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International Journal of Educational Research Open

journal homepage: www.elsevier.com/locate/ijedro



Bridging borders: Global insights and challenges in internationalising higher education using a decade-long case study

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ARTICLE INFO

Keywords:
Internationalisation
Higher education
Student mobility
Research collaboration
Exchange program
Partner
Agreement
Challenges
Pandemic
Strategic

ABSTRACT

The manuscript examines a decade of internationalisation efforts at the Department of Health and Care Sciences at UiT The Arctic University of Norway. Employing a mixed-methods approach, it analyses student mobility, research collaborations, and international partnerships, offering strategic recommendations to enhance global educational practices. The findings provide valuable insights into international education, with applications in research, policy, and practice beyond the study's context. Challenges such as the COVID-19 pandemic and financial constraints are highlighted, along with the need for cultural competence and adaptive strategic planning. The study proposes solutions, including flexible exchange programs, the use of virtual technologies, and increased international collaboration to advance higher education in a globalised world.

Introduction

Internationalisation in higher education has emerged as a crucial strategy for institutions worldwide, driven by the need to enhance global engagement, foster cultural exchange, and enrich academic quality through diverse perspectives. As Knight (2015), (2020) notes, the landscape of internationalisation has evolved significantly in recent years, presenting both positive and negative implications for higher education institutions globally. This evolution is part of a broader shift towards globalisation, in which educational institutions increasingly focus on preparing students for an interconnected world.

Altbach and De Wit (2017) emphasise that the new global landscape of internationalisation requires institutions to adapt to rapidly changing political and economic conditions. At the university level, internationalisation involves making the institution more welcoming and accessible to international students and scholars, while also preparing students to become globally engaged citizens. This can include a variety of initiatives, such as developing international partnerships and exchange programs, offering language and cultural learning opportunities, and promoting diversity and inclusion on campus. The process integrates

international and intercultural dimensions into the research, teaching, and service functions of higher education (Knight, 1999, 2003; Harman, 2005; Cheng et al., 2017).

In Norway, higher education and research at the international level are central to the development of a sustainable society – environmentally, socially, culturally, economically, and politically¹. To achieve this, evidence-based knowledge for right choice decision-making is of prime importance. However, since climate change is the great challenge of our time, international cooperation towards common goals in developing knowledge is relevant. In support of all such aspects and in alignment with the UN's 2030 Agenda, including the Sustainable Development Goals (SDGs) and the international conventions and agreements on the rights of indigenous peoples as well as national legislation, UiT The Arctic University of Norway aims to contribute to the development of evidence-based knowledge in collaboration with global partners. UiT's ambition is to be an international leader in knowledge and competence about and for the Arctic and the northern regions.

The Department of Health and Care Sciences (IHO) at UiT presents a compelling case study, highlighting a decade of efforts from January 2013 to July 2023 in student mobility, research initiatives, and

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¹ Pertinent Norwegian policy documents such as: The white papers "A World of Opportunities – International student mobility within higher education" (2020–21), ... "Long-term plan for research and higher education 2019-2028" (Rumbley and Altbach, 2020), "Quality culture in higher education" (O'Dowd, 2021), "Education for development" (Marinoni and Land, 2020), and "Common Responsibility for Common Future – the Sustainable Development Goals and Norway's Development Policy" (O'Dowd, 2021).

international collaborations. Despite the apparent benefits, internationalisation efforts are not without challenges. Institutions often face financial constraints, language barriers, and disparities in educational standards (De Wit et al., 2015). Beelen and Jones (2015) argue that financial limitations often restrict the ability of institutions to fully implement internationalisation strategies, particularly in underfunded programs. Moreover, the COVID-19 pandemic has dramatically altered the landscape of global higher education, underscoring the necessity for flexible and resilient internationalisation strategies (Marinoni et al., 2020; Marinoni and Land, 2020). However, opportunities exist in leveraging technology for virtual exchanges, enhancing support systems for international students, and fostering inclusive international research collaborations (Rumbley & Altbach, 2020).

This study aims to analyse the historical development, current status, challenges, and successes of internationalisation efforts at IHO, providing insights into effective strategies and areas needing improvement for internationalisation globally. Focusing on IHO at UiT, this study seeks to offer broader recommendations for enhancing internationalisation strategies at higher education institutions worldwide. Specifically, the objectives are to document the evolution of student exchange programs, research collaborations, and international partnerships from 2013 to 2023, assess the barriers faced by students and faculty in internationalisation efforts, and more so, highlight successful strategies employed to overcome these challenges. Drawing on the experiences of IHO, the study aims to propose a range of actionable recommendations that higher education institutions worldwide can adopt to refine and advance their internationalisation strategies.

