

Exploring the use of international virtual exchange to develop intercultural competencies using UNESCO Story Circles

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Executive summary

International virtual exchange (IVE) and collaborative online international learning (COIL) offer students an international education opportunity without the need for international physical mobility. IVE/COIL projects in any discipline can contribute to development of intercultural competencies, technological literacy and teamwork skills and competencies among the students. However, methods and tasks to develop these competencies are not always purposefully embedded in IVE/COIL projects. The aim of the research was to explore whether the Story Circles methodology could assist students involved in IVE/COIL to develop intercultural competencies. The researchers wanted to assess the effects of incorporation of Story Circles in the process of development of intercultural competencies among university students involved in IVE/COIL projects between Durban University of Technology and its international partners.

To assess intercultural learning and development of intercultural competencies through IVE/COIL, we used a multi-phased research methodology. The data was collected using an online survey of students and interviews with academics. The research was conducted at Durban University of Technology and partner universities from Mexico, United States and Venezuela which collaborated on IVE/COIL projects. Survey findings show that students had good motivational cultural intelligence (CQ), meta-cognitive CQ and behavioural CQ, but weaker cognitive CQ. Our qualitative data and findings highlight the need to engage with academics and international partners working on IVE/COIL projects on a more effective planning, preparation and provision of intercultural learning in projects. Most importantly, our findings indicate that there is a need for a provision of sufficient time and meaningful content and methods for practising intercultural learning and engagement between students who participate in IVE/COIL projects.

Introduction

International virtual exchange (IVE) and collaborative online international learning (COIL) offer students an international education opportunity without the need for international physical mobility. IVE/COIL projects in any discipline can contribute to development of intercultural competencies, technological literacy and teamwork skills and competencies among the students. However, methods and tasks to develop these competencies are not always purposefully embedded in IVE/COIL projects. Often, academics develop projects to create a platform for their students to engage with students in another part of the world on a specific academic subject. While beneficial, meetings and engagements online do not necessarily develop intercultural competencies. It is not enough to bring students from different countries and institutions together, have them engage on a specific topic, and expect them to develop intercultural competencies. Through IVE/COIL, we need to go beyond academic engagements and exchange of information and perspectives and enable students to purposefully practise and develop intercultural competencies.

In our research project, we explored whether IVE/COIL can be improved to better contribute to development of intercultural competencies among students through incorporation of specific tools into IVE/COIL projects. An important tool that can assist in developing intercultural competencies is the Story Circles. The goal of our research was to explore whether the Story Circles can assist the students involved in IVE/COIL to practise development of intercultural competencies. This tool/methodology was developed by Dr Darla Deardorff, a leading global expert and scholar on intercultural competencies, for the United Nations Educational, Scientific and Cultural Organization (UNESCO) as a structured but also flexible methodology for developing intercultural competencies in different settings (Deardorff, 2020). While the Story Circles manual was initially developed for in-person engagements, it has been repurposed and redeveloped by Dr Deardorff since the outbreak of the COVID-19 pandemic to be used in online engagements.

Our research was conducted at Durban University of Technology (DUT) in South Africa, and with DUT's international partners. The International Education and Partnerships (IEP) directorate at DUT, has an important mandate to embed international education into DUT's academic programs. To enable all DUT students and staff an international education experience, IEP has rolled out collaborative online international learning and international virtual exchange across the university. DUT was the first university in Africa to become a member of the State University of New York (SUNY) global network of universities participating in COIL. This has enabled the university to take a lead in South Africa on COIL/IVE with international partners across the globe.

Aim of the project

The aim of the research was to explore whether the Story Circles methodology could assist students involved in IVE/COIL to develop intercultural competencies. The researchers wanted to assess the effects of incorporation of Story Circles in the process of development of intercultural competencies among university students involved in IVE/COIL projects between Durban University of Technology and its international partners.

