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OCCUPATIONAL THERAPY STUDENTS' PERCEPTION ON PARTICIPATING IN AN INTERNATIONAL COLLABORATIVE LEARNING PROJECT

Submitted by **Nabeela Kharva**, student number **18310258**,
in fulfilment of the degree of Masters in Occupational Therapy (MOccTher) by virtue of research at the University of Pretoria

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Date	**:**	13 February 2024

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Date: 31-01-2024

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ETHICS STATEMENT

The author, Nabeela Kharva, whose name appears on the title page of this dissertation, has obtained the applicable research ethics approval for the research described in this work.

The author declares that she has observed the ethical standards required in terms of the University of Pretoria's code of ethics for researchers and the Policy guidelines for responsible research.

Ethics reference number: 371/2022

DEDICATION

I dedicate this research in fond and loving memory of my parents,
Shireen and Yusuf Ebrahim Kharva.

I thank them for their emphasis on dedication, foresight and rigour in everything that I was engaged in from a young age.

While they are not here today, their values are not forgotten. The hard work, guidance and encouragement of my parents are the vehicles for all the achievements I have enjoyed to date. I devote this academic contribution to them both.

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ABSTRACT

Introduction: Internationalisation has gained traction in higher education given its merits in preparing students to cope in diverse and multicultural settings. International online collaborative learning provides students the opportunity to achieve internationalisation goals in their local contexts. The International Discussions in Occupational Therapy i-DOT project is an online collaborative learning opportunity for occupational therapy students from nine institutions from Austria, Belgium, Croatia, Germany, France, Kuwait, the United Kingdom and South Africa. It facilitates student discourse on occupational therapy-related topics between foreign counterparts, through English-based online discussions, in the absence of collective online teaching. The i-DOT is the first known project in occupational therapy higher education involving this many international institutions, using a design that provides flexibility and autonomy to its involvement of institutions.

Aims and objectives: The research aimed to describe occupational therapy students' perceptions and experiences of participating in i-DOT, an international online collaborative discussions project. The objectives were to describe the benefits, facilitators and barriers to participation in the project for occupational therapy students.

Research design and method: A quantitative, descriptive cross-sectional survey design was employed. Occupational therapy students from nine international institutions, involved in i-DOT in 2022, formed the population of the study. The entire population was invited to participate, implementing non-probability volunteer sampling. Data was collected through a self-developed electronic questionnaire, offered in English and German, distributed by occupational therapy educators from the respective institutions. Descriptive statistics were used to analyse quantitative data, together with the application of the Kawa Model as a theoretical framework. Principles of trustworthiness, reliability and ethics were adhered to.

Results: Occupational Therapy students achieved academic, professional, personal, social and/or diversity-related benefits through i-DOT. Student-led strategies, educator-led strategies and the design of the online collaborative learning project acted as facilitators to student participation. Barriers to participation included, but were not limited to, language-related challenges, time management and technological difficulties.

Conclusion: Occupational therapy students benefitted broadly from i-DOT, an international collaborative learning project. Educators may promote maximal student development by considering participation enablers and inhibitors.

Key terms: Online collaborative learning, occupational therapy, internationalisation at home, higher education, virtual exchange, benefits of international learning, global skill

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LIST OF ABBREVIATIONS / ACRONYMS

Abbreviation/ Acronym	Meaning
COIL	Collaborative Online International Learning
HE	Higher education
ICT	Information and communication technology
IaH	Internationalisation at home
i-DOT	International Discussions in Occupational Therapy
MOOCs	Massive open online courses
OCL	Online collaborative learning
OT	Occupational therapy
OTE	Occupational therapy educator
PDF	Portable document format
SUNY	State University of New York
US	United States of America

CHAPTER 1 - INTRODUCTION

1.1. Introduction

Online collaborative learning (OCL) is a teaching pedagogy that uses information and communication technology (ICT) to connect two or more students in different geographic areas for the purpose of sharing knowledge and ideas to stimulate learning.[1] This learning method dates back as far as the late 1980s, but its use has gained significant momentum in modern times due to the proliferation of technology in the 21st century, and the impact of the coronavirus pandemic in 2019.[1-2] The nature of online collaborative learning can be both interdisciplinary and discipline-specific; both of which have garnered much research in recent years.[3-5] However, there is limited research on the experience of OCL projects by occupational therapy (OT) students specifically[3], with a lack of literature on discussion projects hosting as many as nine international institutions simultaneously. Thus, this research aims to describe OT students' perspectives and experiences of the benefits, barriers, and facilitators of participating in an OT-specific international OCL project.

This introductory chapter will navigate through the background of the OCL project being researched in this study and provide information about the international institutions involved in it. Thereafter, the chapter will outline the research problem and resulting research question, and will go on to unpack the aims and objectives of the study. The significance, limitations, and assumptions of the study will be discussed before providing an overview of the upcoming chapters in this dissertation.

1.2. Background of the study

Higher education (HE) has transformed itself over the past three decades to maximise the advantages of technology development in the modern world.[6] This has enabled the confining walls of the HE classroom to virtually fall away and open students up to opportunities for international exchange; a prospect which may have been otherwise inaccessible to most students due to geographic and financial constraints.[7] The concept of including a global engagement and collaboration component to HE, known as internationalisation, has gained popularity given its contribution to preparing students for employability in a multi-cultural world.[8]

In general, internationalisation is not new. Previously, it was primarily understood as exchange programmes and study abroad opportunities, which offer significant benefits but can reinforce student inequality in HE.[8] However, with the growing popularity and ingenuity of technology in

the current century, internationalisation has increasingly found itself online – A concept known today as 'internationalisation at home'.[8-9]

Internationalisation at home (IaH) programmes are referred to using a number of terms, including virtual mobility, virtual exchange and OCL, alluding to there being no single "correct" strategy to follow to facilitate IaH.[4,10] There are a variety of methods and interpretations of the concept.[4,9] IaH and specifically OCL are often associated with an array of benefits to students, such as exposure to cross-cultural engagements[11] and opportunities to broaden worldviews.[12] The challenges of OCL programmes are also well documented and will be discussed in the literature review of Chapter Two.

While the value and importance of IaH programmes have been appreciated, and it's use applied for many years,[9-10] its implementation increased significantly in the past three years owing to the coronavirus pandemic.[13] The pandemic is widely known to have forced academia to move online in the year 2020 in order to support and sustain HE curricula.[13] Through this, a rapid uptake of ICT tools for teaching and learning by HE educators and students occurred.[2] This has had a positive impact on IaH programmes, with an evident increase in the amount of research undertaken in this area of HE teaching and learning.[13] Today, IaH is a well-recognised sphere of internationalisation in higher education.[8]

The focus of this research study is placed on a specific IaH programme entitled *International Discussions in Occupational Therapy*, henceforth referred to as i-DOT or *the project*. The project is an international OCL experience for OT students from HE institutions and OT training centres around the world, and it forms the context of this research study. The i-DOT project was established in 2018 at the Artevelde University of Applied Science in Belgium and occurred as a virtual project since its inception. This had enabled the project to continue and expand in 2020, steadily increasing the number of institutions involved in the collaborative experience in the midst of a pandemic. The project aims to give OT students the opportunity to discuss OT-related topics and trends with foreign counterparts through English-based peer discussions. In 2022, at the time of this study, the project brought together nine international institutions from eight countries and three continents.

The i-DOT project is structured in terms of the topics of discussion and the number of virtual contact sessions that partnered student groups engage in. However, it remains flexible in terms of how each institution chooses to prepare and involve its students in the project, and how they are to be evaluated thereafter, if at all. In this way, institutions have the autonomy to structure their students' involvement based on their individual learning requirements and course demands at the time.

Resultantly, compulsory participation is integrated into the formal course outline for some student groups involved in the project, while other student groups participate in i-DOT voluntarily. Some student groups require an academic output, which may or may not be graded, while other students have no output or grading requirements at all. Furthermore, institutions can involve students from any year of study, meaning that the project hosts students from first through to fourth year of OT study. This may influence whether students will enter into the discussions individually or as partners.

The i-DOT project takes place annually. Students register for the project individually, in pairs, or as a trio, and are matched with a student, pair of students or trio of students from one institution outside of their own. During i-DOT, the students connect through two to three discussions over a one-month period. While the project aims at achieving online learning between students, it does not include an element of shared online teaching. In 2022, the topics of discussion were centred around the effect of the coronavirus pandemic on the well-being of the elderly population, as well as on the occupational engagement of the broader community in different geographic settings. Approximately 350 students participated in the project in 2022.

Outlined below is an overview of each institution involved in the i-DOT project at the time of the study, listed alphabetically.

i. Artevelde University of Applied Sciences – Belgium

Second-year Belgian students joined the project under a module relating to professional identity and networking, and were required to output a verbal presentation following the project. Orientation to the project was done through an online recording, providing background and timelines for the project. Students also received a lecture on the Manon Reuijters Model[14] related to professional identity, which they were required to use to introduce themselves at the start of the project.

ii. *aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning - Croatia*

Voluntary participation in the i-DOT project was offered to third-year students during their work integrated learning at this community-based occupational therapy training centre. Students were not required to produce an output but could have engaged in a podcast to share their experience of the project voluntarily. They were prepared for the project through discussions on the importance of the international community in the development of the OT profession.

iii. Bildungsakademie der Gesundheit Nord – Germany

First-year German students participated in the project as part of an academic module relating to the clinical management of the elderly. Upon completion, students were required to produce a handout for geriatric institutions with recommendations, such as how to address occupation during a pandemic.

Students received an introductory lesson covering the content, structure, and opportunities related to the project. Potential challenges and possible fears were also addressed. Prior to the project, the students also received lessons on interviewing skills. While most of the German students could communicate in English, there were varying levels of proficiency and confidence in using the language. Students participated in the project in pairs, allowing students with basic proficiency in English to be paired with students with a stronger proficiency in the language.

iv. Kuwait University - Kuwait

Involvement in i-DOT formed part of the Occupational Environment and Daily Life course for fourth-year Kuwaiti students, which placed a particular focus on occupational performance. Students were required to output an academic essay around occupation in the context of their foreign peer, the role of OT and reflections on the i-DOT experience. Students were prepared for i-DOT through two sessions before the commencement of the project.

v. University of Applied Sciences for Health Professionals – Austria

First-year Austrian students participated in i-DOT as part of a module relating to medical English and may have outputted an oral presentation about their experience, which was voluntary.

Preparation for i-DOT took place through one online preparation lecture which covered organisational aspects of the project.

vi. University of Derby – The United Kingdom

Second-year students from Derby engaged in the project voluntarily with specific learning goals related to the reflection of their OT knowledge in a global context.

Students were initially introduced to the project through electronic communication and information videos about the project made available by the i-DOT team. The concept and benefits of the project were later discussed with students face-to-face.

vii. University of Pretoria - South Africa

First-year OT students engaged in i-DOT as part of a module focussing on the OT process, with particular learning outcomes around interviewing skills. Second-year OT students participated voluntarily in i-DOT, acting as mentors to first-year students. Students from the University of Pretoria were the only group using mentorship during the time of the study in 2022. Preparation of students included two to three sessions directly related to the i-DOT project, lectures on interviewing skills and facilitated sessions between mentors and mentees.

viii. University of Southampton - The United Kingdom

Second-year students engaged in the project under a module on therapeutic engagements and partnerships in OT. They were prepared through a session overviewing the i-DOT project, the expectations and the importance of international collaborations in OT education. They also received sessions on occupational justice and had access to preparatory videos and additional reading materials.

ix. Universite Paris-Est Créteil Val de Marne – France

The purpose of second-year French students' involvement in i-DOT was related to a module on the professional use of English. Students were required to produce a storytelling presentation detailing their exchanges and learning experience. Students received general preparation in terms of English lessons, which were not specific to i-DOT.

Further details on student involvement, requirements and languages of communication per institution are outlined in Annexure A. In general, students from the abovementioned institutions come together virtually during the i-DOT project. From the point of being matched, students are expected to make contact with their foreign partner(s), select appropriate ICT for discussions, schedule meetings and complete the discussions without individual facilitation from an occupational therapy educator (OTE), encouraging independence. Closure and feedback following the project is done on an institution-specific level. Anecdotal feedback from OTEs involved in the project indicates that the structure employed for the i-DOT contributes to the sustainability of the project and its ability to include multiple institutions each year.

Presently, there is a growing base of knowledge on international collaborative learning projects, but much of this research is focused on *Collaborative Online International Learning* (COIL)[9], an increasingly popular approach to OCL emerging from the State University of New

York.[15] This approach follows specific phases during collaboration, with emphasis on shared teaching between institutions and a graded presentation of a shared activity between foreign partners at the end of the project.[15] The structure of the i-DOT project differs from this and does not follow all of the phases that the COIL approach outlines. In comparison, i-DOT appears to be more flexible in nature.

This study has set out to describe students' experience of the i-DOT project, an OCL experience focused on online learning only. The target population comprised of OT students involved in the i-DOT project in 2022 from all of the institutions who participated. All nine of the institutions introduced above provided permission for their students to participate in the study.

This research, a quantitative analysis of students' experiences of the i-DOT project forms part of a broader study, entitled 'International discussions in occupational therapy: Exploring facilitators and barriers to participation through a global collaborative learning experience'. The larger study employs a convergent mixed-methods design, using a single-phase approach to merge quantitative and qualitative data in order to triangulate findings.[16] Qualitative data within the broader study was gathered through focus groups and individual interviews with students and staff members involved in i-DOT in 2022. Quantitative data will be obtained directly from this study, which will follow the methodology described in Chapter Three of this dissertation. The master's student of this study forms part of the research team involved in the larger mixed-method study.

1.3. Research problem

Much of the research carried out on OCL in HE focused on projects that employ an element of online teaching, and/or using approaches such as the COIL approach.[7,9,17-19] As a result of this, a large portion of available literature on international OCL does not capture the essence of projects of a similar nature to the i-DOT project, and there is little knowledge on whether insights based on COIL projects may carry over to more flexible OCL projects.

Whilst there is some research on OT students who have participated in OCL projects, there is little research on the wide-ranging benefits[3], facilitators and barriers experienced specifically by OT students, participating in online collaborative discussion projects involving as many as nine international institutions simultaneously.

The problem is that OTEs hoping to embark on OCL projects of a relatively flexible nature, involving multiple international institutions without an element of shared online teaching, do not have sufficient information on the extent to which they are beneficial, the facilitators that

ought to be considered, nor the challenges that should be anticipated and/or mitigated before implementation.

1.4. Research question

Upon examining the gap in the literature and the elements of the research problem, the direction of this study was established. The research question was as follows: What are the benefits, barriers and facilitators to participation experienced by OT students involved in an online international collaborative discussions project?

1.5. Research aim

To answer the research question, the following research aim formed the basis of this research: To describe OT students' perceptions and experiences of participating in an online international collaborative discussions project.

1.6. Research objectives

In order to meet the research aim and answer the research questions, three research objectives were established for this study.

1.6.1. To describe the benefits of an international collaborative discussions project for OT students regarding their:
- Academic development
- Professional development
- Personal and social growth
- Cultural and diversity awareness

1.6.2. To describe the facilitators to OT student participation in an online international collaborative discussions project from the perspective of students.

1.6.3. To describe the barriers to OT student participation in an online international collaborative discussions project from the perspective of students.

1.7. Context

The context of the study was within the i-DOT project in 2022, which engaged students undertaking tertiary education in the field of OT from the nine institutions described in section 1.2 above. The students were from academic years of study ranging from first to fourth year, and were engaged in either a diploma, bachelor or bachelor of science course in OT study, as

outlined in addendum A. Each institution had an OTE who facilitated their respective students' involvement in the project and acted as a liaison between the researcher and the students during the research study.

Established in 2018, the i-DOT project has taken place online since its inception. This enabled the project to continue running annually through the coronavirus pandemic. The research study occurred at the latter part of the coronavirus pandemic in 2022, at a time where the use of ICT tools in HE was rife.[2] The project took place in a virtual environment, hosting a finite cohort of approximately 350 students with a variety of demographic characteristics including various countries of origin, countries of study, year of OT study and languages of communication.

The researcher of this study was directly involved in the i-DOT project, facilitating the involvement of students from the University of Pretoria in the project. The findings from this study forms part of a larger mixed-method study, where quantitative findings from this research was integrated with qualitative findings from the broader study. The team of researchers of the larger study comprised of OTEs from seven of the nine participating institutions involved in the i-DOT project.

1.8. Delineation

The study focussed on the entire cohort of OT students involved in the i-DOT project in 2022 only. It aimed to explore the benefits, facilitators and barriers experienced by OT students in a global OCL project. The study did not involve insights of OTEs/faculty members and students from disciplines other than OT, nor did it include students involved in collaborative learning experiences other than the i-DOT project.

Furthermore, because students were prepared for the project by their respective institution OTE, aligning to their specific learning outcomes, the experience of students across the institutions may have differed. For this reason, students from each institution were not compared to one another during the study, but rather were considered as a whole. Finally, the study did not analyse the content of the discussions held during the project.

1.9. Significance of the study

Online collaborative learning (OCL) experiences have become a common and recommended teaching and learning method in HE as it allows students from diverse geographic backgrounds to interact and learn together, preparing them for employability in a diverse

working world.[8] Many OCL projects described in the literature are structured in the way that students participate. However, i-DOT is a form of OCL that affords flexibility and autonomy in how participating institutions choose to involve their students. This framework allows a greater number of institutions to become involved in the project and arguably impacts the sustainability of the project. This makes it different to the collaborative learning projects commonly described in the literature. There is also a dearth of literature investigating a wide variety of benefit areas of OCL, such as professional, personal and social development, specific to OT students.

This study is significant in that it established the benefits, facilitators and barriers of an OCL project of a flexible nature to OT students specifically. This can contribute to the knowledge about HE OCL programmes that exists in literature. For researchers, this can from the basis on future research studies on projects like the i-DOT project and in the field of OT. For HE educators, this addition to the evidence-based insights on IaH that can act as a guide in the planning and implementation of future collaborative learning opportunities for students on an international level.

As important aspect of the study is that the findings can also provide valuable, discipline-specific information on OCL to OTEs, which can lead to improvements in OT academia. The knowledge gained from this study can contribute towards future reshaping of OT curricula, particularly in the Global South, to universalise the use of OCL and virtual international exchange in OT academia.

Furthermore, this study can be of advantage to OT students as well as students from other disciplines in HE. By bringing the benefits on OCL to the forefront, this study can encourage more unique internationalisation opportunities for students in HE, particularly in the field of OT. The findings from this study can contribute towards facilitating positive experiences for students during virtual exchange, as well as contribute towards enabling the achievement of a wide array benefits for students. This has the potential to enrich students' graduate attributes and prepare them for practice in multi-cultural settings.[20] In doing so, individuals receiving clinical OT intervention by future occupational therapists may be met with OT clinicians skilled in navigating diversity.

Lastly, the potential presence of OCL projects in HE curricula can form the basis for international networking and global connectivity among students, which can allow them to grow beyond their local contexts and identify themselves as global citizens.

1.10. Assumptions

Assumptions are aspects of research that are accepted as true, and reflect the researcher's understanding of concepts and dynamics within the sphere of the study.[21] This is based on specific theoretical reasoning relating to worldview, informing the formation of a research philosophy.[21]

The assumptions of this study acted as a starting point of this research.[21] Ontology refers to the nature of reality and is concerned with the assumptions around how reality is experienced[16]; that is, whether reality is experienced subjectively or completely objectively.[21] On the other hand, epistemology refers to one's knowledge about reality[16], and how that knowledge was or can be obtained. This speaks to whether knowledge is measurable or not, and whether it is open to interpretation.[21]

The study accepted philosophical assumptions of ontology with the view that individuals experience realities differently.[21] In this case, it was assumed that students had experienced the i-DOT project in unique ways, influenced by their different years of study, method of academic preparation received as well as institution-specific learning outcomes they intended to achieve. However, students may also have experienced the project similarly given that they participated in the same project simultaneously.[21] In consideration of epistemology, it was accepted that students' experiences and perceptions of the extent of the learning opportunity could not only be measured, but interpreted too.[21]

The consideration of methodology refers to the process the research study should follow in order for the researcher to obtain the required information and knowledge.[16,21] This methodological assumption was based on the ontological and epistemological assumptions made above.[21] From a methodological point of view, the researcher accepted that in order to understand the differing experiences of students, a large cohort of students from a variety of institutions needed to be studied, with the opportunity for them to provide insight into their experiences.[21] To this end, the surveying questionnaire allowed for text responses from participants so that a wider body of data could be obtained.

Another important assumption of the study was that participants shared their views of the i-DOT project accurately, based on their personal experiences. It was assumed that the anonymity afforded by an online surveying instrument had resulted in a greater inclination of participants to respond truthfully.

There was a further assumption that participants who had consented to participating in the survey after reading the information document had complied with guidelines, such as having relevant proficiency in either English or German in order to complete the survey.

1.11. Definition of key terms

The key terms utilised across the six chapters of this dissertation have been defined below. The definitions provided may include specific interpretations and domains within the context of this study.

Academic development: This refers to development or achievement in the area of academics. In this case, academic development relates directly to the curriculum content of students' respective OT programmes, which includes knowledge directly related to OT.[22]

Barriers: Factors that make a process more challenging or hinder success.[23] In some cases, barriers may be negative factors that are difficult to overcome. Throughout this dissertation, the words 'barrier' and 'challenge' have been used interchangeably.[23]

Benefit: In the noun form, a benefit refers to an advantage experienced.[24] In the verb form, to benefit implies having gained something positive.[25]

Challenge: In the noun form, a challenge refers to a factor that causes difficulty, requiring effort to overcome. In this study, the word 'challenge' has been used interchangeably with 'barrier'.[23]

Collaborative learning: An approach to learning where two or more individuals learn or work together for the purpose of learning, co-operatively.[1]

Cultural awareness: This refers to the respectful recognition, awareness and understanding of differences or similarities that are present between cultures or ethnic groups. Where awareness of culture is achieved, it can lead to the development of cultural sensitivity.[26]

Diversity awareness: This refers to respectful recognition and awareness of differences or similarities among diverse populations. Diversity is a broad term that can include aspects of religion, race, nationality, lifestyle or socioeconomic status, culture and other such categories.[27]

Facilitators: This refers to factors that support a process or assist in making a process easier. Facilitators act as enablers to a process.[23]

Global: International, worldwide.

Graded: In the context of this study, 'graded' activities relate to student learning activities which require a formal academic assessment to receive a mark.[28]

Higher education: Referring to education provided by tertiary education institutions such as universities or comparable establishments[29] and may refer to both undergraduate and postgraduate education.

Internationalisation (of higher education): The purposeful inclusion of a global dimension into tertiary education to improve the quality of education. This includes long-term study abroad opportunities, and medium-term and short-term international exchanges.[10]

Internationalisation at home: The use of ICT to facilitate global engagement in a higher education curriculum, formally or informally, facilitating internationalisation in a virtual space while students remain in their local environments.[10]

Loadshedding: This refers to scheduled interruptions in electricity supply by geographic area to relieve electricity demands and to sustain electrical power systems.[30] This phenomenon commonly occurs in South Africa.

Occupation: Relating to a wide scope of day-to-day personalised activities that people engage in, as individuals or in groups, providing purpose to life.[31]

Occupational therapy educator: An occupational therapist who educates students in the field of occupational therapy, as part of a tertiary educational institution programme.[32] In this study, the term extends to both educators providing theoretical education[32] as well as those providing clinical or practical education in a work integrated learning setting.[33]

Online collaborative learning: The use of ICT to facilitate virtual discussions amongst two or more students in different locations for the purpose of developing new perspectives and knowledge.[1]

Online learning: Students' use of various digital technology tools for the purpose of learning, both synchronously and asynchronously.[1]

Online teaching: The use of ICT by educators to impart knowledge to students in a virtual learning environment.[1]

Perception: Perception refers to the subjective interpretation of an event, based on a personal experience[34] which may differ from person to person.

Personal growth: Relating to personal and internal developments that impact one's life positively. In this study, it refers to the development of personal characteristics such as confidence and self-efficacy[17]; self-awareness[35] and internal motivation linked to taking ownership of learning[18,35]; as well as the development of general knowledge and a broadened worldview.

Professional development: This refers to the development of general skills that are transferrable to various work settings, such as soft skills. In this study, professional development also includes the formation or improvement of professional identity[36].

Project: A planned activity requiring a specific sequence of tasks in order to complete the activity.[37] In this dissertation, 'programme' and 'project' are used interchangeably to describe international collaborative learning opportunities.

Social growth: This relates to the development of interpersonal skills, such as confidence in communicating with new people and the ability to respect the different views and beliefs of others.[35]

Soft Skills: Personality traits, interpersonal skills and core skills that are transferrable to various professional settings, that may contribute to success in the workplace.[38]

Undergraduate: A student in tertiary education who is yet to receive a degree, such as a bachelor's degree, in their field of study.[39]

Virtual: This refers to an online environment accessed through the use of internet and digital technology.[40]

Virtual exchange: The use of ICT in education to connect individuals in different geographic locations, often internationally, in real-time in order to engage in online discussions and dialogue without physical mobility. Its purpose is to facilitate learning, networking, collaboration and intercultural insights.[35]

Virtual mobility: The use of ICT to connect individuals with course content provided by HE institutions in different geographic locations, often internationally. Virtual mobility takes place in lieu of physical mobility. It may not include interaction and collaboration between students and hence differs from virtual exchange.[40]

Work integrated learning: The integration of theoretical learning and practice in a workplace setting for the purpose of student learning.[41]

1.12. Theoretical framework

The Kawa Model[42] was utilised when conceptualising the findings of this study. The Kawa Model, meaning the 'river' model in Japanese, is an OT-specific model that was developed by Dr Micheal Iwama and his team of therapists in the late nineties.[42] It describes the circumstances and well-being of people, groups or populations within their context.[43] Using a

river and its components as a metaphor, the model asserts that experiences are shaped by the environment and influenced by factors such as challenges, opportunities, assets and character traits.[44] These aspects are described metaphorically through five elements, namely water, river walls and river floor, rocks, driftwood and spaces.[43-44] These elements are displayed in Figure 1.1 below, as described by Dr Iwama and colleagues.[42]

When applying the Kawa Model to this study, the water of the river represented the i-DOT student population's academic 'life flow', i.e. learning and general development academically, professionally, personally, socially, and in terms of diversity awareness. A strong river flow would indicate positive and effective learning and development, while a weak flow would represent limited or poor academic learning and development. The river walls and river floor shape the river and form the boundaries of the water. This represented the environment of the project, consisting of the academic, virtual and social environments within the i-DOT project.[42,44]

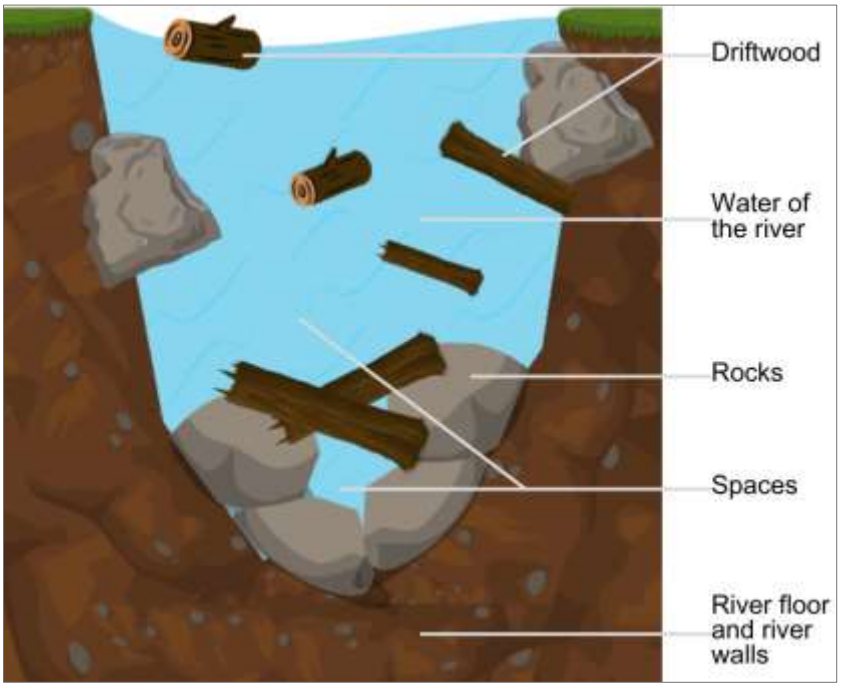

Figure 1.1: Depiction of elements of the Kawa Model

Rocks in a river can act as obstructions to water flow. Metaphorically, these represented barriers or challenges experienced by students. The challenges, or 'rocks', could vary in their effect on the river flow, with some being more impactful than others. Driftwood in the river can either mobilise rocks, increasing the flow of the river; or add to the obstruction. This represented the resources, assets, liabilities and obtained knowledge of students. These could have been either positive in nature, where they may have improved learning development and assisted towards mitigating challenges, or they could have been negative in nature where they

compounded challenges. The spaces in the river between the rocks, driftwood and the river walls and floor are avenues for water flow, which signified opportunities for learning and general development. The larger the spaces were, the greater the water flow, or in this case, the opportunity for developmental advance would be.[42,44]

By integrating the above five components, one forms imagery of a population of students, whose learning and development was shaped by the environment around them, and whose learning potential was influenced by the challenges and resources that were experienced. By employing the Kawa Model as a guiding framework for this study, it was possible to systematically organise the information and findings, conceptualising the relationship of components in relation to student development.

1.13. Overview of forthcoming chapters

In **Chapter One**, the background of the i-DOT project was outlined, and the institutions whose students form part of the population of the study were introduced. The research problem was identified, and the chapter went on to discuss the research question, aims, and objectives of the study. The significance of the study was highlighted, and the limitations and assumptions of the study were explained.

Chapter Two of this dissertation will present a review of the present literature relating to OCL in general as well as within OT. The review will provide emphasis on, but will not be limited to, papers published in the past three years. This will ensure that the review of literature effectively captures the status quo relating to OCL following the acceleration and development of its use as a result of the coronavirus pandemic.

In **Chapter Three**, the research design of the study will be reintroduced. It will expand upon the methodology of the study, which will include aspects related to the development of the research tool, the pilot study employed to validate the research tool, the data collection of the study as well as data analysis. Chapter Three will go on to explore the ethical considerations that form the foundation of the research.

Chapter Four will present the results of the study, and provide a visual representation of parts of the data in the form of tables and graphs. The interpretation of the results will be put forward as a discussion in Chapter Five.

In **Chapter Five**, the Kawa Model, developed by Dr Michael Iwama[42], will be applied to the findings of the study. The metaphoric nature of the model will allow different aspects of the data to be considered in relation to one another and within the virtual context of the i-DOT project, in order to conceptualise the findings.

Finally, **Chapter Six** will aim to answer the research question and provide a conclusion to the study. The dissertation will close with emerging recommendations for future research studies.

CHAPTER 2 – LITERATURE REVIEW

2.1. Introduction

This chapter will expand upon the past and current knowledge base relating to teaching, learning and internationalisation in HE. Focus has been placed upon tertiary education OCL opportunities in general as well as in OT specific settings, relating to student experiences.

A literature search was performed using the WorldCat Discovery, PsycINFO, Scopus, ProQuest and OTseeker databases, and search engines such as Google Scholar and Research Gate. To facilitate the review, keywords that were applied in the searches included, but were not limited to “online teaching and learning”; “online collaborative learning”; “international collaborative learning”; “international collaboration”; “internationalisation at home”; “virtual mobility” and “virtual exchange”. Boolean operators were applied to include the terms “higher education” and “occupational therapy” while excluding the term “COIL” (collaborative online international learning) to diversify the nature of literature associated with OCL.

Specific journals such as the South African Journal of Occupational Therapy and the Journal of Occupational Therapy Education were manually searched for relevant articles with titles using alternative keywords to those described above. Additionally, artificial intelligence platforms such as Researcher Life and Research Rabbit were used to detect further literature with similar themes to those already identified. The search period applied was initially between the years 2000 and 2023 but was later narrowed down to a three-year period, from 2020 to 2023, to emphasise recent developments and current knowledge on internationalisation in HE post-pandemic.

2.2. Teaching and learning in higher education

Teaching and learning in HE has evolved over the past few decades to keep up with a modernising world.[45] Previously, traditional teaching methods saw education as a unidirectional delivery of information from the educator to the student, with the student being a passive recipient of information.[2] However, the evolution of teaching pedagogy has urged students to become active participants in education, emphasising their interaction with course material using a variety of methods.[45] Teaching methodologies such as student-centred learning, cooperative learning, problem-based learning and experiential learning have emerged to suit this new approach to teaching and learning.[2,24,46] Within higher education today, there is an increased importance placed on teaching methods that are human-oriented,

socially oriented[24], and that equip students to function and thrive in diverse, dynamic local and global professional environments.[47]

2.3. The rise in online teaching and learning

Alongside the development of teaching pedagogy, the rapid progression of technology since the 1980s has allowed ICT to make its way into the HE sphere.[1] The use of ICT tools has become common in enhancing educational experiences for students in higher education, not only to supplement teaching strategies but as a vehicle to facilitate online teaching too.[1-2,48] This has made the use of digital learning, blended learning[a] and hybrid learning[b] in classrooms possible,[48] and has provided opportunities to connect students across the globe.[49] In other words, the use of technology has influenced and revolutionised higher education towards what it is today.[47] When the coronavirus pandemic forced the world into lockdown in 2020, academic institutions had to move online to keep their curricula afloat.[45] This inadvertently accelerated the role of ICT in teaching and learning, requiring fresh and renewed approaches to be added to online teaching strategies, with methods requiring the use of digital tools to compliment the new technological normal.[1-2,19,50-51]

The use of technology in ICT has both advantages and disadvantages in its use. Panthallor[46], in an article on electronic learning and teaching methods in HE, asserts that the use of ICT in learning has clear benefits, allowing for greater independence in students, faster access to information and richer learning experiences.[46] It also allows students to learn and benefit from contexts beyond their classroom, with opportunities to collaborate with more people.[1,46] The possibilities that it presents to students can open them up to new avenues of learning.[46] However, the use of ICT in HE is not without its challenges. From a student perspective, the use of ICT can limit social bonding among students, bombard students with a large volume of information, and cause them to become indolent due to the flexibility it affords.[46] From a university perspective, the use of ICT in HE can become costly owing to its infrastructure and administrative support needs, as it demands digital literacy and skill development in faculty and staff.[46]

While Dumford et al.[25] agreed with some of the benefits of online learning mentioned by Panthallor[46], their study found that students in HE involved in online learning may experience a lower quality of interactions with peers and fewer instances of collaborative learning compared to students receiving face-to-face education. They also expressed that students

[a] Blended learning refers to the use of a combination of in-person and virtual educational interactions over time.

[b] Hybrid learning refers to the teaching that takes place with students in-person and online at the same time.

may not be aware of the cultural diversity of others due to them being behind blank screens, resulting in lost opportunities to understand different backgrounds.[25] Dumford et al.[25] highlighted the need for collaborative learning and diversity awareness to be deliberately included in the online learning sphere as students can easily become disadvantaged by its absence and miss out on rich learning experiences.[25] Knopf et al.[1] found that students' motivation and enjoyment were lower when being taught online rather than in-person.[1] However, their study revealed that students found collaborative learning online to be beneficial in building their knowledge and the authors also eluded to the need for intentional collaborative learning opportunities to enhance online learning experiences.[1]

2.4. Internationalisation in higher education

Internationalisation is an intentional inclusion of a global dimension to HE with the purpose of improving the quality of education.[8] It allows students to develop an awareness of cultural diversity globally, and to reflect on their knowledge, conceptualising it beyond their local contexts.[19,52] It also brings about respect and recognition between countries and fosters international partnerships.[23] Internationalisation has become a salient aspect in many HE institutions across the globe in facilitating international engagement and collaboration, and global citizen development in order to prepare students for employability in a multi-cultural world.[8,12,23,53]

Taşçı et al.[54] emphasised that internationalisation is an important aspect of HE strategy globally for modern HE institutions.[54] It represents the intent for intercultural transformation in institutions, underpinned not only by academic and social motivations, but political and economic motivations too.[10,54] Previously, internationalisation was primarily associated with mobility and took the form of long-term, medium-term and short-term study abroad programmes for students to obtain degrees, credits and/or certificates respectively.[10] This was and still is linked closely with global rankings of universities, which allow them to be viewed as world-class institutions.[10,52] According to De Wit et al.[8], this has brought about a competitive element to internationalisation in HE. As such, internationalisation has become a priority for HE institutions across the globe.[23]

Internationalisation abroad has many benefits to students and tertiary institutions alike; however, it comes with criticism too.[52] Traditionally, according to Leal et al.[55], programmes of this nature followed a Western approach, with students from middle to low-income countries as well as Western countries, mobilising to other high-income Western countries to receive education and training.[55] These authors indicated that emphasis was placed on the adoption of Western knowledge and there was, and still is, a distinct hierarchy and power dynamic

between institutions and knowledge from the Global North versus the Global South.[52,55] While internationalisation abroad appears to aim towards collaboration and exchange to facilitate cultural and language awareness, historically, there has been less uptake of information and perspectives from non-Western countries.[8,55] This is due to mobilising students going to host-institutions in wealthier countries to receive education with less emphasis on sharing information, coupled with hierarchical views about knowledge emerging from less-prominent countries. In essence, Leal and colleagues[55] implied that collaboration during internationalisation abroad has, to date, been limited.[55]

In addition to this, De Wit et al.[8] highlighted the inaccessibility that internationalisation abroad affords, as it is reserved for students who can afford it.[8] The cost of study abroad programmes means that a large portion of students cannot access these programmes, making it an opportunity for the elite, rather than for all.[8,12] This sentiment was shared by Kinsella et al.[23] in their article based on Canadian OT students' internationalisation abroad experience in Europe. Despite having rich academic and social benefits, students cited financial strain as the most challenging aspect of the exchange.[23] This idea was reinforced as some students of the cohort who initially expressed interest in the exchange did not eventually participate, presumed by the authors as being due to barriers that may have included affordability.[23] Social demands on students such as family responsibilities and employment-related commitments may also affect their ability to participate in international exchange opportunities.[23] Like De Wit and colleague[8], the Kinsella and colleagues[23] also eluded to the elitist nature of international mobility.[23]

Along with other aspects of teaching and learning in higher education, internationalisation has also been impacted and positively influenced by technological development. This has given rise to 'IaH'.[19] As explained by De Wit et al.[8], the concept of IaH allows for the benefits of internationalisation and global learning to be enjoyed locally and online, without the need for physical mobility nor the costs and carbon footprint associated with it.[8] This effectively decreases and potentially removes financial barriers to access, allowing for inclusion, particularly of students from middle to low-income socio-economic statuses from both Global North and Global South countries.[8] It also promotes the diversifying of student groups in these programmes to allow for the representation of more countries, cultures and marginalised populations, such as disabled[56] and refugee populations, to foster greater intercultural learning.[55] These sentiments were shared by de Klerk and Palmer[56] who confirmed that collaborative learning online allows for the inclusion of people with disabilities in higher education, giving them the opportunity to achieve new avenues of development.[56]

Li et al.[13], in their scoping review of the epistemology of IaH, stated that through IaH, internationalisation can more effectively move away from "Westernisation" in favour of achieving a more universal benefit for all students in participation.[13] This is enabled through the use of a neutral virtual environment for student collaboration rather than unilateral mobility to a host-institution.[13]

The use of IaH for virtual mobility and virtual exchange began before the turn of the 21st century and has had documented use over the years leading up to 2020.[57] However, like other aspects of academia, the coronavirus pandemic halted internationalisation abroad programmes, leading to a recent increase in the use of IaH to enable and/or sustain internationalisation efforts.[13,49,58-59] Even with the pandemic now out of the way, IaH continues to be a popular, equitable and inclusive means of internationalisation in HE.[40,56] This being said, despite its advantage of providing more equal opportunities for international collaboration and learning for students, Rubin and Guth[40] reinforced that virtual exchange as means of IaH is not intended as a substitute to internationalisation through physical mobility or study abroad opportunities.[40] This is because each method offers students different experiences, each of which holds merit.[40] In their paper on IaH, Robson et al.[10] highlighted that there is a lack of consensus on how IaH courses or opportunities should be facilitated and implemented, or even how it is defined.[10] The views of Almeida and colleagues[4] aligned to this, confirming that clarity on the concept was limited at the time of their study.[4] For this reason, IaH is a broad concept that can take many forms which include, but are not limited to, long-term and medium-term hybrid learning, massive open online courses (MOOCs), and shorter-term global OCL opportunities through virtual exchange.[8-9,60]

2.5. Online collaborative learning

Global OCL has become increasingly included in HE owing to the value it affords in achieving IaH outcomes.[9,61] OCL refers to the intentional use of ICT to facilitate discussion and collaboration between individuals in different geographic areas and countries, encouraging the exchange of knowledge and perspectives between students to broaden cultural awareness and understanding of academic content areas.[1] It is hoped that in this process, students can develop cultural awareness or sensitivity, and that their learning experiences will be enhanced.[13,19] The results from the study by Knopf et al.[1] discovered that the use of online collaborative discussions and interactions between students can increase their level of learning and understanding of course content in relation to Bloom's Taxonomy[62] levels.[1]

Knopf et al.[1] explained that there is a difference between online teaching and online learning.[1] The former was used to describe educators' use of ICT to educate students and impart

information, while the latter referred to students' use of online tools for learning, synchronously or asynchronously, through the internet.[1] Online learning can take place in the absence of online teaching. OCL projects can encompass a variety of types of programmes. Some may include a component of online learning only, where students engage with one another online without common teaching taking place in the virtual space,[63] while others can comprise both online teaching and online learning components, where an aspect of the OCL programme includes teaching of course content collectively by academic educators of participating institutions.[64]

An example of OCL that includes both online teaching and online learning is Collaborative Online International Learning (COIL).[9,15] COIL is a paradigm for IaH originating from the State University of New York (SUNY), which has become widely used in OCL internationally.[15] COIL is not only a model for OCL; SUNY has created a COIL Center which formally partners institutions across geographic and linguacultural borders for the purpose of OCL, offering support and guidance as per the COIL model.[65] Its focus is on virtual exchange and global networking to improve cultural competence and overall learning experiences.[15] The key aspects of COIL courses focus on a formalised introduction and teambuilding, joint teaching of course content by involved institutions, collaborative student engagement, a collaborative presentation or output and a formal reflection and conclusion as a collective.[66] Courses may be interdisciplinary or discipline-specific, and occur for a minimum of five weeks, for up to fifteen weeks.[66] There is an emphasis on shared ownership of the course between participating HE institutes, and subsequently, shared teaching.[12,15]

Recent literature on IaH and OCL has focussed largely on programmes and projects such as COIL,[9] which implement elements of both online teaching and online learning, and are fairly structured in nature requiring significant time commitment and schedule alignment between institutions.[7,12,17-19,24,49,53,58,67] This differs notably from the i-DOT project, which does not include shared teaching of course content, does not require a collaborative output from students, occurs for less than five weeks and does not require intensive schedule alignment as students engage in discussions based on mutual availability.[15] Thus, the i-DOT project appears to be relatively more flexible in nature. For this reason, it is not clear whether the bulk of information and findings on IaH and OCL projects in literature can apply to projects that are similar in nature to the i-DOT project.

Nonetheless, a review of literature on IaH and OCL projects in general, which also included but was not limited to COIL programmes, provided insight into the benefits, challenges and potential facilitators to students' participation in OCL experiences in HE. These findings are elaborated upon below.

2.5.1. Benefits of OCL projects

A study by Carroll et al.[12] examined the lessons learned from running a COIL course between students of three institutions in Ireland and the United States of America. Regarding the benefits of the OCL course, their study found that students were able to broaden their worldview, develop an improved awareness of different cultures, and conceptualise how this may affect the perspectives and worldviews of others. Additionally, they found that students were able to develop soft skills such as critical thinking and communication skills, during their engagement in the course.[12] Nair et al.[53], based on their COIL course between students in HE institutions in the United Kingdom, the Sultanate of Oman and Ghana identified similar benefits. In addition, they cited that virtual academic mobility allowed for the improvement of teamwork and leadership skills in some students, digital competence as well as the development of global citizen skills.[53] Other benefits of OCL courses and projects, as cited by Carlisle et al.[49], Robson et al.[10], Liu[59], Guimarães et al.[67], Erdei et al.[35], Liu et al.[68], Kor et al.[69], Huang et al.[5], Naicker et al.[17], Cotoman et al.[18], Wimpenny et al.[70], Zadnik et al.[71] and others, are summarised below.

- Academic benefits – Several authors[5,18,35,49,53,58-59,64,67,71-74] found that OCL projects can improve students' knowledge of aspects relating to their course of study. OCL projects can allow students to better understand their academic course material through the consideration of different contexts and cultural perspectives.[49,58]
- Development of a variety of transferrable skills[12,35,49,58-59,67,73] – Professional skills that are transferable to vast work settings were acknowledged as an area of benefit for students during OCL projects. This included, but was not limited to communication skills, critical thinking skills and the ability to work collaboratively with others.[12,58] Students may additionally improve their leadership skills, teamwork skills[53], problem-solving abilities[49], adaptability, accountability and flexibility.[35]
- Improved digital competence – Some authors[35,49,53,59] including Carlisle and colleagues[49] found that students' virtual engagement in IaH experiences can allow them to develop their skillset and competence in the use of digital technology.
- Intercultural awareness and engagement – A large number of authors had noted that students' insight into cross-cultural dynamics can improve through OCL projects[3,5,10,12,17-18,35,53,58,63,67-70,72-74]. This may range from awareness of intercultural differences to sensitivity or competence, all of which are facilitated through effective intercultural engagement.
- The ability to form meaningful cross-cultural friendships, connections or communication – Beyond forming an awareness and sensitivity to multi-cultural differences, the cited

authors found that students may also benefit in terms of their ability to communicate meaningfully and form connections with individuals who have a different cultural background to them.[5,35,58-59,70,73]

- Broadened worldview[12,49,64,73] and the development of an international mindset[5,59,75] were aspects of student development that had been noticed by the authors cited above. This allows students to look beyond their local contexts and in some cases, identify as global citizens.[53,75]
- Improved self-awareness recognised in students[5,18,49,58] This includes the students' awareness of their own perspectives and perceptions based on factors such as their culture and background.[49,58]
- The ability to acknowledge different perspectives and worldviews was noted by Carroll et al.[12], Gray et al.[58] and Zadnik et al.[71] in their respective studies. Students may not agree with different perspectives but were able to acknowledge and respect that others may view the world in a different way to them.[12,58,71]
- Personal development in terms of taking ownership of learning[18,35,49,63,71,74] and improved self-efficacy[17,35] were identified in students involved in OCL experiences.
- The opportunity to improve language skills where students' first language differs from the language of communication during the project.[35,49,59,64,69,73]
- Social development[18,35] and global networking[73] were noted to be beneficial to students.
- Lastly, Psychouli et al.[63] found that students may experience improvement in their professional identity after participating in virtual exchange opportunities.[63]

As demonstrated above, the benefits that students may enjoy during OCL experiences are numerous. While the authors of the various studies cited above each had a unique consortium of benefits mentioned in their findings, when looked at broadly there was overlap among the benefits that were identified. These benefits were viewed by the researcher as falling under five broad categories, namely academic benefits, professional development, personal and social growth as well as cultural or diversity awareness.