Methodology

To investigate the internationalisation efforts at the Department of Health and Care Sciences (IHO) at UiT, a mixed-methods approach was employed, as outlined by Creswell and Plano Clark (2018). This approach integrates quantitative and qualitative data, enhancing the depth and reliability of the findings. By combining quantitative data analysis with qualitative insights, the study provides a thorough overview of the internationalisation processes and their outcomes over the last decade.

Data collection

Quantitative data were collected from the UiT's Statistical record achieve (Statistikkportalen) (2024), and from the Felles Studentsystem (FS) (2024) that is utilised by UiT for managing student and study data. This included records from 2013 to 2023, encompassing the number of exchange students (both incoming and outgoing), details of exchange agreements, and publication metrics. Qualitative data were gathered from semi-structured interviews with key stakeholders involved in IHO's internationalisation efforts, including program coordinators, faculty members, and participating students. These interviews serve as primary qualitative data sources, allowing for the collection of rich, in-depth insights into the participants' experiences, perceptions, and challenges. Informed consent to publish was obtained from participants. Additionally, policy documents and strategic institutional plans related to internationalisation were reviewed to contextualise the interviews and understand the broader organisational goals at IHO.

The use of semi-structured interviews aligns with the study's objective to uncover nuanced perspectives on internationalisation. This format allowed researchers to explore predefined topics while giving respondents the flexibility to discuss specific experiences, thus capturing both broad trends and unique individual insights. Thematic analysis was used to code and identify patterns, which served as the basis for deriving common themes that reflect both challenges and successful strategies.

Ethical approval was not required. No biological data or individual details, images or videos was involved.

Data analysis

Quantitative data were analysed using SPSS statistical software to determine trends and patterns in student mobility, research collaborations, and publication activities. Qualitative data from interviews were transcribed and subjected to thematic analysis to identify common themes and insights related to the challenges and successes of internationalisation initiatives. This dual approach allowed for triangulation of findings, enhancing the reliability and depth of the analysis.

Common themes identified through thematic analysis

Through thematic analysis of the qualitative data, several recurring themes emerged, revealing insights into key factors influencing internationalisation in higher education:

Financial and Logistical Barriers: Financial constraints emerged as a significant barrier, especially for students from low-income backgrounds and institutions from regions outside Europe and North America. Limited funding affected both incoming and outgoing students, with incoming students often required to cover their own expenses due to institutional budget limitations. The analysis highlights that financial support is critical for achieving balanced student exchanges and maintaining long-term partnerships.

Impact of the COVID-19 Pandemic: The COVID-19 pandemic was another prominent theme, illustrating how global crises can disrupt internationalisation initiatives. The pandemic led to substantial declines in student exchanges, travel restrictions, and program cancellations. This disruption emphasised the need for resilience and adaptability in international education strategies, particularly through the adoption of virtual exchange programs and online collaborations.

Cultural Competence and Adaptation: Cultural competence was identified as both a goal and a challenge, with participants noting the importance of intercultural understanding in internationalisation. Faculty and students needed to navigate language barriers, cultural differences, and diverse educational standards. These factors highlighted the need for cultural training and support to foster inclusivity and ensure that international experiences are valuable for all participants.

Institutional and Policy Constraints: Thematic analysis also brought forth the challenges imposed by institutional policies and political dynamics. For example, work and familial commitments of some master's students at IHO limited their ability to participate in exchange programs, as these students were often more established and less mobile. Political factors, such as changes in visa regulations and geopolitical tensions, were noted as additional barriers to sustaining certain international partnerships.

Importance of Technological Adaptation: With the onset of the pandemic, leveraging technology to facilitate virtual exchanges became a critical theme. Participants highlighted the need to invest in digital platforms to enable virtual mobility and remote collaborations. Virtual exchanges were seen as a feasible alternative that can complement inperson exchanges, offering scalable and accessible international experiences.

Research Collaboration and Knowledge Sharing: International research collaboration was emphasised as a key component of internationalisation at IHO, especially in health sciences. Participants viewed joint research projects as an effective means to build research capacity and foster innovation. However, challenges in securing co-funding and balancing differing research standards were cited as obstacles to successful collaboration.