Methodology

To assess intercultural learning and development of intercultural competencies through IVE/COIL, we used a multi-phased research methodology. The data was collected using an online survey of students and interviews with academics. The research was conducted at Durban University of Technology and partner universities from Mexico, United States and Venezuela which collaborated on IVE/COIL projects. Students who participated in the survey were from or studying in South Africa, Venezuela, Mexico and the United States. Survey data

was collected from student participants using the adapted cultural intelligence (CQ) scale on a five-point Likert scale. This scale was developed among multicultural adolescents in multiethnic schools. The self-report CQ scale showed good reliability and validity (Schwarzenthal et al., 2019). The survey was administered online to students who had completed an IVE/COIL project via Google Forms, with the link to the survey shared with students by academics. The responses were anonymous and managed via the Google Forms response mechanism. Only 17 participants (20%) of the total sample of 86 students took part in an IVE/COIL project which used the Story Circles methodology. Other students participated in projects which did not use Story Circles.

Interviews were conducted with six academics who partnered on IVE/COIL projects: three academics from South Africa and their international partners - one from Mexico, one from Venezuela and one from the United States. These interviews were used to explore academics' experiences of IVE/COIL projects and their perception of students' intercultural competencies development. Two interviewed academics had conducted an IVE/COIL project using Story Circles and were asked about their experience and observations about incorporation of this methodology in their project. The interviews took between 30 and 45 minutes with each academic pair. Survey data was analysed using quantitative descriptive analysis and a qualitative thematic analysis was used for the interview data.

The role of facilitators is key in the Story Circles. They introduce the process, provide information about Story Circles, their purpose and different steps, split participants into smaller groups, provide participants with prompts, and facilitate a debrief after the Story Circles process ends and participants come back into the larger group (Deardorff, 2020). As part of the preparation for this research project, academics interested in using Story Circles in their IVE/COIL projects were provided with virtual training sessions where Dr Darla Deardorff unpacked Story Circles and their use in virtual settings. Sessions also included the practical experiences of being in the Story Circles for the academics. This way, they were able to learn about Story Circles and how to prepare and structure them and have first-hand experience of participating in virtual Story Circles. While our initial goal was to have several IVE/COIL projects using Story Circles as part of this research, it is important to note that only one project used Story Circles (DUT and Mexico).

Literature review

Culture is a set of distinct features of a group of people or a society, including different ways of being that may be linked to the history, present, beliefs, traditions, values, literature and art, to mention only a few (UNESCO, 2001). Cultural competence refers to people's ability to consider the values, beliefs and sociocultural factors of 'others' (Leung et al., 2021). 'Others' can include any people or groups that in some way differ from 'us,' including geographical, cultural, ethnic, racial or any other difference. Cultural competence is also described as the integration of knowledge and skills that enable cross cultural communication and competent interaction with others (Schwarzenthal et al., 2017; Henderson et al., 2018; Leung et al., 2021). UNESCO (2013: 16), defines intercultural competencies as the possession of

Adequate knowledge about particular cultures, as well as general knowledge about ... issues arising when members of different cultures interact, holding receptive attitudes that encourage establishing and maintaining contact with diverse others, as well as having the skills required [to interact] ... with others from different cultures.

Deardorff (2020) adds that intercultural competencies are about improving interactions between people from different settings and backgrounds, whether they are from the same country or different parts of the world. Schwarzenthal et al. (2017) argue that it is important for students to develop intercultural competencies to effectively live and work in culturally and otherwise diverse communities. The development of intercultural competencies is not a one-

off event but something that is built over time and often through the exposure to diverse peoples and cultures. However, the question is whether this development can happen in an ad hoc manner, or if purposeful activities in and outside the classroom can facilitate a more effective and impactful development and practising of intercultural competencies.

