al., "Internationalization in Health Care Education: A Scoping Review," *Journal of Nursing Education*, vol. 58, no. 4, pp. 221–228, 2019.
- [7] European Commission, *Erasmus+ Programme Guide 2021*, 2021. [Online]. Available: <https://erasmus-plus.ec.europa.eu/document/erasmus-programme-guide-2021-version-3>
- [8] U. Teichler, "Internationalisation Trends in Higher Education and the Changing Role of International Student Mobility," *Journal of International Mobility*, vol. 8, no. 1, pp. 177–204, 2020.
- [9] United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*, 2015. [Online]. Available: <https://sdgs.un.org/2030agenda>