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COPILOT – Development and Implementation of International Cooperative Online Intercultural Learning

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Abstract

This article presents the products and evaluation results of COPILOT (Cooperative Online Peer-assisted and Intercultural Learning in Occupational Therapy), an Erasmus+ funded project undertaken by a consortium of six European universities from 2018 to 2021, which addresses the need for internationalization and intercultural learning by developing competences graduates will need in the future. Internationalization has become one of the main avenues to developing global learning in higher education. Online education has a significant role in providing opportunities for internationalization online without the high cost of travel that might deter some students. The interest in online intercultural exchange has been significantly growing in the past five years, though there is still a scarcity of fully developed models and online learning activities to facilitate the practical implementation of this kind of learning. The COPILOT project produced a theoretical framework and a practical model for facilitating online intercultural learning in occupational therapy, as well as a manual with nine innovative, accessible and flexible online learning modules, complete with practical tips on how to implement them, and a collection of online educational resources (OERs). The modules were piloted with 498 students from nine universities and then evaluated by students and teachers. The results show that the project products offer a practical opportunity to implement international and intercultural learning online for all students of occupational therapy. The need for intercultural competence within occupational therapy programs is discussed.

Keywords

Internationalization, occupational therapy, cooperative online international learning, intercultural exchange

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COPILOT – Development and Implementation of International Cooperative Online Intercultural Learning

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ABSTRACT

This article presents the products and evaluation results of COPILOT (Cooperative Online Peer-assisted and Intercultural Learning in Occupational Therapy), an Erasmus+ funded project undertaken by a consortium of six European universities from 2018 to 2021, which addresses the need for internationalization and intercultural learning by developing competences graduates will need in the future. Internationalization has become one of the main avenues to developing global learning in higher education. Online education has a significant role in providing opportunities for internationalization online without the high cost of travel that might deter some students. The interest in online intercultural exchange has been significantly growing in the past five years, though there is still a scarcity of fully developed models and online learning activities to facilitate the practical implementation of this kind of learning. The COPILOT project

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Introduction

Current fast-changing information technologies, globalization, migration and environmental issues pose huge challenges but also chances for human advancement. According to the Organization for Economic Co-operation and Development (OECD, 2018), these circumstances require a new set of skills from young professionals, whose future will most likely be more complex, uncertain, and unpredictable than ever before. To be prepared for this future, today's students "need to develop curiosity, imagination, resilience and self-regulation; they will need to respect and appreciate the ideas, perspectives and values of others; and they will need to cope with failure and rejection, and to move forward in the face of adversity" (OECD, 2018, p. 2). The recent COVID-19 pandemic, with its profound impact on the lives, health and wellbeing of individuals, families and communities as well as on higher education worldwide, provides ample reinforcement for the OECD's argument (Schleicher, 2020).

Key players in tertiary education in Europe and the United States take a similar stance. Both the European Commission and the Washington D.C. based NAFSA Association of International Educators emphasize the critical importance of skills such as problem-solving, analytical capability, a tolerance for complexity and ambiguity, creative thinking, and communicating effectively across national and professional cultures, in order to thrive in a global environment (European Commission, 2017; European Commission, 2020; NAFSA, 2021). Skills such as these, essential for successfully tackling future professional challenges, have been labeled "21st century skills" (Joynes et al., 2019), especially in European discourse. Furthermore, both the European Commission and NAFSA refer to the significant contribution that international learning can make to the development of these skills, in addition to innovative teaching and learning methods that foster subject-specific competences and transversal skills simultaneously (European Commission, 2017; European Commission, 2012; Joynes et al., 2019; NAFSA, 2021).

Of these "21st century skills", intercultural competence has gained crucial significance, especially in the health care sector. Demographic and economic developments require heightened cultural sensibility and a better understanding of the cultural contexts of health care. The World Health Organization (WHO, 2020) considers the latter not only as a prerequisite for appropriate practical client care, but also as "critical to health and well-being development" around the globe (Napier, 2017, p. xi). In occupational therapy, the recognition of all social and cultural aspects that affect living conditions and occupational needs is essential (Talero et al., 2015). Such an understanding can be strengthened by lived intercultural learning and reflection, by international, comparative

learning, and by the global exchange of good practices (Morong & DesBiens, 2016; Perry & Southwell, 2011). As professional mobility increases, cultural sensitivity and a more international outlook on their profession can also raise graduates' employability at home and abroad (European Commission, 2017).

Immersion in another culture by studying abroad is an ideal way to promote the kind of intercultural knowledge and understanding just described. However, for a number of reasons, only 3.5-4 % percent of students in the European Union and less than 1% of American students were able to do so in 2018 (OECD, 2019). Since 2014, the European Union has therefore promoted the concepts of "Internationalization at home" and "Internationalization of the curriculum" as a means of involving more students in international learning at their home universities (UNICollaboration, 2014). An increasing number of higher education institutions have discussed and experimented with the use of online learning settings as internationalization vehicles. In the United States, the State University of New York (SUNY) has developed and promoted the COIL model (Collaborative Online International Learning) as a means for enhancing virtual international learning (Guth, 2013; Rubin, 2015).

COPILOT is a model of international online learning similar to COIL. It can be used to allow occupational therapy students in the United States to communicate and learn with peers from other countries. By presenting the COPILOT project, this article seeks to contribute to the discussion and dissemination of online intercultural learning in the training of health professionals in the United States and Europe. COPILOT addresses the two needs outlined above: (1) identifying and putting into practice online pedagogical approaches that will support occupational therapy students in developing their transversal competences or 21st century skills; and (2) bringing more of an international and intercultural dimension into their education by making use of online learning.