2.5.2. Barriers to student participation in OCL projects

A number of authors on OCL looked at the challenges that students may face when engaged in virtual exchange projects, many of which are common across multiple studies.[3,17-18,35,49,58,63,67-70,72,76] In a study by Kor et al.[69] based on a four-session IaH project between students from Indonesia and Hong Kong, the authors found that, in keeping with numerous other study findings, language barriers were a significant challenge experienced by students.[69] The authors highlight that aside from difficulties with communicating ideas clearly, students

may take a longer time to process information when it takes place in a foreign language.[69] Kor and colleagues[69] also found that unclear preparation for IaH projects and the time demands to participate in them amidst already busy academic schedules were challenging for students.[69] Additional challenges experienced by students in OCL projects, as cited by, Guimarães et al.[67], Erdei et al.[35], Liu et al.[68], Naicker et al.[17], Cotoman et al.[18], Cabatan et al.[76],Hynes et al.[3], Wimpenny et al.[70], Aldrich et al.[72] Psychouli et al.[63] and others are summarised below.

- Managing different time zones[3,15,18,49,58,76] – It has been noted by the cited authors that students having to collaborate across different time zones can be challenging.
- Availability of time in relation to other academic activities[1,3,15,17,49,71,73,76] – Students may have busy schedules when managing other academic demands simultaneously, making the time demands of OCL projects challenging.[15] In addition, HE institutions across countries may have differing academic and semester schedules, which means that the time of year of the project can impact differently on students.[15]
- Ineffective communication among students[1,35,53,67-68,73] – It was noted that when students have poor communication amongst themselves, it could affect the quality and/or success of their projects or learning in general.[1]
- Low motivation of foreign partner, affecting engagement[17-18,49,73] – According to Carlisle et al.[49], students who are not being formally assessed for their engagement in OCL projects may show a lower commitment to the project. This, together with other factors, may impact on students' motivation level, posing as an obstacle to their foreign partner.[49]
- Language barriers[15,17,49,53,63,70-73] – Language barriers in OCL projects were a common challenge identified, where students share different first languages. According to Rubin et al.[15] and Carlisle et al.[49], this can put one group of students at a disadvantage due to their participation in a language they are less proficient in. Most often, this is the English language.[15,49,72]
- Challenges with digital literacy or technology use[3,12,17,35,49,53,63-64,70-73,76] – This may include students having limited skill in using various technological platforms and programmes, unexpected difficulty with technology use, as well as unstable internet connection.[3,49]
- Students' uncertainty of expectations or the purpose of the collaboration can act as a significant challenge as it may result in students being unprepared and uneasy.[49]
- Organisational challenges on the part of students[35,73] can be a barrier to participation as this can affect the effectiveness of arranging meeting times and engaging in the designated collaborative activities.

2.5.3. Facilitators to student participation in OCL projects

Several research articles on OCL discussed aspects that were implemented in their projects that facilitated students' involvement, and/or proposed aspects that *could* facilitate engagement should it be utilised.[3,17,49,67,69,72,76-77] Both of these aspects have been noted in this section.

Based on a COIL project between students in Singapore and Mexico, Carlisle et al.[49] identified potential facilitators to students' participation in an OCL experience. Firstly, they make mention of the need to train students in the use of digital technologies necessary for the OCL experiences, without assuming that the generation of students, often referred to as "Generation Z", are completely digitally competent.[49] They go on to recommend that academic staff ensure that students have a clear understanding of the objectives and expectations of the OCL experience, and provide support to students during the course of the project to accomplish maximal achievement of learning outcomes.[49] It was also noted by these authors that students' initiative in preparing for OCL projects and managing their time effectively can act as a facilitator to their successful participation.[49]

Additional facilitators, as cited by Guimarães et al.[67], Naicker et al.[17], Aldrich et al.[72] Cabatan et al.[76] Hynes et al.[3] and others are described below.

- Use of a multimedia resources[1,49,69,76] – The use of various media sources, including social media, videos, written material and so forth, can facilitate improved learning and understanding of the virtual exchange for students.[1] This may also include instructional videos for early-stage orientation of students to the project.[49]
- Positive engagement of educators/instructors with students[3,49,67,73,77] – This included educators following up with students during the OCL project to offer support[17,49], and motivating students to participate.[3] This was seen by a the above-cited authors as a possible facilitator of effective participation by students.
- Provision of clear guidelines and expectations by educators[3,17,49,72] – Some students found benefit in being adequately prepared for their virtual exchanges and in knowing what to expect.[76] This may include translated resources such as discussion questions for students participating in exchanges in non-first languages.[72]
- Use of appropriate ICT platforms was seen to be a facilitator to positive participation in students.[76-77] This includes the use of communication platforms such as Zoom Video Communications®, Microsoft Teams®[77] as well as social media or instant messaging platforms such as Facebook™ and WhatsApp™ for added informal exchange.[76]
- Provision of support and guidance relating to technology use and digital literacy.[3,49] As mentioned above, the authors highlight that students may not be completely literate in

the ICT required for virtual exchange, thus there is importance in providing support to them in this regard.[3,49]

- Effective interaction amongst student peers,[69,77] and favourable student qualities such as flexibility[49] and willingness to participate[76] were identified as facilitators to participation that were based on the character and approach of students themselves.

While common themes around facilitators to participation have been identified based on work of the authors cited above, each facilitator was not mentioned by every author. However, when consulting the literature on the topic more broadly, the facilitators to participation in virtual exchange can be looked at in three categories, i.e. adequate preparation rendered by academic educators,[3,17,49,69,72,76] provision of support to students during the period of online collaboration,[3,17,49,67] and the enthusiastic nature of students participating in the exchange.[49,69,76-77] On a higher level, emphasis has been placed on the need for educators from respective higher education institutions, in programmes like these, to work together; each emphasising the local context of their setting to promote intercultural exploration.[17-18] It is understood that effort and prior planning are integral in facilitating collaborative learning that will achieve desired outcomes.[15,17-18]

2.6. Online collaborative learning specific to occupational therapy

The importance of implementing a global perspective to tertiary education through internationalisation has not gone unrecognised by the profession of OT. In 2009, Horton's[20] article already identified the need for internationalisation to be included in OT curricula, citing its potential to equip students to interact competently with multicultural societies.[20] Aside from this, Horton also suggested that through internationalisation efforts, OT students could form a more sophisticated understanding of how occupations are experienced.[20] Although the author did not discuss virtual exchange at the time, IaH has proven to be enriching to students and a particularly useful pedagogy in the field of OT since then.[3,5]

Huang et al.[5] conducted a literature review relating to the use of IaH with students in health fields, particularly in nursing and OT, and found that IaH is effective in promoting cultural competence.[5] Their paper placed focus on the importance of cultural awareness and competence in healthcare to ensure quality and patient-directed service delivery. While IaH is widely used in HE to build intercultural awareness, Huang et al.[5] asserted that this aspect has particular relevance to students in healthcare, where cultural competence and respect for diversity are core values.[5]

Similar sentiments were held by Sood et al.[78], who emphasised the need to instil cultural sensitivity and competence in OT students in order to produce practitioners who impact positively on diverse client populations.[78] This holds true in the South African context of OT, as expressed by the minimum standards for the education of occupational therapists, formalised by the Health Professions Council of South Africa.[79] Here, in relation to tertiary training of OT students, it states that "the educational programme should provide opportunities for students to engage with issues of diversity and become culturally sensitive", and that students should "demonstrate an awareness and sensitivity of the influence that diverse cultural and social contexts and systems have on occupational choice and behaviour".[79] This is in line with the World Federation of OT's minimum standards for the education of occupational therapists, which emphasises students' understanding of sociocultural and political factors affecting health and occupations worldwide.[32] It also highlights the need for facilitating global perspectives and global citizen development to prepare OT graduates to work in diverse settings.[32]

Various strategies can be used to expose OT students to diversity and cross-cultural learning opportunities. Global OCL has emerged as one such method of achieving this.[3,78] From 2014 to date[64,80], there have been several research studies on OT-specific OCL projects for international exchange. Recently, in 2022, Hynes and colleagues[3] published a scoping review of research on international collaborative projects in OT education, which closely looked at ten such studies published before the end of 2020. The review identified that the outcomes for most of the OT-specific projects and subsequent studies focussed particularly on intercultural awareness or competence, and/or students' improved understanding of occupation internationally.[3,76] To this end, the authors reported positive qualitative outcomes in all ten of the studies reviewed but concluded that further objective, quantitative measures are needed to clarify whether OCL indeed achieves the intended learning outcomes.[3] The authors also took note of a possible trend indicating that students involved in virtual exchange projects in their first language may experience better learning outcomes than their foreign counterparts.[3] This was reinforced by Alrich et al.[72] who suspected that the perception of the OCL experience by students may be influenced by their proficiency in the language of exchange as well as their year of study.[72] The authors emphasised the need to consider these aspects together with other student feedback in order to improve future collaborations between students.[72]

Zadnik et al.'s[71] study involving OT students from Cyprus and the US, and Todorova et al.'s[73] study which included OT students from Austria, Belgium, Bulgaria, Sweden, the Netherlands and Switzerland both found that their IaH opportunities allowed students to consider aspects of the OT profession in a new light, encouraging them to view the profession from an international perspective.[71,73] A 2017 study on an OCL project between OT students in the US

and the Philippines found that the experience improved students' knowledge and understanding of culture and human occupation, and that students enjoyed the social aspect of the learning.[76] Sood and colleagues[78] also found that their students from institutions in the US and India experienced an increase in cultural competence, where the term 'culture' was used to describe diversity related to cultural views, lifestyle, habits, language, and geographic area.[78]

In a collaboration between OT students from South Africa, Belgium and the United Kingdom, Wimpenny and colleagues[70] identified that over and above facilitating successful intercultural encounters between their students, they were able to promote discourse on social justice during the online collaborations, encouraging students to think more critically about sociocultural and political factors within communities.[70] Aldrich[81], in a study on a US and Swedish collaboration, reported that students experienced synchronous international virtual exchange as the most significant aspect of learning in their course design, despite also going on physical community outings locally to achieve similar learning outcomes.[81] Insights from both Wimpenny et al.[70] and Aldrich[81] appeared to speak to a dynamic experience of the collaboration by their respective OT students that enabled them to think about communities critically.

Psychouli et al.[63], whose study was based on a once-off virtual exchange between OT students in the US and Cyrus found that although students indicated qualitatively that they had experienced improved cultural awareness, students' results using a cultural competence tool showed no changes following the OCL experience.[63] The authors took note that one contact between students may not have been sufficient to facilitate change and that learning could also have been influenced by varying academic levels of students involved in the exchanges.[63]

Barriers and facilitators to participation in OT-specific OCL projects that emerged across the studies overlapped with general barriers and facilitators described in sections 2.4.2 and 2.4.3 above. However, in addition to the facilitators, Cabatan et al.[76] found that OT students may have experienced an improved impact of learning when asked to reflect on their experiences, encouraging them to synthesise concepts they have learnt.[76] This idea was supported by Aldrich[81] whose article also advocated for the structured incorporation of reflection opportunities for students.[81]

From the literature, it was evident that OCL projects specific to OT occurred in various forms. Projects could have been synchronous[63,71,81], asynchronous[78], or have had elements of both online and offline tasks[64,70,73,76]. More of the OT-specific projects described in the literature focussed on an online learning component only[63,70-71,81], with a few having included an online

teaching component too[64,73,76]. While most of the literature focused on discipline-specific virtual exchange between OT students,[3] notably, one study considered an exchange between students from OT and dentistry in an interdisciplinary collaboration.[75] Projects ranged from having a single once-off virtual exchange to periodic exchanges for longer periods of up to 15 weeks.[63,78] The literature on OCL in OT predominantly involved countries from the Global North with a few inclusions of Global South countries, such as Thailand, India, South Africa and the Philippines. However, none of the studies investigated virtual exchanges with up to nine institutions from three different continents, involved in a project simultaneously. While some of the studies may have touched on benefit areas beyond academics and intercultural awareness,[70,73] overall, the studies did not place directed focus on a wide range of benefits that OCL programmes could offer OT to students.

2.7. Conclusion

There is a need for HE to adopt relevant teaching techniques that can create professionals who are adaptable and in tune with the world.[2] The development and growth of technology in modern times has lead to the prevalent use of ICT in teaching and learning globally. This interaction with digital tools in education was strengthened following the global pandemic, which forced students out of their HE lecture halls and into lockdown instead. Important to note is that the move towards technology in HE is not because of the coronavirus pandemic, and therefore its use shall continue even after it.[56]

While the use of ICT has been seen to add value and rigour to education, it is clear that its use can limit social interaction and collaboration between peers. For this reason, academic facilitators need to create overt opportunities and course content geared towards peer interaction and collaboration to enrich learning and achieve broader outcomes through digital means.[25]

Ideas of internationalisation and collaborative learning are specific areas identified in the literature as applicable to HE at present.[9,40] The concept of the i-DOT project can be seen as relevant to this trend. However, its nature of flexibility differs from the framework of the widely described OCL programmes in literature, which are relatively more structured.[9] This makes it unclear whether the benefits, barriers and facilitators described in the literature all carry over to OCL projects of a different nature, involving an element of online learning in the absence of online teaching.

It is also noted that OCL has particular relevance to OT, where international experiences can assist OT students in conceptualising the relationship between sociocultural factors and occupational engagement and well-being.[3] While the research on OT-specific OCL projects is

gradually increasing, they are yet to explore the far-reaching benefits, far beyond academic benefits and intercultural awareness, in projects involving as many institutions as the i-DOT project.

For this reason, this study aimed to clarify the broad-ranging benefits, facilitators and barriers to participation in a global online collaborative discussions project specific to students in OT curricula. In doing so, the study can add to the body of literature on global collaborative learning projects of a flexible nature in OT.

CHAPTER 3 – METHODOLOGY

3.1. Introduction

Research is not an incidental process but rather a product of planning, preparation and careful execution.[82] This chapter aims to unfold the methodological processes and considerations that were applied in this study in order to answer the research question. The objectives of the study were to clarify the nature of the benefits that the i-DOT project had for OT students across the international institutions involved in the project and identify potential facilitators and barriers to their participation.

This section of the dissertation will present the research design that has been applied to achieve the abovementioned objectives, together with the reasoning behind the selection of this design. It will go on to describe the participants of the study in terms of the population, sample and criteria for involvement.

Thereafter, the development of the data collection tool will be discussed, as well as the pilot study that was used to validate the tool before the official collection of data for the study. The management of the data will be outlined, as per the Data Management Policy of the University of Pretoria, before delineating the data analysis process that was used.

Finally, the chapter will provide insight into the quality control measures and ethical considerations that were implemented during the course of the study.

3.2. Research design

This research study is underpinned by a post-positivist approach[83]. According to Al-Saadi[84], the positivist philosophical approach, traditionally associated with scientific, quantitative research methods, has received scrutiny in past years. This is due to the rigid nature of the approach which views reality as entirely objective. This affects a researcher's ability to gain further understanding and insight into a research area, and take into consideration all variables where human participants are involved, as highlighted by Saunders et al., Scotland, Collins, Willson and Ramanathan cited in Alharahsheh et al.[85] As explained by Panhwar et al.[83], this has posed particular limitations to quantitative research in the field of education, where the participation of people brings about subjective experiences too. As a result of the criticism, the post-positivist approach emerged as an extension of the traditional positivist approach.[83-84]

The post-positivist philosophical approach encompasses aspects of both positivist and interpretivist approaches, offering a blend of views while still remaining relatively more positivist in nature.[83] It acknowledges the need for the inclusion of subjective information in a

largely scientific approach.[83] As summarised by Cassim[82], “Post-positivism recognises the weaknesses of just using a positivist approach and the importance of including social factors”.[82] While post-positivism gives importance to both objectivity and subjectivity and is often associated with mixed-method research as an alternative to a pragmatic approach,[82] the researcher has opted to use the approach in this study based on Wildemuth’s view cited by Panhwar et al[83] which states that “The post-positivist approach prioritises quantitative data and emphasises to strengthen their finding with the help of qualitative data”.[83] With this approach in mind, this study employed a quantitative, descriptive cross-sectional survey design. As a non-experimental study, this design was selected as it allowed the researcher to answer descriptive questions, identify trends and gain new insights about students’ experiences through the use of surveys.[16,86]

Quantitative research is objective in nature and makes use of statistical analysis to measure attitudes and trends. Its data collection methods make it easier for researchers to collect data from a larger number of participants, thus generating information that may be more generalisable than that obtained from qualitative research methods.[82,87] The data is also quantifiable, leading to an added layer of confidence in the conclusions drawn. The survey design particularly allows a substantial amount of information to be collected in a short space of time since direct interaction is not required between the researcher and participants. It is also a relatively inexpensive exercise as surveys can be distributed online without the need for travel, printing or postage costs to the researcher or participants. The use of electronic surveys particularly, is efficient in providing accessibility to potential participants who are situated in different countries.[87]

In contrast, the shortcomings of quantitative research include the fact that there is no human interaction with participants during data collection, which can result in a loss of important insights and understanding of social elements affecting trends identified. Pertaining to survey designs specifically, high incidences of non-response can impact the breadth of a study, together with unclear or substandard surveying tools.[82,87]

Nonetheless, the design was selected due to its value and efficiency in collecting information from a large number of students and providing accessibility to potential participants from across the nine institutions involved in i-DOT. In light of there being limited literature regarding OCL projects of a flexible nature in OT, this design can produce a body of information that can be used as the basis for further research in the future. As mentioned in Chapter One, this quantitative study feeds into a larger sequential mixed-method study. The larger study adopts a pragmatic approach, including both quantitative and qualitative designs, thus mitigating some of the shortcomings associated with a purely quantitative design.

A cross-sectional design was selected as data was intended to be collected at one point in time. This decision was based on the fact that the i-DOT project runs for a period of just one month and that most cohorts of i-DOT participants take part in the project once off. Electronic surveying of the students once, upon completion of the project, was found to be practical.

While it was intended to generate objective and quantifiable information about students' experiences, through an ontological lens, the researcher acknowledged that students may have experienced the i-DOT project in unique ways, influenced by various factors such as the intensity of preparation received prior to the project and varying academic schedules at the time of the project. For this reason, the surveys were designed with closed-ended questions to collect categorical and occasionally interval data as well as open-ended questions to collect subjective information, with the intention of coding subjective information to analyse in number form.[82] The inclusion of the latter component allows the study to move away from pure objectivism and bring in a subjective element in keeping with the post-positivist approach. This will be discussed further under the *data collection* section in 3.3 and the *analysis of text data* section in 3.7.2 of this chapter.

Regarding the research method, data was collected through a self-developed electronic survey using Qualtrics™, an online survey platform.[16] The survey was offered to students in two languages, English and German, due to the international nature of the study. This will be elaborated upon further in the chapter.

3.3. Study participants

3.3.1. Population

Approximately 350 OT students involved in the i-DOT project in 2022, from all nine of the participating institutions[c], formed the population of this study. These institutions were from eight different countries across three continents, and students involved were from varying cultural and language backgrounds. The students in the population were diverse in age and could be from the first through to the fourth year of OT study towards a Diploma, Bachelor or Bachelor of Science qualification in the profession[d].

3.3.2. Inclusion criteria

- OT students registered for the i-DOT project in 2022.

[c] Refers to the nine institutions introduced in Chapter One
[d] Course qualifications per institution have been outlined in Annexure A

- OT students registered for the i-DOT project in 2022 from any of the nine institutions affiliated with the project.
- OT students registered with the i-DOT project in 2022, situated in any country.

3.3.3. Exclusion criteria

- Students who have not completed two online discussions during the i-DOT project in 2022.
- Students with limited to no proficiency in either of the languages used in the electronic survey, i.e. English or German.
- Students below the age of eighteen.

3.3.4. Sampling method

The research population was made up of OT students involved in the i-DOT project in 2022, which meant that the reference population was finite. There were approximately 350 students involved in the project at the time of the study. The researcher opted to invite the entire reference population to participate in the study, with the potential of representing the whole group.[88] However, as explained by Arnab[88], this would require an accurate count of individuals in the reference population, together with no cases of non-response. However, cases of non-response are unavoidable, particularly in studies involving a large population.[88] This holds particularly true since students' involvement in the study was completely voluntary. Additionally, the number of students involved in the i-DOT project was an approximate number, since students who participated in groups of two or three registered for the project under one group member's name. This made it challenging to establish an accurate headcount of students, and the researcher did not have permission to access i-DOT registration information in order to determine this.

Ultimately, non-probability self-selected sampling, otherwise known as volunteer sampling, was applied during this research study.[82] This type of sampling involves participants volunteering to take part in a study after being exposed to an invitation or advert to participate.[82] Traditionally, when non-probability sampling is used, individuals in the population usually have an unequal likelihood of being included in a study and there may be an aspect of subjectivity from the researcher in terms of selecting participants.[82] However, since all students were invited to participate in the study, the risk of bias from the researcher was eliminated, and the principle of ethical justice relating to the fair selection of research participants was upheld.[21] Sampling was based on the availability and willingness of students to participate in the electronic surveying questionnaire.[16]

Generally, probability sampling is seen to be more desirable than non-probability sampling as the former can generate a sample that is more representative of a population, which increases the potential for research findings to become generalisable to that population.[86] In cases of non-probability sampling, however, there are greater chances of the sample representing certain aspects of a population more than others.[89] In the case of this study, it would mean that the number of students representing each institution may differ. This would naturally affect the ability of the study results to be generalised to all students in the i-DOT project.

Nonetheless, the researcher opted for a volunteer sample after having invited the entire reference population to participate in the study, as there was insufficient time capacity to employ probability sampling or non-probability purposive sampling across the nine institutions to achieve the desired sample size. In addition, the researcher did not communicate with the population directly, but rather through their institution's OTE involved in the i-DOT project, who acted as liaisons between the researcher and their respective student populations. In the case of the University of Pretoria students, students were communicated with through the course management platform Click-UP™. This, together with the fact that students from the population entered into exams, vacation and/or graduated soon after the i-DOT project, impacted on their availability, and made it difficult for the researcher to sample the students in a method other than through volunteer sampling.

3.3.5. Sample size

A power analysis calculation performed by the University of Pretoria statistician, in consideration of statistical tests such as Fisher's exact test[90], concluded that a sample size of at least 98 participants was needed for this study. Therefore, the study aimed to achieve a sample size of 100 participants or more. The researcher hoped to achieve a relatively large sample due to the population being heterogeneous in nature. This included factors such as students being from different institutions where they received institution-specific preparation for the project; having varying learning outcomes; as well as having different levels of proficiency in English. A larger sample would allow more opportunity for various student demographics to be represented in the data. The study achieved a sample size of 139 participants, out of approximately 350 students involved in the project.

3.4. Data collection tool

Data was collected through a self-developed cross-sectional electronic questionnaire[16], using Qualtrics™, an online survey platform. This was presented to students in both the languages of English and German on a single survey. The inclusion of German was considered in order

to mitigate barriers to participation in the survey in students with limited written language proficiency in English.

The researcher gathered information from the OTEs involved in the i-DOT project from each of the nine institutions regarding the general level of English language proficiency and language medium of teaching at their respective institutions, as detailed in Annexure A. This was done to investigate the language needs of the student population during survey development. Students from the academic institution in Germany appeared to have varying degrees of English language proficiency, requiring consideration. In addition, the German language was identified as a language commonly spoken in at least three of the nine institutions' countries, namely Germany, Austria and Belgium. This meant that the inclusion of this additional language would have benefitted the greatest number of students.

The OTEs involved in the i-DOT project from countries such as Kuwait and Croatia reported functional proficiency in the English language despite their students having different first languages, i.e. Arabic and Croatian respectively. The institutions in the United Kingdom and South Africa reported that teaching was conducted purely in English, indicating fluency in the language for those students. Lastly, the institution in France reported that most students adopted English as a second or third language, however, a small proportion of students were not fluent in the language. Had the researcher included a third language for translation of the data collection tool, French would have been considered. Unfortunately, the researcher did not have sufficient time, financial or human resource capacity to offer the survey in a third language. Thus, it was concluded that the survey would be presented in English and German only. The following sections will expand on the development and translation of the data collection tool.

3.4.1. Development of the tool

The surveying tool was self-developed by the researcher with consideration of the literature. Upon commencement of this process, the researcher referred back to the objectives of the study, i.e. to describe the benefits, barriers and facilitators experienced by OT students during the i-DOT project. Literature was consulted to gather information on these aspects in order to design relevant questions for the survey.[89] In terms of benefits of OCL projects, the researcher was able to identify five distinct areas of benefit from the literature, i.e. academic, professional, personal, social and diversity awareness benefits. These were used to structure aspects of the survey relating to the benefits that were experienced.

The wording of the survey deliberately avoided using complicated language. The OTEs from institutions participating in i-DOT were asked to review the survey and comment on whether the vocabulary used, particularly OT-specific words and concepts, would likely be understood by their students.

The survey was designed using both closed and open-ended questions. Closed-ended questions largely made use of 5-point Likert scales, but included single-response selection and multiple-response selection questions too.[82] The researcher took care to ensure that possible response options included negative responses, such as stating where benefits were *not* experienced in an area, in order to avoid influencing participants' responses into being positive.[89] In addition, open-ended question text boxes were included to allow participants to elaborate on their responses and provide additional answers where available answer variables were not sufficient to reflect their experiences. Aside from the abovementioned text response opportunities, seven standalone open-ended questions were included in the survey to collect qualitative data from students regarding their experiences. According to Polgar et al.[89], the use of open-ended questions allows a researcher to understand participants' views in their own words, providing detail to the data. However, the use of open-ended questions can deter participants from completing a survey due to additional effort required; and analysis of the responses can become tedious where a study has a large sample size.[89] For this reason, the researcher found it valuable to include open-ended questions but ensured that the larger part of the questionnaire was made up of quick-to-answer closed-ended questions.

The survey began with an information sheet outlining the purpose of the study, the inclusion and exclusion criteria, as well as potential participants' right to anonymity if they opted to participate.[89] This was followed by an agreement to participate, where participants were required to provide consent in order to proceed to the survey. This can be seen in Annexure B. Participants who did not provide consent to proceed had no way of accessing the surveying questionnaire.

The survey comprised fifty-five questions under the following six sections: Background information; general experience; academic and professional development; personal and social development; cultural awareness; and overall experience. The sections on general experience and overall experience collected information to ascertain the barriers and facilitators to participation. Information gathered on participants' background information did not gather identifying data such as names, student numbers or contact details. The data collection tool is attached in Annexure C.

3.4.2. Translation of the tool

Once the English version of the data collection tool was complete, the translation to German began. The translation of the survey was completed by a first language German-speaking OTE from one of the partnering institutions involved in the i-DOT project. The academic is familiar with the i-DOT project through direct involvement and forms part of the research team for the larger mixed-method study which this study will contribute to. Once the translation was complete on Microsoft Word®, it was reviewed by another first-language German-speaking OTE involved in the i-DOT project as well as the larger mixed-method study, who provided suggestions regarding the clarity of questions. Amendments to the translations were made in consultation with the abovementioned OTEs.

According to Cassim[82], the method of reverse translation is effective in identifying inaccuracies during survey translations. This involves having an individual translate text from a first language to a second, following which another individual translates the text from the second language back to the first without having access to the original text. This process would highlight any discrepancies and errors there may have been in the translation. While the researcher acknowledges the value of employing this method, it was not achievable due to the time availability of a second translator at the time of the translation, as well as time constraints related to the study and availability of students due to their academic year-end.[e] Hence, the translation of the tool was critically reviewed by a second researcher and further evaluated through the use of a pilot study.

Once the surveying tool was finalised in both English and German, a single surveying questionnaire reflecting both languages was created by the researcher on Qualtrics™, through user licensing obtained through the University of Pretoria. The electronic survey was reviewed by a statistician from University of Pretoria before initiating the pilot study (Annexure D: Letters of statistical support). The information sheet, consent form, questions and answer variables were communicated in English first, formatted in black and with questions in bold, and then reflected in German text below or alongside in dark grey italicised font to differentiate it. As mentioned in the previous section, this data collection surveying tool is attached in Annexure C. The researcher employed the use of one survey for the following reasons:

i. The single survey link could be sent to all participants of the target population without the potential for confusion.

[e] Eight of the nine institutions involved in the study were approaching the academic year-end at the time of the study.

ii. The use of one survey made it possible for the Qualtrics™ software to limit participants to one survey submission per device. Had there been two surveys, there would be potential for a single participant to submit a survey using both links, deliberately or unintentionally.

iii. By having a single survey, all responses could be retrieved from the Qualtrics™ platform on a single document for ease of analysis. This allowed the researcher and statistician to review closed-ended question responses without the need for a translator, as all German text was directly below or alongside the original English text.

iv. Participants who had basic proficiency in both English and German would have access to both languages in the text in order to augment their overall comprehension of the questions and answer variables. This position was based on feedback from one participant involved in the pilot study.

3.5. Pilot study

Pilot studies are small-scale studies recommended for use prior to data collection as it allows a researcher to identify and mitigate potential shortcomings or challenges associated with the data collection tool and process.[89] When performing a pilot study, the demographic of participants must to be similar to the target population of the actual study as they may interpret and interact with the tool in a similar way, thus providing relevant feedback on the process and the tool.[82]

A pilot study was used to test and validate the surveying instrument described in section 3.2 above, and to evaluate the experience of accessing the tool on the Qualtrics™ system, including the time taken to complete it. Furthermore, it aimed to indicate to the researcher whether the translation to German was effective and whether it was easily interpreted by individuals who are not first-language English or first-language German speakers. Data from the pilot study was used purely to inform adjustments and improvements to the instrument and was not used for the purpose of analysis.[91]

3.5.1. Pilot study participants

Owing to the international nature and varying language proficiencies of individuals in the population of the research study, it was essential for participants of the pilot study to be from different countries or institutions, with different first languages. It was also necessary to ensure that students involved in the pilot study were not from the target population of the actual study, and thus participated in the project prior to the year 2022.[91]

The pilot study made use of non-probability purposive sampling to identify participants against the following inclusion criteria:

- Students from any of the nine institutions involved in i-DOT in 2021.
- Students who were not registered for i-DOT in 2022.
- A minimum of 70% of the participants should not be first-language English speakers.
- A maximum of 30% of participants may be first language English speakers.

Participants who were unable to provide written feedback in English were excluded from the pilot study.

Participants were identified for the pilot study by the OTEs from their respective institutions, who provided the participants with information about the pilot study and clarified that participation was voluntary. Once participants provided consent for their email addresses to be shared with the researcher, they were sent a formal invitation to participate together with an information form (Annexure E). It was advised by the University of Pretoria statistician that a minimum of 10 participants would be required for the pilot study, representing different institutions and first languages. Nineteen participants were invited to participate with six cases of non-response. A sample size of thirteen participants was achieved from six countries and institutions, representing six first languages. The country of the institution and the first languages of the pilot study participants are displayed in Table 3.1 below.

Table 3.1: Demographics of pilot study participants

Participant number	Country of institution	First language
Participant One	Kuwait	Arabic
Participant Two	South Africa	English
Participant Three	South Africa	Setswana / Sesotho
Participant Four	Germany	German
Participant Five	Austria	German
Participant Six	South Africa	English
Participant Seven	Austria	German
Participant Eight	South Africa	Afrikaans
Participant Nine	Austria	German
Participant Ten	United Kingdom	English
Participant Eleven	Belgium	Dutch
Participant Twelve	Austria	German
Participant Thirteen	Austria	German

As part of the purposive sampling, the researcher aimed to include first-language German speakers as the largest proportion of the sample in order to evaluate the translations, as well

as participants who held neither English nor German as a first language. First-language English speakers were included in the sample but the researcher ensured that they accounted for less than 30% of the entire sample. This was to ensure that the comprehension of the surveying instrument could be examined across language demographics. Figure 3.1 illustrates the first languages of the pilot study participants as a percentage of the sample.

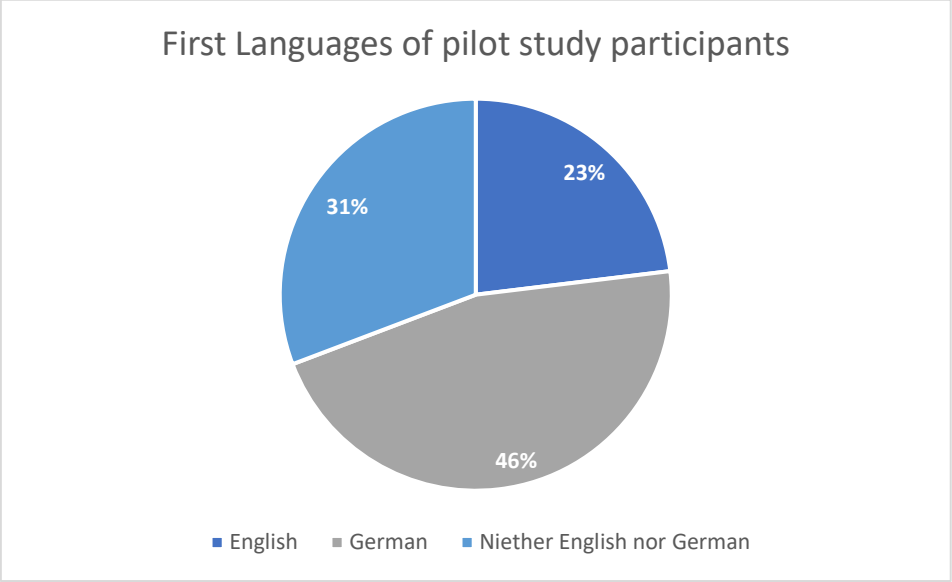

Figure 3.1: First languages of pilot study participants

3.5.2. Pilot study process

Once students agreed to participate in the pilot study, they were sent an email with instructions for participation, the link to the survey on Qualtrics™, a Portable document format (PDF) document of the survey questions as well as a feedback form on a Microsoft Word® document. Participants were asked to access the electronic survey, complete the electronic consent form in order to proceed to the questions, and then complete the survey. Thereafter, participants were asked to complete the feedback form on the Microsoft Word® document (Annexure F) and return the form to the researcher by email. The PDF document of questions was provided for participants to easily refer back to questions from the survey.

The feedback form required pilot study participants to rate the wording and clarity of each question in the survey between one and five, with one representing “very poor” and five representing “very good”. Thereafter, the pilot study participants were asked to comment on the time taken to complete the questionnaire, the layout and user-friendliness of the electronic survey[82] as well as the clearness of the information sheet and consent form at the start of the survey. They were also able to comment on the presence of both English and German on the

same survey and whether this was distracting. In addition, participants were asked to comment on the face validity of the surveying tool.[16]

Lastly, German-speaking participants were asked to comment on the clarity and accuracy of the German translation. As all six of the participants who completed the survey in German were fluent in English too, they could compare the translations to the original English text.

3.5.3. Outcome of the pilot study

The feedback forms from the pilot study participants were analysed at the end of the pilot study. Minor changes were made to the wording of questions to ensure clarity, as well as to the layout of the electronic questionnaire to ensure ease of use on mobile devices.

When asked to comment on the clarity and accuracy of the German translations, German-speaking participants provided feedback such as “The German translation was easy to understand and accurate”; “Good translation!”; and “Clear and comprehensible”. It was also established from the feedback that over 80% of participants found it easy to complete the questionnaire with both languages reflected using different formatting.

The University of Pretoria statistician reviewed the responses to the pilot study survey, performing the Cronbach’s Alpha statistic to test for internal consistency in groups of questions.[92]

Upon approval from the statistician, and because feedback from the pilot study participants did not warrant significant changes to the surveying instrument, a second pilot study was not deemed necessary. The changes made to the surveying instrument can be seen in Annexure G in the form of track changes.

3.6. Data collection

All institutions had reflected written permission for their students to participate in the research, which covered both this quantitative study and the larger mixed-method study towards which this will contribute. Annexure H displays the permission letters from all nine institutions. At the University of Pretoria, permission was granted to request participation from OT students for the broader study by the Deputy Dean of Teaching and Learning.

Contact details of students were not required by the researcher as they were not contacted directly. The invitation to participate in the actual study together with a link to the electronic questionnaire was shared via email with OTEs of the relevant institutions. The OTEs then shared the invitation with their respective student cohorts using a communication platform

relevant to their institution. Students from the University of Pretoria were invited to participate through a verbal announcement in class, as well as through formal virtual announcements and follow-ups through the Click-UP™ platform.

Involvement in the study was voluntary, and participants were required to read an information sheet and complete the electronic consent form before gaining access to the actual questionnaire. Data collected was automatically uploaded to the Qualtrics™ system online as students submitted their surveys. Identifying data such as names and email addresses were not gathered by the system to ensure complete anonymity of the results.

The surveying questionnaire received 169 responses. Seven responses indicated non-consent to participate in the study. These participants were unable to proceed any further with the survey, hence no data was collected from them. Thirteen participants consented to participation and began the survey but did not complete it to the end. Once the survey was closed, the results were retrieved and the thirteen incomplete responses were manually removed from the Microsoft Excel® spreadsheet of data. Hence, 139 completed responses were used in the study. The results were then shared with the University of Pretoria statistician.

3.7. Data management

According to the University of Pretoria's Data Management Policy[93], a structured data management plan is essential to ensure that research data remains securely stored and accessible, even after the research process. Accessibility of data which is unaltered and accompanied by descriptive information, known as metadata, can contribute to a greater impact on the research long-term, contributing to the University's standing as a research-intensive institution.[93]

To this end, the researcher managed the collected data throughout its lifecycle.[93] Data collected through the methods described earlier in this chapter was stored in password-protected documents on a secure, password-protected computer device by the researcher during the course of the study. The data was backed up on a restricted-access Google Drive® owned by the University of Pretoria as well as on a hard drive stored surely under lock and key. As the data collected for this study was captured through Qualtrics™ without direct communication with participants, no personal information of participants has been recorded, ensuring that stored data is completely anonymised. Throughout, raw data was accessible only by the researcher, research supervisors and University of Pretoria statisticians directly involved in the study. Selected data, i.e. German text responses, were shared with research partners from the larger mixed-method study for the purpose of translation only, through a restricted-access Google Drive®.

Following the study, data will be stored on a hard drive at the University of Pretoria occupational therapy department research store-room, 5-25 for a minimum of 15 years, until the year 2038. Data will be accompanied with relevant meta-data which will provide meaning to the data should it be required for future use.

Data collected from this study is owned by the University of Pretoria[93-94], but will be utilised in contribution to the larger mixed-method study by the team of international researchers. The larger study is being conducted through the University of Pretoria under the ethical approval referenced 158/2022, as attached in Annexure I.

3.8. Data analysis

Once raw data has been collected in a study, it needs to be analysed using carefully selected methods in order to give meaning to the data.[91] Upon this stage of the study, the researcher considered to two distinct aspects requiring analysis. Firstly, open-ended responses from the questionnaire were in qualitative text form; and from the 139 participants who responded, 21 participants' responses required translation from German to English prior to analysis. The second aspect of analysis concerned closed-ended responses which were in numerical form, requiring statistical analysis. The process of the data analysis is expanded upon below.

3.8.1. Translation of text responses

At the start of the data analysis process, German text responses were extracted from the dataset, collated into a document and shared with two OTEs from the larger study research team for translation, via a restricted-access Google Drive®. Both individuals were first-language German speakers with a background in OT academia and direct involvement in the i-DOT project. Additionally, due to their involvement in the larger mixed-method study, both individuals were familiar with the objectives of the study.

The first OTE, who previously translated the data collection tool, translated the text responses from German to English. Following this, a second OTE checked the translations and provided recommendations for adjustment. In consultation between both individuals, the translations were finalised on a live online document.

The researcher then introduced the newly translated text responses to the data set, placing them alongside the original German text.

3.8.2. Analysis of text data

Once all text data was represented in English, the researcher performed a content analysis using Microsoft Excel® in order to identify themes by coding the data. Once all of the responses were coded, they were rechecked and codes were analysed to condense them into more concise themes or codes.[82] Where necessary, themes and codes were defined by the researcher to ensure that they were easily interpreted even after merging less frequently occurring codes. The codes were counted to determine the frequency at which they occurred. The data was then shared with the University of Pretoria's statistician in numerical form to be included in the descriptive report for the purpose of further analysis.

3.8.3. Analysis of categorical and interval data

Once the descriptive report was concluded and received from the University of Pretoria's statistician, it was manually checked for accuracy by the researcher using Microsoft Excel®.

Questions and survey responses, which included the coded text responses, were distinctly grouped into categories to allow for the data to be analysed separately according to each objective and where relevant, sub-objective.

Grouped data was explored individually, by the researcher, using descriptive statistical analysis to search for trends and deviations in relation to each objective. Statistical measures such as mean, median and range were applied to the analysis. Further statistical tests were performed by the University of Pretoria's statistician upon request by the researcher, providing further insight into the data. Demographic data of participants was consulted to search for relationships and trends within the data. This relates to demographics such as the age of students, first language, proficiency in the English language, institution of study as well as year of study of students.

Lastly, the data was brought together and analysed holistically using the Kawa Model to provide a metaphorical interpretation of the results.[42] This allows the relationship between the virtual academic environment, facilitators and barriers to participation to be visualised, to understand its impact on the development of students. This will be elaborated upon in Chapter Five of this dissertation. The process that was followed to prepare for and execute the data collection and data analysis of this study is summarised in Figure 3.2 below.

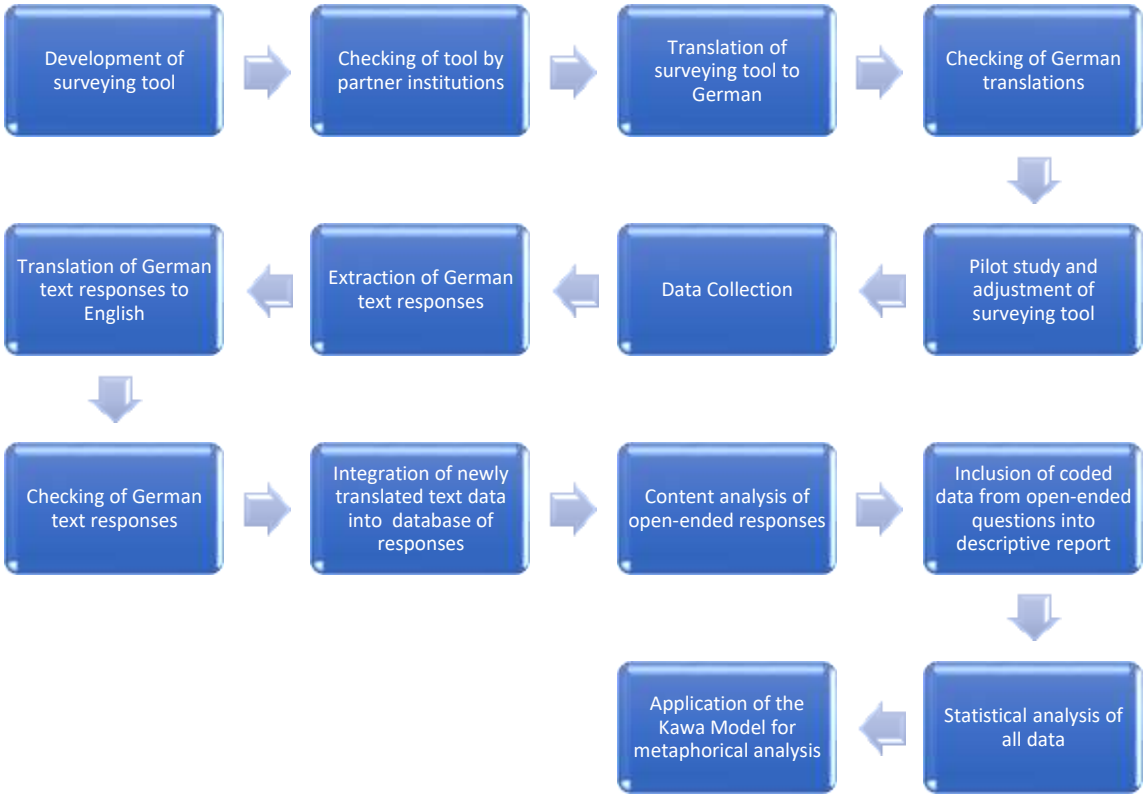

Figure 3.2: Process of preparation and execution of data collection and data analysis

3.9. Quality criteria

3.9.1. Reliability

The reliability of data relates to data that is precise and without bias.[16] It may also speak to the consistency of the survey instrument, and its ability to reproduce stable results if repeated over time.[16] Cassim[82] outlines that the use of a large sample size during a study can decrease potential bias and increase the reliability of the study's data. This concept was considered when determining the target sample size of this study, with the actual study producing a large sample size of 139 participants.

In terms of the surveying instrument, the reliability of the instrument was assessed through the use of the pilot study. The Cronbach's Alpha statistic was used to determine the internal consistency of question groups in the tool before commencing with the actual study.[16,95]

3.9.2. Validity

The validity of the survey instrument was ensured through its design, whereby the development of questions was guided by current knowledge derived from literature. Furthermore, the pilot study was applied to establish the content validity of the instrument.

Feedback from the pilot study offered clarity on the instrument's sensitivity to measure what it intends to, and assisted in establishing face validity, confirming that it appeared to test what it had been designed to test.[16]

Additionally, the researcher has been directly involved in the i-DOT project, which provides an understanding of the OCL experience, affording potential accuracy in analysis and further validity in the findings.[16]

3.10. Ethical considerations

Ethical approval to conduct this study was granted by the University of Pretoria's Research Ethics Committee under ethics reference number 371/2022, as attached in Annexure J, together with annual renewal and amendment approval certificates. Approval was also granted by the University of Pretoria's Research Ethics Committee for the larger mixed-method study under ethics reference number 158/2022 (Annexure I). Furthermore, the study was approved by the University of Pretoria's Survey Coordinating Committee[94], as attached in Annexure K. This was in addition to the individual letters of permission for student involvement from each of the nine participating institutions as described in section 3.6 above.

Over and above this, the following ethical principles were considered during the study:

- **Beneficence**: Beneficence refers to the promotion of benefit to participants or society through research while minimising harm in any form.[21] While the results did not benefit the participants directly as they had completed the project at the point of data collection, the results from the study can be used meaningfully to inform future collaborations of this nature, benefitting a large population of students hereafter.[16]

  While the research may have a positive impact on the HE academic world, consideration was given to the reputational risks to the nine institutions involved in the study, including the University of Pretoria. These institutions have been identified in this dissertation to describe the global context of this study and evidence permissions obtained from said institutions. Care has been taken to ensure that the presentation of the results of this research is not damaging to institutions. Future publications of this study shall omit identifying data of the institutions, placing focus on the country of the institution only.[21]

- **Non-maleficence:** Non-maleficence refers to the importance of preventing harm to potential research participants. Where risks are possible or imminent, aside from mitigating them, it is also imperative to inform participants of risks they may likely face.[89] However,

the research methods that were applied to the study are non-invasive and are unlikely to cause harm. Hence, there are no known risks identified in this study.[16]

- **Voluntary informed consent:** Informed consent is an important ethical consideration in research as it upholds the right to self-determination in potential research participants.[21,89] In this study, participants were informed about the details of the study through an information document using plain language, which they were encouraged to read before participation. This document outlined the purpose of the study and discussed possible benefits, risks and cost implications associated with it, or lack thereof. It also described how the data would be handled and used, emphasising that participation in the study would be completely anonymous. Participants could then participate in the study voluntarily, and emphasis was placed on the fact that non-participation or withdrawal from the study would have had no negative implication or penalty to the students.[21,89] Participants could proceed with the pilot or actual study only after providing electronic written consent.[16]

- **Autonomy:** Autonomy is another ethical aspect relating to the self-determination of participants.[21] This was applied through students' freedom to decline to participate in the study, and to ask for further clarity on the research purpose through the provision of the researcher's contact details in the information document.[21] This was further upheld by allowing participants to freely express their opinions, positive or negative, without concern over adverse implications.[16] This was facilitated by including answer variables that were neutral and negative in the data collection tool, and ensuring that responses could not be linked back to participants.