Need for Strategic Adaptability: Lastly, strategic adaptability was a recurring theme, with respondents stressing the importance of flexibility in adjusting internationalisation policies to align with changing global conditions. This theme underscored the need for institutions to regularly assess and refine their internationalisation strategies to remain relevant and effective.

Case study: Internationalisation at IHO (2013-2023)

Overview of Educational Programs and Exchange Agreements at IHO

The Department of Health and Care Sciences (IHO) at UiT The Arctic University of Norway offers a diverse range of educational programs that cater to various levels and specialisations within the health sciences. These programs are crucial for understanding the scope of internationalisation efforts at IHO, as they form the foundation for student mobility and international collaboration. Table 1 provides an overview of the educational programs offered at IHO.

IHO has established numerous exchange agreements with partner institutions worldwide, which are vital for facilitating international student mobility and collaboration. Table 2 provides an overview of the active exchange agreements at IHO as of January 1, 2024.

This table highlights the active agreements that currently facilitate international student mobility and collaboration, contributing to the global exposure and professional growth of students at IHO.

Historical overview of student exchange at IHO (2013-2023)

IHO has cultivated a substantial network of exchange agreements with partner institutions worldwide. Over the past decade, from January 2013 to July 2023, nearly all study programs at IHO have had at least three international student exchange agreements, meeting the minimum requirement set by the academic supervision regulations (studietilsynsforskriften) [11]. The Master's program in Nursing (ABIOK) has only had three exchange students, and the Health Sciences Master's program, which consists of five master's programs, has had no exchange students during this period, as shown in Fig. 1.

Both the Master's programs in Nursing (ABIOK) and Health Sciences, with the exception of the Master's in Health Development Work, are regulated by the admission regulations to UiT §§ 12.-16, similarly to other study programs at IHO. Additionally, they require two and one year(s) of work experience, respectively, as licensed nurses and physiotherapists in full-time positions, or an equivalent longer period in parttime positions, as admission requirements. According to some interview respondents, this has led to most students in these master's programs being older, established and with families, which may influence their ability or willingness to participate in exchange studies abroad.

Historically, within the period of 2013 and 2023, IHO maintained 42 exchange agreements, including 20 Erasmus+ agreements, one bilateral agreement, eight Nordplus agreements, and an individual agreement

Table 1Overview of IHO's educational programs at UiT.

Educational Program	Study Level	Duration	ECTS Credits	Study Mode			
Nursing	Bachelor	3 Years	180	Full-time			
Nursing	Bachelor	4 Years	180	Part-time/ Decentralized			
Nursing (Sami Nursing)	Bachelor	4 Years	180	Part-time/ Decentralized			
Occupational Therapy	Bachelor	3 Years	180	Full-time			
Physiotherapy	Bachelor	3 Years	180	Full-time			
Radiography	Bachelor	3 Years	180	Full-time			
Paramedicine	Bachelor	3 Years	180	Full-time			
Midwifery	Master	2 Years	120	Full-time			
Nursing (ABIOK)*	Master	2 Years	120	Full-time			
Health Sciences**	Master	3 Years	120	Part-time/			
				Decentralized			

^{*} ABIOK is an acronym for Anesthesia Nursing, Pediatric Nursing, Intensive Care Nursing, Oncology Nursing, and Operating Room Nursing specializations.

 $\begin{tabular}{lll} \textbf{Table 2} \\ \textbf{Overview of active exchange agreements by educational program as of } \\ 01.01.2024. \end{tabular}$

Program	Institution/Location						
Bachelor of Nursing	Aurora College, Canada Københavns Professionshøjskole (KP), Denmark Livingstone, Zambia Röda Korsets Högskola, Sweden Tanga International Competence Centre, Tanzania Professionshøjskolen University College Nordjylland (UCN), Denmark Professionshøjskolen VIA University College (VIAUC), Denmark						
Bachelor of Occupational Therapy	Lusaka Apex Medical University (LAMU), Zambia Livingstone, Zambia						
	Professionshøjskolen University College Nordjylland						
	(UCN), Denmark						
	Professionshøjskolen UC Syddanmark (UCSYD), Denmark						
Bachelor of Physiotherapy	Københavns Professionshøjskole (KP), Denmark Linköping University (LiU), Sweden Livingstone, Zambia						
	Professionshøjskolen University College Nordjylland (UCN), Denmark						
Bachelor of Radiography	Københavns Professionshøjskole (KP), Denmark Livingstone, Zambia						
	Professionshøjskolen University College Nordjylland						
Bachelor of Paramedicine	(UCN), Denmark UWE Bristol - University of the West of England Bristol, UK						
Master of Midwifery	Københavns Professionshøjskole (KP), Denmark Professionshøjskolen University College Nordjylland (UNC), Denmark						

