




DESENVOLVIMENTO SUSTENTÁVEL DE UM COLLABORATIVE ONLINE INTERNATIONAL LEARNING (COIL) NO ENSINO DE ENFERMAGEM: ESTUDO QUALITATIVO

DEVELOPMENT OF SUSTAINABLE COLLABORATIVE ONLINE INTERNATIONAL LEARNING (COIL) IN NURSE EDUCATION: A QUALITATIVE STUDY


DESARROLLO SOSTENIBLE DE UN COLLABORATIVE ONLINE INTERNATIONAL LEARNING (COIL) EN LA ENSEÑANZA DE LA ENFERMERÍA: ESTUDIO CUALITATIVO

Bente Kvilhaugsvik¹  <https://orcid.org/0000-0002-7912-9629>

Eduardo Santos²  <https://orcid.org/0000-0003-0557-2377>

Alessandra Turin³


Claúdia Chaves^{4,5}  <https://orcid.org/0000-0002-8103-7221>

Giacomo Patrizio³  <https://orcid.org/0000-0001-9921-5615>

Leif Steinar Alfsvåg¹  <https://orcid.org/0000-0003-3387-7629>

Mauro Mota^{2,4}  <https://orcid.org/0000-0001-8188-6533>

Petra Schumacher⁶  <https://orcid.org/0000-0003-1409-9737>

Stephanie Jonathan⁷  <https://orcid.org/0000-0002-9857-7750>

Torunn Kittelsen¹

Carlo Alberto Camuccio⁸  <https://orcid.org/0000-0003-1372-9653>

¹ Western Norway University of Applied Sciences, Stord, Norway

² Health Sciences Research Unit: Nursing (UICISA: E), Nursing School of Coimbra (EEnFC), Coimbra, Portugal

³ Nursing School, Department of Medicine, University of Padua, Padua, Italy

⁴ Polytechnic Institute of Viseu, School of Health, Viseu, Portugal

⁵ CI&DEI - Centre for Studies in Education and Innovation, Viseu, Portugal.

⁶ IMC University of Applied Sciences Krems, Department of Health Sciences, Institute of Nursing Science, Austria.

⁷ Adventist Universitet Zurcher, Madagascar.

⁸ University of Padua, Padua, Italy.

Bente Kvilhaugsvik - bente.kvilhaugsvik@hvl.no | Eduardo Santos - ejf.santos87@gmail.com | Alessandra Turin - alessandra.turin.1@unipd.it |

Cláudia Chaves - claudiachaves21@gmail.com | Giacomo Patrizio - giacomo.patrizio@unipd.it | Leif Steinar Alfsvåg - leif.alfsvag@hvl.no |

Mauro Mota - maurolopesmota@gmail.com | Petra Schumacher - petra.schumacher@fh-krems.ac.at | Stephanie Jonathan - yonathanstephanie@gmail.com |

Torunn Kittelsen - torunn.kittelsen@hvl.no | Carlo Alberto Camuccio - alberto.camuccio@unipd.it



Corresponding Author

Eduardo Santos

Avenida Bissaya Barreto s/n
3004-011- Coimbra – Portugal
ejf.santos87@gmail.com

RECEIVED: 27th February, 2023

REVIEWED: 13th May, 2023

ACCEPTED: 29th May, 2023

PUBLISHED: 16th June, 2023

RESUMO

Introdução: Num programa de "Collaborative Online International Learning" (COIL) espera-se que professores/facilitadores e estudantes desenvolvam consciência internacional através do diálogo com pares internacionais. O potencial do COIL para o desenvolvimento de perspectivas globais sobre temas profissionais sem viajar para o estrangeiro é único.

Objetivo: Identificar obstáculos e critérios de sucesso vivenciados durante o desenvolvimento de um módulo COIL na educação de enfermeiros.

Métodos: Foi realizado um estudo qualitativo com participantes de um módulo COIL. Foram incluídas entrevistas de 11 estudantes e 8 professores/facilitadores. A análise do conteúdo foi realizada ao conjunto dos dados recolhidos.

Resultados: Quatro categorias comuns emergiram das perspectivas dos estudantes e dos professores: experiência positiva; dificuldades na experiência; habilidades desenvolvidas; e sugestões para o COIL. Além dessas categorias, as oportunidades oferecidas pelo COIL foram especificamente identificadas pelos professores e as estratégias utilizadas para as dificuldades experienciadas foram especificamente identificadas pelos estudantes.