- **Confidentiality and anonymity:** Confidentiality and anonymity are associated with justice and the right to privacy that should be afforded to research participants, and is an important consideration in research.[21,89] In this study, participation in the surveying questionnaire on Qualtrics™ did not require participants to submit identifying data. In addition, the platform did not record the personal information of participants such as email addresses or internet protocol (IP) addresses, ensuring that responses could not be linked to participants at all.[21] The anonymised data was stored on a secure password-protected device and cloud storage following deliberate security measures.[16] Raw data was accessible only to the researcher, research supervisors and statisticians of this study.

- **Protection of personal information:** The Protection of Personal Information Act No. 4 of 2013, often referred to as POPIA, governs the collection, processing and safe storage of the personal information of individuals. This was considered during the research process, which asserts that information collected should be non-excessive and required, collecting

the minimum amount of information required.[96] To this end, the invitation to participate in the study was shared with participants through their respective institution lecturer or course management platform. Personal details, such as names and email addresses of students were not collected by the researcher as they were not required, given that participants were not contacted directly during the research process.

3.11. Conclusion

This chapter provided a thorough breakdown of the methodological steps taken to conduct this research study. The research design was justified and factors relating to the study participants were detailed. The development and application of the data collection tool were discussed and the data collection and analysis process were unfolded. Lastly, considerations related to rigour were examined and the application of ethical principles were outlined.

The methodologic steps described in this chapter were considered in relation to one another in order to facilitate an orderly and practical research process. Through the application of the relevant data collection and data analysis methods, guided by the post-positivist philosophical approach,[83] the researcher was able to obtain findings from the research participants in pursuit of an answer to the research question.

The following chapter will present these results, accompanied by a visual representation of aspects of the data.

CHAPTER 4 – RESULTS

4.1. Introduction

In this chapter, the results of the study were presented. As the results of the survey questionnaire used in this study form part of a larger mixed-method study, some aspects of the questionnaire fell beyond the scope of this quantitative study. For this reason, only results relating to the objectives of this study were presented in this chapter. The results were augmented with visual representations of the data using tables and graphs.

The demographic data of study participants are displayed first, before presenting the results categorised according to the three objectives of the study, namely:

I. To describe the benefits of an international collaborative discussions project for OT students regarding their:
    i. Academic development
    ii. Professional development
    iii. Personal and social growth
    iv. Cultural and diversity awareness
II. To describe the facilitators to OT student participation in an online international collaborative discussions project from the perspective of students.
III. To describe the barriers to OT student participation in an online international collaborative discussions project from the perspective of students.

The data was analysed using descriptive statistics by the researcher as well as the University of Pretoria statistician, who compared and discussed analyses in order to fulfil the objectives of the study. Selected statistical tests, such as Cronbach's alpha reliability measure[92], Cramer's V test of association[90,97] and Fisher's exact test of independence[90,98] were utilised to provide further meaning to the data.

4.2. Demographic information

During data collection, 139 participants consented to partake in the study and completed the surveying questionnaire. Participants involved in the study represented all nine of the institutions involved in the i-DOT project in 2022, but in different proportions. Fifty-three students from the University of Pretoria in South Africa made up 38.13% of the sample, with the largest number of students from a single institution. This was followed by 26 students from the University of Southampton which accounted for 18.71% of all participants. In contrast, the aRTisINCLudum centre in Croatia was represented by just one student participant, accounting

for less than 1% of the study sample. The institutions and country of study participants can be examined more comprehensively in Figure 4.1.

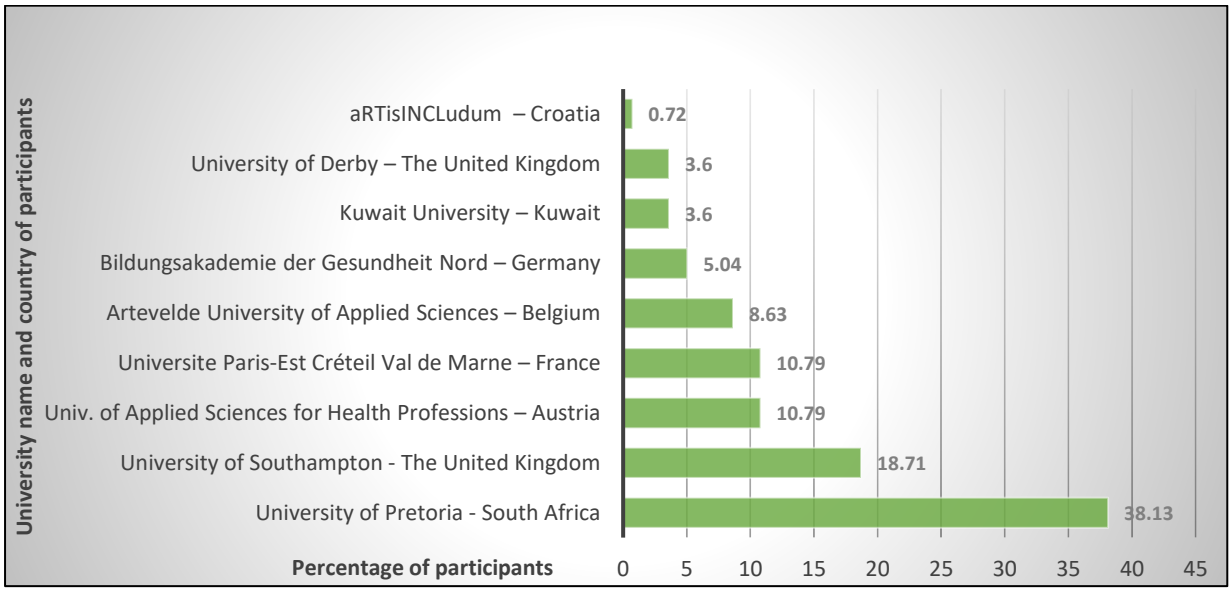

Figure 4.1: Institution and country of study participants

The demographics of the study participants also varied in terms of their age and their year of OT study. Participants ranged between 18 years to 51 years of age, with the most frequently occurring age among participants being 20 years old. The year of OT study of participants ranged from first to fourth year, with the majority of participants being in their second and first year of study respectively. Third and fourth-year students accounted for just 11 participants (7.92%) in the study, representing less than a tenth of the study sample, as can be seen in Table 4.1 below.

Table 4.1: Demographic details of study participants

Demographic component	Results
Age of participants	
Minimum age	18 years
Maximum age	51 years
Mode – Most frequently occurring age	20 years
Mean – Average age across the sample	22.32 years
Year of occupational therapy study of participants	
1st year	41.73%
2nd year	50.36%
3rd year	4.32%
4th year	3.6%

Data related to language was collected to provide the researcher with an insight into study participants' lingual diversity. Figure 4.2 indicates the first language of the study participants.

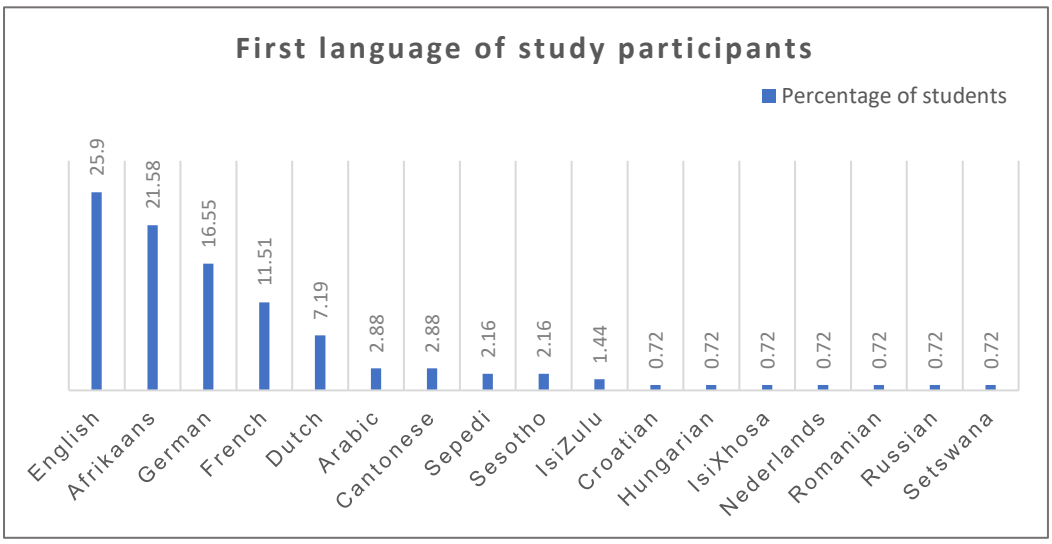

Figure 4.2: First language of study participants

English was the most commonly occurring first language amongst the students, with 36 participants accounting for 25.90% of the sample. This was followed by 30 participants (21.58%) and 23 participants (16.55%) of the sample being first-language Afrikaans and German speakers respectively. The remaining 50 participants, encompassing 36% of the sample, comprised participants who spoke fourteen different languages including French, Dutch, Arabic, Cantonese and Sepedi. Figure 4.3 below indicates the students' self-perceived proficiency in the English language.

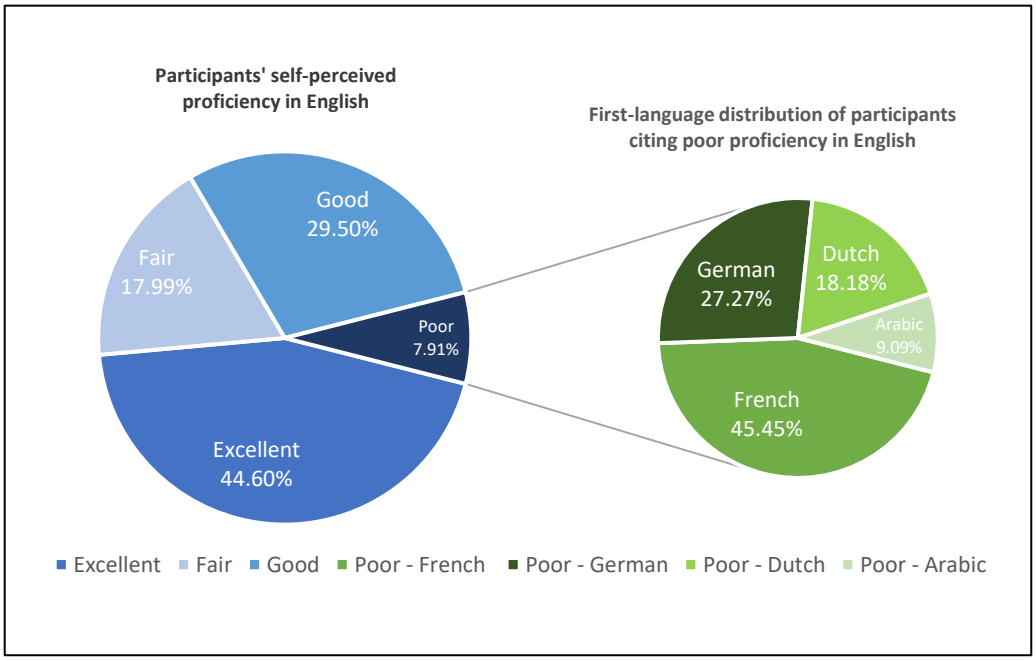

Figure 4.3: English language proficiency of study participants

While just a quarter of the study sample identified English as their first language, 62 participants (44.6%) reported having an excellent proficiency in the language. Only 11 participants (7.91%) of the sample reported having poor proficiency in the English language. These participants had first languages of French, German, Dutch and Arabic. In all, 121 study participants (87,05%) completed the electronic survey in English, while the remaining 18 participants (12,95%) completed it in German.

4.3. Demographic information of participants' international partner

Apart from providing demographic information about themselves, study participants were required to state the institution name and year of study of their international i-DOT partner. The purpose of this was for the researcher to identify trends, if any, and make inferences that may be related to the demographic of participants' foreign counterparts. Data relating to participants' partners are displayed in Table 4.2 below.

Table 4.2: Demographic details of participants' international partners

Demographic component	Results
Institution of participants' international partner(s)	
Artevelde University of Applied Sciences – Belgium	48.2 %
aRTisINCLudum – Croatia	1.44 %
Bildungsakademie der Gesundheit Nord – Germany	3.6 %
Kuwait University – Kuwait	3.6 %
Universite Paris-Est Créteil Val de Marne – France	1.44 %
University of Applied Sciences for Health Professions – Austria	2.88 %
University of Derby – The United Kingdom	8.63 %
University of Pretoria - South Africa	19.42 %
University of Southampton - The United Kingdom	10.79 %
Year of study of participants' international partner(s)	
1st year	18.71 %
1st and 2nd year	5.04 %
2nd year	66.91 %
3rd year	7.91 %
4th year	1.44 %

4.4. Benefits of an international collaborative discussions project to OT students

The questions related to this objective began by addressing students' perceived benefit of the project as a whole and in general. They then focussed on different categories of benefits enjoyed by students related to academic and professional development, personal and social growth as well as the improvement of diversity awareness. These aspects have been presented separately.

When asked whether the i-DOT project was a beneficial learning experience, 69 participants (49.64%) agreed, while a further 39 participants (28.06%) strongly agreed. Combined, five participants (3.6%) either disagreed or strongly disagreed with having a beneficial learning experience. This is illustrated in Figure 4.4 below.

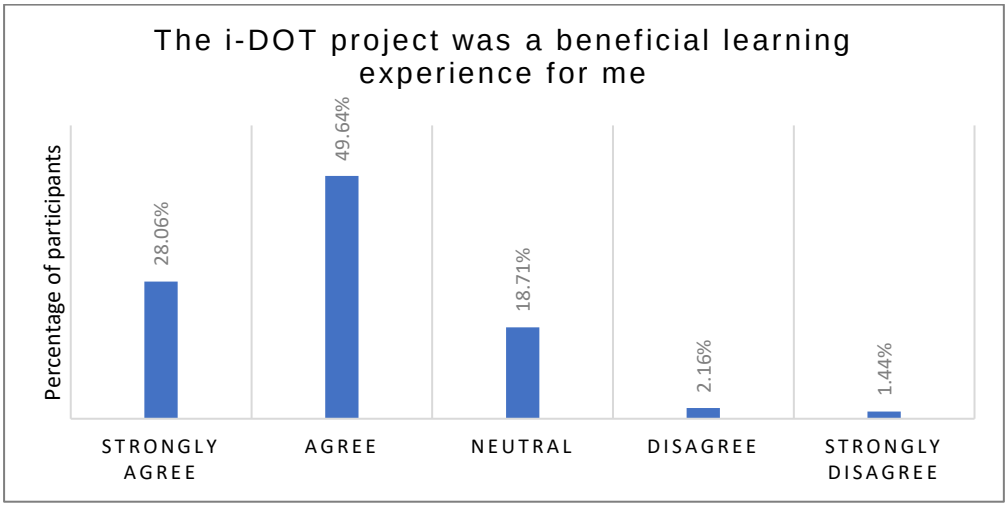

Figure 4.4: The i-DOT project was a beneficial learning experience for me

Upon further investigation into the demographic information of participants, it was noted that those who strongly agreed with the statement represented eight of the nine institutions, and had varying perceived proficiency in the English language, ranging from poor to excellent proficiency. Similarly, participants who disagreed or strongly disagreed also had English proficiency ranging from poor to good, indicating no relationship between proficiency in the language of instruction of the project and the perceived overall benefit of participating in it.

When asked what aspect of the i-DOT project benefitted them the most, participants had varying responses, with just three participants (2.16%) stating that the project did not benefit them at all. Interestingly, the most frequently selected area of benefit was social and interpersonal skills, with 49 participants (35.25%) indicating this option. This was followed by general professional development and diversity awareness, respectively. Notably, just 17 participants (12.23%) cited academic development directly related to occupational therapy as

their main area of benefit during the project. These proportions are displayed in Figure 4.5 below.

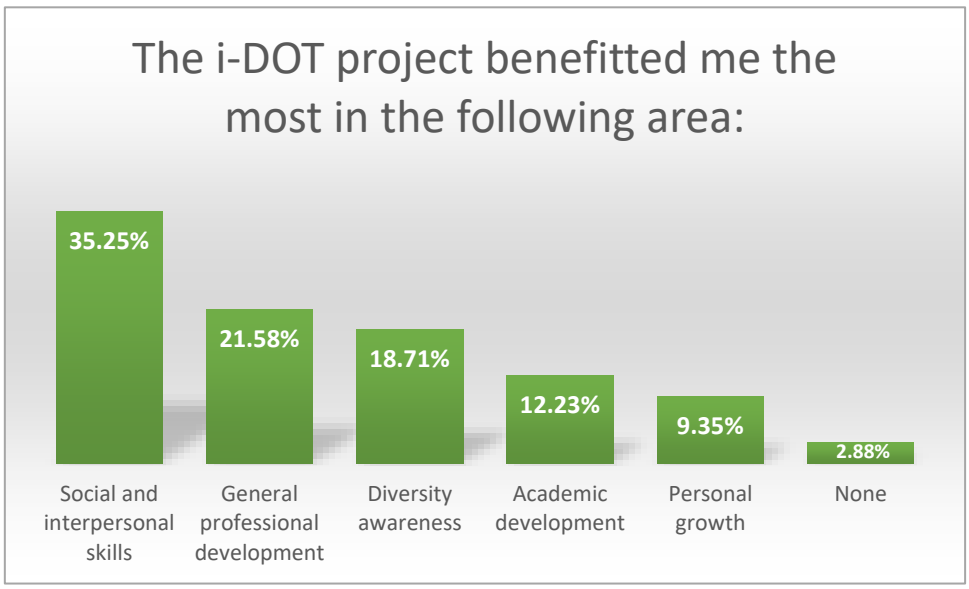

Figure 4.5: Areas of benefit of the i-DOT project

Participants were presented with a statement investigating whether they would have had the same learning experience had the project been done only with students from their own country. This was asked in order to determine whether the international nature of the i-DOT project gave students opportunities for learning and networking beyond what they perceived achievable in local projects. While 13 participants (9.35%) agreed or strongly agreed that they would have had the same learning experience locally, 105 participants (75.54%) disagreed and strongly disagreed with this. When asked whether the participants would have made contact with international students in other ways had they not been involved in the project, no participant strongly agreed, but nine participants (6.47%) agreed that they would have networked with students abroad elsehow. A majority of 110 participants, encompassing 79.14% of the sample disagreed or strongly disagreed with this. For both statements, 14-15% of participants were neutral. Only two participants (1.4%) agreed to both questions, indicating that they would have had the same experience locally as well as being likely to have made contact with foreign students in another way. The Likert plot in Figure 4.6 displays the responses to these two questions.

Upon application of the Cronbach's alpha test for internal consistency[92], an alpha value of α= 0.463 was calculated, indicating a poor internal consistency between these questions. This was understandable as the scope of questions were not completely congruent.

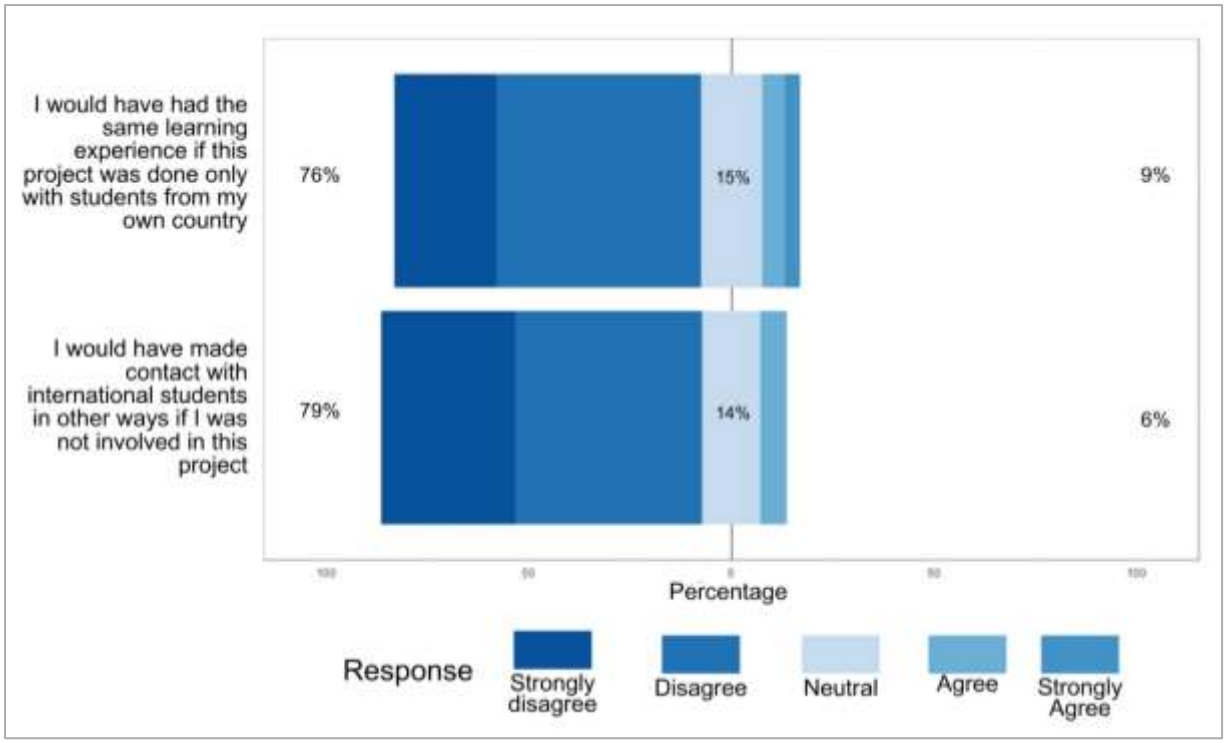

Figure 4.6: Investigating perceptions of the international nature of the i-DOT project

The Fisher's test of independence[90,98] was also performed, which yielded a p-value = 0.002, leading to a null hypothesis. This indicated that there was a dependency between the two questions presented above. Lastly, Cramer's V test of association[90,97] was undertaken to determine the strength of association between the questions. This indicated a statistic of 0.2860 with four (4) degrees of freedom. This indicated a strong association between the questions which were looking to investigate if the i-DOT project offered an opportunity that may not have been enjoyed through a local project.

4.4.1. Academic development

In this study, academic development relates to improvement in OT-specific academic knowledge.[22] Participants were asked whether the i-DOT project provided them with an opportunity for academic learning, to which 103 participants (74.10%) responded in the affirmative. Neutral on the matter was 24 participants (17.27%) with just 12 participants (8.63%) disagreeing that there was academic development opportunity. Upon further analysis, it was noted that participants who disagreed with this question ranged in age from 20 to 44 years old (mean age 25.42 years), and were mostly individuals with excellent proficiency in the English language (75% of negative respondents), but included individuals with good and poor English proficiency too. The 12 negative respondents were from five different institutions,

showing no apparent demographic trend among these participants who disagreed with the question.

In addition, participants were also asked whether the experience of the project improved their insight into occupations in different parts of the world. More participants agreed and strongly agreed with this question compared to the previous question, with 119 participants 85.61% responding in the affirmative. The Likert scale responses to these questions are presented on a Likert plot in Figure 4.7.

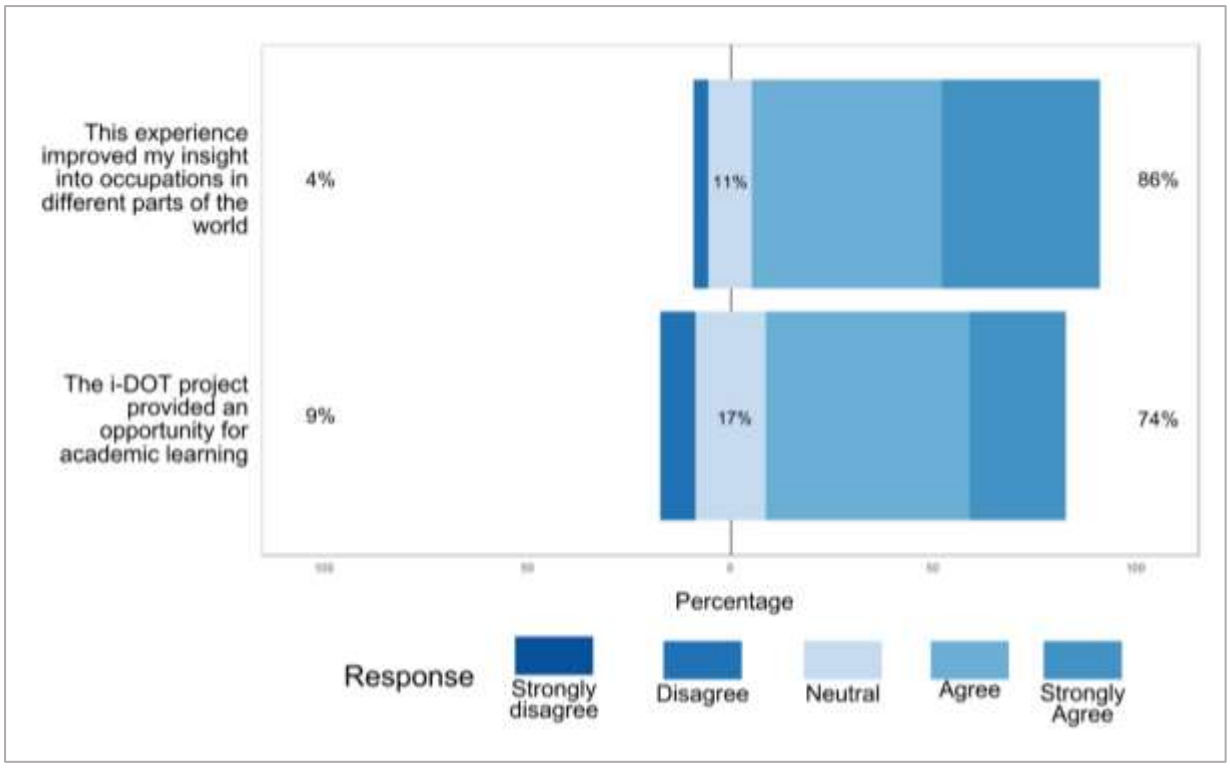

Figure 4.7: Perceived development of academic knowledge of participants

The Cronbach's Alpha test was performed on the two questions to test for internal consistency[92], resulting in a value of $\alpha = 0.581$. This was indicative of poor internal consistency. Cramer's V test was also performed to investigate the strength of the association between the two questions, with a statistic of 0.2897 and three degrees of freedom.[90,97] This indicated a moderate association between them. Lastly, Fisher's test of independence[90,98] was applied showing a p-value of < 0.001, rejecting a null hypothesis of an independent relationship between the questions, thus concluding that there was a dependency between them.

A cross-tabulation of these questions, as shown in Table 4.3, reveals that no participant strongly disagreed to either question on academic development, and only two participants disagreed with both statements. When looking at the response consistency of individual

participants between the two questions, a majority of 37 participants (26.6%) agreed to both of the statements, as highlighted in green in Table 4.3 below.

Table 4.3: Cross-tabulation of responses relating to academic development

		This experience improved my insight into occupations in different parts of the world.					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
The i-DOT project provided an opportunity for academic learning.	Strongly Disagree	0	0	0	0	0	**0 (0%)**
	Disagree	0	2 (1.4%)	4 (2.9 %)	4 (2.9 %)	2 (1.4%)	**12 (8.6 %)**
	Neutral	0	1 (0.7%)	6 (4.3 %)	14 (10.1 %)	3 (2.2%)	**24 (17.3 %)**
	Agree	0	1 (0.7%)	4 (2.9 %)	37 (26.6 %)	28 (20.1%)	**70 (50.3 %)**
	Strongly Agree	0	1 (0.7%)	1 (0.7 %)	10 (7.2%)	21 (15.1 %)	**33 (23.7%)**
	Total	**0 (0 %)**	**5 (3.6 %)**	**15 (10.8 %)**	**65 (46.8 %)**	**54 (38.8 %)**	**139 (100%)**
		Number of participants (percentage of population)					

Participants were asked whether they were able to meet the learning outcomes set out by their institution. The phrasing of the question inquired from students whether they were able to learn what their university or institution intended for them to learn. The responses to this question are depicted in Figure 4.8.

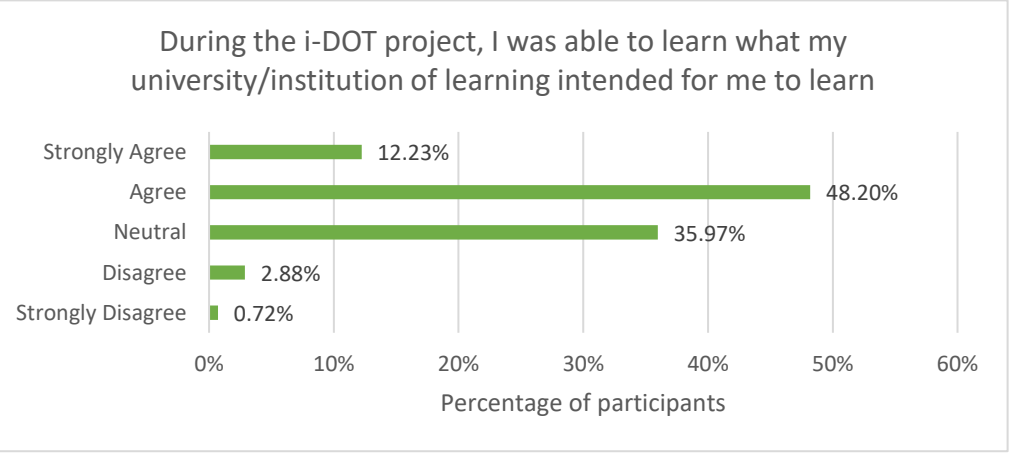

Figure 4.8: Meeting of learning outcomes set by institution

Where students were unsure of what their respective institutions intended for them to learn, they were encouraged to select the "neutral" option. For this question, 84 participants (60.43%) agreed or strongly agreed that they were able to learn what was intended, while just five participants (3.60%) disagreed or strongly disagreed. Owing to the ambiguous nature of the neutral response option to this question, it is unclear whether the 50 participants (35.97%) who selected a neutral response were neutral about their achievement of learning outcomes, or whether they were unsure of what their learning outcomes were altogether.

4.4.2. Professional development

When considering professional development in this study, the development of a professional identity as well as transferrable skills such as soft skills were considered. Participants were presented with a list of transferrable skills over two questions and were asked which of them they developed or improved during the project. More than one option could be selected.

In the first of the two questions, participants were presented with a list of more broad skills that may require sub-competencies to achieve them. A majority of 127 participants (91.37%) indicated that they developed skills in communication during the i-DOT project, while 86 participants (61.87%) identified teamwork and collaboration ability as an area of development. Seventy-nine participants (56.83%) expressed improvement in time management skills, with only 22 participants (15.83%) experiencing development in their leadership skills. As per Figure 4.9 below, five participants (3.6%) did not develop in any of the areas presented to them in this question, and one participant (0.72%) selected "other" without elaborating further.

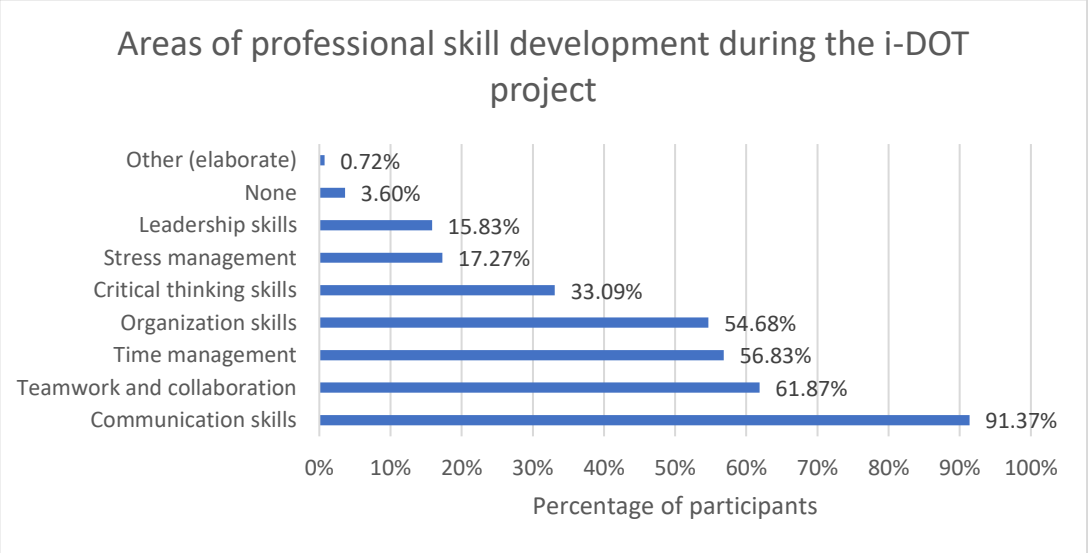

Figure 4.9: Areas of professional skill development during the i-DOT project

When presented with a second list of less broad and more specific professional skills, participants were once again able to select multiple aspects in which they developed or improved. The results are illustrated in Figure 4.10 below.

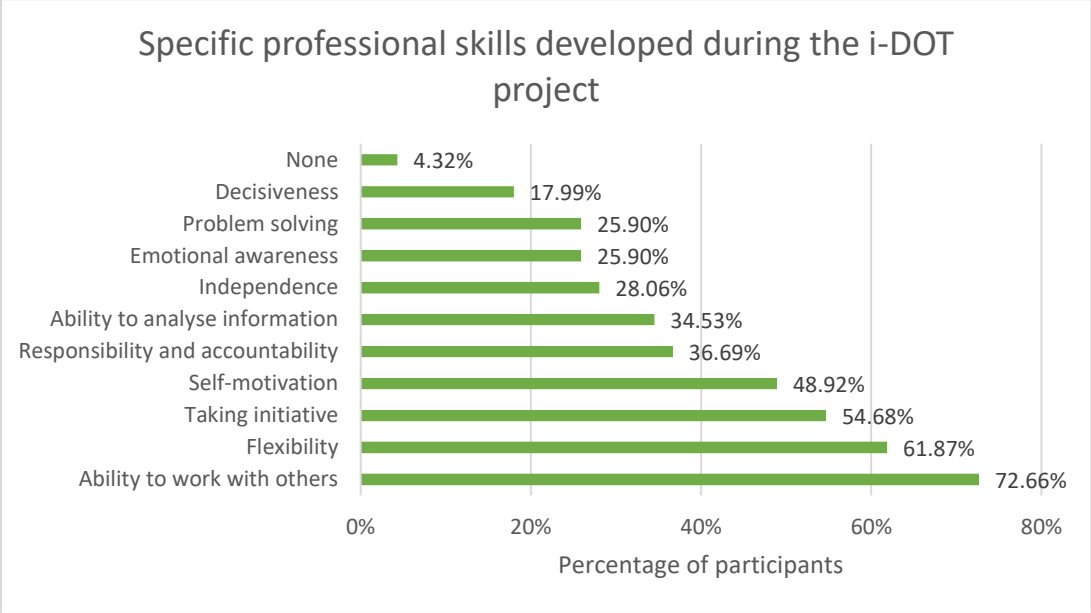

Figure 4.10: Specific professional skills developed during the i-DOT project

Here, 101 participants (72.66%) developed their ability to work with others, while 86 participants (61.87%) improved in terms of being flexible. Between 36 and 39 participants (25.9% and 28.06%), forming a little over a quarter of the sample, grew in terms of problem-solving abilities and independence, respectively. Six participants, representing 4.32% of the sample, did not experience any skill development in the areas listed in this question.

Participants were additionally asked to identify the most important transferrable skill they developed during the i-DOT project. While the responses varied, the most frequently selected skill that participants attributed importance to was communication skills, accounting for 56 participants (40.29%). Meanwhile, just six participants (3.87%) indicated no aspect of importance in terms of professional skill development at all. These responses are tabulated in Table 4.4 below.

Table 4.4: The most important transferrable skill developed during i-DOT

Professional skill	Frequency of selection	% of total responses	% of students citing importance of this skill
Communication skills	56	36.13%	40.29%
Ability to work with others	16	10.32%	11.51%
Teamwork and Collaboration	12	7.74%	8.63%
Time management	12	7.74%	8.63%
Flexibility	10	6.45%	7.19%

Professional skill	Frequency of selection	% of total responses	% of students citing importance of this skill
Taking initiative	9	5.81%	6.47%
Ability to analyse information	8	5.16%	5.76%
Self-motivation	7	4.52%	5.04%
Organisation skills	6	3.87%	4.32%
None	6	3.87%	4.32%
Responsibility and accountability	5	3.23%	3.60%
Critical thinking	2	1.29%	1.44%
Independence	2	1.29%	1.44%
Leadership skills	2	1.29%	1.44%
Emotional awareness	1	0.65%	0.72%
All of them	1	0.65%	0.72%

When asked whether the skills learnt during the i-DOT project could benefit them in future working environments, 111 participants (79.85%) either agreed or strongly agreed, with 23 participants (16.55%) providing a neutral response. Participants were also asked whether the i-DOT project allowed them to develop their identity as a future occupational therapist. To this, 94 participants (67.63%) agreed or strongly agreed. There were more responses in the neutral and negative compared to the previous question, with 10 participants (7.2%) disagreeing or strongly disagreeing with having formed a professional identity. The responses to these questions are presented in the Likert plot in Figure 4.11.

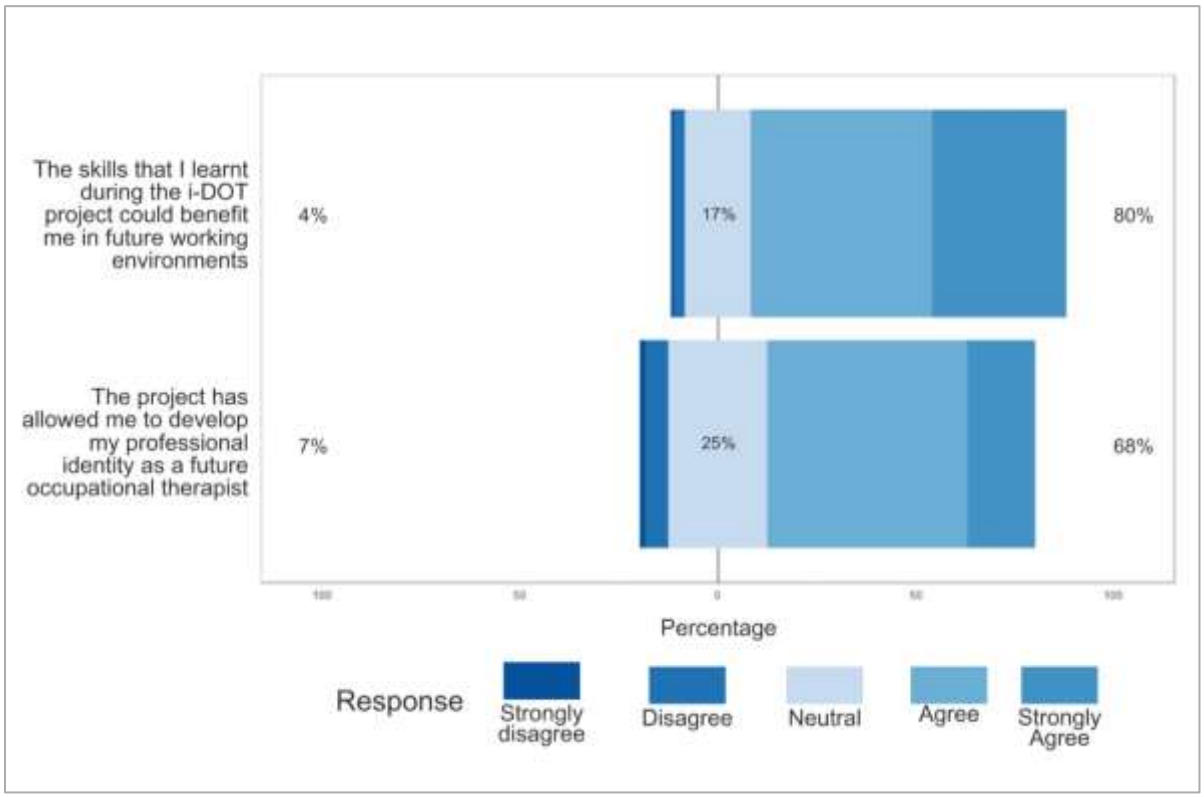

Figure 4.11: Development of transferrable skills and professional identity

The Cronbach's Alpha statistic[92] was performed on the questions, yielding a result of $\alpha = 0.822$, indicating a good internal consistency between these questions, in terms of professional growth. The Fisher's test of independence[90,98] was also performed on the two questions resulting in a p-value of < 0.001, leading to a null hypothesis of an independent relationship between the two (5% significance). Therefore, there was a dependency between the two aspects. Lastly, the Cramer's V test was carried out to test the strength of association between the two questions, with a statistic of 0.4829.[90,97] With four (4) degrees of freedom, it was concluded that there was a strong association between the statements relating to the development of transferrable skills and the development of a professional identity as part of professional development in the i-DOT project.

4.4.3. Personal and social growth

Personal growth in the context of this study refers to personal and internal developments experienced by the students, be it in terms of personal characteristics, general knowledge or their view of the world.

Participants were presented with listed options and were asked to indicate areas where they experienced personal growth. As summarised in Table 4.5, it can be seen that 92 participants (66.19%) experienced growth in their self-confidence, with 59 participants (42.45%) perceiving that they developed in terms of their self-awareness. Fifty-six respondents (40.29%) indicated that they grew in their motivation to learn. A total of 20 participants (14.39%) stated that they did not experience any personal growth during the project. Three participants (2.16%) selected "other", and while one did not elaborate further, the remaining two stated they experienced growth in terms of their communication skills.

Table 4.5: Personal growth during the i-DOT project

Area of personal growth	Frequency of selection	% of participants experiencing personal growth
Confidence in myself	92	66.19 %
Self-awareness	59	42.45%
Motivation to learn	56	40.29%
I did not experience any personal growth	20	14.39 %
Other	3	2.16%

Aside from confidence in oneself, participants were asked, in separate questions, whether they gained more confidence in their knowledge and in their skills during the project. While 101 participants (72.66%) either agreed or strongly agreed to gaining more confidence in their

knowledge, 18 fewer respondents (13% fewer) agreed to gaining confidence in their skills. More participants were neutral regarding gaining confidence in their skills, accounting for 45 responses (32.37%) versus 28 neutral responses (20.14%) regarding confidence in knowledge.

Thereafter, when posed a question regarding the development of general knowledge, 108 respondents (77.7%) agreed in some form that their general knowledge improved through participating in the i-DOT project. Dissimilar sentiments were shared by 10 participants (7.2%), who disagreed.

Lastly, in terms of personal growth, participants were asked whether the i-DOT project allowed them to take ownership of their learning despite not being supervised during meetings. The majority of respondents agreed that it did allow them to take ownership of their learning, with 80 participants (57.55%) agreeing with the statement and a further 29 participants (20.86%) strongly agreeing. Just eight participants (5.76%) stated that they did not have or take on this opportunity.

The results of the four abovementioned questions are depicted together on a Likert plot in Figure 4.12. The Cronbach's Alpha was performed to test for internal consistency between the questions[92], and yielded a result of α= 0.848. This was accepted as having good internal consistency and reliability of the results relating to personal development.

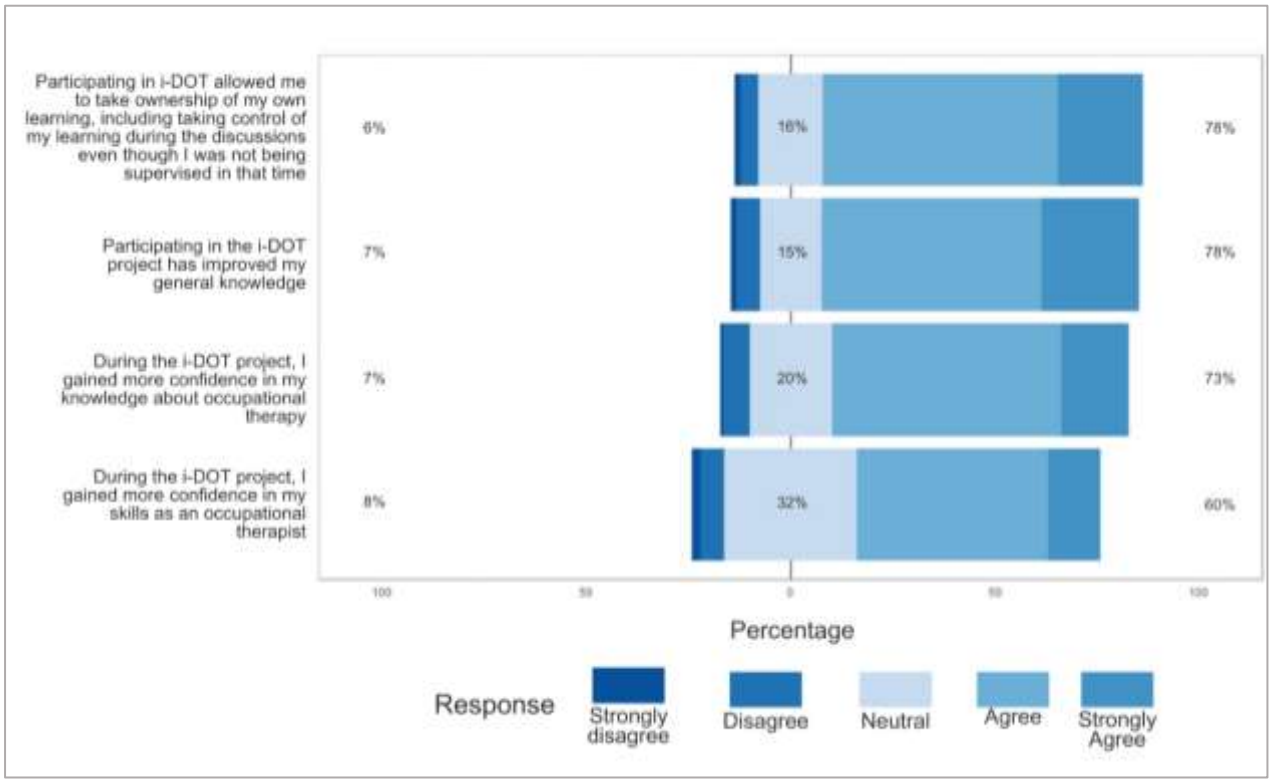

Figure 4.12: Questions investigating personal growth during the i-DOT project

The 20 Participants (14.39%) who indicated not experiencing any personal growth, based on the responses in Table 4.5 discussed earlier were relooked at. Their responses over the subsequent four questions were tracked to ascertain whether they consistently disagreed with experiencing benefits in other areas of personal growth. Interestingly, it was found that the responses of these participants fluctuated and ranged from strongly disagreeing to strongly agreeing with subsequent statements exploring improvement in their general knowledge, confidence in knowledge and skill as well as taking ownership of their learning. This is depicted in Figure 4.13. This plot shows the questions displayed in Figure 4.12, with only the responses of the 20 participants who initially indicated not experiencing personal growth.