with the University of Peloponnese in Greece within Europe. In North America, there was one North to North agreement in Canada and one bilateral agreement in the USA. In Africa, IHO had four bilateral agreements and an agreement with Addis Ababa University in Ethiopia. In the Middle East, there were bilateral agreements with institutions in Palestine and Lebanon, the latter supported by Erasmus+ global project funding. Additionally, there was a bilateral agreement with the University of Sydney in Australia (Table 3).

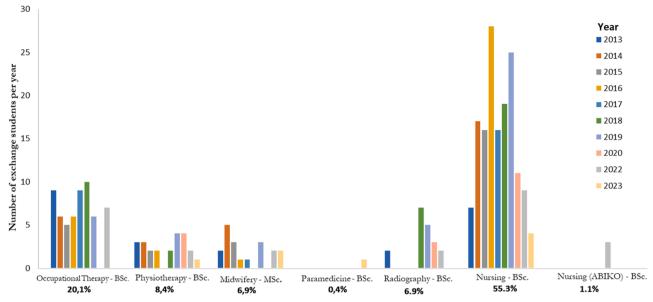
Between the period 2013 and 2023, a total of 688 students participated in such exchange programs at the Department of Health and Care Sciences (IHO). Of these, 224 were incoming students, while 464 were outgoing, representing 10.3% of the 4528 graduates during this period. Out of the 464 outgoing students, 275 completed their exchanges (minimum of 13 weeks), making up 59.3% of the applicants.

A notable challenge was that most bilateral agreements outside Europe and North America involved only outgoing students, primarily due to financial constraints, as incoming students needed to cover their own costs. IHO did not cover expenses for incoming students unless they came from partner institutions with specific collaboration projects.

Outgoing students showed a preference for institutions like Copenhagen University, Tanga International Competence Centre in Tanzania, and Livingstone in Zambia. The bachelor's program in Nursing had the highest proportion of exchange students, with a total of 152 out of 275 students (55.3%) completing study periods abroad from 2013 to 2023 (Fig. 1). This program stood out at IHO with the most extensive selection of exchange opportunities (Table 2), but also with the most enrolled students compared to all other IHO educational programs. The Bachelor of Occupational Therapy followed with 20.7%. Over the past decade (2013 to 2023), no students from Health science master's programs participated in exchanges (Fig. 1).

The COVID-19 pandemic significantly impacted student exchanges, causing a major reduction in 2020 and a complete halt in 2021 due to travel restrictions. The number of withdrawn applications peaked in 2020 as a result of the pandemic, with 46 out of 136 students cancelling their plans before departure, representing 33.8% of the total

^{**} Health Sciences is a collective term for five master's programs: Health Development Work, Public Health Nursing, Physiotherapy (Neurology and Psychomotor), Geriatric Health, and Mental Health Work.



IHO study programs with the percentage of students completing exchange programs abroad betwee 2013 and 2023

Fig. 1. Number of students who completed exchange stays abroad in the period from 2013 to 2023 per year. study program.

Table 3 Active exchange agreements at IHO.

Region	Number of Agreements	Types of Agreements
Europe	30	Erasmus+, Nordplus, Bilateral, Specific University Agreement
North America	3	North to North, Bilateral
Africa	5	Bilateral, Specific University Agreement
Middle East	2	Bilateral
Australia	1	Bilateral

withdrawals from 2013 to 2023. The remaining 66.2% of withdrawals were spread over the other years (Fig 2). The situation began to improve in 2022, which can be considered the post-pandemic period. An increase in the number of completed exchange students in 2023 compared to 2022 was expected, as a result of a return to normal conditions after the pandemic period. However, international student mobility in 2023 was lower than expected, due to several reasons, which includes among others the following:

- Economic challenges that many are currently experiencing globally led to e.g. 4 students in 2023 withdrawing because they could not afford to cover living and travel expenses abroad
- 2. The exchange program in Livingstone, Zambia, which is the most popular destination for IHO students, was not operational throughout 2023, neither in the spring nor the fall semester.
- 3. The Tanga exchange program in Tanzania, which is a preferred exchange location for nursing students (Fig. 3), was not active in the spring semester of 2023.
- 4. The exchange agreement with Lebanon, which has been the only exchange location for master's students in nursing for the past 10 years, was no longer active from the fall semester of 2023.