A forerunner project called "International Case Comparison@home" started out in 2011, when three international partner universities first carried out a module of the same name combining subject-specific and cooperative online intercultural learning. Students from the three countries worked together online to complete a comparative report on occupational therapy approaches for a client group of their choice, and exchanged information about their different national educational and health care cultures. By 2017, the pilot module had been conducted seven times, with a growing number of participating partners. At the same time, similar methods of online intercultural exchange had sprung up or evolved elsewhere, with COIL, developed by the State University of New York (Guth, 2013) being the most successful and widely known (Naicker et al., 2021; Rubin, 2015). However, there was still no fully developed model of how to implement subject-specific online intercultural learning on a more regular basis, and concrete examples describing the use of the approach in occupational therapy or related health studies degree programs were scant.

In order to start filling this gap, the project team, consisting of six partner universities from Austria, Belgium, Bulgaria, the Netherlands, Sweden, and Switzerland, applied for a large applied research project: COPILOT. The extended project proposal was approved by the Austrian Agency for International Cooperation in Education and Research (OeAD) and funded within the Erasmus+ key action “strategic partnerships” and the Swiss agency MOVETIA for the period of 2018–2021.

The aim of the project was to create a sustainable model of embedded international learning as well as suitable learning activities for small international groups or networks of occupational therapy programs, built on three basic principles:

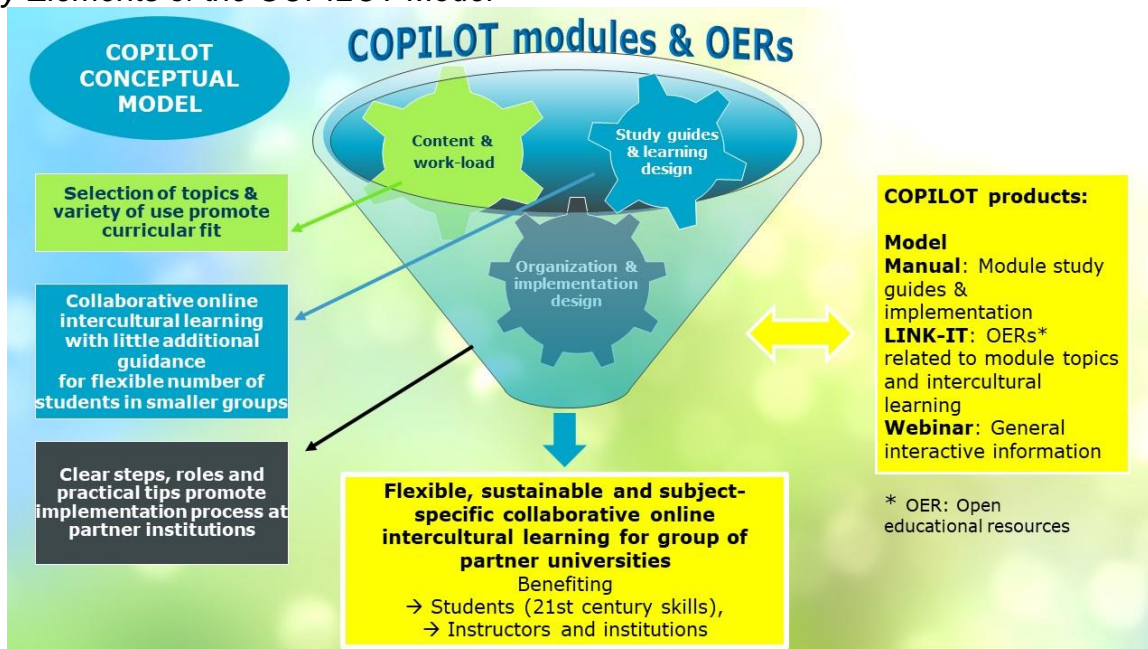
- students can do the e-learning modules within the framework of their regular curricula and receive the usual number of credits (ECTS) for them;
- students learn together independently in internationally mixed groups by doing both synchronous and asynchronous assignments, guided by detailed instructions in “study guides” and loosely tutored by internationally mixed groups of instructors;
- learning takes place in a “digital classroom,” making use of e-learning and multi-media tools such as e-learning platforms, e-lectures, social media, or production of video clips.

Description of Project

COPILOT provides a model, online modules, and supporting materials for shared, international and intercultural learning in combination with subject-specific content that contribute to the development of the above mentioned 21 century skills, as illustrated in Figure 1.

Figure 1

Key Elements of the COPILOT Model



The COPILOT **online modules** are related to broad themes relevant within the context of occupational therapy, such as professional identity, enabling participation, or digitalization in the professional field, and are augmented by detailed **study guides** for the online tasks, which Salmon (2013) dubbed “e-tivities.” Each module is related to a small investigation that the students conduct in their own countries and then compare the results in the international group. The variety of final products includes reports, discussion blogs, videos, cartoons, recorded interviews, etc. with some form of evaluation and reflection in the end.

The study guides are presented in the **COPILOT manual** together with practical tips for their implementation and helpful explanations of the COPILOT model. Another product of COPILOT is **LINK-IT**, an expandable collection of Open Educational Resources (OER), partly produced by the COPILOT team (short online lectures, videos or screencasts), mostly existing resources, that can be used together with the modules. It is published on the COPILOT **Webinar** free online platform¹.