The Cronbach's Alpha test[92] was applied to these responses, showing good internal consistency between them, where α= 0.89. In other words, there was reliability in stating that participants who initially expressed no personal growth did not express this sentiment throughout subsequent questions, and that their responses ranging from strongly disagree to strongly agree were consistent.

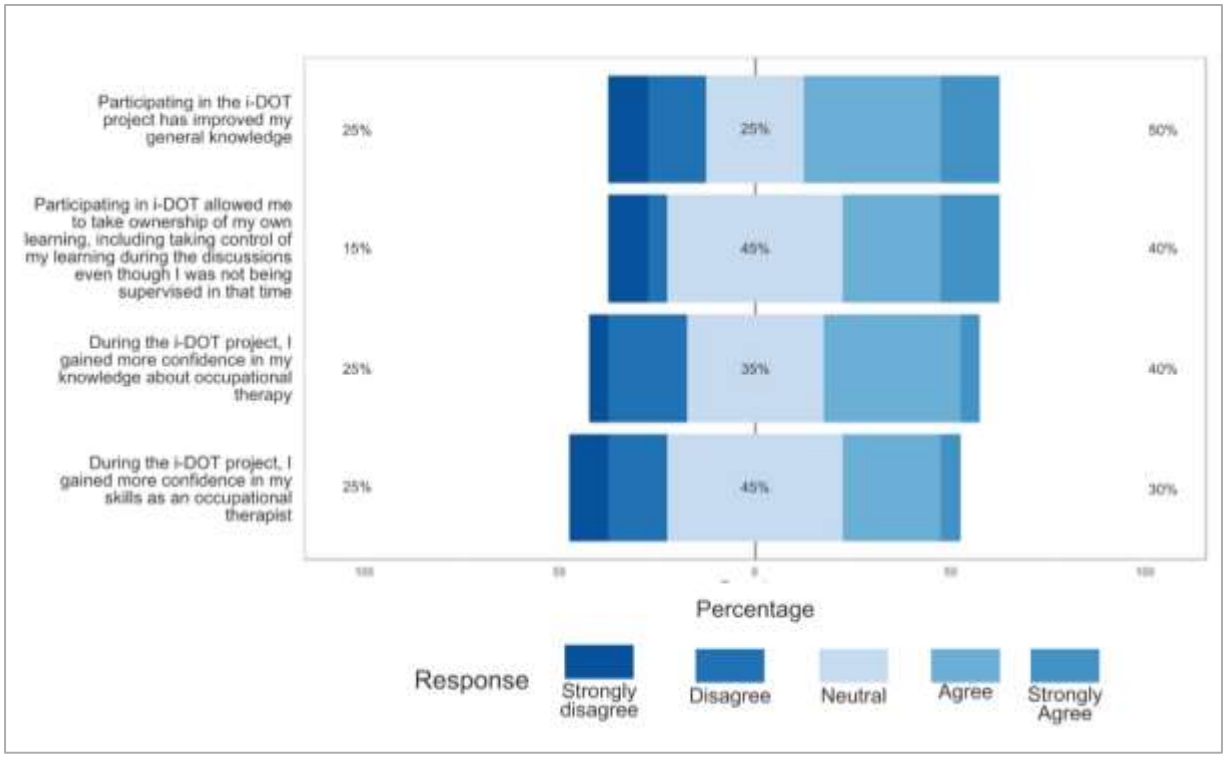

Figure 4.13: Responses of participants who disagreed to experiencing personal growth

In this study, social growth refers to development in the area of interpersonal communication and interaction, as well as the ability to respectfully and meaningfully engage with new people of different backgrounds.

When considering social growth, participants were provided with a list of areas of potential social development and were expected to indicate the areas in which they experienced growth. These results are tabulated in Table 4.6.

Table 4.6: Social growth during the i-DOT project

Area of social growth	Frequency of selection	% of participants experiencing area of social growth
Confidence in communicating with new people	116	83.45%
Skill in active listening	113	81.29%
Ability to respect different views and beliefs of others	97	69.78%
Making new friendships	64	46.04%
I did not experience social growth	6	4.32%

In this, 116 participants (83.45%) indicated gaining confidence in communicating with new people while 113 participants (81.29%) attested to growth in their skill of active listening. Over half of the sample with 97 participants (69.78%) expressed growth in their ability to respect different worldviews and beliefs of others. Just six participants (4.32%) of the sample indicated having no social growth.

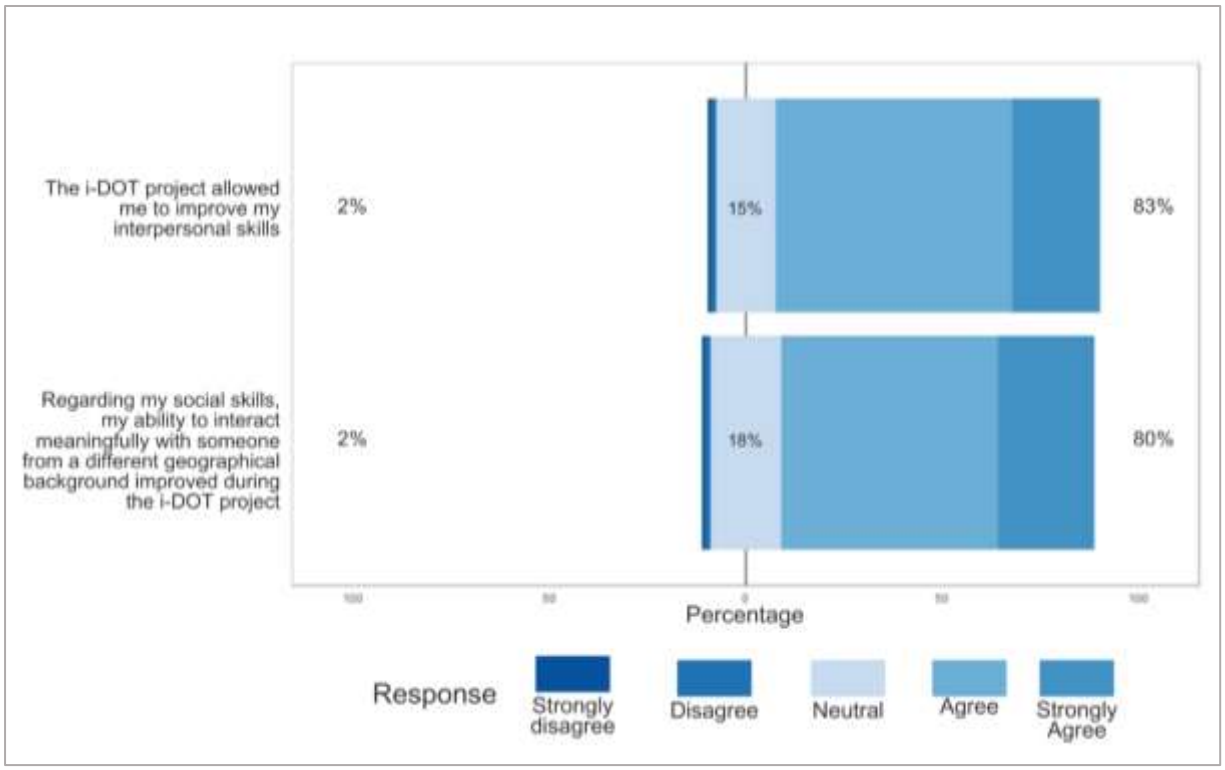

Figure 4.14: Questions investigating interpersonal skill development

Extending from this, participants were asked whether the i-DOT project allowed them to improve their interpersonal skills as well as their ability to interact meaningfully with someone from a different geographic background. The responses to these questions are depicted in the Figure 4.14 above.

The majority of respondents agreed or strongly agreed with both these questions, accounting for 115 participants and 111 participants (82.73% and 79.86%) of the sample, respectively. For both questions, the same proportion of three participants disagreed, accounting for 2.16%. Upon performing the Cronbach's Alpha test for internal consistency[92] on these questions, an alpha value of α= 0.797 was calculated, indicative of an acceptable internal consistency between the results.

A cross-tabulation of these results is provided in Table 4.7. Here, it can be seen that just one participant (0.72%) strongly disagreed with both statements. Participants who simply disagreed with one statement either agreed or were neutral regarding the other. The most consistently selected response across the two statements on social skills were that of agree, accounting for 62 responses (44.6%) as highlighted in green in the table.

Table 4.7: Cross-tabulation of participants responses on social growth

		Regarding social skills, my ability to interact meaningfully with someone from a different geographical background improved during the i-DOT project					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
The i-DOT project allowed me to improve my interpersonal skills	Strongly Disagree	1 (0.7 %)	0	0	0	0	**1 (0.7 %)**
	Disagree	0	0	2 (1.4 %)	0	0	**2 (1.4 %)**
	Neutral	0	0	14 (10.1 %)	7 (5 %)	0	**21 (15.1 %)**
	Agree	0	2 (1.4 %)	8 (5.8 %)	62 (44.6 %)	12 (8.6 %)	**84 (60.4 %)**
	Strongly Agree	0	0	1 (0.7 %)	8 (5.8 %)	22 (15.8 %)	**31 (22.3 %)**
	Total	**1 (0.7 %)**	**2 (1.4 %)**	**25 (18 %)**	**77 (55.4 %)**	**34 (24.5 %)**	**139 (100%)**
		Number of participants (percentage of population)					

4.4.4. Cultural and diversity awareness

Cultural and diversity awareness refers to the respectful recognition and awareness of differences or similarities among diverse populations in terms of culture as well as aspects such as religion, lifestyle, language and geographic location.[27]

Participants were asked what aspects of diversity they were able to learn from their foreign partner(s) during the i-DOT project. Participants were able to select more than one statement in their response to this question. These results are placed in Figure 4.15. A group of 115 participants (82.73%) indicated that they learnt something about their foreign partner's country that they did not know before, while 75 participants (53.96%) indicated learning something new about their foreign partner's culture. Some participants did not learn anything they did not already know, accounting for 11 responses (7.91%) of the sample.

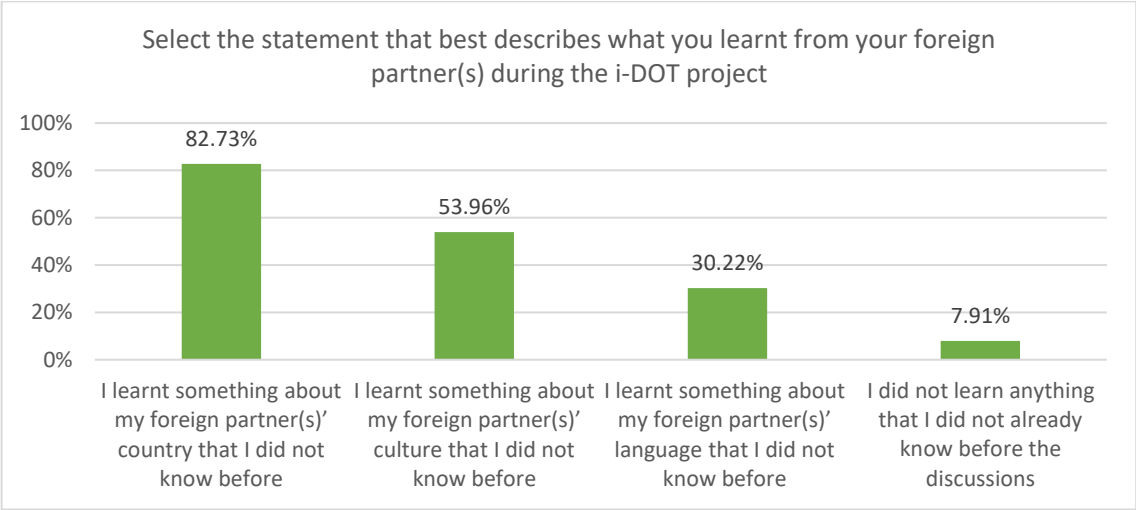

Figure 4.15: Participants' areas of learning related to diversity

Thereafter, participants gave their perspectives on whether having discussions with people from a different country made them more aware of diversity, beyond what they already knew about diversity in their own country. To this, 28 participants (20.14%) were neutral while the majority of 99 participants (71,22%) either agreed or strongly agreed. A small proportion of 12 respondents (8.63%) disagreed.

They were then asked whether they, following their experience of the project, had a better understanding of how cultural and geographical backgrounds affect occupation respectively. For these questions, 98 and 103 participants (70.50% and 74.10%) agreed in some form, respectively. Nine participants (6.47%) disagreed about gaining an understanding of the effect of culture on occupation, while 3 participants fewer (2% fewer) disagreed regarding their understanding related to geographical background.

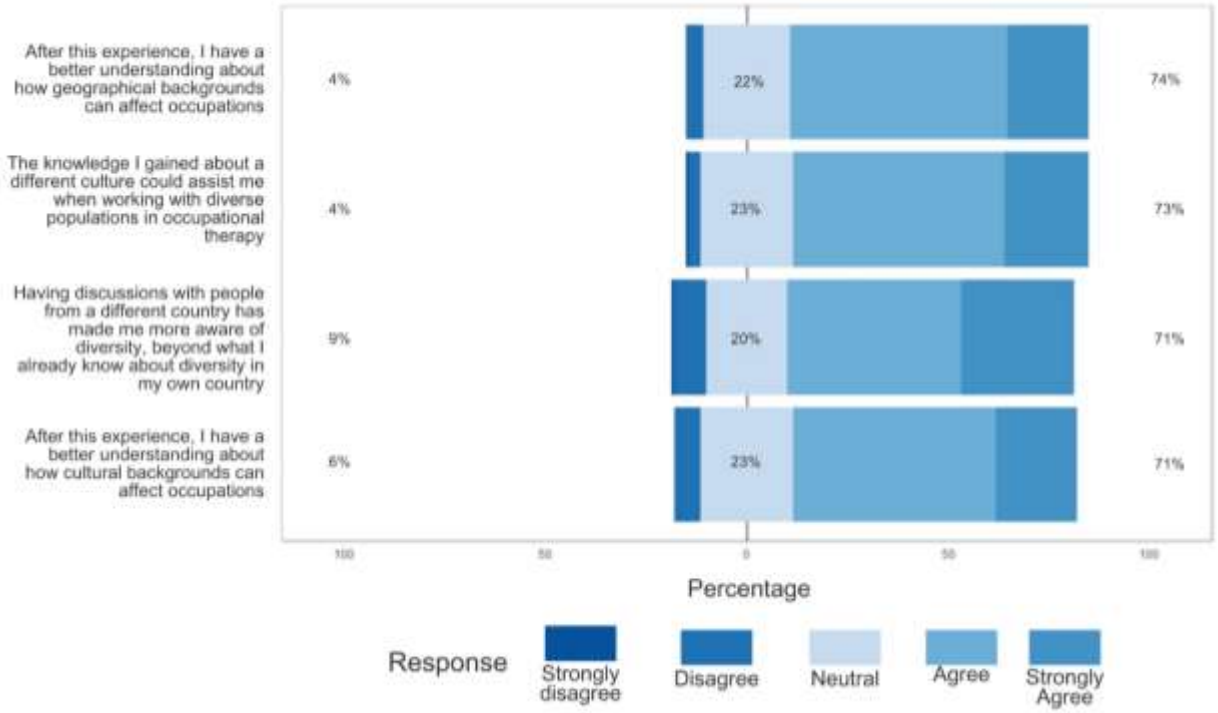

Figure 4.16: Questions investigating diversity awareness

Finally, respondents provided insight into whether the knowledge they had gained about a different culture could assist them when working with diverse populations in OT. In similar proportions to the responses above, 102 participants (73.38%) either agreed or strongly agreed, while five participants (3.6%) felt that the knowledge would not assist them. The responses to the four questions described above are illustrated in Figure 4.16. The Cronbach's Alpha statistic was performed on the 4 questions and yielded a result of α=0.831, which was indicative of a good internal consistency, and reliability between these responses.[92]

Lastly, the responses to the questions on newfound diversity awareness, and the possible effect of new knowledge on OT practice are depicted in a cross-tabulation in Table 4.8. It can be seen in the red outlined table cells that just three participants disagreed in some form with both statements, making up 2.1% of the sample. The remaining participants who disagreed with one question may have agreed or were neutral for another. A key example was that five participants (3.6%) who disagreed that the discussions made them more aware of diversity, went on to agree that the knowledge they gained on culture could assist them in working with diverse populations in OT.

Table 4.8: Cross-tabulation of responses on relating to diversity awareness

		The knowledge I gained about a different culture could assist me when working with diverse populations in occupational therapy.					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Having discussions with people from a different country has made me more aware of diversity, beyond what I already know about diversity in my own country.	Strongly Disagree	0	0	0	1 (0.7 %)	0	**1 (0.7 %)**
	Disagree	1 (0.7 %)	2 (1.4 %)	3 (2.2 %)	5 (3.6 %)	0	**11 (7.9 %)**
	Neutral	0	0	12 (8.6 %)	14 (10.1 %)	2 (1.4 %)	**28 (20.2 %)**
	Agree	0	2 (1.4 %)	11 (7.9 %)	40 (28.8 %)	4 (2.9 %)	**60 (43.2 %)**
	Strongly Agree	0	0	6 (4.3 %)	13 (9.4 %)	20 (14.4 %)	**39 (28.1 %)**
	Total	**1 (0.7 %)**	**4 (2.9 %)**	**32 (23.0 %)**	**73 (52.5 %)**	**29 (20.9 %)**	**139 (100%)**
		Number of participants (percentage of population)					

Having looked at the various areas of benefit separately, the researcher wished to ascertain whether participants who indicated that the i-DOT project was not a beneficial learning experience for them towards the start of the survey, consistently responded negatively to the subsequent questions on specific benefit areas. The responses of these five respondents (3.6%) were tracked over six questions in the survey. These are summarised in Table 4.9 below.

Table 4.9: Question responses of participants (n=5) who disagreed to having a beneficial learning experience during i-DOT

Question	**Applicable answer variables**	**Responses** (Number and % of participants)
The i-DOT project provided an opportunity for academic learning.	Neutral	3 (60.0%)
	Disagree	2 (40.00%)
The skills that I learnt during the i-DOT project could benefit me in future working environments.	Agree	2 (40.0%)
	Neutral	1 (20.0%)
	Disagree	2 (40.0%)

Question	Applicable answer variables	Responses (Number and % of participants)
Regarding social skills, my ability to interact meaningfully with someone from a different geographical background improved during the i-DOT project.	Agree	1 (20.0%)
	Neutral	3 (60.0%)
	Strongly Disagree	1 (20.0%)
Having discussions with people from a different country has made me more aware of diversity, beyond what I already know about diversity in my own country.	Agree	3 (60.0%)
	Neutral	2 (40.0%)
The knowledge I gained about a different culture could assist me when working with diverse populations in occupational therapy	Agree	1 (20.0%)
	Neutral	3 (60.0%)
	Disagree	1 (20.0%)
I would recommend discussion projects like i-DOT for future occupational therapy students	Strongly agree	1 (20.0%)
	Agree	1 (20.0%)
	Neutral	2 (40.0%)
	Disagree	1 (20.0%)

From the table, it can be seen that the respondents were not consistently negative across subsequent questions. Of the sample of 139 respondents, no participant disagreed or strongly disagreed with every question investigating the benefits experienced during the i-DOT project. This has been discussed further in Chapter Five.

4.5. Facilitators to OT student participation in an international collaborative discussion project

The facilitators to participation in an online discussions project were investigated in two ways; that was by looking at facilitators that were present or implemented during the i-DOT project as well as students' recommendations on aspects that could have been implemented to facilitate their involvement. The word "facilitator" itself was not used in the survey as the term may have been misinterpreted by participants not proficient in the English language.

In a text response question, participants were asked to describe any useful methods they used to deal with the challenges that they experienced during the i-DOT project. This aimed to bring about student-directed facilitators to participation that were implemented during the i-DOT project. The responses were analysed and coded, and are summarised in Table 4.10.

Table 4.10: Useful methods to deal with challenges during the i-DOT project

Useful Method implemented	Frequency of response	% of participants who utilised this method
No useful method used	33	23.74%
Strategies to augment communication	41	29.50%
Adequate planning by students	30	21.58%
Flexibility of students	19	13.67%
Effective communication between partners	18	12.95%
Use of more than one ICT platform	6	4.32%
Guidance from a mentor	5	3.60%
Miscellaneous	5	3.60%

Thirty-three participants (23.74%) indicated that they made use of no methods to deal with the challenges experienced. The most frequently mentioned useful method was strategies to augment communication, used by 41 participants (29.50%) when faced with a language barrier. These strategies included intentional simplification of language used, use of descriptions and explanations to deliver ideas, the use of gestures when communicating as well as the use of visuals such as images or slideshows to supplement the discussions. Some participants also prepared relevant vocabulary for the discussions in advance, made use of an in-person translator in the form of a classmate, as well as used a similar non-English language to reinforce ideas (e.g. Use of Dutch and Afrikaans in the same session). Furthermore, 19 of these participants (13.67%) mentioned the use of language translation software to translate words in real-time during discussions.

Adequate planning for the discussions by the participants themselves was the second most frequently mentioned method, by 30 respondents (21.58%) of the sample. This included preparation of technology, preparation of questions and online research before the discussions. For South African students, adequate planning also included the consideration of loadshedding times and the need for a generator as an alternative source of power.

Five participants (3.60%) revealed that seeking guidance from their mentor was a useful strategy that they employed to deal with their challenges. Once again, this method was unique to South African students as the only cohort formally engaged in mentorship during the project at the time of the study.

In another open-ended question, participants were asked what worked well during the preparation of the i-DOT project, that should remain the same. This question aimed to capture educator-lead or project-directed facilitators relating to the preparation of the project. Thirty-

six participants (25.90%) cited that effective preparation by OTEs was an aspect that worked well and should remain the same. This included enthusiasm from their OTE. A further 22 participants (15,83%) noted that the matching process of the i-DOT project worked well, which included the simple online registration process, the partnering of students from the same institutions before entering into the discussions, as well as the freedom for participants to make direct contact with one another informally using various platforms such as WhatsApp™ or Facebook™.

The online exchange itself was supported by 17 participants (12.23%), with the details of their responses relating to the success of the discussions being held online, that they happened in one language and that they began with an informal introductory session for students to meet one another prior to the main discussions. Sixteen participants (11.51%) mentioned that the provision of important information resources and guiding questions on relevant topics for their discussions was successful. The coded responses to this question have been outlined in Table 4.11 below.

Table 4.11: Aspects that worked well and should remain the same

Aspects that worked well and should remain the same	Frequency of response	% of participants citing the aspect
Effective preparation by OTEs	36	25.90%
Not stated	22	15.83%
The i-DOT Matching Process	22	15.83%
Online exchange between students	17	12.23%
Guiding questions and information material	16	11.51%
Mentorship	13	9.35%
Time considerations	11	7.91%
Miscellaneous	8	5.76%
Everything about the project	4	2.88%
Variety of countries involved	2	1.44%

The benefit of student mentorship arose once again with 13 participants 9.35% having cited it in their response to this question. Eleven participants (7.91%) asserted in their text response that the time considerations of the project worked well, stating that there was sufficient time allocated for the discussions to take place. This was in keeping with participants' responses to direct questions on the time allocation of the project.

When participants were asked their opinion on the length of the i-DOT project, which takes place over a period of one month, 103 respondents (74.10%) indicated that the length was adequate. This is expressed in Figure 4.17 below.

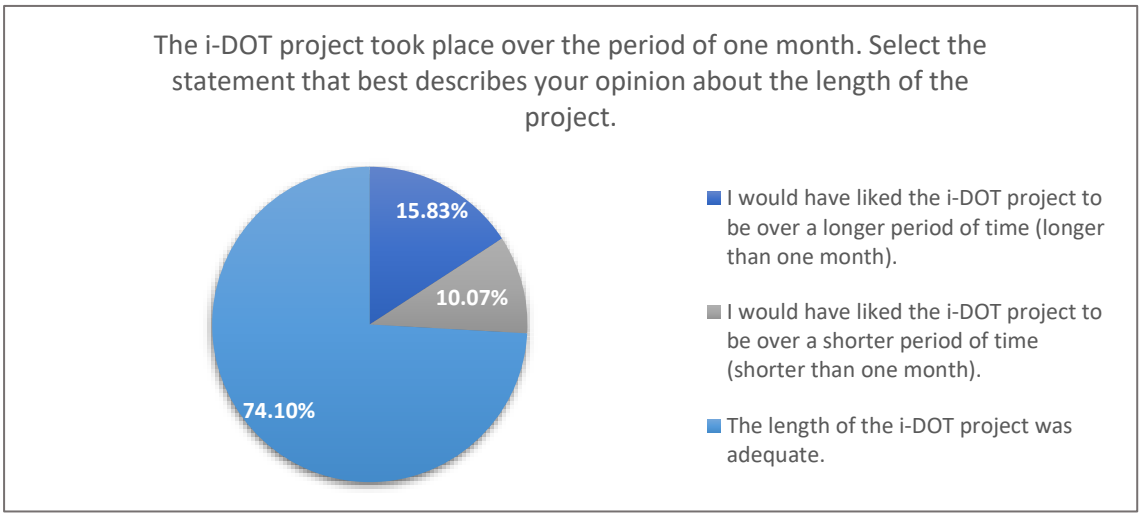

Figure 4.17: Statement that best describes your opinion about the length of the project

When prompted on their opinion on the number of discussion sessions required for the project, which is between two and three sessions, 109 respondents (78.42%) stated that the number of sessions were adequate. This is shown in Figure 4.18 below.

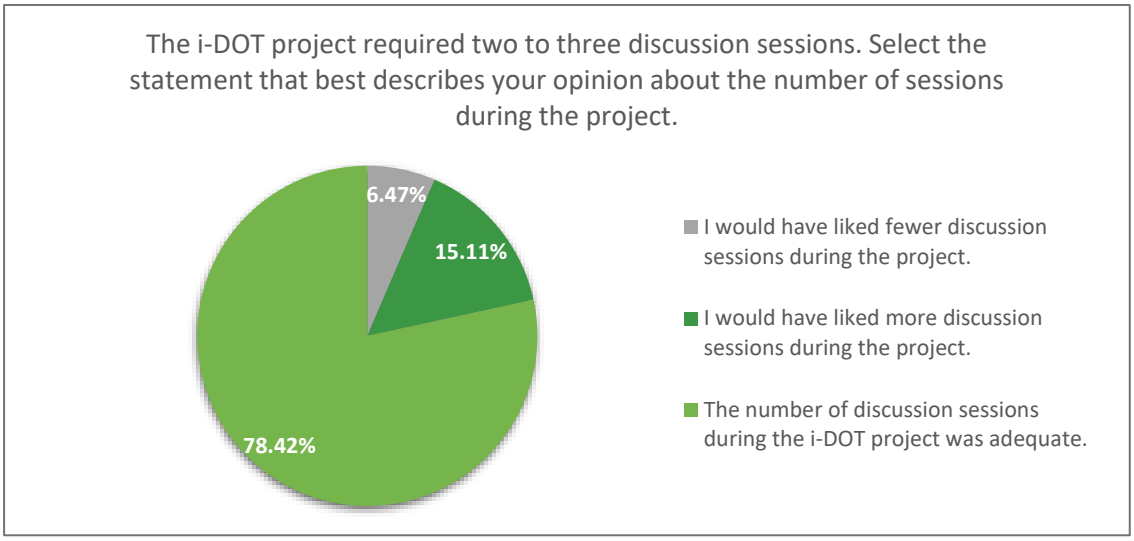

Figure 4.18: Statement that best describes your opinion about the number of sessions during the project

Participants were asked in another open-ended question how this learning experience could be improved. This was to investigate potential facilitators that could be implemented in future projects. Text responses were coded and are presented in Table 4.12.

Table 4.12: How can this learning experience be improved?

Aspects that may be improved	Frequency of response	% of participants citing aspect
No recommendation provided	41	29.50%
Better preparation by OTEs prior to project	41	29.50%
Discussion format and topics	13	9.35%
Time-related considerations	11	7.91%
More input from OTEs during and after project	10	7.19%
Consistency between student requirements	7	5.04%
Exposure to more countries	6	4.32%
Miscellaneous	6	4.32%
Allocation of academic marks for participation	5	3.60%
Streamlined matching and pairing process	5	3.60%

While a third of participants could not think of any improvements, another 41 participants (29.50%) recommended better preparation for the project by their OTE. In addition, 10 participants (7.19%) recommended having more input from OTEs during the project. This includes supervision during the project, assistance with language barriers and facilitation of a reflection or debrief following the project. Thirteen participants (9.35%) recommended improvements in the discussion topics and the format of discussions which may speak to the frequency or intensity of discussions.

In order to determine whether the allocation of academic marks for participation in i-DOT affected motivation, and thus acted as a facilitator, the following questions were asked. Participants were asked to rate how motivated they were during the i-DOT project on a scale of one to ten, where ten indicated being fully motivated while one indicated not being motivated at all. Details on their selection can be seen in Table 4.13.

Table 4.13: Participant rating of motivation level during the i-DOT project

Statistic	Result
Minimum value	2
Maximum value	10
Median	7
Mean (Standard deviation)	6.73 ±
Mode	8

The most frequently occurring level of motivation was rated as eight, accounting for 20% of participants. The highest level of motivation was ten, selected by 14 participants (10.07%) while the lowest level selected was two, selected by four participants (2.88%). The 14

respondents who rated their motivation as 10/10, as well as the 23 respondents (16.55%) who rated their motivation as 5/10 or lower both represented various ages, first languages, language proficiency in English, institutions and years of study. There were no noteworthy trends between student motivation and their demographic information for this question.

The subsequent question was organised with two variables. Participants needed to comment on the nature of their motivation, being either internal, external or absent, as well as indicate whether or not they were being graded for participating in the project. These responses are furnished in Table 4.14. A majority of 83 participants indicated that they were internally motivated to participate in the project, accounting for 59.51% of the sample. Twenty participants (14.39%) stated that their motivation was internal even though they were working towards the achievement of academic marks for their involvement.

A total of 50 participants (35.97%) expressed that they were externally motivated to participate in the project, mainly because participation was compulsory but also for other reasons not further investigated. Only six participants (4.32%) stated that they were externally motivated due to them receiving academic marks. The same number of participants expressed that they were not motivated at all.

Table 4.14: Nature of participants' motivation during the project

Statement	Frequency of response	% of participants
I was internally motivated to participate in the i-DOT project even though I was receiving marks for it.	20	14.39%
I was internally motivated to participate in the i-DOT project even though I was not receiving marks for it.	63	45.32%
I was externally motivated to participate in the i-DOT project because I would be getting marks for it.	6	4.32 %
I was externally motivated to participate in the i-DOT project because participation was compulsory.	23	16.55 %
I was not receiving marks for the i-DOT project, but I was externally motivated for other reasons.	21	15.11%
I was not motivated to participate in the i-DOT study	6	4.32 %

Table 4.15 has demonstrated a cross-tabulation comparing the number of participants who reported being motivated and amotivated to whether or not they were graded for their involvement in the project, based on their institution’s requirements. Five of the six participants who reported that they were not motivated to participate in the project were, in fact, being graded for their participation, while only one participant was not. Of the participants who were

motivated to participate, the majority of participants were not being graded for their participation.

Table 4.15: Cross-tabulation of participant motivation vs grading

Graded	Motivated		*Total*
	No	Yes	
No	1 (0.7 %)	99 (71.2 %)	**100 (71.9 %)**
Yes	5 (3.6 %)	34 (24.5 %)	**39 (28.1 %)**
Total	**6 (4.3 %)**	**133 (95.7 %)**	**139 (100 %)**

The relationship between these variables was further investigated using Fisher's exact test generating a p-value of 0.007.[90,98] This leads to a null hypothesis for an independent relationship rejected at 5% significance, showing that there was a dependency between students' motivation and whether they are graded. The result of Cramer's V = 0.261 at one degree of freedom signified that the association between the variables was weak.[90,97]

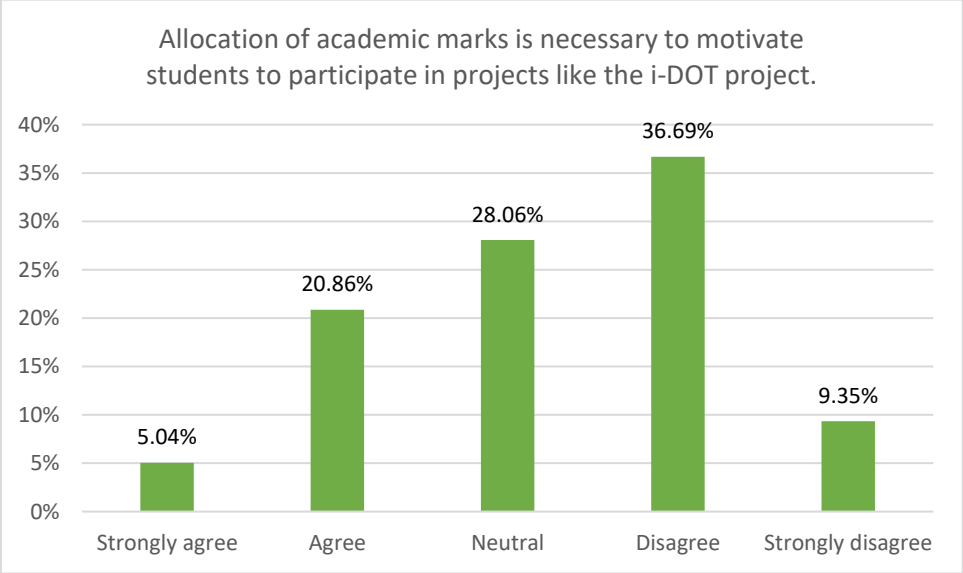

Figure 4.19: Allocation of academic marks is necessary to motivate students to participate

Finally, participants were questioned directly on whether the allocation of academic marks was necessary to motivate students to participate in projects like the i-DOT project. Their Likert scale responses in Figure 4.19 show that participants' views on this varied, however, the majority of participants disagreed with the statement. For this reason, it appears that the allocation of academic marks did not facilitate students' participation in the project.

4.6. Barriers to OT student participation in an international collaborative discussion project

Challenges and barriers to student participation in the project were investigated. In the survey, the word “barrier” was not used due to possible difficulties in the interpretation of the word for foreign language participants. The word “challenge” was used instead, and for this reason, has been used interchangeably with the word barrier when presenting the results. In question forty-five of the survey (Q45), participants were provided with a list of potential barriers and challenges that emerged from the literature, as outlined in Chapter Two, and were asked to indicate which of those challenges they experienced. Subsequently, in question forty-seven (Q47), participants were asked to provide text responses on challenges that they experienced which were not mentioned in Q45. Following content analysis of the text responses, the data from both questions were pooled and compared, and the repetition of challenges mentioned by participants across the two questions were removed.

Table 4.16 has illustrated the challenges experienced by participants. Participants’ text responses in Q57 that stated that no challenges were experienced *in addition* to those already selected in Q45, were not included. A total of three participants (2.16%) indicated across both questions that they did not experience any barriers at all.

The most commonly identified challenge, based on the responses from participants, was the experience of language barriers accounting for 61 responses (43.88%), followed by challenges with scheduling suitable times with partners which garnered agreement from 60 participants (43.17%). Loadshedding was a barrier that was unique to South African students, affecting 10 participants (7.19%). No single barrier or challenge affected a majority of the participants. Challenges around interpersonal skills, which affected 11 participants (7.91%), included difficulty relating to someone from a different cultural background; not knowing what to ask or say during meetings; being introverted and inability to strike up a conversation. Miscellaneous barriers included challenges that were mentioned once-off, such as misinterpretation of questions during the i-DOT meetings unrelated to language; feeling compelled to participate in the project as well as stress; need for additional time during discussions and personal challenges affecting participation.

Table 4.16: Challenges experienced during the i-DOT project

Challenge experienced	Q45: Frequency	Q47: Frequency	Total count	% of participants who experienced the challenge
Language barrier	58	3	**61**	43.88%
Scheduling suitable times with my partner	55	5	**60**	43.17%
Challenges with internet connectivity	54	1	**55**	39.57%
Communication difficulties	42	0	**42**	30.22%
Technological difficulties	35	0	**35**	25.18%
Limited understanding of what was expected	24	4	**28**	20.14%
Understanding or navigating time zones	17	2	**19**	13.67%
Interpersonal skills	7	4	**11**	7.91%
Loadshedding	0	10	**10**	7.19%
Partner student dynamic	4	4	**8**	5.76%
Miscellaneous	0	8	**8**	5.76%
Busy academic schedule	0	6	**6**	4.32%
Different student requirements	0	2	**2**	1.44%
None	3	0	**3**	2.16%

Participants were directly asked whether language negatively affected their ability to communicate and share ideas with their foreign counterparts. The results showed that 19 participants (13.67%) agreed, while a further eight participants 5.76% strongly agreed that language affected their communication. A majority of 95 participants (68.35%) were in disagreement. This was in keeping with the pooled responses from Q45 and Q47 above, where less than 50% of participants stated that language barriers were a challenge that they experienced.

When provided a statement suggesting that cultural differences between foreign partners made it difficult to interact meaningfully, a majority of 118 participants disagreed or strongly disagreed with this, making up 84.89% of the responses. Notably, 15 participants (10.79%) did however find that cultural differences affected their interactions. These participants ranged in age from 18 to 51 years old and were from five different institutions. These respondents had different levels of proficiency in English, from poor to excellent, and represented ten (10) different first languages. Considering this, there was no evident demographic trend among the participants who indicated that cultural differences affected meaningful exchange. Findings from these statements relating to the effect of language and cultural differences on communication and interaction are depicted in Figure 4.20 below.

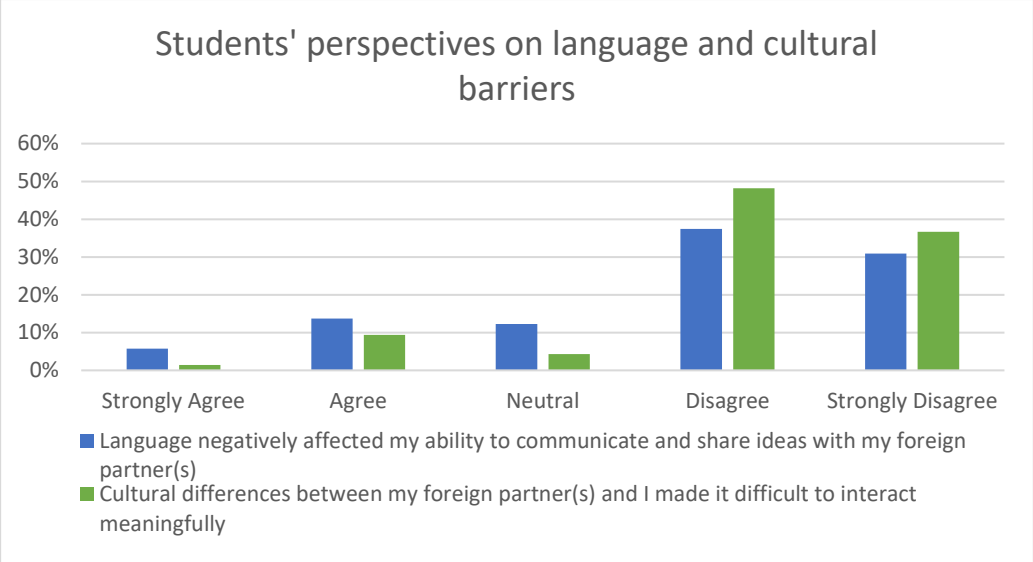

Figure 4.20: Students' perspectives on language and cultural barriers

As digital literacy could have affected students' participation in online collaboration, as per available literature, participants in this study were directly asked whether they had sufficient technological skills to participate in the i-DOT project, including skill in selecting and using the appropriate software. Most participants (126 respondents, 90.65%) indicated that they did have sufficient skill in this regard, with a minority of just four participants (2.88%) who may have experienced challenges in this regard. These responses have been displayed on the pie chart in Figure 4.21.

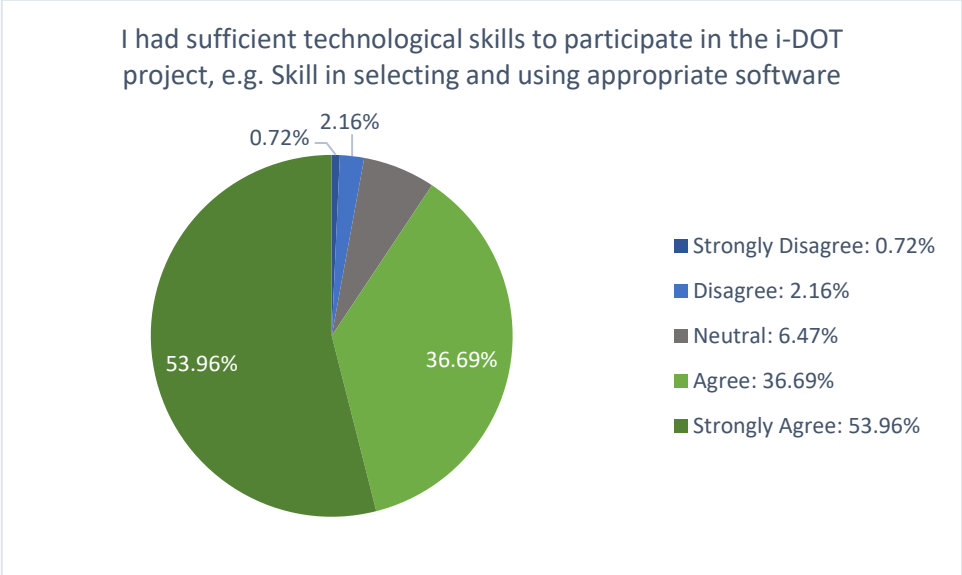

Figure 4.21: I had sufficient technological skills to participate in the i-DOT project

A question was posed to the participants to ascertain whether a difference in the academic year of study of their foreign partner potentially acted as a barrier to their participation and

learning or not. Participants were asked to comment on the impact the year of study of their partner had on their discussions, where the foreign partner was in a different academic year. A third of the respondents selected the “not applicable” option, indicating that their foreign partner was in the same year of study.

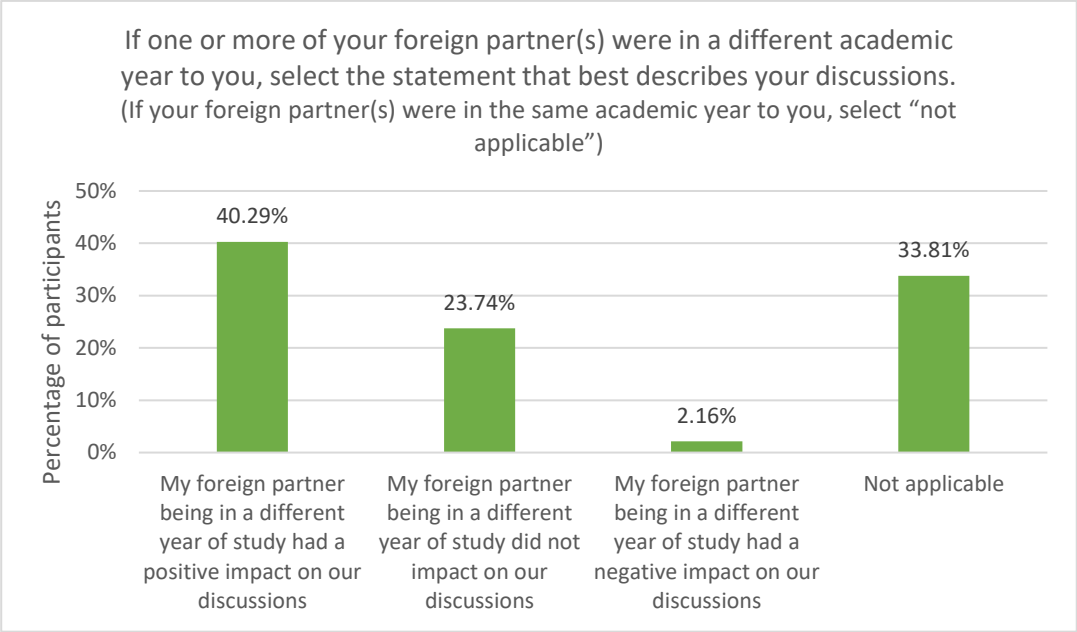

Figure 4.22: Effect of foreign partner's year of study on discussions

Ninety-two participants (66.19%) had partners in a different year of study, and of these, just three participants, making up 2.16% of the study sample, indicated that it had a negative impact on their discussions. Two of these participants had foreign partners who were two academic years below them, and the third participant had a foreign partner who was one academic year ahead of them. The remaining participants found that the different years of academic study either had no impact or a positive impact on their discussions, as outlined in Figure 4.22. For this reason, discussions held with students in a different year or study did not appear to be a barrier to participation or benefit.

4.7. Conclusion

This chapter was dedicated to the findings of the study and has described and illustrated the results obtained from the survey questionnaire. These results were categorised and presented in accordance with the objectives of the study, and selected statistical tests were applied and outlined accordingly. The results obtained from the study have provided an indication of students’ perceptions of the i-DOT project in terms of the benefits they experienced, the facilitators to their participation as well as the barriers that they faced in engaging in the project.

From the data, it was evident that the majority of participants perceived the project to offer them advantages with were enjoyed in different forms, including academically, professionally, personally and socially. It was also appreciated that the facilitators and barriers to the participants' participation in the project were in keeping with some of the themes identified in the literature search described in Chapter Two.

Further analysis of these findings will be discussed in the following chapter, where they will be examined, triangulated with literature and interrelated through the use of the Kawa Model.

CHAPTER 5 – DISCUSSION

5.1. Introduction

The i-DOT project, as an international OCL opportunity, formed the basis of this research study. The opening chapter of this dissertation briefly described the project and illuminated the research problem that had initiated this study. In summary, the conundrum was that OTEs wishing to facilitate HE OCL projects involving multiple institutions without an element of online teaching do not have sufficient information on whether the findings from current literature apply to projects structured similarly to the i-DOT project. This gave rise to the research question: What are the benefits, barriers and facilitators to participation experienced by OT students involved in an online international collaborative discussions project?

Aligned with this, the objectives of the study were to describe:

I. The benefits of an international collaborative discussions project for OT students regarding their:
    i. Academic development
    ii. Professional development
    iii. Personal and social growth
    iv. Cultural and diversity awareness
II. The facilitators to OT student participation in an online international collaborative discussions project from the perspective of students.
III. The barriers to OT student participation in an online international collaborative discussions project from the perspective of students.

The previous two chapters provided a detailed explanation of the methodology applied in the research process and have presented the data obtained from the surveying questionnaire. This chapter will now interpret and discuss the results with influence from literature, in pursuit of an answer to the research question. The findings of each objective will be discussed separately and will be related to Dr Micheal Iwama's Kawa Model.[42] Following this, the findings expressed by elements of the Kawa Model will be synthesised metaphorically, in order to capture the interconnectedness of elements in the i-DOT learning experience.