IVE/COIL involves students collaborating over a period of time in online activities across geographical borders and cultures. Often, the collaboration also includes multiple languages and different academic disciplines (O'Dowd, 2018). These exchanges are technologically mediated with the goal of learning about the world, learning with and about others, and developing intercultural competencies, technological skills and the ability to work in teams. These are often referred to as the 'soft skills' which students are encouraged to develop during their studies (Apusigah, 2020). IVE/COIL is an example of internationalisation at home (IaH), which is arguably a more equitable approach to internationalisation of higher education than physical mobility, which benefits only a small number of students globally (Jones, 2022). IaH and IVE/COIL, on the other hand, can provide opportunities to more students to have an international experience without the challenges and expenses of physical mobility (Orton & Cooke, 2020). Given the challenges that the world is facing regarding the climate crisis, IaH and IVE/COIL also contribute to limiting CO2 emissions in higher education while contributing to development of international and intercultural competencies (Shields, 2019; CANIE, 2022).

IVE/COIL is an important pedagogical methodology for enhancement of students' learning, including learning about the world and development of intercultural competencies. However, O'Dowd (2019; 2021) writes that IVE/COIL projects often focus on connecting students from different parts of the world and engaging primarily on themes linked to specific disciplines, while paying little attention to unpacking differences in cultural practices and perspectives and developing intercultural competencies in the process. Importantly, Helm (2013) notes that there is a danger that, with increasing acceptance, collaboration on cultural aspects through IVE/COIL could become trivial. It is important to engage students meaningfully and purposefully in discussions about cultures and different settings, and the issues of historical, social, economic, political and other importance (O'Dowd, 2016). This is key if international education is to contribute to development of critical and relevant knowledge about the world and all its complexities (Heleta & Chasi, 2022).

Using Story Circles to develop and practise intercultural competencies

The development of intercultural competencies occurs through two main approaches - formal intercultural learning and informal learning opportunities such as engagements with people from different countries and cultures, and through arts, museums, libraries, media, movies and other experiences. The development of intercultural competencies is a lifelong process. Story Circles methodology is one way of developing and practising intercultural competencies in different settings across the world. Story Circles allow students (or anyone else) from different backgrounds to come together and explore cultural similarities and differences. Through this process students develop an understanding of other people and cultures, as well as a greater self-awareness, openness, respect, reflexivity, empathy, cultural humility and increased awareness of others. Key elements of the Story Circles methodology are the focus on self-awareness, listening, sharing, reflection, openness and relationship building. Story Circles are practised through voluntary sharing of personal experiences with others in a safe space, and listening to others share their experiences. Sharing of experiences is guided using specific prompts aimed at developing intercultural exchange and learning. After the engagement and sharing of personal experiences, facilitators engage with participants through debriefing, where they critically reflect on the engagements and experiences in the Story Circles. Trust, respect, empathy, humility and equality of all within the Story Circle are of utmost importance in the process. This way, participants are encouraged to connect on an emotional level and learn about each other's cultures (Deardorff, 2020).

Story Circles ideally include three to six participants, as smaller groups are generally better for engagement and sharing of stories. The Circles include at least two rounds of sharing of stories by all participants based on the prompts given to them by facilitators during the introduction stage. The first round is about getting to know each other, while the second round aims to encourage deeper sharing. While one person speaks, other participants in the Circle are asked to listen to understand what the speaker is sharing, rather than listening to respond. After two rounds of sharing, participants go back to a larger group to engage in a facilitated critical reflection about the experience. To be effective and meaningful, Story Circles require between 75-120 minutes, depending on the number of participants (Deardorff, 2020). While Story Circles were initially developed as a tool for in-person engagement and development of intercultural competencies, the methodology was adapted and used in virtual settings after the outbreak of the COVID-19 pandemic.

Findings

The findings that emerged from our research will be reported in two sections below - the quantitative description of survey data (N=86) and then the thematic analysis of the qualitative interview data (N=6).

Quantitative results

The survey sample (N=86) ranged in age from 18 years to 36 years old, with the largest number of students at 20 years old (n=25, 21.1%). The majority of those who participated were from Durban University of Technology (South African students n=74, 86%) as well as one DUT student from Angola (n=1, 1.2%) and one from the Democratic Republic of Congo (n=1, 1.2%); Mexico (n=6, 7%); and the United States of America (n=4, 4.7%). Just over two thirds (n=58, 67.4%) of the participants were Zulu-speaking, 18 (20.9%) English-speaking, 6 (7%) were Spanish-speaking, with Xhosa, Siswati, Portuguese and Ndebele spoken by one participant each (1.2% each). Sixty-five (65) students (75.6%) were in their 3rd year, 17 (19.8%) in the 2nd year, and 4 (4.7%) in their 1st year of university/college education. We were not able to disaggregate the data from students who participated in the Story Circles because these participants constituted a small proportion (n=17, 20%) of the larger sample.