Conclusão: O COIL deve ser cuidadosamente planejado e regulado da mesma forma que toda a restante programação de atividades curriculares. É importante considerar os diferentes currículos, fusos horários e horários entre programas educacionais nos diferentes países.

Palavras-chave: intercâmbio educacional internacional; competência cultural; estudantes de enfermagem

ABSTRACT

Introduction: In "Collaborative Online International Learning" (COIL) teachers/facilitators and students are expected to develop international awareness through dialogue with international peers. COIL's potential for the development of global perspectives on professional themes without traveling abroad is unique.

Objective: To identify obstacles and success criteria experienced during the development of a COIL module in nurse education.

Methods: A qualitative study was developed with participants of a COIL module. Interviews with 11 students and 8 facilitators were included. The content analysis was performed on the data as a whole.

Results: Four common categories emerged across students' and teachers' perspectives: positive experience; experienced difficulties; skills developed; and COIL suggestions. Additionally, opportunities provided by COIL were specific for teachers, and strategies used for the difficulties experienced were specific for students.

Conclusion: COIL should be carefully planned and regulated like all programming of curricular activities. Different curricula, time zones, and schedules across education programs in different countries must be considered.

Keywords: international educational exchange; cultural competency; students; nursing

RESUMEN

Introducción: En un programa "Collaborative Online International Learning" (COIL) se espera que profesores/facilitadores y estudiantes desarrollen una conciencia internacional a través del diálogo con compañeros internacionales. El potencial del COIL para desarrollar perspectivas globales sobre cuestiones profesionales sin viajar al extranjero es único.

Objetivo: Identificar los obstáculos y los criterios de éxito experimentados durante el desarrollo de un módulo COIL en la formación de enfermería.

Métodos: Se desarrolló un estudio cualitativo con participantes de un módulo COIL. Se incluyeron entrevistas a 11 estudiantes y 8 facilitadores. Se realizó un análisis de contenido del conjunto de los datos.

Resultados: Cuatro categorías comunes emergieron de las perspectivas de estudiantes y profesores: experiencia positiva; dificultades experimentadas; habilidades desarrolladas; y sugerencias de COIL. Además, las oportunidades proporcionadas por el COIL fueron específicas para los profesores y las estrategias utilizadas para las dificultades experimentadas fueron específicas para los estudiantes.

Conclusión: El COIL debe ser cuidadosamente planificado y regulado de la misma forma que el resto de las actividades curriculares. Es importante tener en cuenta los diferentes planes de estudios, zonas horarias y horarios entre los programas educativos de los distintos países.

Palabras Clave: intercambio educacional internacional; competencia cultural; estudiantes de enfermería

INTRODUCTION

International collaboration allows students to develop an understanding of global issues that future professionals will have to deal with. A literature review (Wimpenny et al., 2020) investigated how internationalization is implemented in educational institutions and how initiatives of Internationalization of Curriculums (IoC), where the learning outcomes allow internationalization throughout the study programs, can be supported by institutional strategies and academic practices to deliver internationalization to all students. Higher education teachers should educate respectful, caring, and responsible global citizens through a socially-just pedagogy and a systemic approach. Participation in a global university where IoC is the focus can transform teachers' cultural perspectives and research. According to Wimpenny et al. (2021), western countries have dominant views on what knowledge is, pedagogical methods, and research. IoC should be addressed, and reflection on one's viewpoints is necessary for developing new dialogues and focuses like inclusivity, internationalization, and global citizenship (Wimpenny et al., 2021).

Internationalization as physical mobility results in few students going abroad. With internationalization at home (IaH) strategies, which means all strategies where students develop international competence without going abroad, all students are potentially reached (Beelen & Jones, 2015). IaH must be properly anchored by organizational leadership and international officers for internationalization should be involved. Higher education teachers and educational developers are key stakeholders and need to develop skills for IaH. However, to integrate internationalization throughout curriculums, all teachers should be involved in learning outcomes, learning activities, and assessments (Beelen, 2017).