The Kawa Model is a metaphorical theoretical model which looks at a subject area in context. The model recognises that people do not exist in a vacuum but rather within an environment with various subjective experiences, issues and supporting factors.[44] The model is comprised of five elements, namely water, which relates to the river flow; the river floor and walls; rocks; driftwood; and spaces.

In the context of this study, the water of the river signifies the learning and development of students. The stronger the river flows, the more learning and development it represents. The river flow may be influenced positively or negatively by the four other elements part of the river. The floor and walls of a river shape it and will determine the course in which the river will meander, and a wider river floor and walls may influence an increased river flow.[44] In the case of this study, the river wall and floor signified the environment or context within which the project took place. Findings regarding facilitators to participation, particularly those facilitators related to the structure of the project and those occurring in preparation for the project were considered under this element.

Rocks in the river represented barriers and challenges that were experienced during the project, which can severely hamper river flow. These rocks may vary in size and impact depending on the extent of the challenge and the ability of it to be overcome. Rocks in the Kawa Model can be decreased in size or displaced all together by positive influencing factors in the river, thereby signifying the mitigation or weakening of a challenge. Barriers and challenges emerging from the findings informed this element of the model. Driftwood in the river represented influencing factors and could serve one of two functions. It could assist in removing obstructions by mobilising or decreasing the size of rocks when it was an asset. Conversely, it could compound obstructions when it was a liability.[44] In the application of the model, the driftwood element was mainly informed by facilitators to participation related to student characteristics and OTE input during the project. Aspects that emerged from objective three on the barriers to participation were considered under this element in cases where an emerging theme was identified as a liability rather than a barrier.

Lastly, the spaces in the river, between the river wall and floor, the rocks and the driftwood, are avenues for water flow. The larger the avenues are, the bigger the spaces and the stronger the river flow may be. The benefits of the study represented the spaces in the river. The more benefits available to students during the project, the more avenues there would be for students to learn and develop within. Furthermore, the impact of the benefit on students determines whether the spaces in the river are noteworthy in size or a restricted in opportunity. The former contributes to a greater river flow. Ultimately, a strong river flow in the Kawa Model is a desired outcome and signifies harmony between the elements.[44]

This chapter will now provide insights into the demographic information of study participants, and then go on to discuss the study findings in accordance with each study objective.

5.2. Demographic information

All students who were involved in the i-DOT project in 2022 were invited to participate in the study by invitation extended through their institution-specific OTE. Of the approximately 350 students, 139 of them provided consent to participate in the study and completed the surveying questionnaire. These participants were from all nine of the institutions involved in the project. With two of the institutions being in the same country, a total of eight countries involved simultaneously in the OCL project, were represented in a single study. This was noteworthy as no research on a single OT-specific OCL project with this extent of international involvement has been identified. The scoping review conducted by Hynes and colleagues[3] on international student collaboration in OT represented nine countries in their paper, however, this was based on involvement across ten studies that were being reported upon in the review.[3]

Although all institutions were represented in this study, the proportions were unequal. Students from UP made up 38% of all participants, the highest percentage of all institutions, meaning that responses from South African participants may have been more prominent in the results. This was recognised through text responses referencing loadshedding as a challenge during participation and mentorship as a facilitator to participation, accounting for 7% and 9% of all responses respectively. Upon analysis, it was confirmed that both of these aspects were experienced by South African students exclusively.

The institutions with the fewest represented participants were from the countries of Croatia and The United Kingdom (Derby) accounting for 0.72% and 3.6% of the sample respectively. The reason for the lower number of responses may have been that students from Croatia and Derby in the United Kingdom engaged in the i-DOT project voluntarily, meaning that their cohort of students involved in the project, meeting the inclusion criteria of the study, may have been small, to begin with. Examinations and long university vacations following the i-DOT project, especially for the European, British and Middle Eastern institutions, were expected to have contributed to lower response rates from other institutions.

Participants were from varied age groups, ranging from 18 years to 51 years of age. However, mature students above the age of 30 accounted for 9% of the study sample. According to Gregoryk and Myron[99], it is not uncommon for undergraduate classrooms to be multi-generational and age-diverse.[99] All participants were undertaking training in the field of OT, towards a diploma, bachelor or bachelor of science qualification. While most participants were in their first or second year of study, just 8% were in their third or fourth academic year.

The language considerations around participants were of interest to the researcher, given that the i-DOT project itself required English-based discussions, regardless of varying first-languages among students. This may have impacted on students' perspectives of the project. Additionally, the international nature of the study and the fact that the survey was offered in only two languages made it important to understand the linguistic demographics of the student participants. Seventeen different native languages were represented in the data which included seven of South Africa's official national languages. English was the most common first language among the participants. Duarte et al.[100] explained that monolingualism is becoming less prevalent and that as a result of globalisation and increasingly diverse societies, multilingualism has become common in recent times.[100] In consideration of this, participants were further asked to comment on their proficiency in the English language over and above citing their first language, showing that 45% had declared having excellent proficiency in the language. Eleven participants (8%) however reported having poor proficiency. Five of these participants were first-language French-speaking, two were Dutch speakers and one with a mother tongue of Arabic. Three of the eleven participants identified German as their first language and thus completed the survey in German. Upon closer examination of the survey responses of participants who completed the survey in English after having cited poor proficiency in the language, it was noted that their text responses to open-ended questions were coherent and relevant, showing a clear understanding of the questions posed to them. A majority of 121 participants (87%) completed the survey in English.

When examining the demographic details of the participants' foreign partners, it can be seen that once again, all nine institutions were represented, this time by the partners of the participants. The partners were also from different years of study ranging from first to fourth year.

5.3. Benefits to OT student participation in an online international collaborative discussion project

The first objective of the study was to describe the multi-faceted benefits that OT students enjoyed during the i-DOT project, to establish whether they were in line with the benefits achievable in other internationalisation at home (IaH) programmes described in the literature. Moreover, the exploration of benefits was able to provide insight into the avenues of development opportunities available in the i-DOT project in relation to the Kawa Model.[42] In doing so, the survey began by investigating the overall experience of the project before focussing on specific areas of development and growth.

When participants were asked whether the project was a beneficial learning experience for them, a majority of 108 participants (78%) indicated that it was. A group of five out of 139 participants (4%) indicated that it was not beneficial, however, when their responses were tracked through subsequent questions in the survey, it was noted that these participants were not consistently negative, and were neutral or positive when asked about more specific areas of benefit.

The question investigating the area in which the i-DOT project benefitted participants the most showed that each of the five aspects of benefit listed in objective one was valued by some number of participants. This showed that the range of benefits that can be experienced in the project was in keeping with that which was described in literature when synthesising the benefits mentioned by a wide range of studies as cited in section 2.4.1 of Chapter Two. In addition, the area of benefit that was most frequently selected by the participants, and perceived to be most valuable was to do with social and interpersonal skills (49 participants, 35%), followed by general professional development (29 participants, 21%). This was a notable observation as several OT-specific studies have placed focus on intercultural learning and the understanding of concepts related to occupational therapy and occupational science primarily.[3] While aspects of personal, social and professional development in OT students have been considered in some studies[70,73,76], to date these have been less prominent areas of investigation in OT-specific studies. From the findings in this study, however, they appeared to be relevant areas of consideration.

Aside from ascertaining whether the project was beneficial to the participants, it was also necessary to establish whether the international nature of the project was worthwhile in offering them perceived advantages that were not already accessible to them in their local contexts. When asked whether they would have had the same learning experience had the project been done with students from their own country, 105 participants (76%) disagreed. This provided affirmation from the majority of participants that the international nature of the project provided a unique experience for them. A minority of 13 participants (9%) however did feel that the learning experience was achievable in their local contexts. The researcher initially suspected that this could have been influenced by pairing with a foreign partner from a nearby and familiar country, thereby limiting diversity-related learning opportunities; however, the group of respondents had both intra-continental and trans-continental foreign partners. To further counter the idea, findings from an OCL study by Todorova and team[73] detail that cultural competence development was identified among students from European countries in close proximity to one another,[73] showing that novel learning was achievable even between nearby countries.

Nonetheless, the participants' minority view of the learning experience being attainable in local contexts could have been due to a number of other factors, such as the quality, breadth and/or lack of international focus of discussions shared between students. These potential scenarios could have been influenced by the motivation levels, interpersonal skills and personal characteristics of individual students. In line with this assumption, in their study on a virtual collaboration between OT students, Cabatan and Grajo[76] found that personal characteristics and motivation of students acted as an enabler to learning and interaction, and could thus influence students' experience of the online collaboration as a whole.[3,71]

When participants were asked whether they would have made contact with international students in other ways had they not been involved in the project, a few more participants strongly disagreed with this compared to the previous question. Once again, a majority of 110 participants (79%) indicated that they were exposed to an opportunity they may not have accessed had the discussions project not been of an international nature. A similar idea was noted by Todorova and colleagues[73] whose students expressed appreciation for their collaborations upon realisation that they would not have connected with their foreign counterparts in lieu of the international project.[73]

When considering the findings and statistical analysis of the two questions together, statistically the results were not reliable in communicating the same idea, that the project offered something unique; however further statistical testing confirms that the concepts are dependent and strongly associated despite this. On a descriptive level, only two participants out of 139 (1%) expressed in response to both questions that the project did not offer them anything exclusive. Most participants found that the project did offer something unique. This aligns with the findings from Erdei et al.[35], who discussed the opportunities that virtual exchange programmes can provide in stimulating development. The authors asserted that the competency development achievable in international programmes is not generally attainable in local contexts.[35]

5.3.1. Academic development

The perceived academic advance of the participants was investigated through three targeted questions. To begin, a broad statement was presented to participants, where they needed to indicate whether the project provided them with an opportunity for academic learning. The second statement was more specific, where participants reflected on whether the experience improved their insight into occupations in different parts of the world. As the conceptualisation of occupation is at the core of occupational science and the OT profession[31], the development

of insight into and understanding of occupation is an indication of academic development in itself.

A total of 103 participants (74%) and 119 participants (86%) agreed or strongly agreed with these questions respectively. While the majority of participants responded in the affirmative for both questions, 16 more participants (12%) were undecided or responded negatively when asked about academic learning in general as compared to when asked about occupation in particular. This could have been because some participants may not have regarded improved insight or understanding of concepts as academic development generally, as there was no formal teaching undertaken, or because learning may have been more subtle than overt. Five percent fewer participants disagreed when asked about learning related to occupation directly. The findings align with that of Erdei at al.[35], who found that online collaboration between international students was able to provide knowledge and understanding to students in specific subject areas, with new perspectives on course content. The authors proposed that new insights can be established through student discourse and application of knowledge, and does not rely solely on formal teaching from educators.[35]

On a statistical front, when considering results from both of these questions, there was insufficient consistency and hence the results are not thoroughly reliable. Tavakol and Dennick[92] argued that a low Cronbach alpha statistic could be due to a number of reasons, including due to a limited number of questions.[92] In this case, the statistic was performed on just two questions. Moreover, a unidimensional set of questions would lead to a stronger alpha statistic when considering reliability.[92] Despite the questions being homogenous in their aim to investigate academic learning, the fact that one question was more general than the other may have affected the interrelatedness of the questions, ultimately leading to a lower level of internal consistency calculated.[92] However, further statistical testing using Cramer's V test[90,97] and Fisher's test of independence[90,98] showed that there was a moderate association and a dependent relationship between the responses to the two questions. On a descriptive level, in both questions, the vast majority of participants (74% and 86%) had attested to having academic learning opportunities. Only two participants (1.44%) had negative responses to both of the questions.

The third question was in the form of a five-point Likert scale, and participants were asked whether they were able to learn what their institutions intended for them to learn during the i-DOT project. The purpose of this question was to establish whether participants achieved their respective learning outcomes. Feedback on this question during the pilot study showed that three out of thirteen participants did not know what learning outcomes they were expected to have achieved, making it difficult for them to select a response. For this reason, an addition

was made to the question, instructing participants to select the neutral option if they did not know what their institution intended for them to learn. Due to this addition, the neutral responses from 50 participants (36%) were ambiguous and could either indicate that they were neutral about whether they had met their learning outcomes, or that they were simply unaware of what the learning outcomes were. Nonetheless, 84 participants (60%) indicated that they were able to meet their learning outcomes, and those 5 participants who disagreed form the minority, accounting for less than 4%.

Upon review of all three questions, it was evident that the majority of participants involved in the study had experienced some form of academic benefit during their involvement in the project. Alrich and colleague[72] identified this as well, when discussing the deepening of knowledge achieved by their students. According to de Sam Lazaro and Riley[101], peer interaction and collaborative learning can assist students in learning and understanding theoretical knowledge more effectively than faculty-led teaching methods alone. Furthermore, these authors suggested that student discourse on theory-related topics may have a positive impact on their knowledge levels in relation to Bloom's Taxonomy[62], and thus their critical thinking ability too.[101] This supports the notion that academic benefit was achievable during the i-DOT project owing to the collaborative student exchange it required.

5.3.2. Professional development

When investigating the professional development of participants during the project, the researcher considered the development of transferrable skills which could be carried over to various academic and work situations, as well as the development of a professional identity in students as future occupational therapists.

The transferrable skills that were identified as achievable in OCL projects are based on the synthesis of benefits mentioned in the literature as presented in section 2.4.1. of Chapter Two, were listed. Todorova et al.[73] refer to some of these as "21st century skills", which encompasses problem-solving skills, creative thinking, communication skills, as well as further aspects unrelated to this section such as intercultural competence.[73] These authors highlight the importance of 21st century skills as they are contributors to success in global environments and in managing professional challenges.[73] Additional transferrable and soft skills that the researcher suspected could have been relevant to the participants in this study were included on the list. This lengthy list of transferrable skills was separated into two questions and presented to participants, who were able to select the transferrable skills they believed they developed or improved on during the i-DOT project. Participants had the option of indicating

that they experienced no professional skill development, or to provide additional skills in text form should any relevant skill have been omitted from the predetermined lists.

From the responses, it was noted that a majority of 126 participants, accounting for 91%, identified communication skills as an aspect that they improved in. This was reinforced when participants were asked to indicate through text response what the most important transferrable skill developed was, with the most frequently mentioned skill by 56 participants (40%) being communication skills. Based on the coding of test responses, communication skills encompass effective communication of ideas, active listening skills, skill in interviewing as well as skill in communicating in English with the presence of a language barrier. This is in keeping with Todorova and colleague's[73] study on an online intercultural exchange project in OT, where one of the main themes around the greatest benefit of the project involved communication and learning from one another. In their study, the benefits to online communication also involved practising and interacting in the English language where students were not proficient English speakers.[73] The second most commonly developed skill identified by 101 participants (73%) was the ability to work with others, which was also the second most frequently selected skill of importance by 16 participants (12%). In a US-based study, Baird et al.[102] looked at employers' perspectives on the most important skills needed by graduates for employability. They found that the ability to work with others was the most vital competence for graduates to have, followed by communication skills, critical thinking abilities and personal motivation; all of which were among the most highly ranked competencies valued in the workplace.[102]

All of the transferrable skills noted by Baird and colleague[102] as well as those in the literature review were developed by some proportion of students during the i-DOT project. Further professional skills that were identified to have been developed include that of self-motivation (68 participants, 49%) with 76 of participants (55%) stating that they developed in the area of taking initiative. Organisation and time management skills were also developed in more than half of the respondents, accounting for 76 participants (55%) and 79 participants (57%) respectively. Approximately a quarter of respondents pointed to the formation of emotional awareness (36 participants, 26%) and independence (39 participants, 28%) during the project.

Only 22 participants (16%) attested to developing in the area of leadership ability, which was a lower proportion than expected by the researcher. Nair and colleagues[53] discussed the development of leadership skills during their students' asynchronous COIL collaboration. Their students' reflections evidenced the development of leadership skills during the collaboration, however, this was mainly identified in students who were self-motivated, active scholars.[53] The low incidence of leadership skill development during the i-DOT project may too have been a

result of the personal characteristics of student participants, who may have already exhibited this skill. Alternatively, this could potentially have been a result of a shared ownership of the discussions between the group members where a leadership role was not warranted during the exchange. Additionally, it could have been influenced by the length of the project, where two to three discussion sessions may not have been sufficient in cultivating leadership skills in a broader group of students.

When considering the responses to the two questions with listed options of transferrable skills, only four participants (2.9%) indicated not having experienced the development of any transferrable skill, across both of the questions. The remaining 135 participants (97%) indicated having improved on at least one transferrable professional skill when considering the pooled responses from both questions. When commenting on the most important transferrable skill developed, six participants (4%) indicated no skill that held value. The rest of the participants placed importance across fourteen different skills in varying proportions, with one participant indicating that all of them were important. Upon being asked directly to comment on whether the skills learnt could benefit them in future environments, 111 of the participants (80%), making up the majority, indicated that they would. Just five participants (3.6%) answered negatively, only one of which disagreed strongly.

Professional identity relates to the development of knowledge, insight, values, beliefs and attitudes to form a social identity that is associated with a profession.[103] According to Ashby et al.[36], the establishment of professional identity is linked to professional development and is an important contributor to students' success in their transition from HE to the working world[36] and in their careers itself.[104] To this end, the development of professional identity during students' years of study is of importance. Professional identity was investigated in this study by asking participants to indicate whether the project allowed them to develop their professional identity as future occupational therapists. The feedback yielded fewer responses in the affirmative compared to the previous question regarding the transferability of skills to different settings. While a majority of 94 participants agreed in some form to have formed a sense of professional identity as an occupational therapist, they made up 68% of the sample. Thirty-five participants (25%) were neutral to this question.

Gray and colleagues[104] suggest that instances of students having less certainty in their professional identity may be related to lower confidence in their knowledge and skill in the occupational therapy profession at the time. This may have been a contributing factor to the results on personal identity in this study, which loosely aligns with students' responses in subsequent questions on the development of confidence in their knowledge and skills. The former garnered 73% of positive responses while the latter, related to confidence in skills, was

affirmed by just 60% of the study sample, somewhat aligning with the figure of 68% who experienced professional identity establishment.

Moreover, Ashby and colleagues[36] discuss the importance of professional socialisation in the development of professional identity. While professional socialisation may include group work and discussion between peers to establish professional identity, the authors highlight that socialisation between students and educators may be more effective and valuable in establishing professional identity. In the absence of OTE facilitation and teaching *during* the i-DOT project, this may be a factor in 45 participants (32%) not having cited professional identity formulation through the project.

When reviewing the responses to the five questions instigating professional development, it was evident that development was present in the participants who were involved in the i-DOT project. A majority of 135 participants (97%) were able to develop at least one transferrable skill, with participants placing importance on a variety of these skills, most notably communication skills. A majority of 111 participants (80%) also agreed that these skills could be transferred to different settings. Finally, professional development was also evidenced through the formation of a professional identity as future occupational therapists in more than half of the student participants (68%).

5.3.3. Personal and social growth

The personal and social growth of participants were investigated separately. The areas considered under personal growth included aspects of self-perception[35]; self-efficacy[17]; personal ownership of learning[18,105]; and the development of general knowledge, which may contribute towards broadened worldviews.

To begin, participants were presented with a list of three personal growth areas and could indicate which of them they experienced. Participants could select “other” and indicate areas of personal growth by elaboration through text, and had the option of indicating an experience of no personal growth at all. Ninety-two participants (66%) indicated that they developed confidence in themselves, while 59 participants (42%) agreed to developing self-awareness, both speaking to improvement in self-perception. These findings are in keeping with results presented by Erdei, Rojek and Leek.[35] Their study on virtual exchange programmes between five European countries found that personal development was a remarkable aspect of benefit amongst their students. Their students were able to improve with regard to their self-reflection and understanding of themselves, similar to the concept of self-perception in this study. The importance of self-confidence, confidence in one’s skills and being conscious of one’s own

behaviour was also unveiled by the authors, who describe that students were able to make this realisation during their exchanges.[35]

One in seven participants, however, indicated that they did not experience any personal growth, accounting for 20 participants of the sample (14%). While some participants may genuinely had not experienced any personal growth, it was suspected that others may have indicated negatively due to a lack of clarity on what may have constituted personal growth in the context of the study. When the responses from these participants were tracked over subsequent questions on personal growth, a number of them were seen to answer positively or in the neutral. For example, when asked whether they improved in their general knowledge, 50% of these twenty participants agreed or strongly agreed that they had. Furthermore, when looking at these participants' responses over four questions, Cronbach's alpha statistic showed consistency in their answers[92] which ranged from strongly disagreeing to areas of personal growth to strongly agreeing. This indicates that there were consistently varied responses to areas of personal growth, evidencing that not all of the twenty participants experienced no personal growth at all.

Participants were then asked to comment on whether they gained more confidence in their knowledge and their skills, which speaks to the development of self-efficacy in the students. In a study investigating ownership of learning in college students, Case[105] outlines that self-efficacy in students can be increased through accomplishment in their given tasks or performance, and is a contributor to students taking ownership of their learning.[105] The majority of respondents in this study, making up 83 participants (60%) and 101 participants (73%) agreed or strongly agreed to gaining more confidence in their skills and knowledge respectively, following the discussions. Less than a tenth of respondents (11 participants) felt otherwise. This may suggest an experience of success and/or validation by some of the participants during their peer discussions, allowing for an increase in their confidence regarding their competency. This was consistent with the findings from Naicker et al.[17] who, following a COIL course, also found that students were able to develop a sense of self-efficacy. Here, the authors discussed specifically how self-efficacy was formed in students from the Global South, specifically South Africa, when measuring themselves against international peers. The authors highlight that this increase in confidence could have a significant impact on the future careers of these students.[17]

General knowledge was another area that participants experienced benefit in, with 108 participants (78%) indicating improvement in this area. Niemczyk[47] outlines that the mere exchange of information or experiences does not necessarily equate to being educated. Therefore, aspects of information exchange during the i-DOT project may not have all been

related to academic development but rather contributors to general knowledge and insights into the world. For this reason, the development of general knowledge was considered an area of personal growth as its advantages may extend beyond the OT profession, and influence the breadth of an individual's worldview.

Fifty-six participants, making up 40%, indicated that they grew in their motivation to learn, which essentially is a form of intrinsic motivation. In contrast, 109 participants (78%) indicated that the project allowed them to take ownership of their learning, despite the absence of direct supervision during the discussions. This was an interesting incongruity as one would assume that the latter would be based on intrinsic motivation to learn.[105-106] Nonetheless, the finding that so many participants were able to take control and ownership of their learning is in keeping with findings from Kor et al.[69] who noted an increased initiative in some of their students, with an effort to be proactive during their exchanges. It also aligns with a study by Cotoman and colleagues[18] reflecting on a COIL course between British and Japanese students. They took note that projects geared towards international collaboration allow students to take ownership of their learning and apply initiative in order to succeed.[18] Erdei et al.[35] added, based on their study, that the expectation of a high level of autonomous learning during the virtual exchanges, requiring student ownership of learning and motivation, was a contributor to personal growth in students in particular.[35]

Application of Cronbach's alpha statistic on the four Likert scale questions on personal growth, relating to self-efficacy, general knowledge, and ownership of learning showed that there was a strong reliability between the responses of these questions.[92]

The investigation of social growth considered participants' confidence in communicating with new people, ability to create friendships, the ability to interact with someone different, and respect for differing views of others.[35] It also explored the development of interpersonal skills, influenced by the skill of active listening.

To begin, when participants were asked whether the project allowed them to improve their interpersonal skills, 115 participants (83%) indicated that it did. Only three participants (2%) disagreed with this. In addition, 113 of participants (81%) attested to growth in the area of active listening, an important aspect of interpersonal skills. This aligns with findings from Cotoman and the research team[18], who also found that interpersonal skills were improved during their international collaborations.[18] Yu et al.[107] express the importance of interpersonal skill building in OT students for success in work integrated learning opportunities as well as for preparation for their entry into the OT profession.[107] Further, Brown et al. emphasise the importance of active listening, together with interpersonal skills as core competencies for

health professionals. These areas of growth could affect the overall professionalism and professional identity of students.[108]

While a small proportion of six participants (4%) indicated not experiencing any social growth, the overall responses regarding social growth were positive. Sixty-four participants (46%) found they were able to make new friendships while 116 participants (83%) found confidence in communicating with new people. Additionally, 97 participants (70%) were able to grow in their ability to respect the views and beliefs of others that may be different to theirs. When asked whether they were able to improve their ability to interact meaningfully with someone from a different geographical background, 111 participants (80%) responded in the affirmative. This may have impacted their ability to respect the differing views of others.

This aspect is important as it goes beyond simply interacting with other people, which could be achievable in a local context. Rather, it speaks to the ability to interact meaningfully in the presence of diversity, with an acceptance that others may hold different values and beliefs. Once again, Todorova et al.[73] had a similar finding emerging from their OCL project between OT students from European universities, where reportedly a noteworthy number of students expressed increased confidence in communicating with people from a different culture. Beyond simply gaining awareness of different cultures, some students in their study expressed becoming more accepting of differences, with a recognition of differing opinions.[73] Erdei and colleagues[35] also found that their students were able to create an understanding of different social frames of reference and go on the accept and respect them. This was made possible by exposing students to social opportunities to interact across borders; however, despite the great opportunity for social growth, these authors were still of the opinion that the full advantage of international exchange was lost owing to the virtual nature of the interactions. Participants of their study compared their virtual exchange experience to physical mobility, highlighting that social development and socialisation may be hindered by technological difficulties, organisation difficulties and feelings of alienation behind blank screens. Thus it appears that although OCL projects can provide great opportunities for social growth, the scale of this development may not equate to that achievable through in-person international collaborations.[35]

In a cross-tabulation looking at the responses to two questions, that is on the improvement of interpersonal skills and ability to interact meaningfully with someone from a different background, only one participant (0.7%) disagreed in some form, in this case strongly disagreed, with both questions. Most of the participants either agreed or strongly agreed to the questions.

In summary, students' perceptions of both personal and social growth were investigated. From their responses, the majority of participants appeared to have experienced growth, both personally and socially. In every question on personal and social growth, some proportion of participants responded positively, affirming growth in the respective areas. This included growth in aspects related to self-perception, self-efficacy, learning ownership and general knowledge; as well as interpersonal skills, active listening, making new friendships, confidence in communicating with new people and respecting alternative views of others. In both areas of growth, only a small proportion of participants appeared not to have experienced benefit.

5.3.4. Cultural and diversity awareness

The perceived development of cultural and diversity awareness in the participants was explored, as intercultural competence is often a key learning outcome when engaging students in international exchange[3,5,15], both physically and virtually. Participants were asked whether they were able to learn something new with regard to their foreign partner's country, culture and language. A majority of 115 participants (83%) indicated that they learnt something new about their partner's country while only a little north of half of all respondents, making up 75 participants (54%) learnt something new about their partner's culture. While a large portion of participants did attest to gaining new insights into the culture of their partner, the significance of this aspect, in particular, does not correlate completely with the findings in other studies outlining significant findings regarding cultural learning in particular.[5] In a literature review on cultural competence in IaH projects, Huang et al.[5] concluded that IaH programmes can offer effective opportunities for intercultural engagements, contributing to cultural competence. Aldrich and Johansson[72] also found that intercultural and diversity-related learning were important areas of improvement in their students involved in virtual exchange.[81]

Psychouli and colleagues[63] however had findings contrary to this. While their students reported having improved intercultural awareness through qualitative and subjective communication, quantitative and objective data in their study showed no change in the intercultural knowledge and understanding of students. The authors, who engaged OT students in a once-off international collaborative discussion session, explain that this result may have emerged as one meeting session may not have been sufficient time for students to develop their knowledge and competence in the area.[63] While many students in this study did attest to learning about another culture, the extent of it aligns loosely with Psychouli and colleagues[63], that is to say, that the limitation of development in the area of cultural awareness may have been due to the students participating in just two to three discussion sessions in total. This may not have afforded them enough time to delve into the matter of culture more comprehensively.

However, with 83% of participants indicating having learnt about a new country, diversity in aspects beyond simply culture appears to have gained student insight. Only 11 participants (8%) denied learning anything new during their discussion sessions. This was further reinforced by the following question, where 99 participants (71%) agreed or strongly agreed that the exchange with foreign partners improved their awareness of diversity beyond what they already knew about diversity in their own country.

Participants were further asked whether their experience in the project gave them a greater understanding of the effects of cultural and geographic factors on occupation, with affirmative responses from 98 participants (71%) and 103 participants (74%) respectively. While the majority of participants agreed or strongly agreed with both of these, the positive responses were marginally more favourable regarding understanding of geographic determinants of occupation. This was in keeping with the observation above, where general diversity awareness appears to be more prominent than cultural learning specifically, despite both being an area of benefit for the majority. Findings by Cabatan and colleagues[76] aligned with the results in this study, whereby they too found that students were able to develop a deepened conceptualisation of links between cultural or diversity-related factors and occupation.[76]

Finally, participants were able to reflect on whether the knowledge they obtained about diversity could assist them in working with diverse populations of people in the future. Once again, the majority of respondents affirmed that it would, accounting for 102 participants (73%). When looking at the last four questions described above, together, Cronbach's alpha statistic shows a strong reliability in these results[92] portraying an improvement in diversity awareness. When looking at the responses to two questions on diversity, that is whether participants were now more aware of diversity beyond their own country, and whether the knowledge they had gained could assist them in future working environments, it was evident that the majority of participants agreed or strongly agreed with both questions. There were a mere three individuals, accounting for less than 3% of the sample, who disagreed in some form with both of these questions.

The findings in this sub-objective are congruent with several other studies on international collaboration citing cultural and/or diversity-related learning as a benefit. Wimpenny et al.[70] found that their student participants were able to increase their cultural sensitivity and improve intercultural attitudes, while Sood and the research team[78] found advantages in cultural competence and how relevant insights can relate to, and be considered in OT practice. Sercu's[109] paper on a Belgian IaH confirmed that their students were able to gain rich learning in the area of cultural competence. Despite being in a classroom with limited diversity among

students, Sercu's students were still able to dabble in the area of diversity through the medium of virtual exchange.[109] They reinforce that these competencies can contribute to students becoming more global-minded, should the opportunities be adopted.[109]

5.3.5. Summary of benefits experienced

The first objective of the study was to describe the benefits experienced by OT students during an international collaborative discussions project. The areas of benefit investigated correlated with those described in the literature presented in Chapter Two. From the findings, it was noted that the participants of the study were able to benefit in all of the areas of benefit investigated, showing that projects of a flexible nature like the i-DOT project, without an element of online teaching can hold comparable advantages to OCL projects of a different nature.

Upon further discussion of specific sub-objectives, it was noted that the majority of participants experienced benefit in all five areas of interest, which included academic development, professional development, personal and social growth as well as cultural and diversity awareness. However, in each of these areas, a minority of participants, usually below 10% of participants, did not experience growth in these areas. Participants with negative responses were tracked over different questions to ascertain whether specific individuals were consistent outliers in the data. This was not the case as participants who disagreed with some areas of benefit were found to be neutral or positive in other aspects of the survey. In addition, no single participant involved in the study provided a negative response to every question in the survey.

From these observations, it was concluded by the researcher that the i-DOT project was able to provide advantages in a number of learning areas, however, not every one of these aspects of improvement was enjoyed by each participant. This could be due to several influencing factors including personal characteristics of the student and/or their foreign partner, and possibly the level of diversity within their partnership. Nonetheless, it appeared that most participants, if not all, were able to profit from the project in some form.

When these findings are considered in light of the Kawa Model, the benefits are seen as spaces in a river. This is depicted in Figure 5.1 below. As mentioned, the more opportunities for benefit and the greater the breadth of the opportunities, the larger the spaces in the metaphorical river will be. Large spaces in the river allows for a strong and sustained river flow, which is a desirable end-goal signifying optimal student development. With confirmation that a consortium of benefit areas could be enjoyed during the i-DOT project, the spaces in the metaphorical i-DOT river have various avenues and spaces for water to flow through. In addition, validation from the discussion on the success of sub-objective learning areas shows

that these avenues offer great learning opportunities and are thus large spaces for water to flow through.

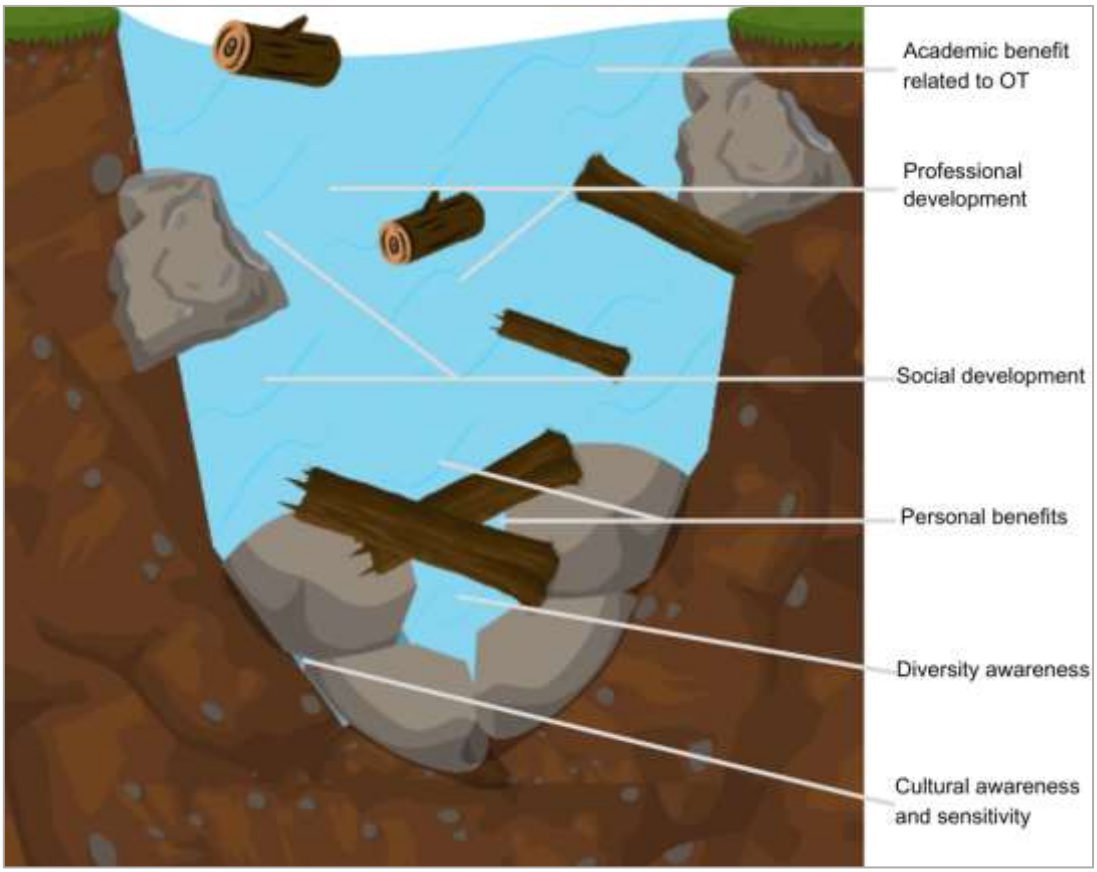

Figure 5.1: Depiction of benefits experienced in the i-DOT river (Kawa Model)

The river walls and floor represent the context of the i-DOT project. It is evident from Figure 5.1. that the river walls and floor play an important role in shaping the river, which impacts the width and depth of the river as well as its capacity to hold large spaces for water flow. Despite the presence of rocks and driftwood in the river, there is still much space for water to flow through, and for water flow to meander fairly easily. Figure 5.2 shows two cross-section depictions of a river for a side-by-side comparison. At first glance, it is evident that the volume of water in the image on the right is far less than the water in the image on the left. The interpretation of the images concludes that the extent of student development opportunities available in the image on the left is more significant than the opportunities in the image on the right, based on the water volume.

In the image on the left in Figure 5.2, there are large spaces depicting avenues for water flow, and the river walls and floor, depicting the context, support the potential for a strong water flow. This could be interpreted as the need for the academic and virtual environment to support the existence of expansive learning opportunities that can be obtained by students. In the

image on the right, however, it is evident that the river floor and walls are narrower and more shallow, subsequently restricting the spaces in the river. This represents how a limiting academic and virtual context of an OCL project can directly restrict learning opportunities for students. Even if there were a variety of avenues for learning opportunities in the river, the volume of the avenues in the image on the right would be far less than those in the image on the left. Therefore, the possibility of achieving vast areas of benefit during the OCL project may be hindered and limited by external factors. The influence of the environment in the metaphorical river will be further discussed in section 5.4.

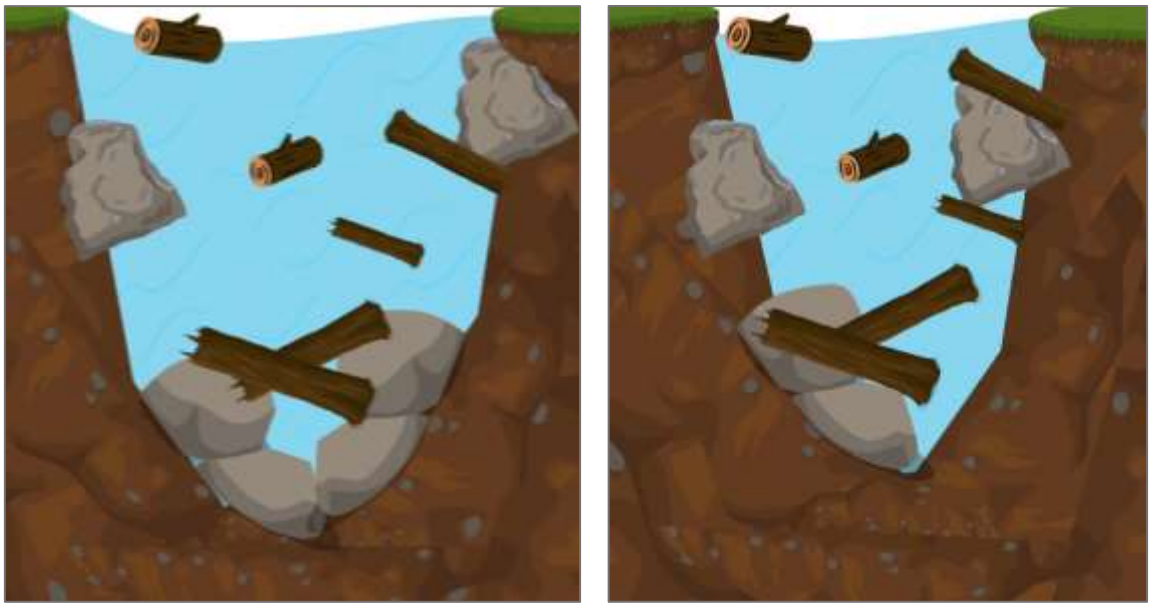

Figure 5.2: Side-by-side comparison of spaces in the i-DOT river (Kawa Model)

Finally, in consideration of the observation that participants experienced the areas of advantage of the project differently, one could then assume that the metaphoric river described may look different for each student. In other words, the avenues of learning of individual students may vary and be influenced by several subjective elements such as assets and challenges. Therefore, one metaphoric depiction or illustration of the Kawa Model may not apply to every student participating in the i-DOT project.

5.4. Facilitators to OT student participation in an online international collaborative discussion project

The second objective of the study was to investigate and describe the facilitators to participation in an international OCL discussion project. The researcher sought to establish whether these facilitators are similar to those described in other IaH studies, in projects dissimilar to the i-DOT project. Furthermore, the findings allowed the researcher to identify

environmental and influencing factors, signifying the river floor and walls, and driftwood in the metaphoric river in the Kawa Model respectively. The facilitators to participation relating to the structure of and preparation prior to the project formed the academic and virtual environment of the project, while the facilitators implemented during the project itself acted as influencing factors in the form of assets and/or personal characteristics of the participants themselves. By considering these within the framework of the Kawa Model, the researcher was able to conceptualise how various factors interact to affect the overall development enjoyed by students in the i-DOT project.

5.4.1. Facilitators to participation

The surveying questionnaire did not make use of the word “facilitator” specifically. This was due to concerns of possible misinterpretation of the word in context by students with limited proficiency in English. Instead, questions in the survey made use of general open-ended questions as well as five-point Likert scale and rating questions. This allowed the researcher to gain new information through the former, and investigate areas that are already cited in literature through the latter. These questions were presented in section two and section six of the survey, and are presented in the results and discussion in the order that they were analysed rather than in the order in which they appeared in the survey. In addition, the analysis of responses considered factors that were implemented during the i-DOT project that facilitated participation already as well as aspects recommended by participants that have the potential to act as facilitators in the future.

To begin, participants were asked to comment on any useful methods that they used to deal with challenges they experienced during the project. This open-ended questioned looked to determine the student-directed strategies that facilitated participants’ participation. In response to this question, 33 participants (24%) did not have any useful methods to share. While a small portion of these participants did not cite any challenges to begin with, most of them did experience some sort of challenge during the project but did not report any innovative ways of tackling them. Forty-one participants (30%) cited the use of strategies to augment their communication as effective. The strategies used varied across the respondents, and included methods such as the use of basic English to simplify the language used; paraphrasing; rephrasing; elaboration and descriptions to reinforce verbal communication and talking points. Some participants also found it useful to use visual aids including pictures and PowerPoint® presentations to reinforce their message, as well as gestures to support their communication. In an overlap with the theme on adequate planning, participants also reported on the prior preparation of relevant vocabulary, where they were not fluent in OT-specific jargon in English. The availability of the relevant vocabulary augmented their communication

capacity during the discussions. A few text-responses from participants indicated the use of in-person translators in the form of their local partners to assist them during the discussions. Psychouli and colleagues[63] also identified the translation of questions or relevant vocabulary beforehand to be a successful facilitator to interactive discussions between students during their study. In addition, the authors also acknowledged the positive impact of in-person translators for their students, where they made this formally available to their students in their OCL project.[63] Hynes et al.[3] however point out that arranging translators who are not already involved in the discussions is contingent on resources.[3] As described in Chapter One, the German institution deliberately paired their local students according to their English language proficiency during the i-DOT project, where linguistically weak students were partnered with more English-proficient students. In light of the view by Hynes et al.[3] mentioned above, facilitating in-person translations between students themselves may be a more sustainable facilitator than external translators. Lastly, the use of language translation software for virtual real-time language conversion was a strategy implemented by 19 participants (14%). Participants specifically mentioned the use of language translation software such as DeepL Translator® and Google Translate™.

Thereafter, the most frequently mentioned strategy by 30 participants (22%) was adequate planning by the participants themselves. Participants provided text responses that revealed the need to prepare their technological hardware and software, as well as internet connection prior to the discussion sessions. Preparation was also required for students to address the discussion content of the meetings. For this purpose, some participants found it important to research the areas of discussion and prepare questions or talking points beforehand. In responses from South African students exclusively, some students commented on their consideration of loadshedding schedules in their area and how they intended to deal it, such as by planning discussion sessions at a time when power was available; ensuring that sufficient mobile internet data was available; and through preparation of alternative power sources such as the use of an area with a power generator. One participant (0.7%) highlighted that back-up plans were necessary to ensure the smooth running of their discussions, while others emphasised the need for prioritisation of academic tasks and time management. Furthermore, under the code of adequate planning, participants commented on the effective consideration of time zones and the need for reminders between foreign partners as part of their planning towards successful discussion sessions. Nineteen participants (14%) went on to highlight the importance of flexibility and adaptability, while 18 participants (13%) cited maintaining effective and clear communication with their foreign partners as another used strategy during the project.

Based on these comments from respondents, it was understood that students needed to play an active role in the project in order to overcome their challenges, towards success in their discussions. Furthermore, participants taking initiative appeared to have acted as a facilitator to their participation. This idea was shared by Simões and Sangiamchit[110] who concluded following their study that initiative in students had positive impacts on their success in an IaH programme, not only academically but on their personal growth too.[110] This was an important consideration as facilitating participation and achievement during OCL projects does not lie on the shoulders of academic educators alone. This reinforces the move in teaching pedagogy in HE from educator-lead learning to students becoming active participants in the tertiary education learning process.[2] Student participants in Carlisle and Sáenz's[49] study came to this realisation, with the authors relating their students' reflections around the importance of adequate time management, prior research and active participation during their virtual exchange.[49] Participants in the study by Barbosa et al.[111] too made similar realisations, having recognised the need to be proactive in their self-preparation and in finding solutions for challenges faced during their exchanges.[111]

Six participants in this study (4%) referred to the effectiveness of using more than one ICT platform to communicate with their participants. They made mention of alternating video conferencing platforms such as Google Meet™ and Zoom®; instant messaging applications such as Facebook Messenger™; social media platforms such as Facebook™; web-based live documents, such as Google Docs™; and email. A study by Ng, Chan and Lit[77] described that the type of online tools used by students during their international collaborations can have a positive impact on student learning performance and that the benefit of various tools should be considered.[77] Cabatan and Grajo[76] also found that their students used various types of platforms including social media tools, and the authors considered this as an enabler to student learning.[76] The i-DOT project's structure of being non-prescriptive on the type of ICT platforms used by students allowed them to select the platforms that provided them ease and efficiency of use, and to take their communication beyond the formal discussion sessions[3]. The inclusion of informal communication among students may have contributed to the social aspect of the project, which a large portion of the participants attributed importance to. It also may have allowed participants to feel familiar and comfortable in communicating with one another, thereby decreasing feelings of uncertainty and anxiety related to the formal discussions itself. The finding on autonomous ICT selection and multifarious communication opportunities as a facilitator was thus logical and in keeping with findings from other authors in the literature.

All of the facilitators discussed until this point relate to student-directed facilitators. The following question inquired from participants what worked well during the i-DOT project, which

they recommended should stay the same. This intended to gather information about possible facilitators that were in place during the project, facilitated by their OTEs or the structure of the project itself. Here, 36 participants (26%) reported that effective preparation by their OTE was a positive, and thus an enabler to their engagement in the project. In text responses under this point, participants stressed the usefulness of clear instructions around their engagement in the project while others acknowledged the use of slideshow presentations and reading material provided to them to best grasp the roles and requirements of the project. As per the structure of the i-DOT project, student preparation for the project was not done collectively between the nine institutions, but rather in isolated, institution specific sessions. Participants commenting on effective preparation were seen to come from a variety of institutions, hence no one institution stood out particularly in this regard. Sixteen participants (12%) cited the guiding questions and information resources provided to them as being an aspect that worked well. The guiding questions refer to a set of questions provided to all students in the i-DOT project, across all nine institutions, to guide their discussions and promote interaction around the course topics (Annexure L). It also allowed students to anticipate the talking points in the discussions and prepare information and vocabulary accordingly. Effective and thorough preparation by OTEs was seen to be important for students to reap the rewards of international OCL projects, by authors such as Zadnik and colleagues[71] and Aldrich and Johansson[72]. Students are said to better cope when they know what to expect[81]. And Cabatan and colleague[76] affirm that the preparation of specific questions for discussion can be a positive enabler, steering students towards meaningful discussions. In the i-DOT project, the use of guiding questions was built into the structure of the project and provided a sense of uniformity in an otherwise ununiform and flexible project, possibly expanding its influence as a facilitator to the participation of students.