Didactic Background and Learning Design

The COPILOT project is grounded in the constructivist learning theory that is based on the idea that people actively construct their own knowledge, and that reality is determined by their experiences as learners. Constructivism suggests that students learn best when engaged in learning experiences rather than passively receiving information. Learning is inherently a social process, because it is embedded within a social context as students and teachers work together to build knowledge (Bada & Olusegun, 2015; Hein, 1991). Therefore, the goal of the different tasks in the modules developed in the project was to involve students in active learning experiences that facilitated both individual and shared construction of knowledge. Constructivist learning strategies applied in the project include cooperative learning, reciprocal teaching/learning, inquiry-based learning (IBL), experiential learning, and problem-based learning (PBL). The importance of such learning processes for successful development of transversal competences and 21st century skills has been scientifically proven (Morong & DesBiens, 2016; Zhang & Pearlman, 2018).

Intercultural learning is the second informing principle of learning design and is used both as a means and an end with a view to skill development. There is evidence that learning in international, supportive contexts not only develops intercultural skills but also works as a catalyst for the acquisition of transversal skills and subject-specific skills alike, by stimulating critical reflection, collaboration, creative problem-solving and flexibility (Deardorff, 2006; Kniel, 2009; Knight, 2004; Shliakhovchuk, 2019).

Based on these guiding principles, learning activities in the modules combine subject-specific assignments with international comparison or intercultural reflection. The study guide design is inspired by the criteria of “culturally responsive online learning” (Morong & DesBiens, 2016), and Salmon’s (2013) five-stage model of online learning.

¹ <https://mooc.fh-joanneum.at/moodle/course/view.php?id=21>

COPILOT gives the students an opportunity at home for flexible international learning in a virtual environment and in a time frame determined mostly by themselves. Learning takes place both asynchronously and synchronously through online meetings initiated and organized by the students themselves.

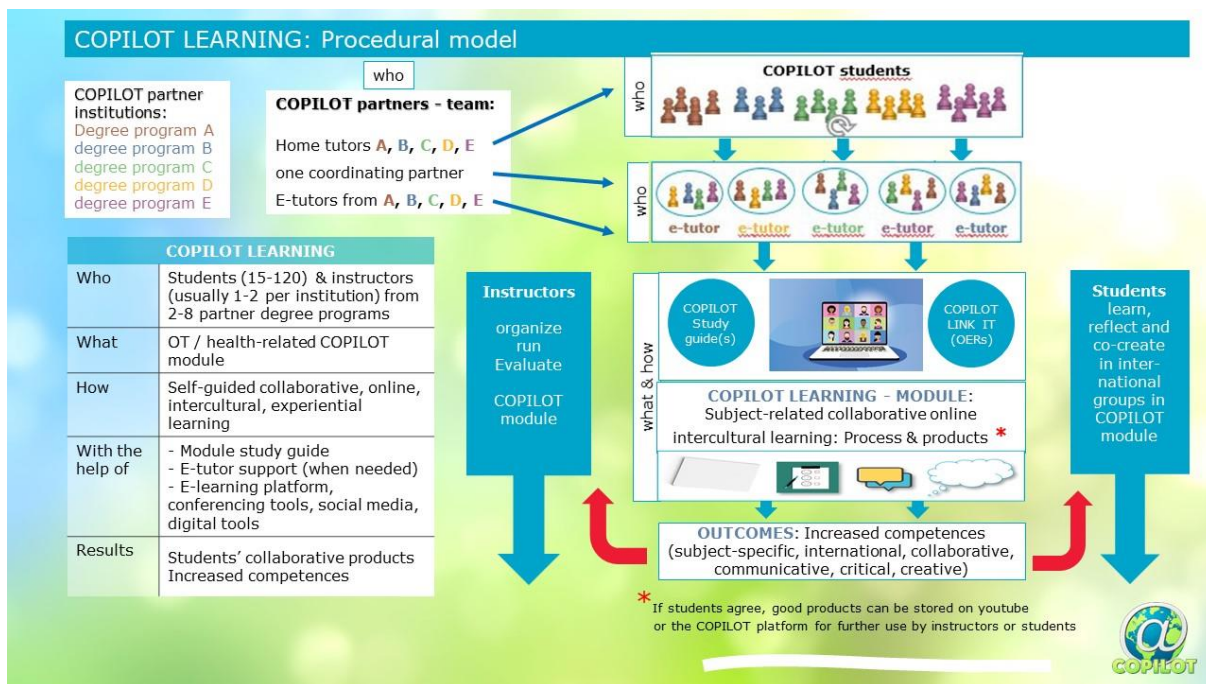
The competences addressed in the modules are based on the TUNING competences in occupational therapy. TUNING Educational Structures in Europe is a process that started in 2000 with the aim to identify common points of reference expressed in terms of generic and subject-specific competences of first-, second- and third-cycle degree programs. TUNING has developed a model for designing, planning and implementing curricula ensuring compatibility and comparability of higher education in Europe by protecting the uniqueness and rich diversity of programs (González & Wagenaar, 2003). The set of subject-specific occupational therapy competences was developed by the European Network of Occupational Therapy (ENOTHE; Berding et al., 2008). They have become an integral part of most European occupational therapy degree programs. Examples of TUNING specific competences include the ability to “engage in rational and reasoned debate in relation to occupation and occupational therapy” (p. 48-50), or generic competences such as teamwork, ability to work in an international context, time management, critical thinking and problem solving, communication skills, language literacy, etc. (p. 39).