"Collaborative Online International Learning" (COIL) is an IaH model where an existing module in an education program is "internationalized" by the incorporation of a collaborative project across international educational institutions (Hackett et al., 2023). Learning outcomes about intercultural competence allow teaching staff to be innovative and start IaH (Guimarães & Finardi, 2021). In such ways, higher education institutions can stimulate worldwide dialogue (Wihlborg et al., 2018). In addition to learning management systems (LMS), social media can be used in collaborative learning in nurse education because they give possibilities for close to real-time discussions (O'Connor et al., 2017). IaH strategies enable intercultural dialogue where students can develop global perspectives on professional themes and national contexts (Chan & Nyback, 2015), intercultural awareness, discipline-specific knowledge, and collaborative skills (Vahed & Rodriguez, 2021).

In spring 2021, a COIL module was implemented between five universities (in Norway, Austria, Italy, Portugal, and Madagascar). Students were divided into 45 groups led by 1 to 2 facilitators. Each group included at least one student from each country. The COIL module lasted one month, with the first 2 weeks being dedicated to the socialization of the students and the remaining weeks to the completion of tasks, led by the teachers with a facilitation approach (Vahed & Rodriguez, 2021). This consisted of themes, with support materials, on the nursing profession's responsibilities and comparison between the countries. At the end of the process, a final group poster was made and presented at a conference with all participants. We developed qualitative research to identify obstacles and success criteria experienced during the development of this COIL module in nurse education.

1. METHODS

1.1. Participants

The COIL counted the participation of 209 nursing students and 12 teachers (who played the role of facilitators) from the institutions (Table 1).

Table 1. Characteristics of the COIL module participants.

University Country	Students n (%)	Mandatory/ not mandatory for students	Facilitators = Teachers n (%)
Norway	90 (43.1)	Mandatory	3 (25)
Madagascar	62 (29.7)	Not mandatory	2 (16.7)
Italy	42 (20.1)	Not mandatory	3 (25)
Austria	15 (7.2)	Not mandatory	1 (8.3)
Portugal	0	Not mandatory	3 (25)

The inclusion criteria in the study were that students and facilitators had completed the COIL module. All COIL participants, both students and facilitators, were asked by e-mail to become informants in the research. Informants were added until the data were saturated, which led to the inclusion of eleven students (3 from Austria, 3 from Norway, 3 from Italy, and 2 from Madagascar) and eight facilitators (2 from Portugal, 3 from Italy, 1 from Norway, 1 from Madagascar and 1 from Austria). Data saturation was described as the point of data collection and analysis where new incoming data generated little or no new information to answer the research question (Guest et al., 2020). Therefore, the number of participants was determined according to data saturation, which is most commonly used for estimating sample size in qualitative studies, after no new information is found (Guest et al., 2020). A researcher contacted all interested parties by email, confirmed their eligibility, carried out the informed consent, and scheduled the interviews.

Sociodemographic characteristics showed that eight students (72.7%) were female, aged between 20 and 45. Six facilitators (75%) were female, aged between 34 and 60. The facilitators had at minimum a master's degree.

1.2. Data Collection

Single interviews with students and group interviews with facilitators were carried out in July 2021 via ZOOM®. The duration of the interviews varied between 30 and 60 minutes. Five researchers conducted the semi-structured interviews, and all had extensive experience in conducting interviews (SJ, AT, GP, PS, and BK). Before conducting the interviews, the interview procedures were trained and standardized. The interview script was developed for this purpose and was pre-validated by the research team. It focused on the experience of virtual collaboration, what participants learned, and if COIL could be a future strategy to develop internationalization. Two pilot interviews were performed to test the questions of the interview script. These interviews were not included in the analysis. The interviewers and interviewees did not know each other previously.

1.3. Data Analysis and Synthesis

The interviews were transcribed verbatim by five researchers (SJ, AT, GP, PS, and BK), without having access to the participants' identifying data. The sound files were password protected and were destroyed after the data processing. The interviewers met in Zoom® to list and discuss the main categories obtained and to assess data saturation. The coding and analysis of content were done using ATLAS.ti software (v.9.1) by two researchers (ES and BK) in an inductive way, that is, without categories defined *a priori*. It followed the procedure of content analysis – pre-analysis, exploration, result processing, inference, and interpretation (Bardin, 2011). Data were arranged into subcategories and categories. In the end, three meetings were held with all researchers to discuss the thematic index. After confirming that there was no further content in the analysis, the findings were evaluated according to the criteria for reliability, applicability, audibility, and neutrality to ensure the study's reliability (Lincoln & Guba, 1985). Reliability was ensured by confirming the content analysis findings to five study participants. Applicability was confirmed by presenting the research results to two students and two teachers who had experience working with international learning but did not participate in this study. Audibility was ensured through the reviews of one researcher, who was not involved in the study but had extensive experience in qualitative research. Finally, neutrality was ensured by comparing our results with those found in other studies. The Consolidated criteria for reporting qualitative research (COREQ) checklist for interviews and focus groups were followed to structure this paper (Tong et al., 2007).