Cultural intelligence is a concept which suggests that intercultural competencies, as a specific intelligence with constructs, can be measured (Hackett et al., 2023). Those who possess high cultural intelligence (CQ) have an intrinsic drive (motivational CQ) to engage in intercultural activities, know about norms and practices in different cultures (cognitive CQ), have knowledge and awareness of their own and others' cultural practices and inculcate them into their interaction (meta-cognition), and behave in a culturally appropriate way (behavioural CQ) (Schwarzenthal et al., 2019). The adapted self-report CQ scale consisted of 24 items, with six items per construct of cultural intelligence: motivation (Q1-Q6), cognition (Q7-Q12), meta-cognition (Q13-Q18) and behaviour (Q19-Q24). Figure 1 illustrates the frequency of participants responses (see appendix 1 for a more detailed table with frequencies and percentages):

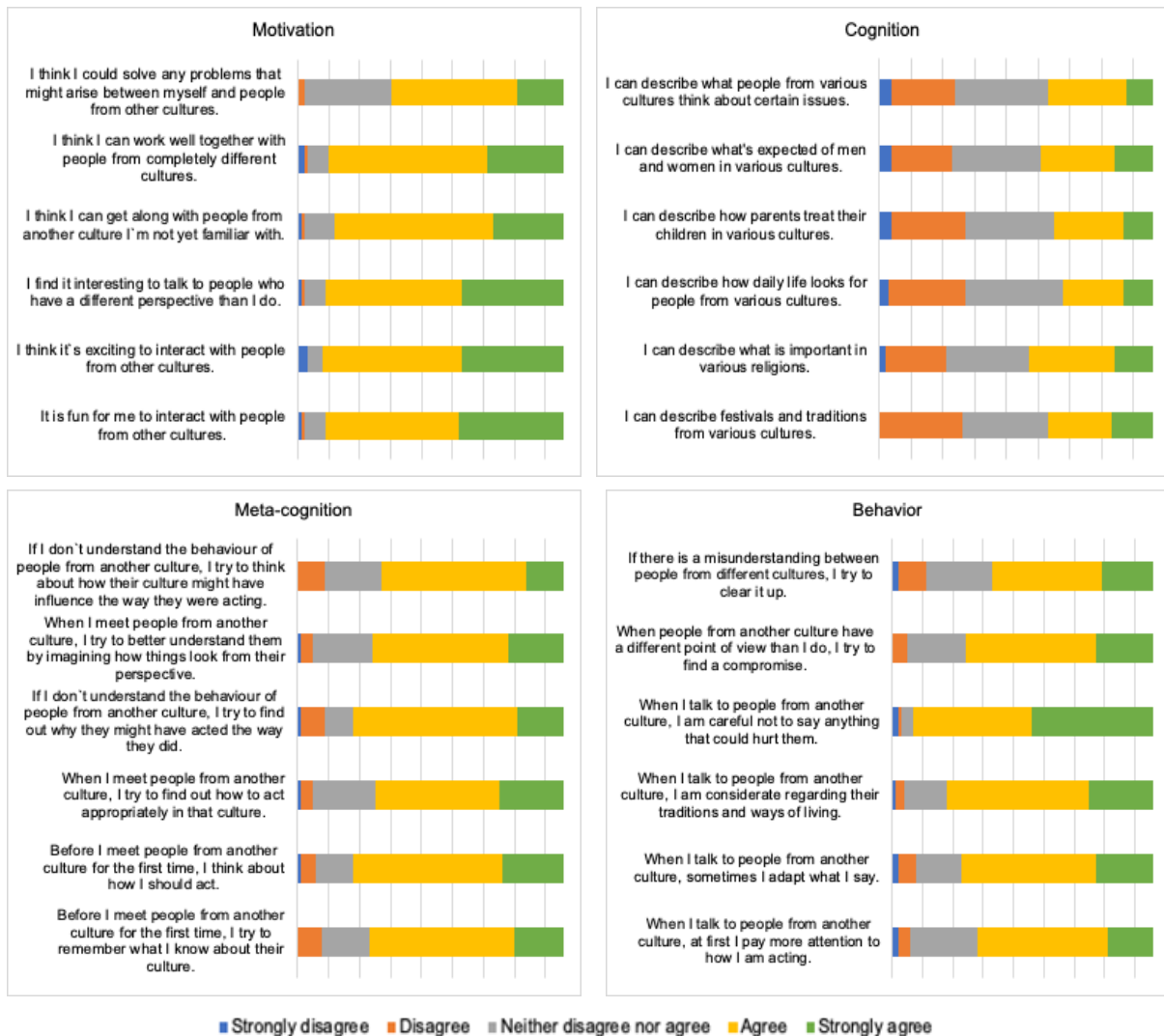


Figure 1: Cultural intelligence survey responses

Students agreed or strongly agreed on all the items measuring motivation (Q1-Q6) and ranged between 86% (n=74) and 90.7% (n=78) for each question. Similar results were found for meta-cognition (ranged from 68.7% and 79.1 %) and behaviour (61.7% and 91.8%). A pleasing result was that 91.8% (n=79) of students agreed or strongly agreed when presented with the following statement: 'When I talk to people from another culture, I am careful not to say anything that could hurt them.' The cognitive dimension of the scale showed less agreement or strong agreement than the other three constructs. The scores in this dimension ranged between 32.6% (n=28) and 45.4% (n=39) indicating less than half of those sampled had knowledge about norms and practices in different cultures. It is important to note the weaker cognitive CQ as this reflects an area that academics might want to consider addressing through ice breakers in their IVE/COIL projects. Students demonstrated good motivational CQ (M=24.83, SD 3.08), weaker cognitive CQ (M=19.17 SD 4.99), good meta-cognitive CQ (M=23.08, SD 3.56) and good behavioural CQ (M=23.53, SD 3.36). The instrument indicated good reliability in this population (α .914) with the subscales of motivational CQ (α .778), cognitive CQ (α .880), meta-cognition CQ (α .790) and behavioural CQ (α .723) showing fair to good reliability in this sample.