In COPILOT, TUNING competences are used in combination with CanMED roles, which were developed by the Royal College of Physicians in Canada (Frank et al., 2015). CanMEDS is a framework that identifies and describes the abilities physicians need to effectively meet the health care needs of patients, grouped thematically under seven roles. The CanMEDS model has been adapted around the world, both within and outside the health professions.

Developing intercultural competence is a core goal of all COPILOT international modules and is understood as the ability to react effectively and appropriately in intercultural situations. It includes certain attitudes, emotional aspects, cultural knowledge, special abilities and skills and general reflective competence. This involves, for example, acquiring knowledge about other cultures, as well as intercultural communication skills and attitudes that enable students to work in an international team (Bertelsmann Foundation, 2008).

Organizational Aspects

A COPILOT partnership consists ideally of four to eight occupational therapy or other health studies programs from different countries. Partners set the timeframe for the online module and divide tasks. One institution serves as coordinator and is responsible for the e-learning platform, communicating the start and end of the module and providing orientation while it is running. The process of organizing an online module is illustrated in Figure 2.

Figure 2*Organization of a COPILOT Module*

Partnering universities either choose one of the modules developed within the project or define a set of competences they want students to acquire in an international context and then design their own online module by using a study guide template provided in the manual.

The COPILOT online modules can be integrated into the curricula in several different ways – replacing an existing class, becoming a part of an existing class or as an elective class (e.g. internationalization requirement). The module study guides provide information on the goals, content, methods, deadlines, and assessment criteria of the module.

The optimal number of participating students is 40 to 50, distributed in groups of four to five. The variety of languages and cultures enriches the shared experiences of mutual learning. Each partner institution announces the upcoming modules and selects students. COPILOT recommends a variety of options – four to five students from each country, all students from a cohort of two or three universities, groups of three to four students from each university, who share their results with their colleagues, groups of two to five students from different courses at each university in a research project. The coordinator assigns students to internationally mixed groups and provides e-moderation through postings which are intended to motivate and draw attention to deadlines.

The students are supported by tutors, who follow the learning progress based on the activities in the learning platform. Two types of tutors have been established in COPILOT – e-tutors and home tutors. Each international group of students is allocated a group e-tutor by the coordinator of the module. E-tutors are usually teachers from the partnering institutions, who are involved in the particular module. They are responsible for ensuring that the work of the international group runs smoothly and effectively. Home tutors are responsible for organizing student recruitment, information, and assessment at the home institution. The performance of the individual students is assessed either by the tutors or by the course leaders at the home universities.

The usual duration of a module is nine to ten weeks but can be shortened if agreed upon by all participating universities. At the beginning all participating students receive a short introduction by home tutors. Then the coordinator introduces the study guide, the time frame and the electronic resources. Each international group of students works independently following the instructions in the study guide using the learning resources on the e-learning platform. Depending on the length of the module, interim results are uploaded to the platform at regular intervals (usually every two to three weeks). Students are free to choose which tools they use to communicate and to carry out their tasks, and to plan their communication at a time that fits their own schedules.

The professional communication for all modules is conducted via online learning platforms. They are used for publishing instructional materials, tutoring and guidance, communication and documentation of the results and process. The main requirements for the e-learning platform are opportunities to work in groups, to upload and store information and for video conferencing. As a result of the COVID–19 pandemic, the number of online learning platforms has expanded enormously, as well as the skills needed for working online. The variety of e-learning platforms includes Moodle, MS Teams, BlueJeans, Zoom, Canvas, Google Classroom, Google Meet, among others.

In addition, a variety of digital tools for online collaboration and presenting shared work results have been tested by the partners and recommended to students, such as Animoto, Voice Thread, Powtoon, Screencast-O-Matic, Monosnap, Peerwise, Quizlet, Kahoot, Poll everywhere, and Sway. In line with the didactical principle of co-creation, the best of the students' digital products resulting from the modules will be included in the COPILOT collection of OERs, thus also ensuring the ongoing expansion and sustainability of the collection.

COPILOT Modules

Within the project, so far seven topics with nine modules have been agreed upon (see Figure 3). The study guides for eight of them are fully developed (in italics). All modules have been tested during 2019, 2020 and 2021.

Figure 3*COPILOT Topics with Modules*

OT identity	<ul style="list-style-type: none"> • <i>Am I an OT?</i> • <i>OT professional roles and identities across Europe</i>
OT goes public	<ul style="list-style-type: none"> • <i>OT goes public</i>
Vision of the future	<ul style="list-style-type: none"> • <i>Vision of the future</i>
OT in a European perspective	<ul style="list-style-type: none"> • <i>ICC@home</i> • <i>Family Occupations through Generations</i>
OT and digitalization	<ul style="list-style-type: none"> • <i>Digitalisation and OT</i>
Community perspectives	<ul style="list-style-type: none"> • <i>Enabling occupation and participation in your community</i>
Professional Ethics	<ul style="list-style-type: none"> • <i>Ethical considerations</i>

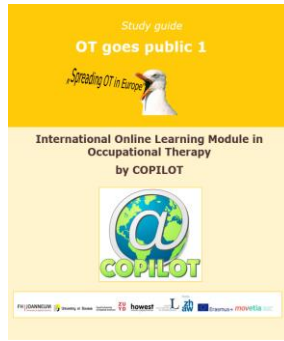
The modules briefly described below have already been tested as part of the Erasmus + COPILOT project and are intended to illustrate which content can be integrated into various curricula. The modules presented could be incorporated into different courses.