But more so, the data for 2023 includes only exchange students for the spring semester, possibly can add to the explanation for the decrease in the number of exchange students for 2023 compared to 2022.

In 2023, several exchange agreements were inactive, including those with Livingstone in Zambia, Tanga in Tanzania, and Beirut in Lebanon, with the latter terminated due to political challenges. Overall, the

average percentage of exchange students was 6.1%, rising to 7% when excluding the pandemic years. The Bachelor of Occupational Therapy had the highest average percentage of exchange students at 27.8% per year (Table 4).

The low percentage of exchange students at 6.1% represents a significant challenge for IHO in increasing this figure to meet UiT's goal of 25%, and even more so to meet the government's goal of 50%. Additionally, based on UiT's objectives, it may be challenging for IHO to effectively contribute to UiT's aim of increasing the total number of approved student mobilities (both incoming and outgoing students) lasting three months or more to 600 outgoing, balanced by incoming students. This is particularly significant considering that IHO had a total of 275 approved outgoing students over the past ten years.

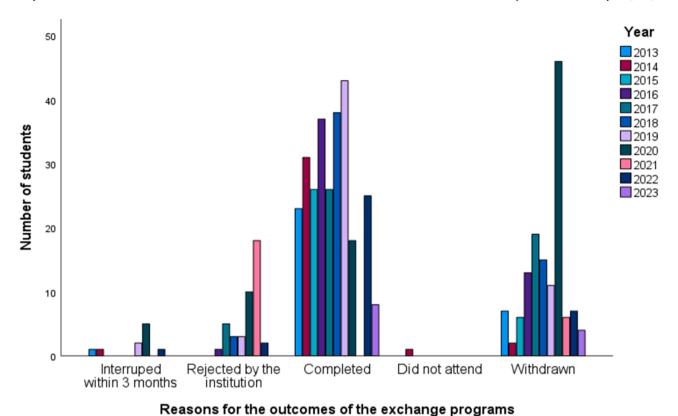
An important part of IHO's international engagement is student mobility and exchange agreements. Statistics show that the number of exchange students at IHO has significantly decreased in recent years, as shown in Table 4. Restrictions on international travel, political and economic challenges have all contributed to this decline. This highlights the need for a strategic review and adaptation from IHO to support and promote international exchange moving forward.

Analysis of international research activity and initiatives

International research initiatives and collaboration

IHO's engagement in international research initiatives and collaborations is integral to its strategy for promoting a global approach to research and education. As Montgomery (2020) highlights, strengthening international research networks is crucial for building research capacity and fostering innovation across borders. These collaborations not only aim to develop and share knowledge but also to address complex global health challenges. Between 2013 and 2022, IHO published 842 research articles, with 35.2% resulting from partnerships with international collaborators.

The historical statistics provide insights into the institute's research activities, including international research collaboration. The number of published research articles with international partners (international copublications), with a target of 60% by 2026, has been one of the key indicators of international research success [10, 14]. Of the 842 publications from 2013 to 2022, 743 articles were published in international



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Fig. 2. Outcomes of Exchange Programs: Reasons and Completing Status Over the Year Between 2013 and 2023.

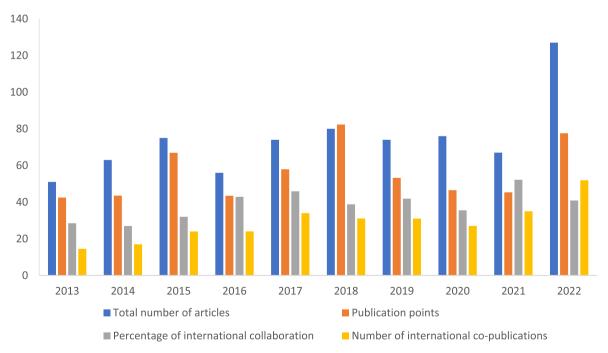


Fig. 3. Overview of Publication Activity and Degree of International Collaboration at the Institute from 2013 to 2022.

journals, representing 559.31 publication points. Furthermore, 38.9% of the 743 articles published in international journals were the result of international collaboration. This demonstrates IHO's engagement in international research networks and its contribution to the global scientific community. Despite this, IHO still has a way to go to meet UiT's international co-publication target of 60% by 2026.