1.4. Ethical Considerations

The project followed the ethical guidelines given in the Helsinki Declaration. Ethical approval was obtained by the Norwegian Centre for Research Data, with the number 838551. Informed consent was obtained from all participants. For confidentiality purposes, each participant was randomly identified with a capital letter and the interview number.

2. RESULTS

Results of the qualitative analysis identified four categories common to students and teachers, one that emerged from students' and one from facilitators' answers. The specific results for each are presented below, first looking at students' perspectives and then at the teachers/facilitators.

2.1. Students' perspectives

Category 1: COIL suggestions

Students made several suggestions, which emerged from the following subcategories: *'Clearer instructions for the task'*, *'Improve socialization period'*, *'Mandatory participation'*, *'Need of physical presence'*, *'Focus on cultural competence'*, *'Promote lectures for the task'*, *'Promote local facilitation strategies'*, *'Smaller tasks'* and *'Use of other platforms and social networks'*. Most students (72.7%) prefer a platform other than the one proposed (CANVAS®), as illustrated by the following transcripts: *"It is not like any other famous media like Facebook, Instagram, or whatever..."* (S7) and *"Maybe even exchange e-mails with students, then exchange numbers, make a group on WhatsApp...or make a video call with Zoom..."* (S11).

Category 2: Experienced difficulties

Students expressed experiencing difficulties that mainly emerged from these subcategories: *'Learning management system'*, *'Circumstantial access problems'*, *'Lack of students' participation and motivation'*, *'Establish a relationship'*, *'Difficulties in carrying out the COIL task'*, *'Group work'*, *'Language'*, *'Need to have previous skills'*, *'Poster development'* and *'To conciliate COIL with academic life'*. The difficulty with the greatest expression (63.6%) was the conciliation of COIL with academic life: *"We had so many exams and too little time and I was not into the project, but I think it was something personal, but we knew we had the deadline..."* (S1) and *"It was a bit stressful in parts because it was during my exam period, the whole project... that was a bit stressful, but that's not a big negative factor now."* (S3).



Category 3: Positive experience

It was emphasized by all the students that the experience of participating in COIL was a positive one. Several subcategories were identified, such as: *'Enjoy the experience'*, *'Feeling of ease in adaptation to the COIL'*, *'Positive intercultural exchange'*, and *'Interest in repeating the experience'*. Most students highlighted that the intercultural exchange was positive (90.9%), that they enjoyed the experience (72.7%), and that they would repeat it in the future (45.5%). One student stated: *"I also found it very cool that there were so many instruction videos on how to do what. And I also think that all the facilitators seemed quite friendly... such joy in such a project"* (S3), and another *"It was a good experience precisely, to confront other countries, other realities ..."* (S10).

Category 4: Skills developed

Several skills were developed during COIL and recognized by the students, among them: *'Internationalization competence'* (36.4%), *'Communication'* (27.3%), *'Digital competence'* and *'Scientific reading'* (18.2%), and last *'Poster development'*, *'Evidence searching'* and *'Critical thinking'* (9.1%). One student said: *"I got training in many things and increased my competence in the creation of a poster and to search for good research articles."* (S5) and another shared: *"...it would teach me a lot of things and help me to have critical thinking..."* (S7).

Category 5: Strategies used for the difficulties experienced

Lastly, the students, to answer some of the difficulties they experienced, used other platforms and social networks (45.5%). They also suggested that future COIL planning should consider the student's academic commitments.

2.2. Facilitators' Perspectives

Category 1: Positive experience

Like the students, the facilitators found COIL to be a very positive experience. They shared that: *"...even with all the difficulty that we are sorry about, the thing that I think remains it's how great it was, to do it."* (F5) and *"I thought it was a very interesting occasion, and experience because it gave me the possibility of comparing myself with the academic and professional realities."* (F8). Several categories were identified: *'Enjoy the experience'*, *'Interest in repeating the experience'* and *'Good relationship'*. Most of the facilitators stated that it was an experience that they enjoyed (75%).