***Am I an OT***

Students compare their professional development as OTs at the present points of their training. Students first explore the concept of professional identity through literature and a video introduction. They sum up their personal thoughts on the subject and upload the summary for the other members of the international student group to provide feedback.

OT Identity across Europe

Students explore and compare professional roles and identities of OTs across Europe through online research, developing and conducting expert interviews and critical exchange, all in their international groups.



OT Goes Public

Students first individually and then jointly carry out a SWOT analysis of the situation in their professional field, compare and compile the results and then build a possible marketing strategy for a new target group ("client group"), with the help of target group and stakeholder interviews and a joint review. Open educational resources (OER) provide an introduction to SWOT analysis and marketing strategies.



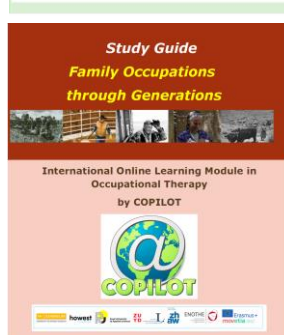
Vision of the Future

Here, students use online materials to consider how major, general social changes (e.g. globalization, digitization, climate change, demographic change ...) will (could) be reflected in challenges but also opportunities in their professional field. In the small groups they then agree on a specific challenge and together develop potential innovative approaches to everyday occupational therapy in the future.



International Case Comparison @Home

In small groups, students define a specific, practice-oriented question for a specific client group within an aspect of their subject chosen by them in advance. They then research, develop and compare practical solution approaches as they are common in their respective socio-cultural, institutional, and professional national contexts. The end product of this module is a joint critical report.



Family Occupations through Generations

In this module, students explore the way in which patterns of work and leisure change throughout generations in one family, and how these patterns are shaped by socio-cultural contexts. They select a multi-generational family they know about to explore the characteristics and the evolution of occupations through generations, and related attitudes.



Digitalization & OT

This module provides students with an insight into how digitalization is developing within their field in different countries. They gain a general insight from an international, comparative perspective into five topics in the digital health and OT world: 1. E-health, 2. Robotics, 3. Gamification, 4. 3D printing and 5. VR/AR. Based on the students' choices, one of these topics is investigated in detail, and its usability for a specific client group is discussed and presented.



Enable Occupation and Participation in Your Community

Students explore common public places in their communities to find good and not so good examples of accessible and usable environments. Within their internationally mixed groups, they choose one type of public place and a specific target group and then examine and document its accessibility and usability. Students apply the Seven Principles of Universal Design as well as national and local policy guidelines, and they develop recommendations for improving accessibility to stakeholders.

Testing and Implementation

So far, almost 500 occupational therapy students have taken part in COPILOT modules, during the period 2019 – 2021 (see Table 1). In addition to the partner universities, 85 students from external institutions, such as UPEC (France) and the University of Bacau (Romania), took part in eight of the eleven test runs.

Table 1

Piloted Modules with the Number of Participating Students

Module	Period	Number of students
ICC@Home	spring 2019, 2020, 2021	126
Vision of the Future	fall 2019	102
Am I an OT?	fall 2019, spring 2020	32
OT Identity across Europe	spring 2020	29
Family Occupations through Generations	fall 2020	79
OT Goes Public 1: Spreading OT in Europe	fall 2020	40
Enabling Occupation and Participation in Your Community	spring 2021	48
Digitalization & OT	spring 2021	42
Total		498

Evaluation

Methodology

The modules have been evaluated by participating students and tutors from the following COPILOT partner universities: FH JOANNEUM University of Applied Sciences (Austria), HOWEST University of Applied Sciences (Belgium), "Angel Kanchev" University of Ruse (Bulgaria), Luleå University of Technology (Sweden), ZUYD University of Applied Sciences (the Netherlands), and ZHAW, Zurich University of

Applied Sciences (Switzerland). Additionally, students from three other higher institutions – University of Bacau (Romania), UPEC University (France) and Han University of Applied Sciences (the Netherlands), joined the modules.

The data in this study was collected through the evaluations that have been carried out systematically over the past few years using online questionnaires for all students. All the participating tutors also received an evaluation questionnaire after each module. Both questionnaires included several open-ended questions concerning benefits and challenges of the modules. According to Züll (2016), open-ended questions are more suitable than closed questions for measuring knowledge or insight, because they not only minimize the likelihood that respondents will try to guess the right answer but also often yield more reliable and valid information. Students' questionnaires also contained questions regarding their opinions and recommendations regarding content, length, and structure of the study guide and the e-tivities. The questionnaires were distributed at the end of each module. A letter that accompanied the evaluation stated that students and tutors participated voluntarily and anonymously, and that individual consent was considered to have been given if the questionnaire was returned completed. The data in this study is based on the answers from the open-ended questions from 244 students and 27 tutors.

Data Analysis

The analysis of the open-ended questions was undertaken using a manifest content analysis based on Mayring (2014). This method can be described as a process of identifying, coding, and categorizing the primary pattern of the data. To obtain a sense of the overall data, the first (LT) and last author (MP) first read the answers from all the students independently. Next, the answers were condensed into codes and the codes were compared and discussed between the first and the last author. After that the codes were sorted into themes according to similarities and differences in content. The themes were then compared to identify threads of meaning that run through the text on an interpretive level. The analysis resulted in three themes: "*Communication and learning from each other*," "*Viewing occupational therapy in an international context*," and "*Increased intercultural awareness and confidence*". The tutors' evaluations were summarized and the different aspects that arose are presented in the result section. The answers from the students' questionnaire were analyzed separately from those of the tutors.