Fig. 3 provides a detailed overview of publication activity at IHO for

each year from 2013 to 2022. The total number of articles indicates how many articles were published by the institute in the specified year. Publication points are a quantitative value reflecting the publication's quality and impact, where higher points indicate better quality or a greater scientific contribution. The percentage of international collaboration represents the proportion of the total number of publications developed in collaboration with researchers affiliated with foreign

Table 4Overall statistics in percentage of total completed IHO exchange students relative to total graduated students between 2013 and 2023.

Study program	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average % during the Period
Nursing – Bachelor	3,7 (191)	6,01 (283)	6,8 (235)	11,5 (244)	6,1 (256)	6,60 (288)	8,7 (288)	3,8 (293)	0 (274)	2,9 (310)	1,6 (248)	5,2
Occupational Therapy – Bachelo	90,0 (10)	22,2 (27)	23,8 (21)	60,0 (10)	50,0 (18)	62,5 (16)	40,0 (15)	0 (21)	0 (26)	30,4 (23)	0 (22)	27,8
Physiotherapy – Bachelor	10,7 (28)	13,0 (23)	10,0 (20)	9,1 (22)	0,00 (20)	8,3 (24)	11,4 (35)	13,3 (30)	0 (31)	5,1 (39)	3,3 (30)	7,6
Radiography – Bachelor	20,0 (10)	0 (18)	0 (17)	0 (7)	0 (13)	50,0 (14)	20,8 (24)	18,8 (16)	0 (21)	9,1 (22)	0 (22)	10,3
Paramedicine – Bachelor	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (23)	0 (21)	5,3 (19)	1,6
Nursing – Master	0 (70)	0 (68)	0 (34)	0 (6)	0 (1)	0 (1)	0 (33)	0 (39)	0 (3)	6,3 (48)	0 (21)	1,0
Midwifery – Master	0 (19)	0 (17)	0 (13)	0 (17)	0 (13)	0 (15)	0 (18)	0 (13)	0 (13)	11,1 (18)	10,0 (20)	10,8
Health Sciences - Master	0 (40)	0 (48)	0 (30)	0 (43)	0 (20)	0 (30)	0 (6)	0 (34)	0 (11)	0 (96)	0(2)	0
Total Percentage of Exchange Students at IHO in the Period	6,25	6,40	7,03	10,60	7,62	9,79	10,26	4,04	0,00	4,33	2,08	6.1% = [(275/ 4528)*100]

Note: The data basis for graduated students in this table from the UiT statistics portal [12] was not yet fully updated for 2023 during the time of analysis, so the results may change (but not significantly) as more data becomes available. The numbers in parentheses are the number of graduated students.

institutions. The number of international co-publications refers to the exact number of publications co-authored with international partners.

From Fig. 3, several trends and points of interest can be observed. Among others, the figure shows an upward trend in the number of publications, with a significant increase to 127 articles in 2022. Publication points, reflecting the quality and quantity of research work, vary from year to year, peaking in 2018 at 82.34 points. The proportion of international collaboration has also varied, with a notable increase in 2021 to 52.20%. The number of international co-publications followed a similar trend, reaching its highest point in 2022 with 51.94 publications. This indicates a growing tendency towards international collaboration and a strengthening of the international dimension of research over time. However, from Fig. 3, we can see that the institute's international co-authorship publications do not follow a consistent trend. To achieve the target consistently, the institute must work to increase the proportion of international collaboration in the coming years, requiring a significant effort to meet the deadline.

Impact of economic, political, and global health factors on IHO's internationalisation

Economic downturns or budget cuts can significantly limit resources available for internationalisation efforts. UiT and the Faculty of Health Sciences are facing challenging times with restructuring that will reduce resources from 2024, potentially hampering internationalisation efforts.

Political instability and stricter visa regulations can also complicate the recruitment of international students and faculty, thereby affecting collaboration programs. For instance, Brexit has led to stricter visa requirements and uncertainty, impacting IHO's collaboration programs and students.

Political tensions can hinder international collaboration and research exchange, as seen with the halted exchange program with Beirut Arab University due to regional political challenges. Geopolitical changes can affect existing partnerships. IHO is limited in establishing new exchange programs, such as in Russia, due to funding cuts to programs like Erasmus. This can slow the development of IHO's international work. Changes in political priorities and budget cuts can reduce available research funding, limiting international research projects.

Additionally, global health crises such as the COVID-19 pandemic have posed significant challenges. The pandemic led to widespread travel restrictions and temporary halts in student exchange programs, which disrupted planned activities and delayed the progress of ongoing international collaborations. These factors collectively highlight the

vulnerability of international educational initiatives to external global events and underline the need for adaptable strategies in internationalisation efforts.