Category 2: Opportunities brought by COIL

Several opportunities were presented with the unfolding and conclusion of COIL of which the following are noteworthy: *'Limits restrictions imposed to mobility'* and *'Nursing programs exchange'*. Facilitators stated for example that: *"...COIL allows students who do not have the economic possibility to have an experience with physical mobility, like Erasmus, to still be able to participate in international activity."* (F8) and *"...we caught the opportunity to contact with another nursing programs, see how our colleagues work and how they saw so many questions, for us it's a huge opportunity..."* (F5).

Category 3: Skills developed

The facilitators also identified several key competencies that were developed by students, including: *'Digital competence'*, *'Internationalization competence'*, *'Cultural competence'*, and *'Communication'*. Cultural competence was the most mentioned (37.5%) by facilitators. They stated: *"...I can enforce the students more to learn more things from digital skills, cultural skills, language skills"*. (F4) and, *"...that the possibility of developing a multicultural vision of the nursing profession is a fundamental key to improving the university education and the quality of assistance."* (F8).

Category 4: Experienced difficulties

Regarding the difficulties experienced, it was mentioned that the most prevalent was managing the students' group work (50%). The subcategories found were: *'Manage students group work'*, *'Lack of students' participation and motivation'*, and *'Learning management system'*. Facilitators shared that: *"...quite hard parts are the planning process to meet the schedule in each of the different countries, different roles, different, I mean students and things like that. I guess one of the main ... issues, to synchronize all the different schedules and different ideas and things like that."* (F4) and *"The problem was that not all students were able to participate even if they said that they wanted to... I guess there were several reasons... for some students, it was mandatory to participate and for other students, it was not."* (F6).

Category 5: COIL suggestions

Several suggestions were made, the most mentioned was the use of other platforms and social networks (62.5%). In addition, the following were mentioned: *'More meetings needed'*, *'Focus on cultural competence'*, *'Project must go ahead'*, *'Need of physical presence'*, *'Improve the socialization period'* and *'Tutorials should be provided'*. Facilitators stated: *"I noted the students had a parallel communication. They used to create groups on Messenger or WhatsApp to communicate avoiding using the chosen LMS. The system is complex, full of opportunity, but it's not a quick and easy platform to use."* (F1) and *"We are now a COIL network, and I think this is the*

main thing... so now we need to grow up, as a team, as a group, and also as a pedagogical net in a digital world, and I hope also to be in a big learning experience..." (F5).

2.3. Comparison of students' and facilitators' perspectives

When we compare the perspectives of the students and facilitators it is noticeable that the categories are the same for 4 out of 5. More specifically, 'COIL suggestions', 'Experienced difficulties', 'Positive experience', and 'Skills developed'. This trend was also seen in the subcategories. In the category 'COIL suggestions' we found that the perspectives (subcategories) of students and facilitators were the same for 'Use of other platforms and social networks', 'Focus on cultural competence', 'Need of physical presence', and 'Improve the socialization period'. For 'Experienced difficulties' the same subcategories were 'Manage students group work', 'Lack of students participation and motivation', and 'Learning management system'. For 'Positive experience' the same subcategories were 'Enjoy the experience' and 'Interest in repeating the experience'. Finally, for 'Skills developed' the same subcategories were 'Digital competence', 'Internationalization competence', and 'Communication'. The comparison of students' and facilitators' perspectives is presented in full (Table 2).

Table 2 - Comparison of student and facilitator perspectives by rank from highest to lowest.