Student mentorship was another facilitator that emerged from the data in more than one question. As mentioned previously, only South African students at the University of Pretoria engaged in peer-mentorship, with first-year students being mentored by second-year OT students during the i-DOT project in 2022. Thirteen participants (9%) highlighted this facilitator in favour of the assistance and guidance received from their mentor. While student mentorship has not emerged as a prominent facilitator of OCL participation in other studies to date, it has been acknowledged as beneficial to students in HE in general. Upon investigating the advantages of peer-mentorship for OT students, Gallagher and Hamed[112] confirm that the practice is particularly useful for entry-level OT students and contributes to them better navigating their academic course. They concluded that peer-mentorship can reduce feelings of stress in students, build up their confidence and facilitate success within their academic

tasks.[112] This notion supports the view of students in this study around the usefulness of peer-mentorship during the international student discourse.

The fact that the project took place online was an aspect appreciated by 17 participants (12%). Although Erdei and colleagues[35] had alluded to the superiority of in-person internationalisation versus internationalisation at home[35], the online nature of the project was seen as particularly favourable in this study by these 17 participants. This was likely due to the inclusivity and accessibility afforded by the project in lieu of physical mobility demands.[113] While on the discussion of the design of the i-DOT project, the matching process, as well as the time frames of the project, emerged as facilitators to student participation by 22 participants (16%) and 11 participants (8%) respectively. Two participants (1.44%) specifically commented on the variety of countries involved in the study, identifying this as a possible motivator to participation. As considered in Chapter Two's literature review, OCL projects may take many forms as there was no set standard or structure required to achieve IaH. Here it can be seen that there was merit to some of the unique features of the i-DOT project. The method of registration and student pairing was completed electronically by the OTEs at the Artevelde University of Applied Science using Microsoft Outlook®, following a streamlined process; while the existence of the project in a virtual sphere, following an autonomous involvement framework for participating institutions made it possible for eight countries and nine institutions to partake in the exchange synchronously. Eleven participants (8%) mentioned that the time frames of the project were positive. Interestingly, this was an early area of consideration for the researcher too.

In two direct multiple-choice questions, participants were asked to comment on the length of the i-DOT project, which takes place over a period of a month, as well as the number of discussion sessions, where two meetings were compulsory and a third was optional. This was to establish whether the time allocated towards the project potentially acted as a barrier to participation or on the contrary. For both of these questions, the widely-held opinion of participants was that the time considerations for the project were adequate. One hundred and three participants (74%) were satisfied with the length of the project, and 109 participants were content with the number of discussion sessions that were prescribed. A total of 22 and 21 participants (16% and 15%) felt that the project should have either been longer or have had more discussion sessions respectively, while only fourteen and nine participants (10% and 6%) communicated that the project should have been over a shorter period of time or have required fewer discussion sessions respectively. In Psychouli and colleagues'[63] paper, they reported that the OCL experience offered to their students consisted of a once-off discussion session, which may have impacted on the advantages experienced by students. The authors acknowledged that limited interaction with foreign peers may have limited the opportunity for

students to benefit from a virtual exchange, and that one interaction may have been insufficient to significantly impact participants.[63] This brought about the question of whether two to three discussion sessions, as in the i-DOT project, would be a sufficient number of interactions. Based on the views of the majority of the respondents, it appears that it was.

On the other hand, an OCL project that runs for too long of a period may also disadvantage students. Although OCL projects such as COIL programmes run for longer periods up to fifteen weeks and are successful, these programmes are often incorporated into the course outline of participating institutions,[66] allowing for designated time allocation for collaborative tasks. The i-DOT project was not formalised into the curriculum for all of the nine participating institutions, and thus students need to include the virtual exchange sessions into their existing schedules. As noted by Kor et al.,[69] students can be challenged by the time demands of virtual exchange programmes when they are already faced with busy academic schedules. This can be exacerbated further by differing academic schedules between institutions, where students may need to navigate varying semester and yearly academic milestones and events at the time of the project.[15] Thus, a higher frequency of the collaborative discussions between participants may result in a greater need to negotiate scheduling dilemmas. It appears that an OCL project of a flexible nature such as the i-DOT project, should therefore be neither too short nor too long to ensure optimal engagement and benefit for participants.

In consideration of the responses to the two questions described above, together with participants' text responses positively citing the time consideration of the project, as well as the evidence of a beneficial learning experience presented in section 5.3 of this chapter, the time factor of the i-DOT project appears to be a facilitator to participation to most participants in this study.

In the following open-ended question, participants were asked how the learning experience of the i-DOT project could be improved. This question was included in the survey to identify potential facilitators that could be implemented in future projects, and were not necessarily present in the project at the time of the study in 2022.

In an earlier question, 26% of participants indicated that they received successful preparation for the project by their OTE, which worked well. However, in this question, 41 participants (30%) noted that the preparation received from their OTE could have been improved. Once again, participants who provided this form of text response represented a number of different institutions, therefore no one institution stood out as having required improved student preparation for the project. It was clear from both students who did and did not perceive receiving sufficient preparation for the project, that appropriate and clear preparation for the virtual exchange was a crucial factor for students.

Thirteen participants (9%) noted that relevant topics of discussions are important for virtual exchange as they can facilitate engagement, while another five participants (4%) reported that the matching process could be streamlined. Six participants (4%) would have liked to have been paired with foreign counterparts from more than just one country during the matching process. While the role of OTEs with regard to the i-DOT project was primarily to prepare students for the project before commencement, 10 participants (7%) would have liked for their OTEs to have provided more input or guidance during and/or after the project as well. This included recommendations for a reflection session on aspects learnt during the project as well as the facilitation of a debrief among students. A small number of seven participants (5%) added that the project could be improved by ensuring some consistency between the requirements and preparation of students. These recommendations all speak to the need to streamline the processes of the virtual exchange project; before, during and after the project; to facilitate participation, achievement and benefit.

Five participants shared a view that the allocation of academic marks for participation would improve the learning experience. They accounted for just 4% of the sample. The allocation of academic grading and its relationship with motivation was an area of interest of the researcher based on the literature findings by Carlisle et al.[49], presented earlier in Chapter Two. These authors stated that low motivation in students may affect participation in virtual exchange and that students who do not receive formal academic grading for their participation could exhibit lower motivation and commitment towards the OCL project.[49] Conversely, it could be assumed that the presence of formal academic grading could impact positively on motivation levels of students, thus facilitating participation in an OCL project. To investigate this, students' motivation levels were considered over three questions.

When looking at participants motivation levels in general, it was noted that the majority of participants in the study were more motivated than not. The most frequently occurring level of motivation among participants was rated as eight out of ten, with ten signifying full motivation in the participants and one representing a lack of motivation all together. Fourteen participants (10%) reported being completely motivated, showing no significant demographic commonalities. These respondents were from various age groups and institutions, and did not hail only from institutions offering academic grading for participation in the i-DOT project.

The following question asked participants to comment on the nature of their motivation, being either internal, external or absent. A majority of 83 participants (60%) reported being internally motivated, suggesting that academic grading was not a core factor underpinning the motivation of participants. In fact, only four participants (3%) indicated overtly that their motivation to participate in the project was directly related to academic grading; a finding that

was quite in contrast to the suggestions by Carlisle and collague.[49] While 133 participants (96%) showed that they were motivated in some form, six participants (4%) displayed that they were not motivated to participate in the i-DOT project at all. This data was compared to whether or not participants were graded for their participation in a cross-tabulation in Table 4.15. Interestingly, this revealed that of the six participants who were not motivated to participate in the project, five of them were being graded for their participation. Furthermore, the majority of participants who were being graded as well as the majority of those who were not being graded were motivated to participate in the study.

To investigate this more overtly, participants were asked directly whether academic grading was necessary to motivate students to participate in projects like the i-DOT project. While the responses from students varied, 64 participants (46%) either disagreed or strongly disagreed that academic grading was needed to foster motivation. Only a quarter of respondents (36 participants, 26%) were of the opinion that grading was needed. This finding further corroborates the idea that contrary to suggestions in literature, student motivation did not have a significant relationship with academic grading during the i-DOT project, and that formal academic grading was not identified as a facilitator to participation in the OCL project.

5.4.2. Summary of facilitators to participation

The second objective of the study was to describe the facilitators to student participation in the i-DOT project. Based on participants responses to closed-ended and open-ended questions, three categories of facilitating factors emerged. These categories are as follows: Student-led facilitators; educator-led facilitators; and facilitators related to the structure of the OCL project.

Student-led facilitators refer to the personal characteristics of students such as the ability to be flexible, as well as effort and initiative from students to prepare for and engage actively in OCL discourse. This also includes the dynamic management of challenges or barriers that may arise during the course of a project. In the Kawa Model, these factors were identified as driftwood in the proverbial river, due to them being assets to students that could have positive effects on challenges experienced and on development during an OCL project overall. Where these factors are experienced negatively, such as student characteristics that are rigid and inflexible, they can also be considered as driftwood in the Kawa Model river, adding to the obstructions in river flow.

Faculty-led facilitators refer to the preparation rendered to students by OTEs prior to the project; facilitating consistency of the preparation between the different institutions; as well as the provision of support, guidance and reflection opportunities during and after the project.

Input provided during and after the project was also considered as driftwood in the Kawa Model river as positive influencing factors for students. The preparation provided prior to the project formed part of the environment and context of the river, signified by the river floor and walls. This was because the orientation to the project provided by OTEs shaped students' experiences of the project and could impact on how effectively and confidently they engaged in the project. Where preparation is done clearly and overtly, it opens up opportunities for students to experience development in various areas and to excel, thereby increasing the metaphorical river flow. However, if preparation is superficial and uncomprehensive, the opportunity for river flow can be lessened with smaller avenues of water flow.

Lastly, facilitators related to the structure of the project refer to the inherent characteristics of the OCL project, which enable students to engage effectively. This includes the relevance of discussion topics; the format and time considerations of the OCL meetings; information resources provided to all students including guiding questions for discussions; the use of multiple ICT platforms for formal and informal communication as well as peer-mentorship during the project. As these factors form the context of the project, shaping the experience of students, they too are considered metaphorically as the river floor and walls in the Kawa Model. These factors have the ability to significantly shape and broaden the spectrum of opportunity for students and enhance the value-potential of an IaH project as a whole.

Figure 5.3: Depiction of facilitators to participation in the i-DOT river (Kawa Model)

Figure 5.3 presents the facilitators to student participation in relation to the Kawa Model. The illustration shows that the river floor and walls provided sufficient space in the river, allowing for ease of water flow. In other words, there was much potential for learning and development as a direct result of the context of the OCL project, which comprised of factors such as the inherent characteristics of the project and comprehensive student preparation by OTEs. While obstructions in the form of rocks were present in the river, given the configuration of the river walls, a strong and continuous river flow was still possible.

The illustration further depicts the driftwood in the river. As the driftwood represents influencing factors that are positive, such as student characteristics and active efforts by students and OTEs during the project, it can be seen that the driftwood has not compounded the obstruction of rocks in the river. Instead, they have assisted in mobilising the rocks in the river to the periphery, thereby facilitating greater avenues for water flow.

The abovementioned description of the Kawa Model outlines an ideal version of the metaphoric river. In contrast, Figure 5.4. depicts a river in a scenario without the positive influences of the facilitators mentioned in this section.

Figure 5.4: A River (Kawa Model) scenario with negative influencing factors

The illustration displays a river floor and walls which are narrow and shallow, which has a noticeable impact on the size of the river as well as the capacity it has to hold river water and facilitate significant flow. This represents an OCL project with a structure and preparation that is limiting and superficial, which expectedly stunts opportunities for vast and valuable learning experiences. In addition, the image depicts driftwood representing negative influencing

factors. In this scenario, instead of mobilising rocks to the periphery, the driftwood compounds the obstruction caused by the rocks, adding to the weakening of the river flow. A side-by side visual comparison of the above two scenarios are presented in Figure 5.5, showing how the dearth of facilitating factors in an OCL project can impact on the avenues and extent of learning for students.

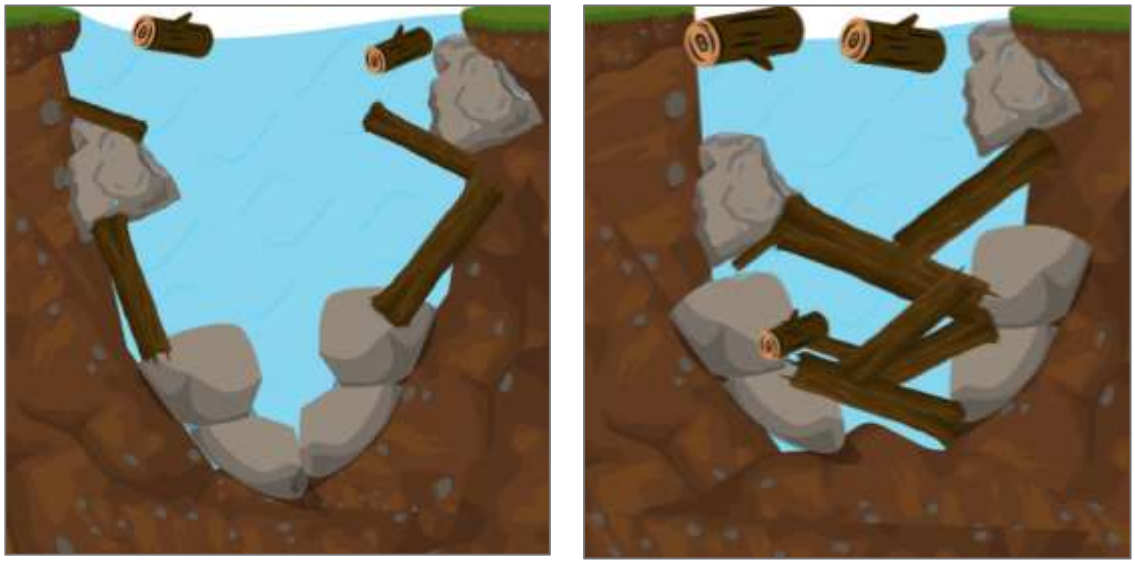

Figure 5.5: Side-by-side comparison of river floor, walls and driftwood in the i-DOT river (Kawa Model)

Both images have the same number of rocks, representing challenges. However, the image on the left has significantly more spaces of water and would maintain a stronger river flow given the influence of the river floor and walls, and the driftwood. In the image on the right, the water flow is significantly impeded, despite having the same number and size of rocks acting as obstructions. This is due to the limiting effect of the river bottom and sides, compounded by negative influencing factors, in the absence of facilitators.

It is important to reiterate that the Kawa Model depiction of the driftwood, river floor and walls may vary from student to student, and between institutions. With regard to the river floor and walls which represent the context of the study - while the inherent features of the project would remain the same for all students, aspects of student preparation in relation to institution-specific learning outcomes may differ. Thus, students within the i-DOT project may have differently shaped rivers based on their institutional requirements and input. Driftwood, as mentioned, refers to influencing factors which may be positive or negative. Some students may have an abundance of positive influencing factors, such as constructive personal characteristics, active attempts to prepare for discussions and to mitigate challenges, as well as OTEs who are supportive during the course of the student discourse. This may not be the case for some students, who may experience the opposite, with high instances of negative

influencing factors, or simply an absence of positive influencing factors where there is a prominence of neither positive nor negative driftwood. This shows that the experience of facilitators during the project may be a unique experience for each student. Overall, the depiction of the side-by-side rivers in Figure 5.5 illustrates the importance of implementing or encouraging facilitators to participation in an OCL project given its broad impact on the overall student experience and opportunity for development.

5.5. Barriers to OT student participation in an online international collaborative discussion project

The third objective of the study was to investigate and describe the barriers to student participation in an international OCL discussion project. The researcher wished to establish whether the barriers and challenges experienced in the i-DOT project aligned with those described in previous literature on OCL and whether additional barriers or challenges could be established. Furthermore, the information obtained from this objective was vital for consideration of the Kawa Model, wherein barriers and challenges are represented by rocks in the metaphoric river. Where identified challenges are considered as an influencing factor in the form of a liability rather than a barrier, these were represented by driftwood in the river instead.

5.5.1. Barriers to participation

As outlined in Chapter Four, the word ‘barrier’ was not used in the surveying tool in favour of simple English vocabulary. Instead, the word ‘challenge’ was used in both open-ended text-response questions and closed-ended select-response questions. Participants were provided a list of potential barriers and challenges based on the literature search described in Chapter Two, and were asked to indicate which of those challenges they experienced. In another question, participants were asked to outline any additional challenges that they experienced, if any, through a text response. Following content analysis and coding of text answers from students, the responses from both questions were pooled and integrated, and responses repeated by individual participants were removed.

From the responses, the experience of a language barrier was the most commonly occurring barrier, experienced by 61 participants (44%) during this study. The difficulty around language during OCL programmes was a common finding across many other research studies, including that of Carlisle et al.[49] and Wimpenny et al.[70], with students from a study by Zadnik and colleagues[71] citing language concerns as the “biggest barrier” to participation.[71] This stands to reason given the international nature of the IaH project, which brings together students from

various geographic and linguacultural backgrounds.[65] It is important to note, however, that despite language-related challenges being an often-cited barrier to participation in the results, less than half of all participants from this study experienced language barriers during the project. This could be due to 103 participants (74%) having indicated good to excellent English proficiency at the start of the survey. The researcher acknowledges that had the study sample been equally distributed across the nine institutions involved in i-DOT, that the prominence of responses related to language difficulties may have been greater. However, despite 74% of participants confirming good or excellent proficiency in the English language, this number does not account for the language barriers that may have arisen due to the English language proficiency of participants' foreign partner. The result of 44% of participants having experienced a language barrier may have also been linked to the student-directed facilitators described in section 5.4.1, where participants described numerous ways in which they augmented their communication during the discussion sessions.

Over and above the presence of a language barrier, it was worth discussing the extent of the impact of experiencing a language barrier during an OCL engagement. Both Carlisle and colleagues[49] and Aldrich and Johansson[72] have suggested that a weaker proficiency in the language of communication in an OCL project, which is often English, could lead to lower levels of confidence in students, which may affect their engagement in the discussions.[49,72] Aldrich and colleague[72] have went on to suggest that the presence of language difficulties could lead to more superficial engagements between students, and affect students' outlook on the discussions as a whole.[72] When participants in this study were asked whether language negatively affected their ability to communicate and share ideas with their foreign partners, 27 participants (19%) agreed or strongly agreed, despite more than double the number of respondents (44%) having expressed the experience of a language barrier. This provides a slight contrast to the findings of Aldrich and Johansson.[72] Additionally, in an earlier question investigating whether the i-DOT project was a beneficial learning experience for students, 108 participants (78%) who agreed and strongly agreed with the question included participants who perceived themselves to have had fair and poor proficiency in English, and also included participants who experienced a language barrier. These findings suggest that language difficulties were experienced by a portion of the participants, and while they may have posed significant challenges to some students, it did not inhibit the ability of all students who experienced it to converse and benefit from the project. Therefore, it appears that this barrier to participation was one that could be managed and supported, to some degree, as proposed in section 5.4.1 in the discussion of the study facilitators relating to strategies to augment communication.

Difficulties with scheduling suitable meeting times between partners was another challenge experienced by 60 participants (43%). Text responses from study participants described difficulty with conflicting academic timetables and partner availability. Suyama et al.[64] commented that synchronous discussions during virtual exchange can be challenging to schedule, and that student OCL activities should be cautiously arranged. However, the i-DOT project did not prescribe times for students to meet owing to the flexibility of the project and the number of institutions involved. It therefore relied on students to schedule suitable times within their smaller groups. Emphasis on time considerations by the participants were placed more on scheduling times and busy academic schedules compared to navigating time zones. Since the nine institutions fell within one of three time zones, it did not appear to be a significant challenge, with only 19 participants (14%) citing difficulty in understanding of or navigating time zones. This is in keeping with Suyama and colleagues'[64] findings, where different academic schedules and activities of participating institutions were noted as influencing factors on synchronous meeting times. These authors also found that for their students, a time difference of two hours between the countries of the institutions in their OCL project did not pose significant challenges to them.[64]

Challenges with internet connectivity were highlighted by 55 participants (40%). This was a difficulty which was seemingly difficult to completely mitigate, with its mention across several studies including that of Zadnik et al.[71] and Naicker et al.[17]. Naicker and colleagues[17] discussed the effect of poor connectivity on their students' meetings, which affected the momentum of discussions and wasted valuable interaction time within already constrained schedules.[17] The authors, whose study included students from South Africa, further highlight the effect of loadshedding on the discussions, which ultimately compounded barriers around connectivity.[17] The issue of loadshedding also came up in this study through text responses from 10 South African participants (7%), with some citing its negative effect on their internet signal as well as their meeting schedule and availability of the group to reschedule. Important to note was that with 53 South African participants involved in this study, less than a fifth of these participants indicated being impacted by the interruptions in power supply as a result of loadshedding. The reason that some participants were affected more than others could be informed by the text responses from participants related to their facilitators to participation. While some students had mentioned the use of power generators during times of loadshedding, others considered their area loadshedding schedule as part of their planning and preparation for the meetings. Thus, a portion of participants experiencing loadshedding were able to mitigate its effects in some way.

Technological difficulties were experienced by 35 participants (25%). As these responses emerged from a closed-ended question, the nature of these difficulties remains unknown.

Carlisle and colleagues[49] advised that the presence of technological literacy in students of OCL projects should not be simply assumed.[49] For this reason, in this study, participants were asked directly whether they had sufficient technological skills to participate in the project, such as skills in selecting and using appropriate software for the discussions. In response, 126 participants (91%) of participants either agreed or strongly agreed. Just four participants (3%) indicated that their skill was insufficient. Based on this, it was suspected that much of the technological difficulties experienced by 25% of the participants were related to the hardware or software used itself, rather than their skill in using it. This assumption was in keeping with comments from Zadnik et al.[71], who made mention of technological challenges related to computer hardware used rather than students' ability to use it. In their study, Zadnik and colleagues[71] acknowledged that technological and internet connectivity troubles were significant barriers to student participation[71], aligning with the results from this study.

A further challenge experienced by 28 students (20%) was their limited understanding of what was expected of them during the project. This aligns with the earlier-mentioned recommendation by 41 participants (30%) for improved preparation to be provided by OTEs prior to the virtual exchange. It also corresponds with the findings of Carlisle et al.[49] and Kor et al.[69] who highlighted that unpreparedness in students could lead to feelings of uneasiness[49], making their experience more challenging.[69] A smaller proportion of eight respondents (6%) cited the dynamics between their partner as a challenge for them during the project, which was a challenge also identified by Naicker and research team.[17] However, while mentorship was mentioned by some participants as a facilitator to participation, four out of the eight participants who had difficulty with their partner confirmed that their challenge was with either their own mentor or mentee.

Communication difficulties, presumably with participants' foreign partners, were experienced by 43 participants (30%). Challenges with communication can occur in the absence of a language barrier, and poor communication may be as a result of various factors including student motivation and willingness to engage.[17] Eleven participants (8%) indicated that their interpersonal capabilities were a challenge during the discussions. A limitation of interpersonal skills can act as a liability for students during virtual exchange as, according to Knopf and research team, poor communication and interaction among student groups can affect the success and quality of the learning opportunity.[1] Respondents from this study commented on their difficulty in starting or maintaining a conversation, with one respondent having stated that both they and their foreign partner were introverts. Two participants (1.4%) mentioned a challenge around having different requirements during the project compared to their foreign partner. Both respondents explained that their foreign partner(s) has prepared a PowerPoint presentation to introduce themselves in the first session, while they were not instructed to

prepare anything. This left one of the students feeling unprepared and the other feeling embarrassed. The students alluded to the need for similar preparation and requirements between students to ensure they commenced the project on equal footing.

To explore whether cultural differences affecting the depth of the discussions between students, participants were asked to comment on whether it affected their ability to interact meaningfully with their foreign partner. From the responses, it was evident that this was a challenge for a few students, with 15 participants (11%) agreeing or strongly agreeing with the statement. While some of these respondents had a foreign partner from a different continent, other respondents found challenges with partners from other countries within the same continent, i.e. within Europe. However, 118 participants (85%), forming the majority of the sample, disagreed with cultural differences having a negative effect on their peer interactions.

Lastly, according to Aldrich and Johansson[72], the different years of academic study of students in their study affected how active they were during the discussion sessions, and the authors concluded that it could also affect students' outlook and perception of an online collaboration.[72] To investigate whether differing years of study of i-DOT partners had an effect on their interactions, participants were asked to comment on the impact of their partner's academic year on their discussions, if their partner was in a different academic year to them. The researcher wished to establish whether the pairing of students from various years of academic study, as per the structure of the i-DOT project, was a barrier to their participation. Ninety-two out of 103 participants (66%) had foreign partners who were in a different year of OT study. From these participants, 33 respondents (36%) indicated that the varying years of study did not impact on their discussions, while 56 respondents (61%) indicated that it had a positive effect. Only three participants (3%) felt that it had a negative effect on their interactions. For this reason, dissimilar to the sentiments shared by Aldrich and colleague[72], pairing of students across years of study does not appear to be a barrier to student participation.

Most of the challenges experienced by the participants, with the exception of loadshedding, challenges around different student requirements, and cultural differences, have been documented in the literature. A total of three participants (2%) confirmed that they did not experience any barriers to participation during the i-DOT project.

5.5.2. Summary of barriers to participation

The third objective of the study was to describe the barriers to student participation in the i-DOT project. Through participants' responses to closed-ended and open-ended questions, barriers that were identified mainly included language-related challenges, communication difficulties unrelated to language barriers, technology and connectivity difficulties, scheduling

meeting times amidst busy timetables, limited understanding of the OCL tasks, and struggles with navigating time zones. A small number of participants experienced challenges in relation to their own interpersonal skills, their cohesiveness with their partner as well as navigating different OCL requirements between foreign partners. Lastly, loadshedding was identified as a barrier to participation that was unique to South African students. While the systematic interruptions in power supply affected the internet connectivity and thus meeting schedules of some students, loadshedding did not act as a barrier to every South African student.

In consideration of the Kawa Model, most of these barriers are represented as rocks in the metaphoric river as they act as obstructions to the river flow, and thus to the development potential of students. There may be instances where rocks in a river are not greatly impactful and hence do not significantly impede water flow. This may be in cases where a river has few rocks; the rocks are not large; they exist on the periphery; or the rocks are not clustered to form a larger unmovable obstacle. Conversely, large and numerous rocks can easily hinder the size of water avenues in the river, leading to a weaker river flow.

Driftwood in the river have been discussed in relation to the facilitators to participation and to this point has largely been described as a positive feature of the metaphoric river. However, some challenges experienced by students, such as their limitations in interpersonal skills, poor dynamics between partners, and feelings of unpreparedness or inadequacy related to different student requirements can act as liabilities to students, best represented by driftwood in the Kawa river. Driftwood that signifies negative influencing factors are known to compound the obstructions by becoming lodged into rocks, thus further impeding water flow in the river.

Figure 5.6 shows a depiction of the rocks and negative driftwood in the Kawa Model. It can be seen from the image that the size of rocks and driftwood in the river differ in size, based on how significant they are. Smaller rocks and driftwood may have a lesser impact on the river compared to larger ones and may be displaced more easily. Larger rocks cause more significant effects on the water volume and spaces, thus decreasing the river flow. Driftwood here have become lodged into the rocks, fixing them into position and compounding their obstruction.

Seldom will rocks not be present in a river at all. In the case of this study, only three participants (2%) reported experiencing no barriers to participation at all. For this reason, it can be expected there will be some rocks in the river, and together with attempting to remove them for a better river flow, one could also attempt to mobilise them to the periphery or decrease them in size where they cannot be removed completely. In other words, during an OCL project, some number of barriers and challenges can be expected, and while some of these may be difficult to mitigate completely, at a minimum OTEs and students can attempt to decrease the

size and impact of the barrier so that its' effect on the OCL experience is not entirely detrimental.

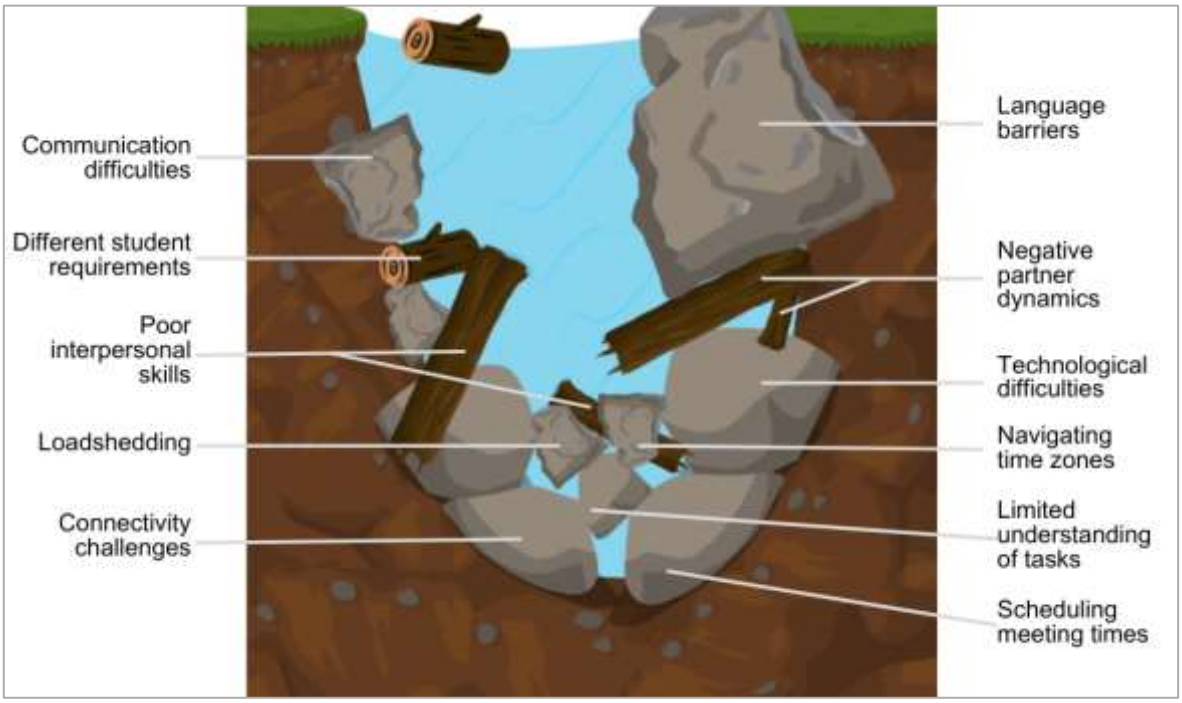

Figure 5.6: Depiction of barriers to participation in the i-DOT river (Kawa Model)

Some examples of how this can be done have been touched upon in the discussion of the facilitators and include strategies to augment communication to manage language barriers, effective planning and organisation to deal with potential technological difficulties and loadshedding, and appropriate preparation for the OCL project by the OTE to limit task-uncertainty by students.

Once again, it is important to note that students will experience different barriers to participation during an OCL project and the extent of those barriers may differ from their peers experiencing a similar barrier. For this reason, the Kawa Model river will look different for each student.

Figure 5.7 shows a side-by-side comparison of two scenarios depicting the barriers to participation. Both images show the same number of rocks and driftwood in the river, with the same river floor and walls. However, the size of the rocks are substantially larger in the image on the left compared to the right. Furthermore, the driftwood in the image on the right serve the function of keeping the rocks to the periphery of the river, which differs from its function on the left where instead, it compounds the obstruction and decreases some of the avenues of water flow.

Figure 5.7: Side-by-side comparison of rocks and driftwood in the i-DOT river (Kawa Model)

These images provide a prime example of the effect of these rock and driftwood elements in a river, where the image on the right has far more spaces as avenues for water and will therefore produce a stronger water flow. By decreasing the impact of challenges experienced, even when they cannot be fully eliminated, and by limiting negative influencing factors, the avenues for student development can increase substantially. For this reason, addressing barriers to participation can have a noteworthy impact on the breadth of opportunities available for students to develop and benefit during an OCL experience.

5.6. Synthesis and summary of the Kawa Model

The three objectives of the study were discussed and related to the Kawa Model individually. This section will now synthesise the elements of the Kawa Model to highlight the interrelatedness between them.

When utilising the Kawa Model, the aim was to achieve harmony between the five elements within it. This is achieved when there is a strong water flow utilising various spaces for water to flow through in the river. A strong water flow is influenced by the elements in the river, making it important to consider them all rather than focus on the river flow alone. In other words, when reviewing the development that students perceived to have enjoyed during an OCL project, or when planning future development opportunities for students, it is necessary to consider the context of the project, the facilitators to participation as well as the barriers to participation as these contribute to students' experience of development.

The discussion began with debating the perceived benefits of the project by students, where it was noted that students were able to benefit in several areas of development. In order for

this to be possible, the i-DOT project needed to have provided relevant opportunities for this through the way it was structured. The participants were able to experience academic benefit during the project, which would have been encouraged by the type of questions and topic areas provided to the students through the guiding questions of the project (Annexure L). This included topics focussed on the elderly as well as the effect of the coronavirus pandemic on occupation. The participants were also able to experience professional development during the project, which may have been encouraged by the structure of the project itself, which required students to be independent and exercise initiative in order to complete it. Personal growth and social growth were further areas that students perceived to benefitted in. Including an introductory session to the i-DOT project for students to virtually meet one another in an informal manner, and encouraging interaction outside of the discussions through various ICT and social media platforms may have encouraged personal and social development to come to the forefront. Finally, the participants agreed to have improved in their awareness of diversity during the project. The inclusion of a variety of diverse countries in the project, as well as encouraging participants to discuss the occupation and circumstances in their respective countries may have contributed to participants and their foreign partners increasing their insights into different geographic and linguacultural settings. Through this, one can see that the benefits that were enjoyed by the participants were directly facilitated by the structure and characteristics of the i-DOT project.

The structure of the i-DOT project, together with educator-led preparation for the project form the context of the project, and thus played a key role in shaping the proceedings of the project. A restricted and tightly controlled project could decrease the reach of a project, limiting opportunities for broad benefits to students. Therefore, adequate planning, structuring and organisation of an OCL project is vital to allow for multiple areas of achievement for students.

The barriers to participation in the i-DOT project were described as rocks in the river. Many of these barriers may be out of one's control, such as having a language barrier, experiencing technological difficulties despite having sufficient digital skills, and managing numerous other academic activities amidst a busy time schedule at the time of the project. For this reason, it is realistic to say that not all barriers could be completely mitigated. However, given their potential to significantly reduce opportunities for academic learning of students, it was evident that there is a need to decrease the size and impact of these barriers. This would allow for active learning and development to take place in spite of the barriers that are present.

Driftwood was discussed as being influencing factors in the i-DOT project and were both positive and negative. Facilitators to participation, which were considered as positive influencing factors, played an important role in assisting students to navigate and decrease

the impact of the barriers they experienced, and could thus have supported development during the i-DOT project. These were in the form of educator-led strategies as well as student-led strategies. The latter was an important aspect of the project to allow for student-directed learning, allowing for active engagement in the project by students. In future cases, this could be achieved by encouraging students to utilise their positive personal characteristics to excel in the virtual exchange journey, and by equipping students with the skills to manage the challenges that they are expected to face during a project. Negative influencing factors may also be present, and where necessary, it is important for OTEs to take steps to try and limit these liabilities to the i-DOT process. For example, one negative influencing factor that arose from the study related to feelings of embarrassment after a foreign partner was more prepared for the discussions, having created a concrete resource to utilise during the introductory session. Such a factor could be mitigated by ensuring that student preparation by OTEs loosely aligns with other institutions to ensure that students enter the discussions on a similar footing.

Lastly, the most salient aspect of the Kawa Model focuses on the strength of the river flow. Once all of the abovementioned elements are balanced and are in harmony, a strong river flow can be achieved. This would signify a beneficial learning experience for students, allowing for progress in an array of development areas. Based on the findings of objective one of the study, the participants involved in the i-DOT project perceived, as a unit, to have benefitted in all areas of benefit that was investigated. For this reason, the kawa model elements of consideration during the i-DOT project appear to have been in harmony.

5.7. Conclusion

This chapter has analysed and discussed the findings of the research study, which were initially presented in Chapter Four of this dissertation. The Kawa Model was applied as a theoretical framework to synthesise the emerging information to establish its interrelatedness in enabling student development through OCL. Knowledge from current literature was consulted and used to compare the findings emerging from this study, and establish whether they align with current knowledge.

The discussion of the findings was able to conclude that the participants of the study who engaged in the i-DOT project in 2022, were largely able to benefit from the student discourse. The nature of benefit experienced by the participants ranged from academic and professional development, to personal and social growth, and diversity-related insights. However, this chapter highlighted that not every participant was advantaged by every one of these areas.

A review of the facilitators to participation in the project highlighted three distinct themes. These were enabling strategies initiated by the structure and characteristics of the OCL project; the preparation and input by OTEs; and by the student themselves. The effectiveness of student mentorship in OCL projects was a novel facilitator that emerged from the study. Furthermore, this study found that the allocation of academic grading in the project was not necessary to foster motivation in students and therefore was not a facilitator to participation.

The barriers to participation that were identified were predominantly language and time related challenges, but included technological issues and a limited understanding of the expectations of the project. Loadshedding emerged as a barrier unique to South African students, however, it did not impact on every South African student engaged in the project. From the findings, discourse between students in different years of academic study was not identified as a barrier to participation in the project.

These findings were interrelated using the Kawa Model[42], in an analysis that supported the notion that maximal student benefit and development can be promoted through the consideration of facilitators and barriers to participation. The management of enablers and inhibitors to engagement can give rise to greater and more favourable avenues for student development.

The results from this study were largely congruent with the current literature, having provided some aspects of new information. This has enabled the research objectives of the study to be satisfied, paving the way for the research question to be addressed. In the following and final chapter of this dissertation, the research question will be answered, allowing the research study to be concluded. Recommendations for further studies will be put forward, motivating for future research in the area of IaH through international OCL.

CHAPTER 6 – CONCLUSION

6.1. Introduction

What are the benefits, barriers and facilitators to participation experienced by OT students involved in an online international collaborative discussions project? This was the research question that had prompted this research study, giving rise to the research aim of describing OT students' perceptions and experiences of participating in an online international collaborative discussions project, namely the i-DOT project. To this end, a quantitative descriptive cross-sectional survey design was used to gather data from 139 OT students who participated in i-DOT in 2022.

This dissertation commenced by providing a background to the study and an overview of the i-DOT project in Chapter One. Here, the international nature of the project was highlighted, having introduced the nine institutions involved in the project. After stating the research problem, the research question, aim and objectives were stated, and the significance of the study was clarified. The assumptions related to the research study were discussed before introducing the Kawa Model[42], the theoretical framework selected for use in this study.

Chapter Two presented a review of the literature available on online learning, internationalisation and specifically online collaborative learning (OCL). This was looked at broadly and then focus was placed specifically on OCL programmes in OT. The nature of the i-DOT project was differentiated from other OCL programmes commonly described the in literature, thus, the gap in research was identified. The findings from the literature review were used to inform the development of the data collection tool for this study.

The methodology chosen for and applied in the study was outlined in Chapter Three. Here, the research design and study participants were discussed, and the process of developing the research tool was explained. Following an explanation of the data analysis methods used, the quality criteria, ethical considerations and data management procedures were elaborated upon.

Chapter Four of the dissertation presented the results emerging from the study. These were presented according to the three objectives of the study and included the demographic information obtained from the data. Statistical measures applied to the data were also discussed.

Following this, the results of the study were discussed under Chapter Five with input from the literature. This allowed for the data to be analysed and understood, and be related to the Kawa Model for further understanding of the information obtained.

In this final chapter of the dissertation, the main findings from this study will be summarised and concluded, and the research question will be answered. After outlining the importance and the limitations of the study, the chapter will close with recommendations for future research studies and final remarks of the researcher.

6.2. Main study findings

This research study was based on students' engagement in the i-DOT project, an OCL project for OT students involving nine international institutions. The inherent characteristics of the i-DOT project make it flexible in nature compared to other OCL projects commonly described in the literature. Therefore, it was unclear at the start of the study whether present literature on OCL applied to projects structured like the i-DOT project. This study aimed to describe the perceptions and experiences of OT students during an online international collaborative discussions project. This was satisfied through consideration of the three study objectives, which allowed the researcher to examine the benefits that the participants perceived to have experienced, the perceived facilitators to their participation as well as the perceived barriers to their engagement. By successfully uncovering these aspects during the study, the researcher was able to understand the experience of the i-DOT project by OT students, providing an answer to the research question. The salient findings of these objectives are concluded upon below, separately.

Objective one – To describe the benefits of an international collaborative discussions project for OT students regarding their academic development; professional development; personal and social growth; and cultural and diversity awareness.

From the findings of the study, it was evident that combined, the student participants were able to enjoy a wide range of benefits while engaging in the i-DOT project. The majority of participants agreed that the i-DOT project was a beneficial learning experience for them, and that the international nature of the project offered them benefits that they perceived may not have been achievable within their local contexts.

Four distinct sub-objective areas of benefit were investigated, the first of which was academic development. Most participants agreed that they benefitted from the i-DOT project academically and in terms of their understanding of occupation. Many reported that, through their discussions, they were able to meet their institution-set learning outcomes. When participants were surveyed about their professional development, once again the majority of participants attested to progress in this area. Professional development referred to the development of a professional identity as well as transferrable skills that can be valuable in

various settings. From this study, the most notable transferrable skills highlighted by participants were communication skills, the ability to work with others and flexibility.

The perceived benefits achieved by students extended into their personal lives. When surveyed about personal and social growth, most participants were in agreement that they experienced growth in both of these areas. Personal growth included the development of self-efficacy, general knowledge and self-confidence, while social growth included participants' confidence in communicating with new people and the ability to respect the views and beliefs of others. Lastly, the majority of participants perceived themselves to have benefited in the area of cultural and diversity awareness, including in understanding how factors of diversity could affect the occupations that people hold. Participants also agreed that the knowledge they had gained from the i-DOT project could assist them in working with diverse populations in OT.

Since all of the sub-objective areas of development were experienced by a majority of participants, it is concluded that the i-DOT project was able to offer broad and diverse opportunities for student development in all of the areas that were investigated. These benefits are in keeping with those already described in literature.

Objective two - To describe the facilitators to OT student participation in an online international collaborative discussions project from the perspective of students.

Findings on the facilitators to student participation from this study included both facilitators that were implemented at the time of the i-DOT project and facilitators that participants recommend to be implemented in the future. Three distinct categories of facilitators were identified from the findings, namely student-led facilitators, educator-led facilitators and facilitators related to the structure of the project.

From the responses of participants, it was evident that their taking an active role in the international collaboration was useful and facilitated their participation as well as their success in the project. Student-led facilitators refer to a number of strategies employed by participants, including adequate planning for the student discourse, use of strategies to augment their communication and manage language barriers, as well as personal characteristics such as the ability to be flexible.

Educator-led facilitators refer to the input that OTEs can provide to facilitate improved participation by students. Largely, this related to the comprehensive and clear preparation of students before their OCL experience, which included the provision of useful written and audiovisual resources. It also related to the provision and guidance, support and reflection opportunities during and after the OCL period.

Finally, facilitators related to the structure of the project refers to the features of the i-DOT project that were effective. This included the provision of guiding questions for students to use as well as the encouragement of informal communication between students using alternative ICT platforms.

Some sources of literature suggested that the allocation of academic marks could act as a facilitator to student participation, however, this idea was refuted by the findings of this study. While some findings align with those described in literature, some novel facilitators to participation have emerged from this study, such as the use of peer-mentorship during international virtual exchange.

Objective three - To describe the barriers to OT student participation in an online international collaborative discussions project from the perspective of students.

The final objective of the study was to describe the barriers to student participation in the i-DOT project. Participants described barriers related to language, communication, technology and internet connectivity. Difficulties around time scheduling and navigating time zones were also identified, together with participants' own challenges with their interpersonal skills. South African students in particular identified loadshedding as a barrier to participation. Students being in various years of academic study, from first to fourth year, was not identified as a noteworthy barrier to participants' involvement in the i-DOT project. The findings related to the barriers to participation are largely congruent with those put forward in current literature.

6.3. Limitations of the study

While every effort was made to conduct the study in an exemplary manner, seldom are research studies without limitations. Some important limitations of this study have been outlined below.

The sample of participants of this study was not representative of the larger population, made up of OT students participating in the i-DOT project in 2022. Students from the nine institutions participating in the i-DOT project were not equally represented in the data. There could be two reasons for this. Firstly, the invitation to participate in the study was shared with the OTE who acted as the i-DOT representative of each institution, who then extended the invitation to the relevant student cohort within their institutions. Participation reminders were suggested by the researcher, however, the carry-over of these within the various institutions was inconsistent. Secondly, the data collection period of the study overlapped with the academic year-end and university vacation of institutions in the Northern Hemisphere. Therefore, a large portion of students were inaccessible through their university email addresses during this period.

As a result of this, 38.1% of all responses were from students at the University of Pretoria, while 18,7% were from students of the University of Southampton. Of the nine institutions involved, the two abovementioned institutions account for more than half of the participants in the study.

In addition, the researcher acknowledges that students from different institutions may have experienced the i-DOT project differently due to differences such as their first languages and the institution-specific preparation they received for the project. For this reason, the findings and conclusions from this study are not intended to be generalisable to the larger population and beyond. This can be mitigated in future research studies by employing probability sampling instead.

A further limitation of the study was that not all first languages of participants were represented during the data collection process. Due to resource and time constraints, the data collection tool was offered in the languages of English and German only, despite the multiplicity of first-languages among the participants of the sample. The researcher was cognisant that language proficiency in either the English or German languages could have affected participants' interpretation of questions in the surveying questionnaire. In addition, this may have affected the willingness of participants with different first languages to participate in the study.

As the study made use of a cross-sectional survey design, it captured the opinions of participants at one point in time following the study. It was unable to measure change over time or compare participants' perceptions to those they held before the project. In addition, given that the study focussed on the perceptions of students, in lieu of an objective outcome measure, the findings from this study are entirely subjective. Furthermore, given that the study makes use of a quantitative survey design, there were limitations related to the interpretation of students' experiences. While the design provided clear information on what the experiences of the students were, there was limited information on the reasons for those experiences. However, because this study forms part of a larger study, the qualitative aspect of the mixed-method study will contribute to mitigating this upon data integration of the larger study.

The final limitation of the study relates to the data collection tool, a self-developed questionnaire. As there was limited available research on OCL programmes in occupational therapy particularly at the time of tool development, the tool was largely developed based on general literature and was not influenced by projects specifically similar in nature to i-DOT. In future studies, if within a large mixed-method study, a three-phased exploratory sequential design may be effective in designing a novel data collection tool as information emerging from qualitative data can influence the preparation of a surveying tool.[16]

6.4. Strengths of the study

A number of strengths have been identified in this study. These are elaborated upon below:

- The structure of the i-DOT project is unique in that the flexibility and simplicity it affords allowed nine international institutions to be involved in the project at the time of study in 2022, with potential for more institutions to join in future years. No such project has been identified in the literature; therefore, the strength of this study is that the findings it has produced are a new and unique.
- The international scale of the study acts as a strength as it includes perspectives from students in eight different countries and nine different institutions. This has allowed for well-rounded information to be gathered from diverse student participants, with different cultural and language backgrounds. In addition, no study in the literature has been identified by the researcher as having collected data from students from this many institutions.
- Another strength of the project is that the surveying tool was offered to students in both the languages of English and German. By including German in the survey, there was an opportunity to diversify the participants who participated in the study by facilitating language inclusion. In addition, the use of the German language was identified as a language inclusion that could have benefitted the most number of students from the population.
- The German translations were made possible by OTEs who were involved in the larger mixed-method study as well as the i-DOT project itself. As they were directly engaged in both aspects, they had an understanding of the purpose of the study and the survey. In addition, two of the OTEs were direct educators to the students who would be using the German translations in the survey. This is a strength as it had a positive impact on the German translations, particularly in the translation of terms commonly related to OT such as “occupation” and “internal/external motivation”.
- The study sample consisted of 139 participants. This is a large sample that allowed for vast and diverse data to be collected. While the exact number of students involved in the i-DOT project is not known, it is estimated that approximately 350 students or more engaged in the online discussions. Based on this estimation, approximately 40% of the population may have been represented in the study sample.
- Aside from the actual study, the pilot study also included a diversity of students from different language, geographic and cultural backgrounds. This is a strength as it allowed the data collection tool to be effectively tested and reviewed in both languages by different student groups previously involved in the project.