Results

Students' Evaluation

Overall, the learning experience in the COPILOT modules was consistently rated positively by the students. All indicated an increase in competence in one or more of the "21st century skills" presented at the beginning of this paper. As in regular courses, the workload was perceived by the students as very different. The greatest challenge cited was the difficulty of finding times for online meetings and the use of English as the working language. Students were also critical and gave constructive feedback and recommendations that were taken into consideration in the further development of the modules. Below is a more detailed description of the student evaluation.

The students mentioned many **benefits** related to the participation in a COPILOT module: getting in contact with occupational therapy students and occupational therapists from other countries and learning about OT education and the profession; training and improving English language skills; getting insight into another culture; improving organizational skills in an international team; improving knowledge about online communication, etc. Students' opinion about the greatest benefits can be clustered around two themes:

One theme addressed **communication and learning from each other**. One student said *"This is also useful for our future career, because we can learn from each other. For me it was an enriching experience."* Another student named the following benefit: *"The chance to experience online communication with OT students from other countries and to brush up on my English."*

Being able to practice their English and to connect with students from other countries who were also studying occupational therapy was positive for many of the students. They also recognized that knowing or learning the language was an important benefit they had not thought much about before, but could now see was important.

Working on a shared product together with students from other countries in the project was another big benefit according to them. The students expressed that they learned not only about how occupational therapists work in the different countries but also how to argue, structure a written report or use digital tools in different ways.

Students liked the experience of working in teams with other students that they would never have met if they had not partaken in the project, realizing that these could be their future colleagues.

A second theme was about **viewing occupational therapy in an international context**. The students reported that the fact that occupational therapy is a bit different in each country widened their view on how to work with different client groups. One student said: *"I could see how the occupational therapists are thinking in other countries in various situations and I found out interesting things about the health care system from these countries."*

Students reflected on the importance of expanding their knowledge and learning how things worked in other countries. Meeting students from other countries gave them the opportunity to discuss how healthcare systems have an impact on their role as occupational therapists. Some students also reported having philosophical discussions regarding the meaning of occupation in different cultural contexts.

A third theme was related to students' **increased intercultural awareness and confidence**. A significant number of students expressed that they gained knowledge and confidence in areas that were not related directly to the theme of the specific module, such as feeling more confident in interacting with persons from other cultures.

“You know, I think I can now see and accept it much better when clients are different from me.” They expressed that they had increased their awareness of different cultural behaviors and a more differentiated picture of culture and its interconnections: *“I saw more options and opinions, looking further than your own country with their own values”*.

Despite the positive experiences, students also faced numerous challenges, such as oral and written communication in English, fitting the module into their university and personal schedules, working with “unknown” partners in an online group. Below is a more detailed description of the **challenges** identified in the student evaluations.

On the one hand, communication in English was apparently a point that some students considered a benefit; on the other hand it was considered by some as a major challenge not only because of the language itself but also because they had underestimated the time it took to communicate in English.

The students’ evaluations pointed out that it was difficult to get a flowing conversation when some students needed a classmate to translate everything that was said. Writing a report was also a challenge according to the students. To agree on a layout and how to do the references took a lot of discussion before an agreement could be reached. Another problem was if there were several students from one country, they would speak a lot of the time in their own language which made the other students feel a bit left out. Students stated: *“Communication was a challenge sometimes, the others were not alone so they talked in their language really often and I couldn’t understand anything they were saying.”*

Another challenge was organizing the work and time management. This included the organization of meetings and the organization of the work itself. For some groups of students, it was difficult to agree on a specific subject in the assignment, on the type of presentation and to stick to this agreement. A common problem was finding the right time for everybody to meet. Students experienced that it was hard to schedule a time that was possible for all group members. Some students had field work and could only meet in the evenings and some had small children and could not meet in the evenings. Due to COVID a lot of the students’ other work had changed, adding to the difficulty in finding a common time. One student stated: *“Doing my internship at the same time as this project and other projects. I couldn’t give myself 100%.”*

Another challenge was that some students decided on making changes without talking to the others in the group, or that some of the other students in the group did not respond to any contact even if different social media were used. Some students also found it a hard to tell other students that they needed to work more or participate more.

There was also a difference in academic importance in the different countries. For the students in some countries the work resulted in a grade on their transcript, while for others it was just an assignment: *“I felt that the cooperation was sometimes difficult, as all the people involved had different demands on the project and its presentation to the*

university due to the various colleges/ universities.” Students also reported some technical issues, such as understanding how the platform and other digital resources worked.

In the students’ evaluations there were also some specific **recommendations** concerning the structure of the study guides, the activities, and the requirements. The material offered and the structure of the study guides were rated as being helpful by the students. They repeatedly stated that more contact with the tutors would be helpful and suggested that one or two meetings with tutors should be indicated in the study guides. The goal of these meetings should be to get to know the tutors and to be able to ask questions about the content of the module. According to the students, it would be nice to have at least one online meeting with all students and teachers, to really “get the feeling” of internationalization, as well as final presentations before the whole group as a closing activity.