Students' perspectives (n=11)		Facilitators' perspectives (n=8)				
n (%)	Subcategory	Category	Subcategory	n (%)		
8 (72.7)	Use of other platforms and social networks	COIL suggestions	Use of other platforms and social networks	5 (62.5)		
2 (18.2)	Improve socialization period		More meetings needed	3 (37.5)		
2 (18.2)	Mandatory participation		Focus on cultural competence	2 (25)		
2 (18.2)	Need of physical presence		The project must go ahead	2 (25)		
2 (18.2)	Focus on cultural competence		Need of physical presence	1 (12.5)		
2 (18.2)	Promote lectures for the task		Improve the socialization period	1 (12.5)		
2 (18.2)	Promote local facilitation strategies					
2 (18.2)	Clearer instructions for the task		Tutorials should be provided	1 (12.5)		
1 (9.1)	Smaller tasks					
7 (63.6)	To conciliate COIL with academic life	Experienced difficulties	Manage student's group work	4 (50)		
5 (45.5)	Learning management system		Lack of students participation and motivation	4 (50)		
3 (27.3)	Lack of students participation and motivation					
2 (18.2)	Establish a relationship					
2 (18.2)	Language					
1 (9.1)	Group work		Learning management system	1 (12.5)		
1 (9.1)	Difficulties in carrying out the COIL task					
1 (9.1)	Need to have previous skills					
1 (9.1)	Poster development					
1 (9.1)	Circumstantial access problems					
10 (90.9)	Positive intercultural exchange	Positive experience	Enjoy the experience	6 (75)		
8 (72.7)	Enjoy the experience		Good relationship	2 (25)		
5 (45.5)	Interest in repeating the experience		Interest in repeating the experience	1 (12.5)		
4 (36.4)	The feeling of ease of adaptation to the COIL					
4 (36.4)	Internationalization competence	Skills developed	Internationalization competence	3 (37.5)		
3 (27.3)	Communication		Cultural competence	2 (25)		
2 (18.2)	Digital competence		Digital competence	2 (25)		
2 (18.2)	Scientific reading					
1 (9.1)	Poster development		Communication	1 (12.5)		
1 (9.1)	Evidence searching					
1 (9.1)	Critical thinking					
5 (45.5)	Use of other platforms and social networks		Strategies used for the difficulties experienced	Opportunities provided by COIL	Limits restrictions imposed on mobility	3 (37.5)
					Nursing programs exchange	1 (12.5)

3. DISCUSSION

Our study analyzed a COIL module with characteristics different from those found described in the literature: the number of students and universities of different countries involved was higher, e.g. In fact, one study describes a COIL with 15 students from a trilateral project (Jung et al., 2022), while another important work (Wihlborg et al., 2018) describes a COIL with 180 students between two countries. In addition, another study (Carlson et al., 2019) had three universities with about 30 students involved. Indeed, the COIL described in this study involves 209 students and 12 facilitators from five different universities (a sixth, Odense University in Denmark, participated in the planning of the course but not in the implementation in spring 2021). The number of students and universities is significant and symbolic at the same time. In 2020 and 2021, the Erasmus+ Program, which is a European Union (EU) program that supports education, training, youth, and sport in Europe, a particularly international exchange that allows students to study at universities in the EU for set periods, was severely affected due to the Pandemic. This impacted planned exchanges for nursing students, with almost all departures and arrivals canceled due to difficulties in carrying out internships. Most of these exchanges are clinical internships and due to their practical nature could not be replaced by other types of international exchange.

The idea of this COIL was therefore largely born as a method of overcoming the difficulties of physical internationalization. Thus, this COIL is symbolically a way of internationalizing and continuing the Erasmus idea despite the restrictions imposed by the pandemic. The objective of this study was to identify obstacles and success criteria for establishing a sustainable COIL for nursing students and teachers. As set in the Result section, our main findings are a) the feeling of difficulty that emerged in students in reconciling COIL attendance with other academic commitments; b) the general feeling of satisfaction regarding the experience with a particular focus on 'Internationalization competence' and 'Cultural competence', and c) the need to have an agile and "student-friendly" teaching platform. International competencies have been indicated by everyone, both students and facilitators, as the greatest benefit of this COIL. The goal of internationalization at home, therefore, seems to interest and represent an important value for the participants. This value is described in many studies: students affirm that the opportunity to meet and relate to nursing students in other countries is highly valuable (Carlson et al., 2019). A professional value, that manifests itself with knowledge of other nursing systems (Jung et al., 2022) and through the creation of bonds of friendship (Carlson et al., 2017; Carlson et al., 2019; Wihlborg et al., 2018) with other student nurses. This is a value that has to do with relational nature as well as a purely professional one.

To improve the relational nature of this experience we have preceded the working period on professional issues by a period of "socialization" that allowed the students to get to know each other. The socialization phase can convey professional and didactic content: in our case, the students were asked to discuss the different traditions and rules regarding uniforms and the use of jewelry. These contents may represent some of the cultural-professional focus that both students and facilitators suggested expanding.