- The data collection tool was based on literature, which allowed specific pieces of information to be gathered on different aspects relating to the objectives of the study. To date, no one study has been identified by the researcher as having produced a similar breadth of information as this study, unless in a review of numerous studies. Therefore, the strength of the study relates to the extent of information that it has produced.
- Another strength of the study was the use of open-ended questions that allowed for new perspectives and elaboration to emerge from the data, producing new findings and a better understanding of aspects of students' experiences.
- Despite primarily using descriptive statistics for the analysis of data, formal statistical tests were applied to the results to support findings, and demographic information was consulted and cross-checked to unveil possible trends, if any, in the data. In addition, responses of individual participants were tracked through the data to provide a clearer understanding of students' individual experiences. Through this, the data was not taken at face value but rather scrutinised through different phases of analysis.
- The use of the Kawa Model was a strength in this study as it allowed for an additional layer of analysis of the data, integrating the findings that emerged from each objective. To date, the Kawa Model has had only occasional use and application in the field of academia as opposed to clinical practice in OT. However, no such use has been identified in the area or of IaH. Therefore, its use in this study has been an innovative application of the model that has not been seen in the area of OCL prior to this.

6.5. Recommendations

The following recommendations are provided for future research studies in the area of OCL:

1. Future studies are recommended to utilise probability sampling, ensuring an equal representation of student participants from various countries and institutions.
2. A mixed-method study using a three-phase exploratory sequential design is recommended where qualitative findings can be used to inform and create a novel quantitative data collection tool. This will allow for information to be explored and then generalised.[95]
3. A study utilising a pretest-posttest design with one group of students is recommended.[16] In this case, an objective outcome measure can be used to provide concrete and quantifiable evidence of the benefits of OCL projects for students.
4. Should changes be made to the i-DOT project following findings from this study as well as the larger mixed-method study, it is recommended that the project be researched

once again with a new cohort of students to determine whether new knowledge on facilitators and barriers to participation produce different outcomes and views of students. This may be done through further implementation of one or more of the recommendations mentioned above.

5. Future studies that investigate the content of virtual exchange discussions through qualitative research designs are recommended. This can provide valuable information on the topics of student discourse and inform the planning of OCL programme content going forward.
6. The study of interdisciplinary OCL projects involving OT students paired with students from other disciplines, either within health sciences or beyond, is recommended. To date, OCL research relating to OT focusses on discipline-specific engagements, with little available information on OT student discourse with foreign partners from different academic fields of study.
7. Lastly, the researcher recommends future studies on OCL projects that include students from more developing countries, or those underrepresented in literature from regions such as Africa, South America, the Middle East and central Asia. This will allow for more diverse perspectives to be captured in literature.

6.6. Final conclusion

The i-DOT project, as an online international collaborative discussions project, was able to provide OT students with wide-ranging benefits in the domains of academic and professional development, personal and social growth, as well as in cultural and diversity awareness. Barriers and facilitators to participation in the project have also been identified, thus providing an answer to the research question. The findings largely align with current literature, indicating that the i-DOT project can offer students similar benefits to other OCL projects already investigated. However, the extent of these benefits falls beyond the scope of this research study.

Analysis using the Kawa Model highlighted key recommendations for HE educators in future OCL practice. It is necessary to consider the interrelatedness of barriers and facilitators to participation, and how these factors influence the breadth of the benefits available to students in an international OCL project. Barriers to participation may inhibit development opportunities for students and should be eliminated as far as possible. Where barriers cannot be eliminated, educators should equip students with the tools to manage and mitigate them instead. Facilitators to participation should be purposefully included into OCL projects, and emphasis should be placed on the active role of students throughout the collaboration process. Finally,

intentional structuring and characteristics of the OCL project appeared to have played a key role in the success of i-DOT project, and thus should be given careful consideration in future OCL opportunities.

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ANNEXURES

Annexure A: Institution-specific information on students involved in the i-DOT project

Annexure A:

Institution-specific information on students involved in the i-DOT project

Name and country of Institution	Type of OT course	Academic year of students	Compulsory participation	Academic output	Academic Grading	Student participation in discussions	Language(s) of the student majority	Language of teaching at the institution
Artevelde University of Applied Sciences, Belgium	3 year *B.OT	2nd year	Yes	Yes	Yes	Individual or in pairs	Primarily Dutch; German and French	Dutch; Occasio-nally English
aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning, Croatia	3 year B.OT	3rd year	No	Optional	No	Individual or in pairs	Croatian; English common as a second language	Croatian
Bildungsakademie der Gesundheit Nord, Germany	3 year Diploma	1st year	Yes	Yes	Yes	In pairs	German	German
Kuwait University, Kuwait	4 year *BSc.OT	4th year	Yes	Yes	Yes	Individual	Arabic	English
University of Applied Sciences for Health Professionals, Austria	3 year B.OT	1st year	Yes	Optional	No	In pairs or in a trio	German; English common as a second language	German
University of Derby, The United Kingdom	3 year BSc.OT	2nd year	No	No	No	Individual or in pairs	English	English
University of Pretoria, South Africa	4 year B.OT	1st year 2nd year	Yes No	No	No	In pairs, one mentored the other	English Afrikaans Sepedi, and others	English

Name and country of Institution	Type of OT course	Academic year of students	Compulsory participation	Academic output	Academic Grading	Student participation in discussions	Language(s) of the student majority	Language of teaching at the institution
University of Southampton, The United Kingdom	3 year BSc.OT	2nd year	Yes	No	No	Individual	English	English
Universite Paris-Est Créteil Val de Marne, France	3 year B.OT	2nd year	Yes	Yes	Yes	In pairs	French	French, Occasio-nally English

*B.OT – Bachelor of Occupational Therapy

*BSc.OT – Bachelor of Science in Occupational Therapy

Annexure B: Information and consent form

Annexure B: Information and consent form

International discussions in occupational therapy: Exploring facilitators and barriers to participation in a global collaborative learning experience

Ethics reference number: 371/2022

Dear Participant

This form provides information that will help you to understand what the study is about and what will happen during the study. If you have questions whilst completing the questionnaire and during the study, please email the principal investigator.

Why is this study being done?
The researchers of this study would like to describe the perspectives of occupational therapy students participating in the International Discussions in Occupational Therapy (i-DOT) project, which is a global collaborative learning experience. Whilst collaborative learning opportunities have been researched in other studies, this is the first known project in occupational therapy higher education involving this many international institutions and with the flexibility that the project has been designed with.

Who may take part in this study?
Occupational therapy students who were involved in the i-DOT project in 2022 from any country, and who have completed a minimum of 2 discussion sessions with their foreign partners. Students who participate may have any first language, but should have a basic written/reading proficiency in English or German.

How many students may participate and how long will the study take?
The study aims to gather information from as many participants involved in i-DOT 2022 as possible. This is to ensure that we get a fair representation of perspectives and experiences of students. The electronic questionnaire may take approximately 20 minutes to complete.

What will you be asked to do if you take part in this study?
If you agree to participate in this research, you will be asked to complete and submit the electronic questionnaire. This questionnaire has a series of self-report questions about your experience of the i-DOT project.

What are the risks that you might experience if you take part in this study?
Apart from taking up some of your time, there are no other risks or discomforts involved in participating in the study. The risks associated with participation are no greater than

the risks encountered in everyday life.

Are there any benefits for you if you choose to take part in this study?
There are no known benefits to you if you participate in this study, besides knowing that you are contributing to the body of knowledge in international collaborative learning.

Will there be any cost to you to take part in this study?
There are no anticipated costs to you for participating in this study.

Will you be paid to take part in this study?
You will receive no payment for participating in this study. This includes compensation for study related injuries.

How will information about you be kept private or confidential?
Only basic information about yourself and the institution you are from will be needed. All efforts will be made to keep your personal information confidential, but total confidentiality cannot be guaranteed. Data collected during the study will be stored securely in an encrypted, password-protected digital format. Only the primary investigator and research associates will have access to the data and results. No personal identifiers that link you personally to your responses will be collected. The results of this study will be disseminated to the scientific community in aggregate form. In other words, your individual data will not be shared, but the average data from all participants in this study will be disseminated in the form of peer-reviewed scientific publications, and research presentations at professional conferences.

What will happen if you decide not to take part in the study or later decide not to complete the study?
Participation in this study is voluntary. You may choose not to participate, or you may change your mind at any time. There is no penalty for deciding not to participate or opting out during the study. After you have submitted your survey, it will however not be possible to remove the data already collected from you, since you will not be identifiable.

Who can you contact if you have any questions?
Mrs Nabeela Kharva – Principal investigator, University of Pretoria
Email: nabeela.kharva@up.ac.za / naba786@gmail.com

Who can you contact if you have ethics related questions about the study?
Mrs Manda Smith – Departmental Administrator
Faculty of Health Sciences Research Ethics Committee, University of Pretoria
Email: manda.smith@up.ac.za Tel: +27 (0)12 356 3085

What are your rights if you decide to take part in this research study?
You have the right to ask questions about any part of the study. If you agree to participate in this study, you will still have your legal rights. However, no funds have been allocated to compensate you in the unlikely event of injury.

AGREEMENT TO PARTICIPATE / TEILNAHMEVEREINBARUNG

→ **I have read this entire form, or it has been read to me, and I understand what has been discussed. By beginning this survey, I affirm that I am over 18 years of age and agree that the information from this survey may be used in the research project described above as well as in further publications of the study.**
Ich habe das gesamte Formular gelesen oder es wurde mir vorgelesen und ich habe den Inhalt verstanden. Damit, dass ich die Umfrage beginne, bestätige ich, dass ich 18 Jahre oder älter bin und willige ein, dass die Informationen, die aus dieser Umfrage gewonnen werden, sowohl für das oben beschriebene Forschungsprojekt als auch für Publikationen in Zusammenhang mit dem Forschungsprojekt genutzt werden dürfen.

→ **I have read and understood the consent form and hereby voluntarily agree to participate.**
Ich habe die Einwilligungserklärung verstanden und willige hiermit freiwillig in die Teilnahme ein.

→ **I have sufficient language skills to complete the survey in either the English or German language.**
Ich habe ausreichende Sprachkenntnisse, um an dieser Umfrage entweder in Englisch oder Deutsch teilzunehmen.

☐ **I hereby voluntarily agree to participate in the research, and understand that by continuing with the survey, I have accepted the information provided above.**

Ich willige hiermit freiwillig ein, an der Studie teilzunehmen und verstehe, dass ich – wenn ich weiter an der Umfrage teilnehme – oben Aufgeführtes akzeptiere.

☐ **I do not agree to participate in the research.**

Ich stimme der Teilnahme an der Studie nicht zu.

Annexure C: Data collection surveying tool

Annexure C: Data collection surveying tool

International discussions in occupational therapy: Exploring facilitators and barriers to participation in a global collaborative learning experience

1. Agreement to participate / Teilnahmevereinbarung

- ○ **I hereby voluntarily agree to participate in the research, and understand that by continuing with the survey, I have accepted the information provided above.**
  Ich willige hiermit freiwillig ein, an der Studie teilzunehmen und verstehe, dass ich – wenn ich weiter an der Umfrage teilnehme – oben Aufgeführtes akzeptiere.

- ○ **I do not agree to participate in the research.**
  Ich stimme der Teilnahme an der Studie nicht zu.

BACKGROUND INFORMATION / HINTERGRUNDINFORMATION
(Section 1 of 6 / Abschnitt 1 von 6)

2. Age / *Alter*

Drop down menu: 18 – 65

3. First language / *Muttersprache*

- ○ **Afrikaans** / *Afrikaans*
- ○ **Arabic** / Arabisch
- ○ **Croatian** / Kroatisch
- ○ **Dutch** / *Niederländisch*
- ○ **English** / *Englisch*
- ○ **French** / Französisch
- ○ **German** / *Deutsch*
- ○ **Sepedi** / *Sepedi*
- ○ **Setswana** / *Setswana*
- ○ **Other (Please elaborate)** / *Andere (bitte ausführen)*

4. **Proficiency in the English language /** Englischkenntnisse
    - ○ **Poor** / *Schwach*
    - ○ **Fair** / *Ausreichend*
    - ○ **Good** / *Gut*
    - ○ **Excellent** / *Sehr gut*

5. **Name of university** / *Name der Bildungsstätte*
    - ○ **Artevelde University of Applied Sciences** – **Belgium** / *Belgien*
    - ○ **aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning – Croatia** / *Kroatien*
    - ○ **Bildungsakademie der Gesundheit Nord** – **Germany** / *Deutschland*
    - ○ **Kuwait University – Kuwait** / *Kuwait*
    - ○ **University of Applied Sciences for Health Professions – Austria** / *Österreich*
    - ○ **University of Derby – The United Kingdom** / *Vereinigtes Königreich*
    - ○ **University of Pretoria - South Africa** / *Südafrika*
    - ○ **University of Southampton - The United Kingdom** / *Vereinigtes Königreich*
    - ○ **Universite Paris-Est Créteil Val de Marne – France** / *Frankreich*

6. **Year of occupational therapy study at the time of the project** / *Ausbildungs-/Studienjahr zum Zeitpunkt des i-DOT Projekts*
    - ○ **1st year /** *1. Jahr*
    - ○ **2nd year** */ 2. Jahr*
    - ○ **3rd year /** *3. Jahr*
    - ○ **4th year /** *4. Jahr*

7. **Year of occupational study of my foreign partner(s) /** *Studienjahr meine:r ausländischen Partner:in/ Parnter:innen*
    - ○ **1st year /** *1. Jahr*
    - ○ **2nd year** */ 2. Jahr*
    - ○ **3rd year /** *3. Jahr*
    - ○ **4th year /** *4. Jahr*
    - ○ **1st and 2nd year** / *1. und 2. Jahr*

8. **University of my foreign partner(s) /** *Bildungsstätte mein:e ausländische:n Partner:in/ Partner:innen*

   - ○ **Artevelde University of Applied Sciences** – **Belgium** / *Belgien*
   - ○ **aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning – Croatia** / *Kroatien*
   - ○ **Bildungsakademie der Gesundheit Nord** – **Germany** / *Deutschland*
   - ○ **Kuwait University – Kuwait** / *Kuwait*
   - ○ **University of Applied Sciences for Health Professions – Austria** / *Österreich*
   - ○ **University of Derby – The United Kingdom** / *Vereinigtes Königreich*
   - ○ **University of Pretoria - South Africa** / *Südafrika*
   - ○ **University of Southampton - The United Kingdom** / *Vereinigtes Königreich*
   - ○ **Universite Paris-Est Créteil Val de Marne – France** / *Frankreich*

9. **Language that the survey will be completed in /** *Sprache, in der die Umfrage durchgeführt wird*

   - ○ **English /** *Englisch*
   - ○ **German /** *Deutsch*

GENERAL EXPERIENCE / ALLGEMEINE ERFAHRUNGEN

(Section 2 of 6 / Abschnitt 2 von 6)

10. **The i-DOT project was a beneficial learning experience for me.**
    Das i-DOT Projekt war eine positive Lernerfahrung für mich.

11. I would have had the same learning experience if this project was done only with students from my own country.

Ich hätte die gleiche Lernerfahrung, wenn das Projekt nur mit Lernenden aus meinem Land durchgeführt worden wäre.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

12. I would have made contact with international students in other ways if I was not involved in this project.

Ich hätte anderweitig Kontakt mit ausländischen Studierenden aufgenommen, wenn ich nicht in das Projekt involviert gewesen wäre.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

13. I had sufficient technological skills to participate in the i-DOT project, e.g. Skill in selecting and using appropriate software

Ich hatte ausreichende technische Fähigkeiten, um an dem i-DOT Projekt teilzunehmen, z. B. die Fähigkeit passende Software auszusuchen und anzuwenden.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

14. I received sufficient guidance from my lecturer/faculty before the i-DOT project.

Ich habe vor dem i-DOT Projekt genug Unterstützung von meine:r Dozent:in bzw. meinen Dozent:innen erhalten.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

15. I received sufficient guidance from my lecturer/faculty during the i-DOT project.

Ich habe während des i-DOT Projektes genug Unterstützung von meine:r Dozent:in bzw. meinen Dozent:innen erhalten.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

16. **On a scale of 1 - 10 indicate how motivated you were to participate in the i-DOT project, with 10 being fully motivated and 1 being not motivated at all.**
Geben Sie auf einer Skala von 1-10 an, wie motiviert Sie waren, an diesem i-DOT Projekt teilzunehmen, wobei 1 überhaupt nicht motiviert und 10 vol motiviert bedeutet.

17. **Select the statement that best applies to your motivation during the i-DOT discussions.**
Wähle die Aussage, die auf deine Motivation während der i-DOT Diskussionen am besten zutrifft.

- ○ **I was internally motivated to participate in the i-DOT project even though I was receiving marks for it.** *Ich war intrinsisch motiviert, am i-DOT Projekt teilzunehmen, obwohl es benotet wurde.*

- ○ **I was internally motivated to participate in the i-DOT project even though I was not receiving marks for it.** *Ich war intrinsisch motiviert am i-DOT Projekt teilzunehmen, obwohl es nicht benotet wurde.*

- ○ **I was externally motivated to participate in the i-DOT project because I would be getting marks for it.** *Ich war extrinsisch motiviert, am i-DOT Projekt teilzunehmen, weil es benotet wurde.*

- ○ **I was externally motivated to participate in the i-DOT project because participation was compulsory.** *Ich war extrinsisch motiviert am i-DOT Projekt teilzunehmen, weil die Teilnahme verpflichtend war.*

- ○ **I was not receiving marks for the i-DOT project, but I was externally motivated for other reasons.** *Ich habe keine Benotung für das i-DOT Projekt erhalten, aber war aus anderen Gründen extrinsisch motiviert.*

- ○ **I was not motivated to participate in the i-DOT study.** *Ich war nicht motiviert am I-DOT Projekt teilzunehmen.*

- ○ **Other (Please elaborate)** / *Andere (bitte ausführen)*

18. **The following statement best describes my foreign partner(s)' motivation to engage with me during the discussions:**
Die folgende Aussage beschreibt am besten die Motivation meine:r ausländischen Partner:in/ Partner:innen sich während der Diskussionen mit mir zu beschäftigen:

- ○ **My foreign partner(s) was/were receiving marks for the i-DOT project and they were motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten Noten für das i-DOT Projekt und waren motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were receiving marks for the i-DOT project but they were not motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten Noten für das i-DOT Projekt, aber waren nicht motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were not receiving marks for the i-DOT project, but they were motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten keine Noten für das i-DOT Projekt, aber waren motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were not receiving marks for the i-DOT project and they were not motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten keine Noten für das i-DOT Projekt und waren nicht motiviert an den Diskussionen teilzunehmen.*

- ○ **I do not know if my foreign partners was/were receiving marks for the i-DOT project, but they were motivated during the discussions.** *Ich weiß nicht, ob mein:e ausländische:n Partner:in/ Partner:innen Noten für das i-DOT Projekt erhielten, aber sie waren motiviert während der Diskussionen*

- ○ **I do not know if my foreign partner(s) was/were receiving marks for the i-DOT project, but they were not motivated during the discussions.** *Ich weiß nicht, ob mein:e ausländische:n Partner:in/ Partner:innen Noten für das i-DOT Projekt erhielten, aber sie waren nicht motiviert während der Diskussionen.*

- ○ **I do not know if my foreign partner(s) was/were motivated or not.** *Ich weiß nicht, ob mein:e ausländische:n Partner:innen motivert war:en oder nicht.*

19. **Allocation of academic marks is necessary to motivate students to participate in projects like the i-DOT project.**
Bewertung/ Benotung ist notwendig, um Auszubildende/ Studierende zu motivieren an Projekten wie dem i-DOT Projekt teilzunehmen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

20. The i-DOT project took place over the period of one month. Select the statement that best describes your opinion about the length of the project.

Das i-DOT Projekt dauerte einen Monat. Wähle die Aussage, die am besten deine Ansicht bzgl. der Länge des Projekts beschreibt.

- ○ **The length of the i-DOT project was adequate.** *Die Länge des i-DOT Projekts war angemessen.*
- ○ **I would have liked the i-DOT project to be over a longer period of time (longer than one month).** *Ich hätte es besser gefunden, wenn das i-DOT Projekt über einen längeren Zeitraum stattgefunden hätte (länger als ein Monat).*
- ○ **I would have liked the i-DOT project to be over a shorter period of time (shorter than one month).** *Ich hätte es besser gefunden, wenn das i-DOT Projekt über einen kürzeren Zeitraum stattgefunden hätte (kürzer als ein Monat).*

21. The i-DOT project required two to three discussion sessions. Select the statement that best describes your opinion about the number of sessions during the project.

Das i-DOT Projekt benötigt zwei bis drei Treffen. Wähle die Aussage, die am besten deine Ansicht bzgl. der Anzahl der Treffen während des Projekts beschreibt.

- ○ **The number of discussion sessions during the i-DOT project was adequate.** *Die Anzahl der Diskussions-Treffen während des i-DOT Projekts waren angemessen.*
- ○ **I would have liked more discussion sessions during the project.** *Ich hätte gerne mehr Diskussions-Treffen während des Projekts gehabt.*
- ○ **I would have liked fewer discussion sessions during the project.** *Ich hätte gerne weniger Diskussions-Treffen während des Projekts gehabt***.**

22. If one or more of your foreign partner(s) were in a different academic year to you, select the statement that best describes your discussions. (If your foreign partner(s) were in the same academic year to you, select "not applicable").

Wenn eine:r oder mehrere Deiner ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr war/en als Du, wähle die Aussage, die Eure Diskussionen am besten beschreibt.

(Wenn Dein:e ausländische:r Partner:in bzw. Deine ausländischen Partner:innen im selben Studien-/Ausbildungsjahr waren wie Du, wähle „nicht zutreffend“).

- ○ **My foreign partner being in a different year of study had a positive impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte einen positiven Einfluss auf unsere Diskussionen.*

- ○ **My foreign partner being in a different year of study had a negative impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte einen negativen Einfluss auf unsere Diskussionen.*

- ○ **My foreign partner being in a different year of study did not impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte keinen Einfluss auf unsere Diskussionen.*

- ○ **Not applicable.** *Nicht zutreffend.*

ACADEMIC AND PROFESSIONAL DEVELOPMENT / AKADEMISCHE UND PROFESSIONELLE ENTWICKLUNG

(Section 3 of 6 / Abschnitt 3 von 6)

23. The i-DOT project provided an opportunity for academic learning.

Das i-DOT Projekt ermöglichte fachliches Lernen.

24. During the i-DOT project, I was able to learn what my university/institution of learning intended for me to learn. (If you do not know what your university intended for you to learn, select neutral)

Während des i-DOT Projektes war ich in der Lage, das zu lernen, was meine Universität/ meine Einrichtung erwartet hat. Wenn Du nicht weißt, was deine Universität/ Einrichtung für Erwartungen hat, wähle ‚neutral‘.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

25. This experience improved my insight into occupations in different parts of the world.

Diese Erfahrung hat mein Wissen über Betätigungen in anderen Teilen der Welt vertieft.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

26. During the i-DOT project, I developed/improved in the following areas of professional skills (You may choose more than one):

Während des i-DOT Projekts konnte ich professionelle Fähigkeiten in folgenden Bereichen entwickeln (Mehrere Antworten sind möglich):

- ○ **Communication skills** / *Kommunikation*
- ○ **Critical thinking skills** / *Kritisches Denken*
- ○ **Leadership skills** / *Führung*
- ○ **Organization skills** / *Organisation*
- ○ **Stress management** / *Stressmanagement*
- ○ **Teamwork and collaboration** / Teamarbeit/Zusammenarbeit
- ○ **Time management** / *Zeitmanagement*
- ○ **None** / *Keine*
- ○ **Other (elaborate)** / *Andere (bitte ausführen)*

27. During the i-DOT project, I developed/improved in the following specific professional skills (You may choose more than one):

Während des i-DOT Projekts konnte ich die folgenden speziellen professionellen Fähigkeiten verbessern. (mehrere Antworten möglich):

- ○ **Ability to analyse information** / *Informationen analysieren*
- ○ **Ability to work with others** / *Mit Anderen zusammenarbeiten*
- ○ **Decisiveness** / *Entschlussfreudigkeit*
- ○ **Emotional awareness** / *Emotionales Bewusstsein*
- ○ **Flexibility** / *Flexibilität*

- ○ **Independence** / *Selbstständigkeit*
- ○ **Problem solving** / *Probleme lösen*
- ○ **Responsibility and accountability** / *Verantwortung übernehmen*
- ○ **Self-motivation** / *Eigenmotivation*
- ○ **Taking initiative** / *Initiativ werden*
- ○ **None** / *Keine*
- ○ **Other (elaborate)** / *Andere (bitte ausführen)*

28. During the i-DOT project, the most important professional skill that I developed (mentioned in the previous two questions) is:

Die wichtigste professionelle Fähigkeit, die ich während des i-DOT-Projekts entwickelt habe, ist (in den beiden vorherigen Fragen erwähnt):

Text response

29. The skills that I learnt during the i-DOT project could benefit me in future working environments.

Die Fähigkeiten, die ich während des i-DOT Projekts erlernt habe, können hilfreich sein für meine späteren beruflichen Einsatzfelder.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

30. The project has allowed me to develop my professional identity as a future occupational therapist.

Während des Projekts konnte ich meine professionelle Identität als Ergotherapeut:in entwickeln.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

< → Next / Nächste >

40% Survey Completion

PERSONAL AND SOCIAL DEVELOPMENT / PERSÖNLICHE UND SOZIALE ENTWICKLUNG

(Section 4 of 6 / Abschnitt 4 von 6)

31. Participating in the i-DOT project has improved my general knowledge.

Die Teilnahme am i-DOT Projekt hat mein Allgemeinwissen verbessert.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

32. During this project, I experienced personal growth in the following areas: (You may choose more than one):

Durch das Projekt erlebte ich in folgenden Bereichen persönliches Wachstum (mehrere Antworten möglich):

- ○ **Confidence in myself** / *Selbstvertrauen*
- ○ **Motivation to learn** / *Lernmotivation*
- ○ **Self-awareness** / *Selbstbewusstsein*
- ○ **I did not experience any personal growth** / *Ich habe kein persönliches Wachstum erlebt*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

33. During the i-DOT project, I gained more confidence in my knowledge about occupational therapy.

Durch das i-DOT-Projekt habe ich mehr Vertrauen in mein Wissen über Ergotherapie gewonnen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

34. During the i-DOT project, I gained more confidence in my skills as an occupational therapist.

Durch das i-DOT Projekt habe ich mehr Vertrauen in meine Fähigkeiten als Ergotherapeut:in gewonnen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

35. Participating in i-DOT allowed me to take ownership of my own learning, including taking control of my learning during the discussions even though I was not being supervised in that time.

Die Teilnahme am i-DOT Projekt ermöglichte mir, Verantwortung für mein eigenes Lernen zu übernehmen, dies beinhaltet, mein Lernen während der Diskussionen zu kontrollieren, obwohl ich zu dieser Zeit nicht beaufsichtigt/ betreut wurde.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

36. During this project, I experienced social growth in the following areas (You may choose more than one):

Durch das Projekt erfuhr ich soziales Wachstum in den folgenden Bereichen (mehrere Antworten möglich):

- ○ **Ability to respect different views and beliefs of others** / *Die Fähigkeit andere Ansichten und Überzeugungen zu respektieren*
- ○ **Confidence in communicating with new people** / *Vertrauen in die Fähigkeit zur Kommunikation mit fremden Menschen*
- ○ **Making new friendships** / *Neue Freundschaften schließen*
- ○ **Skill in active listening** / *Aktives zuhören*
- ○ **I did not experience social growth** / *I did not experience social growth / Ich habe kein soziales Wachstum erlebt*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

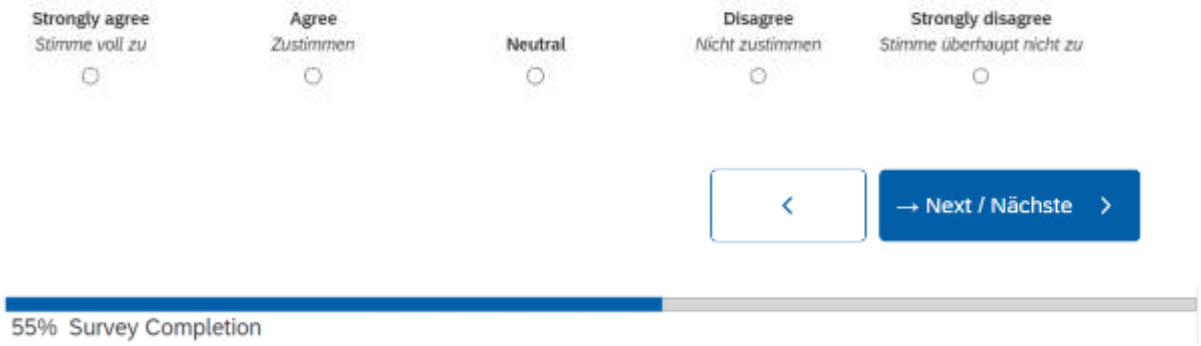
37. The i-DOT project allowed me to improve my interpersonal skills.

Im i-DOT Projekt konnte ich meine Interaktionsfähigkeiten verbessern.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

38. Regarding social skills, my ability to interact meaningfully with someone from a different geographical background improved during the i-DOT project.

Bzgl. der sozialen Kompetenzen hat sich meine Fähigkeit, bedeutungsvoll mit Menschen zu interagieren, die einen anderen geographischen Hintergrund haben, durch das i-DOT Projekt verbessert.



CULTURAL AND DIVERSITY AWARENESS / KULTUR- UND DIVERSITY-SENSIBILITÄT

(Section 5 of 6 / Abschnitt 5 von 6)

39. Cultural differences between my foreign partner(s) and I made it difficult to interact meaningfully.

Kulturelle Unterschiede zwischen mir und meine:r ausländischen Partner:in bzw. meinen ausländischen Partner:innen machten es schwierig bedeutungsvoll zu interagieren.

40. Please select the statement that best describes what you learnt from your foreign partner(s) during the i-DOT project. (You may select more than one option).

Bitte wähle die Aussage, die am besten beschreibt, was Du während des i-DOT Projekts von Deine:r ausländischen Partner:in bzw. Deinen ausländischen Partner:innen gelernt hast (mehrere Antwortoptionen möglich).

- ○ **I learnt something about my foreign partner(s)' country that I did not know before.**
  Ich habe etwas über das Land meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ **I learnt something about my foreign partner(s)' culture that I did not know before.**
  Ich habe etwas über die Kultur meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ **I learnt something about my foreign partner(s)' language that I did not know before.**
  Ich habe etwas über die Sprache meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ ***I did not learn anything that I did not already know before the discussions.***
  Ich habe nichts gelernt, was ich nicht vor den Diskussionen schon wusste.

41. Having discussions with people from a different country has made me more aware of diversity, beyond what I already know about diversity in my own country.

Die Diskussion mit Menschen aus anderen Ländern hat mein Bewusstsein für Diversität, verbessert, jenseits dessen, was ich schon über Diversität in meinem eigenen Land wusste.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

42. After this experience, I have a better understanding about how cultural backgrounds can affect occupations.

Nach dieser Erfahrung habe ich ein besseres Verständnis für den Einfluss des kulturellen Hintergrundes auf Betätigungen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

43. After this experience, I have a better understanding about how geographical backgrounds can affect occupations.

Nach dieser Erfahrung habe ich ein besseres Verständnis für den Einfluss des Geografischen Hintergrundes auf Betätigungen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

44. The knowledge I gained about a different culture could assist me when working with diverse populations in occupational therapy.

Das Wissen, welches ich mir über eine andere Kultur angeeignet habe, kann mir helfen, wenn ich mit diversen Bevölkerungsgruppen in der Ergotherapie arbeite.

OVERALL EXPERIENCE / ALLGEMEINE ERFAHRUNG

(Section 6 of 6 / Abschnitt 6 von 6)

45. During the i-DOT discussion project, I experienced these challenges (You may choose more than one):

Während des i-DOT Diskussionsprojektes musste ich folgende Herausforderungen bewältigen (mehrere Antwortmöglichkeiten):

- ○ **Challenges with internet connectivity** / *Probleme mit der Internetverbindung*
- ○ **Communication difficulties** / *Kommunikationsschwierigkeiten*
- ○ **Language barrier** / *Sprachbarriere*
- ○ **Limited understanding of what is expected** / *Eingeschränktes Verständnis der Erwartungen an mich*
- ○ **Little interest from the foreign student** / *Wenig Interesse auf Seiten des/ der ausländischen Studierenden*
- ○ **Relating to someone from a different cultural background** / *Kulturelle Unterschiede*
- ○ **Scheduling suitable times with my partner** / *Passende Zeiten mit meine:r Diskussionspartner:in abstimmen*
- ○ **Technological difficulties** / *Technische Schwierigkeiten*
- ○ **Understanding or navigating time zones** / *Umgang mit unterschiedlichen Zeitzonen*

○ **Other (elaborate)** / Andere (bitte ausführen)

46. **Language negatively affected my ability to communicate and share ideas with my foreign partner(s).**
Die Sprache hat meine Kommunikationsfähigkeit mit dem/ der ausländischen Partner:in/ den ausländischen Partner:innen und die Möglichkeit, Ideen zu vermitteln, eingeschränkt.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

47. **These are the challenges I experienced that were not mentioned above:**
Diese Herausforderungen, die nicht erwähnt wurden, habe ich erlebt:

Text response

48. **Describe any useful methods that you used to deal with the challenges that you experienced.**
Beschreibe nützliche Methoden, die Du benutzt hast, um mit den Herausforderungen umzugehen, die Du erlebt hast.

Text response

49. **Select the sentence that best describes your experience of how your lecturers prepared you to deal with challenges during this project.**

Wähle den Satz, der am besten beschreibt, wie Deine Dozent:innen Dich darauf vorbereitet haben, mit Herausforderungen während des Projektes umzugehen.

○ **My lecturer prepared me for all of the challenges I experienced and how to deal with them.** *Meine Dozent:innen haben mich auf alle erlebten Herausforderungen und den Umgang damit, vorbereitet.*

○ **My lecturer prepared me for some of the challenges I experienced and how to deal with them.**
Meine Dozent:innen haben mich auf einige der erlebten Herausforderungen und den Umgang damit, vorbereitet.

○ **My lecturer mentioned some of the challenges I faced but did not prepare me to deal with them.**

Meine Dozent:innen haben einige der Herausforderungen erwähnt, aber mich nicht darauf vorbereitet, diese zu bewältigen.

- ○ **My lecturer did not prepare me for the challenges I experienced.**
  Meine Dozent:innen haben mich nicht auf die erlebten Herausforderungen vorbereitet.

- ○ **Not applicable.**
  Nicht zutreffend.

50. How can this learning experience be improved?

Wie kann diese Lernerfahrung verbessert werden?

Text response

51. What worked well during the preparation for the i-DOT project, that should remain the same?

Was hat in der Vorbereitung auf das i-DOT Projekt gut funktioniert und sollte beibehalten werden?

Text response

52. For me, the best part of the i-DOT project was:

Für mich war das beste am i-DOT Projekt:

Text response

53. The i-DOT project benefitted me the most in the following area (select one):

Das i-DOT Projekt bringt mir den meisten Nutzen in folgendem Bereich (einen auswählen):

- ○ **Academic development related directly to occupational therapy** / *Fachliche Entwicklung mit direktem Bezug zur Ergotherapeutischen Praxis*
- ○ **General professional development** / *Allgemeine Professionelle Entwicklung*
- ○ **Personal growth** / *Persönliches Wachstum*
- ○ **Social and interpersonal skills** / *Soziale und interaktionelle Kompetenzen*
- ○ **Diversity awareness** / Bewusstsein für Diversität

- ○ **The i-DOT project did not benefit me in any area** / *Das i-DOT Projekt hat mir keinen Nutzen gebracht*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

54. I would recommend discussion projects like i-DOT for future occupational therapy students.

Ich würde Diskussionsprojekte wie das i-DOT für zukünftige Auszubildende/ Studierende der Ergotherapie empfehlen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

***55.* Please explain your answer above.**

Bitte erläutern Sie Ihre Antwort.

Text response

< → Next / Nächste >

81% Survey Completion

Thank you for completing the survey!
Vielen Dank, dass Sie an der Umfrage teilgenommen haben!

100% Survey Completion

Annexure D: Letters of statistical support

Annexure D: Letters of statistical support

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DEPARTMENT OF STATISTICS

LETTER OF STATISTICAL SUPPORT

Date: 25th April 2022

This letter is to confirm that Ms N Kharva studying at the University of Pretoria, discussed the project with the title ***"Investigating occupational therapy students' perception on participating in an international collaborative learning project."*** with me.

I hereby confirm that I am aware of the project and undertake to assist with the statistical analysis of the data generated from the project. The aim of the study is to describe occupational therapy students' perspectives and experiences on participating in an online international collaborative discussions project.

The pilot study sample will consist of a purposive sample of between 12 and 30 students, which will include three to five students per institution, from a minimum of four HEIs participating in i-DOT. The main study will consist of a convenience sample of at least 100 students.

The data analysis will consist of descriptive statistics such as mean, median, standard deviations, frequencies, proportions etc. to describe the results and graphical representations can be made were applicable to assist in visualizing aspects of the data.

Inferential statistics may be included to investigate differences between universities and subgroups of interest. These tests may include the independent t-test or the nonparametric alternatives or the Chi-squared test. Reliability measures such as the Cronbach's alpha may also be included.

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DEPARTMENT OF STATISTICS

LETTER OF STATISTICAL SUPPORT

Date: 25th April 2022

This letter is to confirm that Ms N Kharva studying at the University of Pretoria, discussed the project with the title ***"A Quantitative study investigating students' perception of benefits, facilitators and barriers to participation in an international online collaborative discussions project."*** with me.

I hereby confirm that I am aware of the project and undertake to assist with the statistical analysis of the data generated from the project. The aim of the study is to describe occupational therapy students' perspectives and experiences on participating in an online international collaborative discussions project.

The pilot study sample will consist of a purposive sample of between 12 and 30 students, which will include three to five students per institution, from a minimum of four HEIs participating in i-DOT. The main study will consist of a convenience sample of at least 100 students.

The data analysis will consist of descriptive statistics such as mean, median, standard deviations, frequencies, proportions etc. to describe the results and graphical representations can be made were applicable to assist in visualizing aspects of the data.

Inferential statistics may be included to investigate differences between universities and subgroups of interest. These tests may include the independent t-test or the nonparametric alternatives or the Chi-squared test. Reliability measures such as the Cronbach's alpha may also be included.

Tanita Botha
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Annexure E: Pilot study information form

Annexure E: Pilot study information form

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artevelde
university of applied sciences

International discussions in occupational therapy: Exploring facilitators and barriers to participation in a global collaborative learning experience

Ethics reference number: 158/2022

Pilot study information sheet

Dear Participant

This form provides information that will help you to understand what the pilot study is about and what will happen during the study. If you have questions whilst completing the questionnaire and during the pilot study, please email the principal investigator.

Why is this pilot study being done?

The researchers of this study would like to describe the perspectives of occupational therapy students participating in the i-DOT project, which is a global collaborative learning experience. The i-DOT project, which stands for International Discussions in Occupational Therapy, was previously known as the Artevelde Virtual Discussions Project in 2021. The structure and process of the project has not changed.

Whilst collaborative learning opportunities have been researched in other studies, this is the first known project in occupational therapy higher education involving this many international institutions and with the flexibility that the project has been designed with.

The purpose of this pilot study is to test the questionnaire that will be used in the main study. Feedback from the pilot study will inform the researchers whether the questionnaire is understandable, user friendly and able to test what it is intended to measure. The results from the pilot study will not contribute to the results of the overall research study, but will guide the researchers to improve the questionnaire if is necessary.

Who may take part in this pilot study?

Occupational therapy students who were involved in the Artevelde virtual discussions project in 2021, who were not registered for the i-DOT project in 2022. Students who participate may have any first language, but should have a basic written proficiency in English.

How many students may participate and how long will the study take?
The pilot study aims to gather information from 12 to 30 students from different universities involved in the Artevelde virtual discussions project. This is to ensure that we get a fair
representation of the perspectives from students with different first languages. The electronic questionnaire may take 20 to 30 minutes to complete, and feedback will be required within three days of receiving the link to the questionnaire.

What will you be asked to do if you take part in this pilot study?
If you agree to participate, you will be asked to complete a number of self-report questions in an electronic questionnaire. For example, some questions may sound as follows:

The i-DOT project provided an opportunity for academic learning.
Das i-DOT Projekt ermöglichte fachliches Lernen.

If you agree to participate, you will be asked to complete the questionnaire. Thereafter, you will be asked to complete a feedback form about your experience of the survey, your opinion about how the questions were asked, as well as the time it took to complete it. You will have the opportunity to make suggestions on how questions could be asked differently. If you are able to understand German, you may also comment on the translation of the questionnaire. The feedback form will need to be emailed to the principal researcher once you have completed it.

What are the risks you might experience if you take part in this pilot study?
Apart from taking up some of your time, there are no other risks or discomforts involved in participating in the study. The risks associated with participation are no greater than the risks encountered in everyday life.

Are there any benefits for you if you choose to take part in this pilot study?
There are no known benefits to you if you participate in this study, besides knowing that you are contributing to the body of knowledge in international collaborative learning.

Will there be any cost to you to take part in this study?
There are no anticipated costs to you for participating in this study.

Will you be paid to take part in this study?
You will receive no payment for participating in this pilot study. This includes compensation for study related injuries.

How will information about you be kept private or confidential?
Only basic information about yourself and the institution you are from will be needed. All efforts will be made to keep your personal information confidential, but total

confidentiality cannot be guaranteed. Data collected during the study will be stored securely in an encrypted, password-protected digital format. Only the primary investigator and research associates will have access to the data and results. No personal identifiers that link you personally to your responses will be collected. The results of this study will be disseminated to the scientific community in aggregate form. In other words, your individual data will not be shared, but the average data from all participants in this study will be disseminated in the form of peer-reviewed scientific publications, and research presentations at professional conferences.

What will happen if you decide not to take part in the pilot study or later decide not to complete the pilot study?

Participation in this pilot study is voluntary. You may choose not to participate, or you may change your mind at any time. There is no penalty for deciding not to participate or opting out during the pilot study. After you have submitted your survey, it will however not be possible to remove the data already collected from you, since you will not be identifiable.

Who can you contact if you have any questions?

Mrs Nabeela Kharva – Principal investigator, University of Pretoria

Email: nabeela.kharva@up.ac.za / naba786@gmail.com

Who can you contact if you have ethics related questions about the study?

Mrs Manda Smith – Departmental Administrator

Faculty of Health Sciences Research Ethics Committee, University of Pretoria

Email: manda.smith@up.ac.za Tel: +27 (0)12 356 3085

What are your rights if you decide to take part in this research pilot study?

You have the right to ask questions about any part of the pilot study. If you agree to participate in this pilot study, you will still have your legal rights. However, no funds have been allocated to compensate you in the unlikely event of injury.

AGREEMENT TO PARTICIPATE

- In order to participate in the pilot study, you will need to be above 18 years of age.
- You will need to have sufficient language skills in English **or** German in order to complete the electronic survey.
- Additionally, you will need to have sufficient language skills in English in order to complete the pilot study feedback form.
- After reading and understanding the information above, you will be required to provide consent in order to participate in the study.
- Informed consent can be submitted electronically through the Qualtrics survey.

Thank you for your time!

Annexure F: Pilot study feedback form

Annexure F: Pilot study feedback form

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

PILOT STUDY FEEDBACK FORM

International discussions in occupational therapy: Exploring facilitators and barriers to participation in a global collaborative learning experience.

Initials :
Email Address :

Higher Education institution at which you studied/are studying:

☐ Artevelde University of Applied Sciences – Belgium
☐ Bildungsakademie der Gesundheit Nord – Germany
☐ Kuwait University – Kuwait
☐ University of Applied Sciences for Health Professions – Austria
☐ University of Derby – The United Kingdom
☐ University of Pretoria - South Africa

Language that questionnaire was completed in: ☐ English ☐ German

Instructions

In 2022, the "Artevelde Virtual Discussions Project" was renamed to the "International Discussions in Occupational Therapy" (i-DOT). The structure and process of the project remains the same as it was in 2021. Where the questionnaire refers to the "i-DOT project", please answer based on your experience of the Artevelde Virtual Discussions Project.

Kindly complete the electronic questionnaire by following the link provided in the email that you received. Take note of the time that it takes you to complete the questionnaire.

Once complete, please use the "Survey Questions" document and this "Pilot Study Feedback Form" to refer to each question from **section 2 – 6** in the questionnaire and score them on a scale of 1 to 5. If you score a question between 1 and 3, please add constructive feedback about the question and/or recommend how it can be improved. Thereafter, kindly provide feedback on your overall experience of using the electronic questionnaire.

You may additionally make comments or *track changes* directly on the "Survey Questions – Pilot study comments" Word document if you wish to recommend specific changes. This task is optional.

Thank you

Rating scale

1 - Very poor
2 - Poor
3 - Average
4 - Good
5 - Excellent

Section 2: General Experience		
Question Number	**Rating 1-5**	**Comments**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		

Section 3: Academic and professional development		
Question Number	**Rating 1-5**	**Comments**
14		
15		
16		
17		
18		
19		
20		
21		

Section 4: Personal and social development		
Question Number	**Rating 1-5**	**Comments**
22		
23		

14		
25		
26		
27		
28		
29		

Section 5: Cultural and diversity awareness		
Question Number	**Rating 1-5**	**Comments**
30		
31		
32		
33		
34		
35		

Section 6: Overall experience		
Question Number	**Rating 1-5**	**Comments**
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		

How long did it take you to answer the electronic questionnaire?

Please provide your opinion on the time taken to complete the questionnaire:

Did you complete the questionnaire on your cell phone/mobile phone or laptop/computer?

☐ Cell phone / mobile phone / Tablet	☐ Laptop / computer

Was it user friendly completing the questionnaire on your laptop/computer or cell phone?

Please provide your opinion about the information and consent page of the questionnaire.

If you are able to understand German, please comment on the clarity and accuracy of the German translation of the questionnaire.

Please comment on having both English and German on the same questionnaire, and provide suggestions on how this may be improved.

Please comment on the language, wording and clarity of the questions. Could you understand what the questions were asking? Please provide suggestions on how this may be improved.