It is crucial for IHO to remain aware of these specific challenges and be prepared for emerging issues that may impact their internationalisation activities.

In conclusion, the case study of IHO at UiT illustrates both the achievements and challenges of internationalising higher education over the past decade. While notable progress has been made in student exchanges and research collaborations, economic, logistical, political, and global health barriers have hindered optimal outcomes. This analysis not only sheds light on IHO's experiences but also provides valuable insights for other institutions aiming to enhance their international profiles in an increasingly globalised educational landscape.

Discussion

The internationalisation efforts at the Department of Health and Care Sciences (IHO) at UiT The Arctic University of Norway over the past decade provide valuable insights into the dynamics of internationalisation in higher education. The findings reveal both significant achievements and substantial challenges that have shaped IHO's internationalisation journey. This discussion synthesises these insights and proposes strategies for enhancing internationalisation efforts in higher education institutions globally.

Achievements in internationalisation

The IHO at UiT has made commendable strides in promoting internationalisation through various initiatives. The establishment of numerous exchange agreements with partner institutions worldwide facilitated significant student mobility, with 688 students participating in exchange programs from 2013 to 2023. Notably, the Bachelor of Nursing program had the highest absolute number of outgoing exchange students, reflecting its large enrolment and extensive exchange opportunities. However, when considering the percentage of total enrolled students participating in exchange programs, the Bachelor of Occupational Therapy program stood out with the highest average percentage of 27.8% over the period. This indicates a strong culture of international engagement within this program, despite its smaller size compared to Nursing. Additionally, IHO's commitment to international research collaboration is evident in its publication metrics, with 35.2% of research articles resulting from international partnerships.

Challenges and barriers

Despite these achievements, several challenges have impeded optimal internationalisation outcomes at IHO. As Altbach & Knight, (2007) argues, financial constraints emerged as a significant barrier, particularly for incoming students from bilateral agreements outside Europe and North America, who needed to cover their own expenses. Language barriers and disparities in educational standards also posed challenges, as did the age and familial commitments of students in certain master's programs, which limited their participation in exchange programs (Deardorff, 2006).

The COVID-19 pandemic exacerbated these challenges, causing a substantial decline in student exchanges in 2020 and a complete halt in 2021. Although there was some recovery in 2022, economic challenges and inactive exchange programs in key locations like Livingstone, Zambia, and Tanga, Tanzania, continued to affect student mobility in 2023. Moreover, as also portrayed in 'Comprehensive Internationalisation' report by Hudzik (2011), political instability and restructuring within UiT, leading to resource reductions from 2024, threaten to further hinder internationalisation efforts.

In summary, the thematic analysis of interviews with stakeholders revealed essential themes that characterise the complexities of internationalising higher education at IHO. Financial and logistical barriers, cultural competence, the impact of global crises, and the role of technological adaptation emerged as critical areas influencing internationalisation efforts. These findings underscore the importance of adopting diversified funding sources, enhancing support for cultural adaptation, leveraging technology, and maintaining flexible policies to sustain and expand internationalisation efforts.

The insights gained from this thematic analysis contribute valuable perspectives for stakeholders and highlight strategies to foster a globally inclusive and adaptable educational environment.

Strengths and weaknesses of the article on internationalisation

The article offers significant contributions to the scholarly field of internationalisation in higher education, providing a comprehensive and detailed exploration of global engagement, cultural exchange, and academic enrichment. Its strengths lie in its robust use of both quantitative and qualitative data, offering a thorough case study of IHO, which adds depth to the analysis. The inclusion of a historical perspective and examination of barriers such as financial constraints, language issues, and the impact of the COVID-19 pandemic are particularly valuable. These insights offer a nuanced understanding of real-world challenges and the strategies employed to address them. Additionally, the article's alignment with global objectives like the UN's Sustainable Development Goals (SDGs) and its integration of established theoretical frameworks enhance its scholarly rigor.

However, the article has some limitations. Its focus on the IHO case study may limit the generalisability of its findings to other institutions with different contexts. The specific challenges and successes discussed may not fully address the diverse needs of higher education institutions worldwide. While the article highlights important barriers, it could offer more specific, actionable strategies to overcome these challenges. Furthermore, the emphasis on virtual exchanges, while timely, might underplay the unique benefits of in-person exchanges. Additionally, the analysis could be strengthened by a more detailed discussion on the long-term evaluation of internationalisation efforts and the role of equity and inclusion in making international opportunities accessible to a broader range of students and faculty.