It, therefore, emerges that the cultural dimension, also through the interpersonal relationship that is established in the various phases of the project, is the one that students and teachers valued the most.

The intrinsic value of virtual exchange and projects of internationalization at home is, as described extensively in the literature, the stimulus to the creation of skills of openness and sensitivity towards cultural differences, or the core of an inquiry-based attitude (Carlson et al., 2017; Carlson et al., 2019; Spadaro et al., 2017; Wihlborg et al., 2018). The stimulus to be culturally curious and sensitive must be obtained and supported through careful didactic planning of the internationalization experience at home – a virtual exchange (Carlson et al., 2019; Wihlborg et al., 2018).

Our second result is the difficulty that many students had in following the COIL project and coping with academic commitments simultaneously. This difficulty is the same concern expressed by Wihlborg et al. (2018) that students needed precise scheduling of synchronous, online small group work to avoid conflict with other classes or clinical experiences.

This is what appears from our interviews with students who were often worried about curricular exams in progress or the overlap with their practical internship.

The validity of these statements is confirmed by the observations of low motivation and lack of participation in group activities by students that emerge from interviews with the facilitators and some students, so much so that it represents a common sub-category in the analysis. Our third result, the need for an easy platform, is a theme that emerges in the reference literature (Carlson et al., 2017; Hao et al., 2022; Wihlborg et al., 2018). The platform used in our studio was CANVAS® used by the Norwegian university who was leading the project. The different groups of students communicated through instant messaging applications such as WhatsApp® or Messenger®, rather than through the assigned LMS. These students used the LMS occasionally or only when mandatory.

In light of these results, the first reflection that comes to mind is that the care and reflection in planning international virtual activities must be the same that regulate all programming of traditional curricular activities: in particular well-stated learning objectives, to avoid overlapping with other curricular activities, attention to the priorities that students give to activities that do not always correspond to the priorities of the trainers and in online learning the use of platforms has to be well reasoned (Hao et al., 2022; Wihlborg et al., 2018).

Another issue, which we have not found in the reference literature on COIL, is the impact of the pandemic on the programs and learning of nursing students.

Other literature describing this type of COIL project dates back almost entirely to the pre-COVID era. We can therefore hypothesize, putting our hypothesis also as a suggestion for future research, that our cohort of interviewees was already familiar with online teaching and the use of educational platforms, therefore already knowing its virtues and its limits in learning (Hao et al., 2022). But at the same time, it is a cohort of students who in 2020 had little clinical training, in any case strongly conditioned by the pandemic restrictions: in this way perhaps, we can understand the priority given in terms of attention to the practical internship by many students.

Study limitations

Our study had some limitations such as a small sample and the fact that this was the first experience of a COIL for most participants.

CONCLUSIONS

International activities, even if viewed with favor and curiosity by students, should not be seen as an absolute value. Careful pedagogical planning is required for a successful experience. In the case of international initiatives, one must also consider the different curricula and the different academic calendars.

We suggest that international learning activities, like this project, could give educational institutions opportunities to give all students international experience. Further research is needed to investigate the achievement of learning outcomes and should also focus on the outcomes of the internationalization of the curriculum.

AUTHOR CONTRIBUTIONS

Conceptualization, B.K.; data curation, B.K., E.S. and C.A.C.; formal analysis, B.K., E.S. and C.A.C.; investigation, B.K., E.S., A.T., C.C., G.P., L.S.A., M.M, P.S., S.J., T.K. and C.A.C.; methodology, B.K, E.S and C.A.C.; project administration, B.K.; resources, B.K, E.S. and C.A.C.; software, E.S.; supervision, B.K.; validation, B.K., E.S., A.T., C.C., G.P., L.S.A., M.M, P.S., S.J., T.K. and C.A.C.; visualization, B.K., E.S., A.T., C.C., G.P., L.S.A., M.M, P.S., S.J., T.K. and C.A.C.; writing-original draft, E.S.; writing-review and editing, B.K., E.S., A.T., C.C., G.P., L.S.A., M.M, P.S., S.J., T.K. and C.A.C.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