Please comment on the layout and overall look of the questionnaire, and provide suggestions on how this may be improved.

The questionnaire aims to gather information about the challenges, facilitators and benefits that students experience during the discussions project.
Does the survey look like it will test this?

☐ Yes ☐ No ☐ Maybe

If you answered no or maybe, please provide suggestions on how this can be improved.

Please add any additional feedback which could help us to improve the content or format of this questionnaire

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Thank you for taking the time to participate in this pilot study!

Once complete, please email your feedback to Ms. Nabeela Kharva at nabeela.kharva@up.ac.za

Annexure G: Pilot study data collection tool with track changes

Annexure G: Pilot study data collection tool with track changes

International discussions in occupational therapy: Exploring facilitators and barriers to participation in a global collaborative learning experience

1. Agreement to participate / Teilnahmevereinbarung

○ **I hereby voluntarily agree to participate in the research, and understand that by continuing with the survey, I have accepted the information provided above.**
Ich willige hiermit freiwillig ein, an der Studie teilzunehmen und verstehe, dass ich – wenn ich weiter an der Umfrage teilnehme – oben Aufgeführtes akzeptiere.

○ **I do not agree to participate in the research.**
Ich stimme der Teilnahme an der Studie nicht zu.

BACKGROUND INFORMATION / HINTERGRUNDINFORMATION
(Section 1 of 6 / Abschnitt 1 von 6)

2. **Age** / *Alter*

Drop down menu: 18 – ~~30~~ 65

3. **First language** / *Muttersprache*
   - ○ **Afrikaans** / *Afrikaans*
   - ○ **Arabic** / Arabisch
   - ○ **Croatian** / Kroatisch
   - ○ **Dutch** / *Niederländisch*
   - ○ **English** / *Englisch*
   - ○ **French** / Französisch
   - ○ **German** / *Deutsch*
   - ○ **Sepedi** / *Sepedi*
   - ○ **Setswana** / *Setswana*
   - ○ **Other (Please elaborate)** / *Andere (bitte ausführen)*

4. **Name of university** / *Name der Bildungsstätte*
   - ○ **Artevelde University of Applied Sciences** – **Belgium** / *Belgien*
   - ○ **aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning – Croatia** / *Kroatien*
   - ○ **Bildungsakademie der Gesundheit Nord** – **Germany** / *Deutschland*
   - ○ **Kuwait University – Kuwait** / *Kuwait*
   - ○ **University of Applied Sciences for Health Professions – Austria** / *Österreich*
   - ○ **University of Derby – The United Kingdom** / *Vereinigtes Königreich*
   - ○ **University of Pretoria - South Africa** / *Südafrika*
   - ○ **University of Southampton - The United Kingdom** / *Vereinigtes Königreich*
   - ○ **Universite Paris-Est Créteil Val de Marne – France** / *Frankreich*

5. **Year of occupational therapy study at the time of the project** / *Ausbildungs-/Studienjahr zum Zeitpunkt des i-DOT Projekts*
   - ○ **1st year /** *1. Jahr*
   - ○ **2nd year** */ 2. Jahr*
   - ○ **3rd year /** *3. Jahr*
   - ○ **4th year /** *4. Jahr*

6. **Year of occupational study of my foreign partner(s) /** *Studienjahr meine:r ausländischen Partner:in/ Parnter:innen*
   - ○ **1st year /** *1. Jahr*
   - ○ **2nd year** */ 2. Jahr*
   - ○ **3rd year /** *3. Jahr*
   - ○ **4th year /** *4. Jahr*
   - ○ **1st and 2nd year** / *1. und 2. Jahr*

7. **University of my foreign partner(s) /** *Bildungsstätte mein:e ausländische:n Partner:in/ Partner:innen*
   - ○ **Artevelde University of Applied Sciences** – **Belgium** / *Belgien*
   - ○ **aRTisINCLudum - Centre for evaluation, education, training, counselling and research of and in daily occupations/activities and occupational functioning – Croatia** / *Kroatien*

- ○ **Bildungsakademie der Gesundheit Nord** – **Germany** / *Deutschland*
- ○ **Kuwait University – Kuwait** / *Kuwait*
- ○ **University of Applied Sciences for Health Professions – Austria** / *Österreich*
- ○ **University of Derby – The United Kingdom** / *Vereinigtes Königreich*
- ○ **University of Pretoria - South Africa** / *Südafrika*
- ○ **University of Southampton - The United Kingdom** / *Vereinigtes Königreich*
- ○ **Universite Paris-Est Créteil Val de Marne – France** / *Frankreich*

8. **Proficiency in the English language /** Englischkenntnisse
   - ○ **Poor** / *Schwach*
   - ○ **Fair** / *Ausreichend*
   - ○ **Good** / *Gut*
   - ○ **Excellent** / *Sehr gut*

As this question came after those asking about the foreign partner, pilot study participants were unsure whether the question referred to them or their foreign partner. The question was moved higher up in the survey, following the question on first language, to limit ambiguity

9. **Language that the survey will be completed in /** *Sprache, in der die Umfrage durchgeführt wird*

   - ○ **English /** *Englisch*
   - ○ **German /** *Deutsch*

Following the pilot study, a progress bar was included for each section, for students to anticipate how long it would take them to complete the survey

GENERAL EXPERIENCE / ALLGEMEINE ERFAHRUNGEN

(Section 2 of 6 / Abschnitt 2 von 6)

10. **The i-DOT project was a beneficial learning experience for me.**
    Das i-DOT Projekt war eine positive Lernerfahrung für mich.

11. **I would have had the same learning experience if this project was done only with students from my own country.**

Ich hätte die gleiche Lernerfahrung, wenn das Projekt nur mit Lernenden aus meinem Land durchgeführt worden wäre.

12. I would have made contact with international students in other ways if I was not involved in this project.

Ich hätte anderweitig Kontakt mit ausländischen Studierenden aufgenommen, wenn ich nicht in das Projekt involviert gewesen wäre.

13. I had sufficient technological skills to participate in the i-DOT project, e.g. Skill in selecting and using appropriate software

*Ich hatte ausreichende technische Fähigkeiten, um an dem i-DOT Projekt teilzunehmen**, z. B. die Fähigkeit passende Software auszusuchen und anzuwenden.***

14. I received sufficient guidance from my lecturer/faculty before the i-DOT project.

Ich habe vor dem i-DOT Projekt genug Unterstützung von meine:r Dozent:in bzw. meinen Dozent:innen erhalten.

15. I received sufficient guidance from my lecturer/faculty during the i-DOT project.

Ich habe während des i-DOT Projektes genug Unterstützung von meine:r Dozent:in bzw. meinen Dozent:innen erhalten.

16. **On a scale of 1 - 10 indicate how motivated you were to participate in the i-DOT project, with 10 being fully motivated and 1 being not motivated at all.**
Geben Sie auf einer Skala von 1-10 an, wie motiviert Sie waren, an diesem i-DOT Projekt teilzunehmen, wobei 1 überhaupt nicht motiviert und 10 vol motiviert bedeutet.

17. **Select the statement that best applies to your motivation during the i-DOT discussions.**
Wähle die Aussage, die auf deine Motivation während der i-DOT Diskussionen am besten zutrifft.

- ○ **I was internally motivated to participate in the i-DOT project even though I was receiving marks for it.** *Ich war intrinsisch motiviert, am i-DOT Projekt teilzunehmen, obwohl es benotet wurde.*

- ○ **I was internally motivated to participate in the i-DOT project even though I was not receiving marks for it.** *Ich war intrinsisch motiviert am i-DOT Projekt teilzunehmen, obwohl es nicht benotet wurde.*

- ○ **I was externally motivated to participate in the i-DOT project because I would be getting marks for it.** *Ich war extrinsisch motiviert, am i-DOT Projekt teilzunehmen, weil es benotet wurde.*

- ○ **I was externally motivated to participate in the i-DOT project because participation was compulsory.** *Ich war extrinsisch motiviert am i-DOT Projekt teilzunehmen, weil die Teilnahme verpflichtend war.*

- ○ **I was not receiving marks for the i-DOT project, but I was externally motivated for other reasons.** *Ich habe keine Benotung für das i-DOT Projekt erhalten, aber war aus anderen Gründen extrinsisch motiviert.*

- ○ **I was not motivated to participate in the i-DOT study.** *Ich war nicht motiviert am I-DOT Projekt teilzunehmen.*

- ○ **Other (Please elaborate)** / *Andere (bitte ausführen)*

18. **The following statement best describes my foreign partner(s)' motivation to engage with me during the discussions:**

Die folgende Aussage beschreibt am besten die Motivation meine:r ausländischen Partner:in/ Partner:innen sich während der Diskussionen mit mir zu beschäftigen:

- ○ **My foreign partner(s) was/were receiving marks for the i-DOT project and they were motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten Noten für das i-DOT Projekt und waren motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were receiving marks for the i-DOT project but they were not motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten Noten für das i-DOT Projekt, aber waren nicht motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were not receiving marks for the i-DOT project, but they were motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten keine Noten für das i-DOT Projekt, aber waren motiviert an den Diskussionen teilzunehmen.*

- ○ **My foreign partner(s) was/were not receiving marks for the i-DOT project and they were not motivated to participate in the discussions.** *Mein:e ausländische:n Partner:in/ Partner:innen erhielten keine Noten für das i-DOT Projekt und waren nicht motiviert an den Diskussionen teilzunehmen.*

- ○ **I do not know if my foreign partners was/were receiving marks for the i-DOT project, but they were motivated during the discussions.** *Ich weiß nicht, ob mein:e ausländische:n Partner:in/ Partner:innen Noten für das i-DOT Projekt erhielten, aber sie waren motiviert während der Diskussionen*

- ○ **I do not know if my foreign partner(s) was/were receiving marks for the i-DOT project, but they were not motivated during the discussions.** *Ich weiß nicht, ob mein:e ausländische:n Partner:in/ Partner:innen Noten für das i-DOT Projekt erhielten, aber sie waren nicht motiviert während der Diskussionen.*

- ○ **I do not know if my foreign partner(s) was/were motivated or not.** *Ich weiß nicht, ob mein:e ausländische:n Partner:innen motivert war:en oder nicht.*

19. **Allocation of academic marks is necessary to motivate students to participate in projects like the i-DOT project.**

Bewertung/ Benotung ist notwendig, um Auszubildende/ Studierende zu motivieren an Projekten wie dem i-DOT Projekt teilzunehmen.

20. The i-DOT project took place over the period of one month. Select the statement that best describes your opinion about the length of the project.

Das i-DOT Projekt dauerte einen Monat. Wähle die Aussage, die am besten deine Ansicht bzgl. der Länge des Projekts beschreibt.

- ○ **The length of the i-DOT project was adequate.** *Die Länge des i-DOT Projekts war angemessen.*
- ○ **I would have liked the i-DOT project to be over a longer period of time (longer than one month).** *Ich hätte es besser gefunden, wenn das i-DOT Projekt über einen längeren Zeitraum stattgefunden hätte (länger als ein Monat).*
- ○ **I would have liked the i-DOT project to be over a shorter period of time (shorter than one month).** *Ich hätte es besser gefunden, wenn das i-DOT Projekt über einen kürzeren Zeitraum stattgefunden hätte (kürzer als ein Monat).*

21. The i-DOT project required two to three discussion sessions. Select the statement that best describes your opinion about the number of sessions during the project.

Das i-DOT Projekt benötigt zwei bis drei Treffen. Wähle die Aussage, die am besten deine Ansicht bzgl. der Anzahl der Treffen während des Projekts beschreibt.

- ○ **The number of discussion sessions during the i-DOT project was adequate.** *Die Anzahl der Diskussions-Treffen während des i-DOT Projekts waren angemessen.*
- ○ **I would have liked more discussion sessions during the project.** *Ich hätte gerne mehr Diskussions-Treffen während des Projekts gehabt.*
- ○ **I would have liked fewer discussion sessions during the project.** *Ich hätte gerne weniger Diskussions-Treffen während des Projekts gehabt***.**

22. If one or more of your foreign partner(s) were in a different academic year to you, select the statement that best describes your discussions. (If your foreign partner(s) were in the same academic year to you, select "not applicable").

Wenn eine:r oder mehrere Deiner ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr war/en als Du, wähle die Aussage, die Eure Diskussionen am besten beschreibt.

(Wenn Dein:e ausländische:r Partner:in bzw. Deine ausländischen Partner:innen im selben Studien-/Ausbildungsjahr waren wie Du, wähle „nicht zutreffend“).

- ○ **My foreign partner being in a different year of study had a positive impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte einen positiven Einfluss auf unsere Diskussionen.*

- ○ **My foreign partner being in a different year of study had a negative impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte einen negativen Einfluss auf unsere Diskussionen.*

- ○ **My foreign partner being in a different year of study did not impact on our discussions.** *Dass mein:e ausländische:r Partner:in/ meine ausländischen Partner:innen in einem anderen Studien-/Ausbildungsjahr waren, hatte keinen Einfluss auf unsere Diskussionen.*

- ○ **Not applicable.** *Nicht zutreffend.*

ACADEMIC AND PROFESSIONAL DEVELOPMENT / AKADEMISCHE UND PROFESSIONELLE ENTWICKLUNG

(Section 3 of 6 / Abschnitt 3 von 6)

23. The i-DOT project provided an opportunity for academic learning.

Das i-DOT Projekt ermöglichte fachliches Lernen.

24. ~~**During the i-DOT project, I was able to meet the learning outcomes expected by my university/institute of learning.**~~ **During the i-DOT project, I was able to learn what my university/institution of learning intended for me to learn. (If you do not know what your university intended for you to learn, select neutral)**

Das i-DOT Projekt ermöglichte es mir, die Lernziele zu erreichen, die von meiner Ausbildungsstätte/meiner Universität vorgegeben wurden.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

25. This experience improved my insight into occupations in different parts of the world.

Diese Erfahrung hat mein Wissen über Betätigungen in anderen Teilen der Welt vertieft.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

26. During the i-DOT project, I developed/improved in the following areas of professional skills (You may choose more than one):

Während des i-DOT Projekts konnte ich professionelle Fähigkeiten in folgenden Bereichen entwickeln (Mehrere Antworten sind möglich):

- ○ **Communication skills** / *Kommunikation*
- ○ **Critical thinking skills** / *Kritisches Denken*
- ○ **Leadership skills** / *Führung*
- ○ **Organization skills** / *Organisation*
- ○ **Stress management** / *Stressmanagement*
- ○ **Teamwork and collaboration** / Teamarbeit/Zusammenarbeit
- ○ **Time management** / *Zeitmanagement*
- ○ **None** / *Keine*
- ○ **Other (elaborate)** / *Andere (bitte ausführen)*

27. During the i-DOT project, I developed/improved in the following specific professional skills (You may choose more than one):

Während des i-DOT Projekts konnte ich die folgenden speziellen professionellen Fähigkeiten verbessern. (mehrere Antworten möglich):

- ○ **Ability to analyse information** / *Informationen analysieren*
- ○ **Ability to work with others** / *Mit Anderen zusammenarbeiten*
- ○ **Decisiveness** / *Entschlussfreudigkeit*

- ○ **Emotional awareness** / *Emotionales Bewusstsein*
- ○ **Flexibility** / *Flexibilität*
- ○ **Independence** / *Selbstständigkeit*
- ○ **Problem solving** / *Probleme lösen*
- ○ **Responsibility and accountability** / *Verantwortung übernehmen*
- ○ **Self-motivation** / *Eigenmotivation*
- ○ **Taking initiative** / *Initiativ werden*
- ○ **None** / *Keine*
- ○ **Other (elaborate)** / *Andere (bitte ausführen)*

28. During the i-DOT project, the most important professional skill that I developed (mentioned in the previous two questions) is:

Die wichtigste professionelle Fähigkeit, die ich während des i-DOT-Projekts entwickelt habe, ist (in den beiden vorherigen Fragen erwähnt):

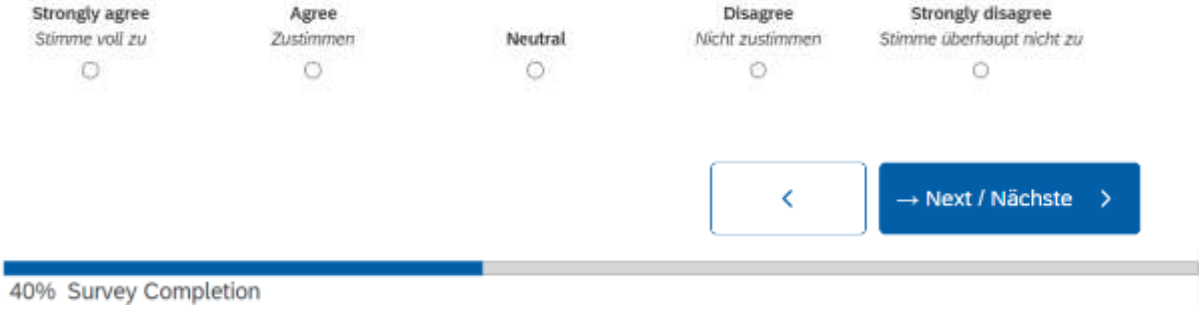
Text response

29. The skills that I learnt during the i-DOT project could benefit me in future working environments.

Die Fähigkeiten, die ich während des i-DOT Projekts erlernt habe, können hilfreich sein für meine späteren beruflichen Einsatzfelder.

30. The project has allowed me to develop my professional identity as a future occupational therapist.

Während des Projekts konnte ich meine professionelle Identität als Ergotherapeut:in entwickeln.



PERSONAL AND SOCIAL DEVELOPMENT / PERSÖNLICHE UND SOZIALE ENTWICKLUNG

(Section 4 of 6 / Abschnitt 4 von 6)

31. Participating in the i-DOT project has improved my general knowledge.

Die Teilnahme am i-DOT Projekt hat mein Allgemeinwissen verbessert.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

32. During this project, I experienced personal growth in the following areas: (You may choose more than one):

Durch das Projekt erlebte ich in folgenden Bereichen persönliches Wachstum (mehrere Antworten möglich):

- ○ **Confidence in myself** / *Selbstvertrauen*
- ○ **Motivation to learn** / *Lernmotivation*
- ○ **Self-awareness** / *Selbstbewusstsein*
- ○ **I did not experience any personal growth** / *Ich habe kein persönliches Wachstum erlebt*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

33. During the i-DOT project, I gained more confidence in my knowledge about occupational therapy.

Durch das i-DOT-Projekt habe ich mehr Vertrauen in mein Wissen über Ergotherapie gewonnen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

34. During the i-DOT project, I gained more confidence in my skills as an occupational therapist.

Durch das i-DOT Projekt habe ich mehr Vertrauen in meine Fähigkeiten als Ergotherapeut:in gewonnen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

35. Participating in i-DOT allowed me to take ownership of my own learning, including taking control of my learning during the discussions even though I was not being supervised in that time.

Die Teilnahme am i-DOT Projekt ermöglichte mir, Verantwortung für mein eigenes Lernen zu übernehmen, dies beinhaltet, mein Lernen während der Diskussionen zu kontrollieren, obwohl ich zu dieser Zeit nicht beaufsichtigt/ betreut wurde.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

36. During this project, I experienced social growth in the following areas (You may choose more than one):

Durch das Projekt erfuhr ich soziales Wachstum in den folgenden Bereichen (mehrere Antworten möglich):

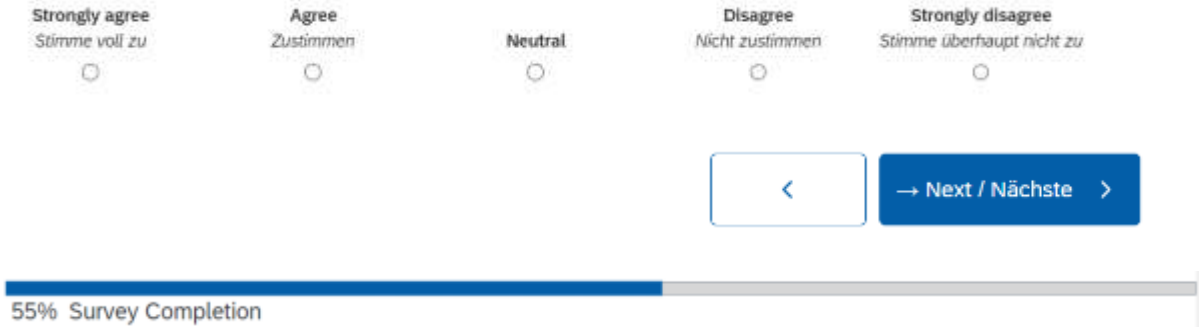
- ○ **Ability to respect different views and beliefs of others** / *Die Fähigkeit andere Ansichten und Überzeugungen zu respektieren*
- ○ **Confidence in communicating with new people** / *Vertrauen in die Fähigkeit zur Kommunikation mit fremden Menschen*
- ○ **Making new friendships** / *Neue Freundschaften schließen*
- ○ **Skill in active listening** / *Aktives zuhören*
- ○ **I did not experience social growth** / *I did not experience social growth / Ich habe kein soziales Wachstum erlebt*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

37. The i-DOT project allowed me to improve my interpersonal skills.

Im i-DOT Projekt konnte ich meine Interaktionsfähigkeiten verbessern.

38. Regarding social skills, my ability to interact meaningfully with someone from a different geographical background improved during the i-DOT project.

Bzgl. der sozialen Kompetenzen hat sich meine Fähigkeit, bedeutungsvoll mit Menschen zu interagieren, die einen anderen geographischen Hintergrund haben, durch das i-DOT Projekt verbessert.



CULTURAL AND DIVERSITY AWARENESS / KULTUR- UND DIVERSITY-SENSIBILITÄT

(Section 5 of 6 / Abschnitt 5 von 6)

39. Cultural differences between my foreign partner(s) and I made it difficult to interact meaningfully.

Kulturelle Unterschiede zwischen mir und meine:r ausländischen Partner:in bzw. meinen ausländischen Partner:innen machten es schwierig bedeutungsvoll zu interagieren.

40. Please select the statement that best describes what you learnt from your foreign partner(s) during the i-DOT project. (You may select more than one option).

Bitte wähle die Aussage, die am besten beschreibt, was Du während des i-DOT Projekts von Deine:r ausländischen Partner:in bzw. Deinen ausländischen Partner:innen gelernt hast (mehrere Antwortoptionen möglich).

- ○ **I learnt something about my foreign partner(s)' country that I did not know before.**
  Ich habe etwas über das Land meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ **I learnt something about my foreign partner(s)' culture that I did not know before.**
  Ich habe etwas über die Kultur meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ **I learnt something about my foreign partner(s)' language that I did not know before.**
  Ich habe etwas über die Sprache meine:r ausländischen Partner:in/ Partner:innen gelernt, was ich vorher nicht wusste.

- ○ ***I did not learn anything that I did not already know before the discussions.***
  Ich habe nichts gelernt, was ich nicht vor den Diskussionen schon wusste.

41. Having discussions with people from a different country has made me more aware of diversity, beyond what I already know about diversity in my own country.

Die Diskussion mit Menschen aus anderen Ländern hat mein Bewusstsein für Diversität, verbessert, jenseits dessen, was ich schon über Diversität in meinem eigenen Land wusste.

42. After this experience, I have a better understanding about how cultural backgrounds can affect occupations.

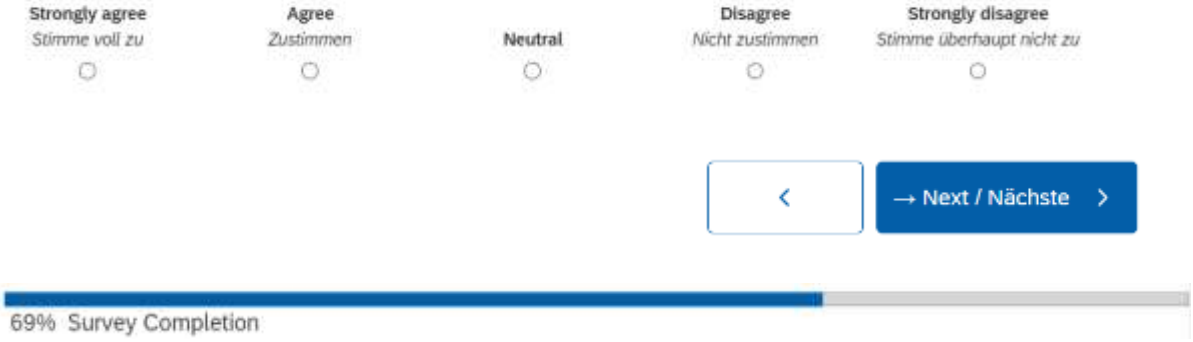
Nach dieser Erfahrung habe ich ein besseres Verständnis für den Einfluss des kulturellen Hintergrundes auf Betätigungen.

43. After this experience, I have a better understanding about how geographical backgrounds can affect occupations.

Nach dieser Erfahrung habe ich ein besseres Verständnis für den Einfluss des Geografischen Hintergrundes auf Betätigungen.

44. The knowledge I gained about a different culture could assist me when working with diverse populations in occupational therapy.

Das Wissen, welches ich mir über eine andere Kultur angeeignet habe, kann mir helfen, wenn ich mit diversen Bevölkerungsgruppen in der Ergotherapie arbeite.



OVERALL EXPERIENCE / ALLGEMEINE ERFAHRUNG

(Section 6 of 6 / Abschnitt 6 von 6)

45. During the i-DOT discussion project, I experienced these challenges (You may choose more than one):

Während des i-DOT Diskussionsprojektes musste ich folgende Herausforderungen bewältigen (mehrere Antwortmöglichkeiten):

- ○ **Challenges with internet connectivity** / *Probleme mit der Internetverbindung*
- ○ **Communication difficulties** / *Kommunikationsschwierigkeiten*
- ○ **Language barrier** / *Sprachbarriere*
- ○ **Limited understanding of what is expected** / *Eingeschränktes Verständnis der Erwartungen an mich*
- ○ **Little interest from the foreign student** / *Wenig Interesse auf Seiten des/ der ausländischen Studierenden*
- ○ **Relating to someone from a different cultural background** / *Kulturelle Unterschiede*

- ○ **Scheduling suitable times with my partner** / *Passende Zeiten mit meine:r Diskussionspartner:in abstimmen*
- ○ **Technological difficulties** / *Technische Schwierigkeiten*
- ○ **Understanding or navigating time zones** / *Umgang mit unterschiedlichen Zeitzonen*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

46. **Language negatively affected my ability to communicate ~~with my foreign partner(s) and deliver ideas~~ and share ideas with my foreign partner(s).**
Die Sprache hat meine Kommunikationsfähigkeit mit dem/ der ausländischen Partner:in/ den ausländischen Partner:innen und die Möglichkeit, Ideen zu vermitteln, eingeschränkt.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

47. **These are the challenges I experienced that were not mentioned above:**
Diese Herausforderungen, die nicht erwähnt wurden, habe ich erlebt:

Text response

48. **Describe any ~~innovative methods~~ useful methods that you used to deal with the challenges that you experienced.**
Beschreibe innovative Methoden, die Du benutzt hast, um mit den Herausforderungen umzugehen, die Du erlebt hast.

Text response

49. **Select the sentence that best describes your experience of how your lecturers prepared you to deal with challenges during this project.**

Wähle den Satz, der am besten beschreibt, wie Deine Dozent:innen Dich darauf vorbereitet haben, mit Herausforderungen während des Projektes umzugehen.

- ○ **My lecturer prepared me for all of the challenges I experienced and how to deal with them.** *Meine Dozent:innen haben mich auf alle erlebten Herausforderungen und den Umgang damit, vorbereitet.*

- ○ **My lecturer prepared me for some of the challenges I experienced and how to deal with them.**
  Meine Dozent:innen haben mich auf einige der erlebten Herausforderungen und den Umgang damit, vorbereitet.

- ○ **My lecturer mentioned some of the challenges I faced but did not prepare me to deal with them.**
  Meine Dozent:innen haben einige der Herausforderungen erwähnt, aber mich nicht darauf vorbereitet, diese zu bewältigen.

- ○ **My lecturer did not prepare me for the challenges I experienced.**
  Meine Dozent:innen haben mich nicht auf die erlebten Herausforderungen vorbereitet.

- ○ **Not applicable.**
  Nicht zutreffend.

50. How can this learning experience be improved?

Wie kann diese Lernerfahrung verbessert werden?

Text response

~~**What worked well in the planning that should remain the same?**~~ **What worked well during the preparation for the i-DOT project, that should remain the same?**

~~*Was hat gut funktioniert und sollte beibehalten werden?*~~ *Was hat in der Vorbereitung auf das i-DOT Projekt gut funktioniert und sollte beibehalten werden?*

Text response

51. For me, the best part of the i-DOT project was:

Für mich war das beste am i-DOT Projekt:

Text response

52. The i-DOT project benefitted me the most in the following area (select one):

Das i-DOT Projekt bringt mir den meisten Nutzen in folgendem Bereich (einen auswählen):

- ○ **Academic development related directly to occupational therapy** / *Fachliche Entwicklung mit direktem Bezug zur Ergotherapeutischen Praxis*
- ○ **General professional development** / *Allgemeine Professionelle Entwicklung*
- ○ **Personal growth** / *Persönliches Wachstum*
- ○ **Social and interpersonal skills** / *Soziale und interaktionelle Kompetenzen*
- ○ **Diversity awareness** / Bewusstsein für Diversität
- ○ **The i-DOT project did not benefit me in any area** / *Das i-DOT Projekt hat mir keinen Nutzen gebracht*
- ○ **Other (elaborate)** / Andere (bitte ausführen)

53. I would recommend discussion projects like i-DOT for future occupational therapy students.

Ich würde Diskussionsprojekte wie das i-DOT für zukünftige Auszubildende/ Studierende der Ergotherapie empfehlen.

Strongly agree *Stimme voll zu*	Agree *Zustimmen*	Neutral	Disagree *Nicht zustimmen*	Strongly disagree *Stimme überhaupt nicht zu*
○	○	○	○	○

54. **Please explain your answer above.**

Bitte erläutern Sie Ihre Antwort.

This question was included to provide qualitative information to the responses in the previous question

Text response

< → Next / Nächste >

81% Survey Completion

Thank you for completing the survey!
Vielen Dank, dass Sie an der Umfrage teilgenommen haben!

100% Survey Completion

Annexure H: Approval of i-DOT research from nine participating institutions

Annexure H: Approval of i-DOT research from nine participating institutions

Pretoria, South Africa:

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences
Deputy Dean: Teaching and Learning

14 June 2022

The Chair
Research Ethics Committee
Faculty of Health Sciences
University of Pretoria

Ethical approval for i-DOT research project

This serves to confirm that I am supportive of the i-DOT research project with Nabeela Kharva, Masters student from the occupational therapy department, as principal investigator.

The project is titled: *Occupational therapy students' perspective on participating in an international collaborative learning project.*

I have no objection to the research team requesting the first- and second-year occupational therapy students from the Health Science Faculty of the University of Pretoria to participate in the study by completing an anonymous questionnaire.

Kind regards

Prof V Steenkamp Deputy Dean: Teaching and Learning
Faculty of Health Sciences

Deputy Dean: Teaching and Learning
Room 5-20.1, Level 5, Health Sciences Building
University of Pretoria, Private Bag X323
Gezina 0031, South Africa
Tel +27 (0)12 319 2174
Email vanessa.steenkamp@up.ac.za
www.up.ac.za

Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Ghent, Belgium:

Gent, 25th of April 2022

Dear

The Artevelde University of Applied Sciences in Gent (Belgium) gives the permission for staff and students of the department of occupational therapy, to be involved in the International Discussions in Occupational Therapy (i-DOT) project as a research study.

An approvement from our Ethics Committee is not required for this project.

Kind regards,

Karen Van de Putte
Head of the department of Occupational Therapy

Karen Van de Putte (Signature)
Digitally signed by Karen Van de Putte (Signature)
Date: 2022.04.27 10:47:46 +02'00'

Artevelde University College NPO
Hoogpoort 15, 9000 Ghent, Belgium
VAT: BE 0474.120.360
Register of Legal Entities Ghent
www.artevelde-uas.be
info@artevelde-uas.be

Department Occupational Therapy
Campus Kantienberg
Voetweg 66, 9000 Gent

Zagreb, Croatia:

aRTis includum

Center for assessment, counseling, education and training of daily life occupations / activities and their contextual application
Adresa: Vukomerec 45
Kontakt: + 38591 7310066
WEB: http//www.artisincludum.hr

To whome it may concern

The students who have undergone filedwork practice at the Centre aRTisINCLudum are allowed to take part in the i-DOT study carried out by the University of Pretoria, South Africa.

U Zagrebu, June 15th 2022.

Saša Radić, BscOTRL, PostGrad cert AdvancedOccupational Therapy

Andrea Matković
President
Centre aRTisINCLudum

Bremen, Germany:

GESUNDHEIT NORD
KLINIKVERBUND BREMEN

Bildungsakademie der Gesundheit Nord • Schule für Ergotherapie
Rotdornallee 64 • 28717 Bremen

Ort, Datum Bremen, den 26.04.2022
Ansprechpartner Susanne Tellers
Zeichen
Durchwahl (0421) 69 66 85 03
Fax (0421) 69 66 85 06
E-Mail susanne.tellers@gesundheitnord.de

Ihr Schreiben
Ihr Zeichen

To whom it may concern!

The students of the College for Occupational Therapy at Bildungsakademie Gesundheit Nord Bremen, Germany are allowed to take part in the i-Dot Study carried out by the University of Pretoria, South Africa.

With kind regards

Bildungsakademie der Gesundheit Nord
Schule für Ergotherapie
Rotdornallee 64, Haus 4
28717 Bremen

Susanne Tellers
Vice Principal

Leitung
BILDUNGSAKADEMIE
Daniela Wendorff

Leitung
SCHULE FÜR ERGOTHERAPIE
Heike Bruns
Susanne Tellers (Stellvertretung)

Kuwait City, Kuwait

جامعة الكويت كلية العلوم الطبية المساعدة قسم العلاج المهني
Kuwait University Faculty of Allied Health Sciences Occupational Therapy Dept.

May 28th, 2022

To Whom It May Concern

The occupational therapy department at Kuwait University reviewed the research proposal and ethics approval certification for the study titled: '**International discussion occupational therapy: exploring facilitators and barriers to participate in a global collaborative learning experience**' and we grant our approval for our students to take part in this research study according to the provided detailed proposal.

Regards,

Naser Alotaibi, Ph.D, OT
Dr.Naser Mohammed Alotaibi
Occupational Therapy Dept
Kuwait University
Chairman, Occupational Therapy Department, Kuwait University
Naser.alotaibi@ku.edu.kw

Linz, Austria:

MEDIZINISCHE FAKULTÄT

Herrn
Stefan Kollmann, MHPE
Per e-mail: stefan.kollmann@fhgooe.ac.at

Ethikkommission der Medizinischen Fakultät

Med Campus I
Gebäude ADM, 7. OG
Krankenhausstraße 5,
4020 Linz

T +43 732 2468 8793
Fax 43 732 2468 8799
ethikkommission@jku.at
jku.at

Linz, am 27.04.2022

Selbstevaluation im Zuge der LV: „International Discussions in Occupational Therapy (i-DOT)“

Sehr geehrter Herr Kollmann, MHPE

Die Ethikkommission der Medizinischen Fakultät der JKU setzt Sie darüber in Kenntnis, dass Ihr Projekt **Selbstevaluation im Zuge der LV: „International Discussions in Occupational Therapy (i-DOT)“** bei der Ethikkommission der Medizinischen Fakultät der JKU nicht einreichpflichtig ist.

Begründung:
Da es sich hierbei nicht um die Verarbeitung von sensiblen Gesundheitsdaten handelt, ist eine Befassung der Ethikkommission der Medizinischen Fakultät der JKU nicht erforderlich.

Mit freundlichen Grüßen

Ethikkommission der JKU Linz

JOHANNES KEPLER UNIVERSITÄT LINZ
Altenberger Straße 69
4040 Linz, Österreich
jku.at
DVR 0093696

Derby, United Kingdom:

UNIVERSITY OF DERBY

Health, Psychology and Social Care
Research Ethics Committee

Applicant: Sian Burgess

Study title: INTERNATIONAL DISCUSSIONS IN OCCUPATIONAL THERAPY: EXPLORING FACILITATORS AND BARRIERS TO PARTICIPATION IN A GLOBAL COLLABORATIVE LEARNING EXPERIENCE

CREC ref: ETH2122-4257

Outcome: Unconditional favourable opinion

Date: 06-06-2022

Dear Sian,

Thank you for submitting the required evidence in support of your project application. Please note that this satisfies the ethical element of the regulatory requirements for completing your research with the University of Derby. You can accept this letter as confirmation of unconditional favourable opinion of the College Research Ethics Committee. Note that it is the responsibility of yourself as the applicant with oversight from your supervisory team to ensure that all external governance and ethics requirements are adhered to, and that necessary management permissions are in place.

If any changes to the study described in the original application or to the supporting documentation is necessary, you must make a resubmission for assessment of the amendments to the committee and seek necessary external approval.

The committee wishes you the best for the future of your project.

Yours sincerely,

Dr Thomas Hunt, Chair

The Health, Psychology and Social Care College Research Ethics Committee
Email: **HPSCCREC@Derby.ac.uk**

Ethics Monitor applications, information and support:
https://research.derby.ac.uk/

Southampton, United Kingdom:

UNIVERSITY OF Southampton

26th May 2022

Dear Nabeela

Re: International discussions in occupational therapy (i-DOT): exploring facilitators and barriers to participation in a global learning experience.

Please accept this letter as confirmation from the University of Southampton (UoS) that the study (titled above) has been approved by the ethics committee (ERGOII) against ID: 72856, allowing the recruitment of UoS student and staff.

Attached screenshot of the confirmartion email.

Kind regards

Sarah McGinley

Sarah McGinley (Occupational Therapy Lecturer)

NO ACTION REQUIRED - Submission with Faculty Ethics Committee for review - ERGO II 72856

ERGO II – Ethics and Research Governance Online https://www.ergo2.soton.ac.uk

Submission ID: 72856
Submission Title: International discussions in occupational therapy: exploring facilitators and barriers to participation in a global collaborative learning experience
Submitter Name: Sarah Mcginley

The above submission has now been sent to your Faculty Ethics Committee for review. You will be notified again if they request a revision or when they approve the submission.

If your project is Category A, this will automatically proceed to the Research Integrity and Governance team following Faculty Ethics Committee review.

You can check the status of your study any time by going to *List My Submissions* in ERGO II. Please note the standard turnaround time for review is 10 working days and submissions should not be chased before this point.

Click here to view this submission

TId: 23024_Staff_email_confirming_submission_to_FEC Id: 491634 slm1n11@soton.ac.uk coordinator

Please do not reply to this message as it has been automatically generated by the system. This email address is not monitored.

Créteil, France:

UPEC
UNIVERSITÉ PARIS-EST CRÉTEIL
INSTITUT DE FORMATION EN ERGOTHÉRAPIE

îledeFrance

Affaire suivie par :
Christophe DURAND
Responsable pédagogique L2
Tel : +33 (0)1 45 17 71 61
Ou : +33 (0)6 69 03 04 32
christophe.durand@u-pec.fr

Créteil, le 2 mai 2022

To whom it may concern!

The students of the college of Occupational Therapy at University of Paris EST Créteil, France, are allowed to take part in the I-Dot study carried out by the University of Pretoria, South Africa.

Christophe DURAND
Responsable pédagogique L2

UPEC
INSTITUT DE FORMATION EN ERGOTHÉRAPIE
80 avenue du Général de Gaulle
94000 Créteil

Annexure I: Ethics approval certificate for the larger mixed-method study

Annexure I: Ethics approval certificate for the larger mixed-method study

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 18 March 2022 and Expires 18 March 2027.
- IORG #: IORG0001762 OMB No. 0990-0278 Approved for use through August 31, 2023.

Faculty of Health Sciences **Research Ethics Committee**

6 May 2022

Approval Certificate
New Application

Dear Ms HE Lister

Ethics Reference No.: 158/2022
Title: International discussions in occupational therapy: Exploring facilitators and barriers to participation through a global collaborative learning experience

The **New Application** as supported by documents received between 2022-03-30 and 2022-05-04 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2022-05-04 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year and needs to be renewed annually by 2023-05-06.
- Please remember to use your protocol number (158/2022) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

On behalf of the FHS REC, Professor Werdie (CW) Van Staden
MBChB, MMed(Psych), MD, FCPsych(SA), FTCL, UPLM
Chairperson: *Faculty of Health Sciences Research Ethics Committee*

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

Research Ethics Committee
Room 4-60, Level 4, Tswelopele Building
University of Pretoria, Private Bag x323
Gezina 0031, South Africa
Tel +27 (0)12 356 3084
Email: deepeka.behari@up.ac.za
www.up.ac.za

Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Annexure J: Ethics approval certificates for the current study

Annexure J: Ethics approval certificates for the current study

Ethics approval certificate:

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 18 March 2022 and Expires 18 March 2027.
- IORG #: IORG0001762 OMB No. 0990-0278 Approved for use through August 31, 2023.

Faculty of Health Sciences **Research Ethics Committee**

27 July 2022

Approval Certificate
New Application

Dear Ms N Kharva

Ethics Reference No.: 371/2022
Title: Occupational therapy students' perception on participating in an international collaborative learning project

The **New Application** as supported by documents received between 2022-06-27 and 2022-07-27 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2022-07-27 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year and needs to be renewed annually by 2023-07-27.
- Please remember to use your protocol number (371/2022) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

On behalf of the FHS REC, Dr R Sommers
MBChB, MMed (Int), MPharmMed, PhD
Deputy Chairperson *of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria*

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

Research Ethics Committee
Room 4-60, Level 4, Tswelopele Building
University of Pretoria, Private Bag x323
Gezina 0031, South Africa
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Email: deepeka.behari@up.ac.za
www.up.ac.za

Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Annual renewal certificate:

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 18 March 2022 and Expires 18 March 2027.
- IORG #: IORG0001752 OMB No. 0990-0279 Approved for use through June 30, 2025 and Expires 07/28/2026.

Faculty of Health Sciences **Research Ethics Committee**

15 September 2023

Approval Certificate
Annual Renewal

Dear Ms N Kharva,

Ethics Reference No.: 371/2022 – Line 1
Title: Occupational therapy students' perception on participating in an international collaborative learning project

The **Annual Renewal** as supported by documents received between 2023-08-21 and 2023-09-13 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2023-09-13 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Renewal of ethics approval is valid for 1 year, subsequent annual renewal will become due on 2024-09-15.
- Please remember to use your protocol number (371/2022) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

On behalf of the FHS REC, Dr R Sommers
MBChB, MMed (Int), MPharmMed, PhD
Deputy Chairperson *of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria*

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

Research Ethics Committee
Room 4-60, Level 4, Tswelopele Building
University of Pretoria, Private Bag x323
Gezina 0031, South Africa
Tel +27 (0)12 356 3084
Email: deepeka.behari@up.ac.za
www.up.ac.za

Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Ethics amendment certificate:

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.
- FWA 00002567. Approved dd 18 March 2022 and Expires 18 March 2027.
- IORG #: IORG0001762 OMB No. 0990-0279 Approved for use through June 30, 2025 and Expires 07/28/2026.

Faculty of Health Sciences **Research Ethics Committee**

9 November 2023

Approval Certificate
Amendment

Dear Ms N Kharva,

Ethics Reference No.: 371/2022 – Line 2
Title: Occupational therapy students' perception on participating in an international collaborative learning project

The **Amendment** as supported by documents received between 2023-10-24 and 2023-11-08 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2023-11-08 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- The Research Ethics Committee (REC) must monitor your research continuously. To this end, you must submit as may be applicable for your kind of research:
  a) annual reports;
  b) reports requested *ad hoc* by the REC;
  c) all visitation and audit reports by a regulatory body (e.g. the HPCSA, FDA, SAHPRA) within 10 days of receiving one;
  d) all routine monitoring reports compiled by the Clinical Research Associate or Site Manager within 10 days of receiving one.
- The REC may select your research study for an audit or a site visitation by the REC.
- The REC may require that you make amendments and take corrective actions.
- The REC may suspend or withdraw approval.
- Please remember to use your protocol number (371/2022) on any documents or correspondence with the Research Ethics Committee regarding your research.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

On behalf of the FHS REC, Dr R Sommers
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Annexure K: Survey coordinating committee approval

Annexure K: Survey coordinating committee approval

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Office of the Registrar

2022-08-19

Ms N Kharva
Department of Occupational Therapy
School of Health Care Sciences
Faculty of Health Sciences
University of Pretoria

Email: u18310258@tuks.co.za

Dear Ms Kharva

APPROVAL OF RESEARCH STUDY

The UP Survey Coordinating Committee has granted approval for the research study titled "Occupational Therapy Students' Perception on participating in an international collaborative learning project".

The proposed research study has to strictly adhere to the associated study protocol, as well as the UP Survey Policy and the Ethics Committee of the Faculty of Health Sciences instructions.

Please liaise with the Market Research Office in the Department of Institutional Planning (carlien.neil@up.ac.za) to officially register the study and to finalise the survey regulations, procedures and the fieldwork dates. In order to register the study, the Market Research Office has to receive the formal ethical approval letter from the Faculty of Health Sciences.

A final electronic copy of the research outcomes must be submitted to the Survey Coordinating Committee as soon as possible after the completion of the study.

Kind regards

Prof CMA Nicholson
REGISTRAR
CHAIRPERSON: SURVEY COORDINATING COMMITTEE

Rectorate, Room 4-23, 4th floor, Administration Building, Hatfield Campus
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel: +27 (0)12 420 4236
Fax: +27 (0)12 420 5849
Email: regis@up.ac.za
www.up.ac.za

Kantoor van die Registrateur
Ofisi ya Mmušakarolo

Annexure L: i-DOT project guiding questions

Annexure L: i-DOT project guiding questions

i-DOT 2022

Here are the questions to help guide the discussions:

- What does occupational deprivation or disruption mean to you?
- How has "social distancing" influenced the leisure and free time occupations of older persons in your country during the pandemic?
- What effect do you think the past 2 years has had on older people in your country?
- What effect is the past 2 years had on you?
- What do you think the role of an occupational therapist is now and, in the future, regarding covid-19?
- How can we as a society help older people to remain doing what is meaningful to them in times like these?
- How do you think health care and occupational therapy will evolve after the COVID19- crisis?
- What are the lessons learned for OT, according to you?
- Will Long-covid be an issue? If so, how?
- Do you have a story of someone you know or have heard of, an older person who has been affected by the Covid-19 virus?

These questions are a guide, and it is hoped will form the basis of a free-flowing discussion.

Annexure M: Turnitin submission and summary

Annexure M: Turnitin submission and summary

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

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UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences
School of Health Care Sciences
Department of Occupational Therapy

OCCUPATIONAL THERAPY STUDENTS' PERCEPTION ON PARTICIPATING IN AN INTERNATIONAL COLLABORATIVE LEARNING PROJECT

Submitted by **Nabeela Kharva**, student number **18310258**,
in fulfilment of the degree of Masters in Occupational Therapy
(MOccTher) by virtue of research at the University of Pretoria

Supervisor : Dr HE Lister
Co-supervisor : Dr T Buys
Date : 12 February 2024

N. Kharva - M.OT submission - Occupational therapy students' perception on participating in an international collaborative learning project

ORIGINALITY REPORT

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