Hackett et al. (2023: 5) have also used the CQ scale to explore intercultural competencies through meta-cognitive, cognitive, motivational and behavioural perspectives. They have also

argued for purposeful intercultural activity during IVE/COIL. Their COIL intervention included group assignments including culture-specific questions posed by students to their international counterparts. They have noted that students who are participating in electives that include cultural activities have a higher CQ at a pre-COIL phase than counterparts that do not. Even though the research team noted significant CQ improvement in students who have not had any other international experiences, they have concluded that COIL facilitates improved CQ.

Qualitative findings

Table 1 presents the demographics of academics who were interviewed for this research project. All participants were academics working at Durban University of Technology or international partner institutions.

Table 1: Demographic information of interview participants

Participant	Home language	Home country	Gender
P1	English	South Africa	Female
P2	Spanish	Venezuela	Female
P3	English	South Africa	Female
P4	Spanish	Mexico	Female
P5	English	South Africa	Male
P6	Chinese/English	United States	Male

The thematic analysis identified three themes - **planning, preparation and provision**. These are unpacked below.

Planning of projects: This emerged as an important consideration, with participants emphasising the importance of keeping IVE/COIL projects simple. All of those interviewed structured their projects around research in their specific disciplines but felt this was too complex and complicated for students who participated in COIL projects for the first time. This is illustrated through the following quotes:

'If we do another COIL project, I think we must make it easier for our students' (P1).

'It is very difficult to do a comprehensive project like a research project in COIL' (P1).