As for the overall topics covered in the modules, students expressed that the exchange about the subject-matter was enriching for them and they would recommend that other students take part in a COPILOT module: *“I would be delighted to do another program like this, to speak about occupational therapy with international colleagues and getting better in talking English.”*

To conclude, the students’ voices revealed that despite challenges in the learning process, they highly appreciated the experience and the achievements from participating in an international module: *“It was a little confusing at first, but now I’m so proud of what we have achieved!”*

Concrete improvements in the module study guides based on students’ feedback included the wording of individual tasks, a “nutshell summary” of assignments and deadlines within the module, pre-determined dates for an introductory online session and final presentations, and the inclusion of the e-tutors in at least two of the online meetings.

Tutors’ Evaluation

The survey of participating tutors’ experiences showed they appreciated the creativity the students displayed in solving various tasks, gaining an insight into different sociocultural backgrounds, and the difference in experience from everyday routine teaching and research: *“Open their eyes that there is a big world out there that is also similar in many ways. Start an interest in OT in Europe.”*

Apart from refreshing their foreign language skills, they were able to draw personal and professional benefits from expanding their intercultural, didactic and occupational therapy perspectives and experiences: *“Working in an international team, learning about specific area of intervention in own country in comparison to other countries is interesting.”*

The moderation of international communication was seen as a challenge, but also as a benefit. When asked what advice they would give to other COPILOT teams, one tutor replied: *“Have the courage and just go for it. Working as a tutor for an international student group is a lot of fun and enriches everyday teaching!”*

Reflection on Curricular and Organizational Aspects

The idea of implementing a COPILOT module by replacing an existing unit in the curricula of the partner universities worked in general but showed some limitations. The six universities managed to carry out all modules within the framework of their existing curricula. They were always able to identify one course to serve as a “carrier course” that could be substituted by one of the COPILOT modules, i.e. for which students received their credits. However, because such “carrier courses” had fixed places in the curricula, it meant that given COPILOT module could be accommodated only in the fall semester or in the spring semester. This obstacle limited the number of participating partners in some cases. The problem was solved by inviting guest universities to enrich the international scope, with whom in all cases some form of international cooperation had existed before, or who had shown interest in taking part after dissemination events.

Participating partners agreed in the evaluation questionnaires or in structured evaluation meetings that having an established model of implementation, with defined roles, tasks, procedures, and module design, proved to be a great advantage in planning and conducting the pilot modules. This greatly facilitated the implementation process, especially when guest partners were involved. Besides, it limited the workload of all partners engaged in any of the modules: coordinating partners indicated a workload of around 20 hours per module; participating e-tutors stated their workload as between six and twelve hours, depending on whether they were new to COPILOT or not.

Concerning transferability of the COPILOT model and modules to other health studies programs, groups of universities from other health disciplines (midwifery, physiotherapy, and dietetics) have started using them for planning their own online intercultural exchange modules. Feedback on transferability, collected in three international dissemination events held in Austria, Bulgaria, and the Netherlands, has been overwhelmingly positive; encouraging reports on usability and clarity of the modules and the supporting material (manual and study guides) are growing in number. However, as the modules at these universities have not been completed at this point, there are no conclusive results as yet on the full cycle of implementation.

Discussion

The COPILOT modules are designed to address multifaceted aspects of the learning process in occupational therapy – international, intercultural, student-centered, and explorative learning, and to lend themselves to relatively flexible and easy implementation within occupational therapy degree programs, as well as other health study programs.

Cultural competence in occupational therapy is considered as a prerequisite for responding “not only to the dynamic, multicultural, and diverse environments in which practitioners currently practice, but to the future needs of a global community facing social, political, economic, and environmental issues that will continue to affect dramatically people’s living conditions and occupational needs” (Talero et al., 2015). There is an agreement in research that developing cultural competence – as all complex competences – requires active learning and that only lived experience can lead to the kind of self-reflection, growth, and change in attitudes which can enhance cultural competence when working with diverse patients or professional teams (Perry & Southwell, 2011; Yancu & Farmer, 2017). In many higher education training environments in occupational therapy, lived intercultural experience cannot be easily provided. Furthermore, studies indicate that many students show “significant apprehension and reluctance to train multiculturally” (Venner & Verney, 2015). Literature pointing out the potential of online learning in intercultural teams in order to establish low-threshold intercultural learning settings has been growing steadily over the past five to ten years (Morong & DesBiens, 2016; O’Dowd & Lewis, 2018; Zhang & Pearlman, 2018), although literature on the nature of this potential and how to make practical use of it in detail is still scant (Aldrich & Johansson, 2015; Zadnik et al., 2019).

The results of students’ evaluations from the different COPILOT modules pointed out that interactions with people from different countries and cultures not only increased students’ awareness of different cultural behaviors, they also showed that students to a much greater extent than before dared to contact and interact with persons from other cultures. The feeling of increased confidence in meeting with people from other cultures was among the greatest benefits of joining a module. This is in line with a study by Zadnik, Psychouli and Collins (2019) where the students expressed appreciation for being exposed to different cultural backgrounds. Their experiences also led to an increased desire to do fieldwork abroad or other form of exchanges.

In a study by Aldrich and Johansson (2015) language and technology were considered a big challenge by the students. In the student evaluation from the COPILOT project, the English language sometimes was an inhibiting factor, however the students stated that the intercultural learning about the profession and common life issues were highly appreciated. Technical issues were not raised as a challenge in the COPILOT modules.