REFERENCES

- Bardin, L. (2011). *Content analysis* (5th ed.). Edicoes, 70.
- Beelen, J. (2017). The missing link in internationalisation: developing the skills of lecturers. *ZFHE*, 12(4), 133-150.
- Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In A. Curai, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area: Between critical reflections and future policies* (pp. 69-72). Springer. <http://link.springer.com/book/10.1007/978-3-319-20877-0>
- Carlson, E., Stenberg, M., Chan, B., Ho, S., Lai, T., Wong, A., & Chan, E. A. (2017). Nursing as universal and recognisable: Nursing students' perceptions of learning outcomes from intercultural peer learning webinars: A qualitative study. *Nurse Educ Today*, 57, 54-59. <https://doi.org/10.1016/j.nedt.2017.07.006>
- Carlson, E., Stenberg, M., Lai, T., Reisenhofer, S., Chan, B., & Cruz, E. (2019). Nursing students' perceptions of peer learning through cross-cultural student-led webinars: A qualitative study. *J Adv Nurs*, 75(7), 1518-1526. <https://doi.org/10.1111/jan.13983>
- Chan, E. A., & Nyback, M. H. (2015). A virtual caravan--A metaphor for home-internationalization through social media: A qualitative content analysis. *Nurse Educ Today*, 35(6), 828-832. <https://doi.org/10.1016/j.nedt.2015.01.024>
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS One*, 15(5), e0232076. <https://doi.org/10.1371/journal.pone.0232076>
- Guimarães, F. F., & Finardi, K. R. (2021). Global citizenship education (GCE) in internationalisation: COIL as alternative Thirdspace. *Globalisation, Societies and Education*, 19(5), 641-657. <https://doi.org/10.1080/14767724.2021.1875808>
- Hackett, S., Janssen, J., Beach, P., Perreault, M., Beelen, J., & van Tartwijk, J. (2023). The effectiveness of Collaborative Online International Learning (COIL) on intercultural competence development in higher education. *International Journal of Educational Technology in Higher Education*, 20(1), 5. <https://doi.org/10.1186/s41239-022-00373-3>
- Hao, X., Peng, X., Ding, X., Qin, Y., Lv, M., Li, J., & Li, K. (2022). Application of digital education in undergraduate nursing and medical interns during the COVID-19 pandemic: A systematic review. *Nurse Educ Today*, 108, 105183. <https://doi.org/10.1016/j.nedt.2021.105183>

- Jung, D., De Gagne, J. C., Choi, E., & Lee, K. (2022). An Online International Collaborative Learning Program During the COVID-19 Pandemic for Nursing Students: Mixed Methods Study. *JMIR Med Educ*, 8(1), e34171. <https://doi.org/10.2196/34171>
- Lincoln, Y. S., & Guba, E. (1985). *Naturalistic Inquiry* (6 ed.). Sage.
- O'Connor, S., Jolliffe, S., Stanmore, E., Renwick, L., Schmitt, T., & Booth, R. (2017). A mixed study systematic review of social media in nursing and midwifery education: Protocol. *J Adv Nurs*, 73(8), 1989-1996. <https://doi.org/10.1111/jan.13310>
- Spadaro, K. C., Wolf, D., Wu, H., & Hunker, D. F. (2017). Preparing for an international student cohort: Making a global impact on nursing. *Nurse Educ Today*, 57, 88-94. <https://doi.org/10.1016/j.nedt.2017.06.014>
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*, 19(6), 349-357. <https://doi.org/10.1093/intqhc/mzm042>
- Vahed, A., & Rodriguez, K. (2021). Enriching students' engaged learning experiences through the collaborative online international learning project. *Innov. Educ. Teach. Int.*, 58(5), 596-605. <https://doi.org/10.1080/14703297.2020.1792331>
- Wihlborg, M., Friberg, E. E., Rose, K. M., & Eastham, L. (2018). Facilitating learning through an international virtual collaborative practice: A case study. *Nurse Educ Today*, 61, 3-8. <https://doi.org/10.1016/j.nedt.2017.10.007>
- Wimpenny, K., Beelen, J., Hindrix, K., King, V., & Sjoer, E. (2021). Curriculum internationalization and the 'decolonizing academic'. *Higher Education Research & Development*, 1-16. <https://doi.org/10.1080/07294360.2021.2014406>
- Wimpenny, K., Beelen, J., & King, V. (2020). Academic development to support the internationalization of the curriculum (IoC): a qualitative research synthesis. *International Journal for Academic Development*, 25(3), 218-231. <https://doi.org/10.1080/1360144X.2019.1691559>