Despite these weaknesses, the article remains a valuable resource, providing important insights and practical recommendations that can inform the development of more effective and resilient internationalisation strategies in higher education institutions globally.

Recommendations for enhancing internationalisation

Based on the findings from IHO's experiences, the following recommendations are proposed to enhance internationalisation strategies in higher education institutions globally:

- Diversified Funding Sources: Institutions should seek diversified funding sources to support internationalisation efforts, including government grants, private sector partnerships, and alumni contributions. Establishing scholarships and financial aid specifically for incoming international students can alleviate financial barriers and promote more balanced student exchanges.
- 2. Flexible and Inclusive Exchange Programs: Developing flexible exchange programs that accommodate the diverse needs of students, including part-time and short-term exchanges, can enhance participation. Programs should also be inclusive, addressing language barriers through preparatory language courses and providing support for students with familial commitments.
- 3. Leveraging Technology for Virtual Exchanges: The COVID-19 pandemic underscored the potential of virtual exchanges and remote collaborations. Institutions should harness technology to facilitate virtual exchange program courses, enabling students to gain international experience without the need for physical travel. O'Dowd (2021) emphasises that virtual exchange program courses can offer scalable and cost-effective international experiences, particularly in the face of ongoing travel restrictions and financial challenges. These courses can serve as an efficient alternative to traditional exchanges.
- 4. Strengthening International Research Collaborations: To increase the proportion of international co-publications, institutions should foster stronger research collaborations with international partners. This can be achieved through joint research projects, cofunding opportunities, and international research networks. Encouraging faculty mobility and international sabbaticals can also enhance research collaboration.
- 5. Adapting to Political and Economic Contexts: Institutions must remain adaptable to changing political and economic contexts. This includes being proactive in establishing new partnerships in politically stable regions and seeking alternative funding sources when faced with budget cuts. Developing contingency plans for global health crises and political instability can ensure the continuity of internationalisation efforts.
- 6. Promoting Cultural Competence and Inclusion: Enhancing cultural competence and promoting inclusion on campus are crucial for a successful internationalisation strategy. Institutions should offer intercultural training for students, faculty, and staff, and create a welcoming environment for international students. Promoting diversity and inclusion initiatives can enrich the campus experience for all students.
- 7. Strategic Planning and Evaluation: A strategic approach to internationalisation, supported by continuous evaluation and improvement, is essential. Institutions should develop clear internationalisation goals, regularly assess their progress, and make data-driven adjustments to their strategies. Engaging stakeholders, including students, faculty, and international partners, in the planning process can ensure that strategies are comprehensive and effective.

Conclusion

The case study of the Department of Health and Care Sciences (IHO) at UiT The Arctic University of Norway highlights the intricate and dynamic process of internationalisation in higher education. While considerable advancements have been achieved over the past decade, this journey is fraught with ongoing challenges that demand continuous adaptation and innovative responses.

To effectively navigate these challenges, institutions must adopt a multifaceted approach that includes addressing financial constraints, promoting flexible and inclusive exchange programs, and harnessing technology to facilitate virtual learning experiences. Additionally, strengthening international research collaborations and cultivating an inclusive campus environment are crucial for deepening global engagement.

These strategies are not just about enhancing the international profile of institutions; they are essential for preparing students to succeed in an increasingly interconnected and interdependent world. By embracing these approaches, higher education institutions can not only sustain but also expand their internationalisation efforts, ensuring they remain resilient and relevant in a rapidly changing global landscape.

CRediT authorship contribution statement

Mbachi Ruth Msomphora: Writing – original draft, Visualization, Validation, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

No conflict exists. The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Acknowledgments

Sincere thanks are extended to the faculty, study program leaders, coordinators, and students at the Department of Health and Care Sciences (IHO) at UiT The Arctic University of Norway for their valuable insights, which were essential in gathering the qualitative data for this research.

Acknowledgement is given to UiT's Statistical record archive (Statistikkportalen) and Felles Studentsystem (FS) for providing the quantitative data that underpinned the analysis. Appreciation is also extended to the administrative staff at UiT for facilitating access to these records, as well as to important policy documents and strategic plans.

Gratitude is expressed to all participants for their cooperation and consent to share their experiences, which greatly enhanced the depth of this study.

Funding statement

No funding involved, or received.

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