Several authors (Fattinger, 2019; Kniel, 2009; Knight, 2004; Shliakhovchuk, 2019) refer to the potential of supportive international learning for the acquisition of transversal competences, such as negotiating difference and making sense of “the other”, it is necessarily based upon learning processes fostering critical and innovative thinking, communication and collaboration skills, creative problem-solving, flexibility and resilience. Graduates will need these skills to deal with a “volatile, uncertain, complex and ambiguous” (VUCA) future (Shliakhovchuk, 2019), alongside their professional competences and the ability to build and make use of international networks. In the evaluations, skills like these were mentioned by the students even though they might not have reflected on how this could be of importance for their future.

The significant contribution of international learning to skill building for the future in higher education has been increasingly put forward in position papers and publications during the past 5-10 years in the socio-economic and political “North” and is being promoted using various concepts, such as “Internationalization at home” (Europe), “Internationalization of the curricula” (Australia), or as part of “Comprehensive Internationalization” in the USA (European Commission, 2017; Leask, 2015). In 2019, the European Commission stressed the need to get more students involved in international learning experiences, also those who do not have the means or possibilities to go abroad during their studies (CHE Consult, 2019). COPILOT offers opportunities to do so. The aim for the participating universities is that all students will have partaken in at least one module during their study program.

Internationalization at home is strongly supported by online learning, which has rapidly expanded due to the global pandemic situation since March 2020. According to the World Economic Forum² the COVID-19 pandemic has changed education “dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. Research suggests that online learning has been shown to increase retention of information, and take less time, meaning the changes coronavirus have caused might be here to stay.” However, a systematic review (Rasheed et al., 2020) on the online component of blended learning reveals that despite the perceived benefits, the inclusion of technology has brought some challenges to students, teachers, and educational institutions. Students need self-regulation skills and technological competence in order to manage their learning independent of their instructors, at their own pace using online technology. Teachers need to be technologically competent to manage and use technology for teaching, as well as to create and upload online learning materials. Educational institutions are responsible for providing training and technological support to both students and teachers. Still many students around the globe do not have technology, reliable internet access and/or skills to participate in digital learning.

The COPILOT partners have taken into consideration the benefits of online learning while developing the modules. The first module ICC@Home was initiated in 2011, far before anyone could predict the rapid need and rise of online education. It proved to be successful and was used as a basis for the development of the COPILOT model and a pool of online modules. In a way the partners were prepared to face the challenges of the current situation and to move faster through them, indicating they were VUCA ready. The unexpected expansion of free online learning platforms and IT tools accelerated the development of the products causing the COPILOT project to adapt to new technologies and leave some of the previous used ones during the project.

² <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>

Implications for Occupational Therapy Education

The international online modules developed in the COPILOT project aim to strengthen specific occupational therapy competencies, established in Europe through the TUNING process (Berding et al., 2008), as well as the so-called "soft" skills such as working in an international and intercultural context, reflective and research skills, critical thinking, foreign language and computer literacy.

The feasibility to use online modules like the COPILOT modules is a great advantage not only in times of COVID-19, but an option for internationalization that is also climate-friendly, since it does not require travel. Working in small groups allows for a relatively high degree of flexibility in planning and tolerates fluctuations in the number of participants, as long as the national and linguistic mix in the student groups is guaranteed in order to support intercultural exchange and language skills training.

Limiting most of the modules to one or two ECTS credits helps with integration into existing curricula in individual courses, making it possible to integrate without changes in the curriculum. However, taking COPILOT modules into account when changing the curriculum also supports the sustainability of the modules. The modules are designed on different levels of difficulty, which allows the participation of students from all courses.

The complete study guides, developed within the COPILOT project, can significantly decrease the workload and efforts of the teaching staff in other occupational therapy programs when organizing a module. The content-related and organizational preparation time, individually and in exchange with the other tutors, can be reduced to approximately three to four hours before starting a module. Another advantage of the complete study guides from the project is that they can reduce the workload for the supervision during the implementation of the module to approximately three to five hours per module and group.

A more international outlook on the profession raises graduating students' employability at home and abroad, in times of increasing professional mobility across European borders. Many students, especially in the medical field of study, cannot or will not go abroad during their education for several reasons, according to the implementation report of the Bologna progress (EC/EACEA/Eurydice, 2015). Therefore, COPILOT learning modules and materials can bring more of an international, intercultural, and global dimension into the delivery of higher education for future health professionals.

In summary, the advantages of this type of training are represented in the autonomous work of students in a flexible mode, as well as the possibility to combine it with the usual workload without additional costs or leaving home. Participation in the COPILOT modules improves the qualification and opportunities for a better understanding of skills needed to work in an international environment and create international contacts all done from home.

Conclusion

Cooperative intercultural online learning offers students and teachers new teaching and learning experiences. It stimulates higher education institutions to innovative forms and methods of online learning in the digital age and encourages cooperation with other higher education institutions on a professional and personal level.

COPILOT is an opportunity for internationalization for all students regardless of financial and time constraints. The model is transferrable to other health care programs and the modules can be integrated into the regular curriculum. The modules also in a global pandemic environment, allow for international and intercultural learning in conditions of social isolation.

Thus, occupational therapy as a profession can be positioned to have a relevant and significant global impact, building from the strength of diversity, and from working together towards ensuring that all people, regardless of difference, have the capabilities (i.e. both the abilities and the opportunities) to engage in occupations that contribute to their own well-being and the well-being of their communities (Hammell, 2018).

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