'... when we start intercultural cooperation, I think we should start with an easier project... get used to it, gradually pick up...' (P6).

'... asking them [students] to do a research project [as part of COIL] ... can be a little bit challenging' (P6).

'... [we should start with] an easier project, help them [students] to cultivate a way of thinking...' (P6).

One participant felt that more work needed to be done with the students on the effective use of technology in IVE/COIL. An academic who used the Story Circles methodology to engage with an international partner whose students speak a different language highlighted the need to use the translate feature of the video conferencing platforms to assist with the language

challenges:

'... we have to overcome some of the technical challenges in terms of bridging people from far away, using technology, and how we can positively promote learning as a cohort or as a group' (P6).

Preparation of students: This emerged as participants spoke about building enthusiasm, motivating students, and creating excitement for the project. Students are nervous and apprehensive when starting an IVE/COIL project - especially the students who are doing this for the first time, and they need encouragement and support to participate effectively and be active learners:

'There was a very small percentage of class who were actually excited... the rest of them were terrified because they had all these insecurities, you know, about the language and all of those other things' (P4).

The differences in semester start time worked in favour of one academic but against her international partner:

'... [the partner university] starts the semester late, and we started I think a month earlier, so I had ample opportunity to do the groundwork in terms of the theoretical aspects of the subject... so by the time we got to the COIL project... [my students] started engaging with it and by the time it was time for data collection they already had a very good idea' (P4).

'The challenge was that I didn't have much time to prepare them [students] ... we start open classes and one week after we start [we had to begin the] COIL project so when they enter, like, no clue about what is going on' (P5).

'... [students] didn't have as long a period to orientate them to it, so of course, they would be, like, what must we be doing' (P5).

Provision of content and intercultural tasks: Participants emphasised the issue of dedicating more time to the intercultural component of an IVE/COIL project and reducing the focus on the disciplinary content:

'Going forward... we will spend more time [on intercultural engagement] ... Appreciating each other's culture little bit more because there was just one session... But, perhaps with the next iteration of our course... make the focus the intercultural sensitivity' (P3).

'... also integrating all of this to the COIL project and the political aspect also, it is important to be considered because all - I mean culture - it is a complex system so all these elements that we are mentioning here are part of a culture' (P2).

[Students] '... should have more time to interact with each other. As part of the COIL project. You know, to maintain this synchronisation and talk more about culture and the issues that they have ... because that would be more sensible' (P4).

One participant thought that planning suitable ice breakers could be used to build intercultural competencies:

'Ice breakers... if we were to work again on another COIL project I would be looking for enough ice breakers... in line with the project' (P5).

Some participants suggested that more synchronous time needs to be added to the IVE/COIL projects to allow students to spend more time engaging and socialising instead of primarily engaging in discussions about the subject matter:

'We need more synchronised sessions. Even if it's not for the segment ... to interact with each other ... this is something that will be helpful' (P4).

[We need to give students] '... more time beyond the content of the courses to ... [engage in] intercultural interaction ... just providing that space that facilitates that exchange of cultures' (P2).

[Providing incentives to] '... students and the faculty to keep in contact and develop those processes after the collaboration is the key element, is the most important part of what is COIL is, otherwise it would be just a regular course' (P2).

When asked about the use of the Story Circles methodology, the participants shared this:

'It will help. However, the problem is that not all in Mexico speak English... they are ashamed to speak because maybe they are saying the words in a bad way. And they think they [other students] are going to laugh at them' (P4).

'I thought the Story Circles, potentially, was a very powerful tool. However, we didn't use it to its full effect... and that was because of the technical issues... we couldn't get them [students] into their groups and all of that, but on the next iteration we will make more time to get that Story Circle aspect right... and then you know also to get students to log on and time and to get them into their groups and yeah put the cameras on and you know to do it like how it's supposed to have been so much more enriching for both sides' (P3).

The key findings from our interviews highlight the need for better planning, preparation and provision of intercultural learning in IVE/COIL projects. This includes 1) [effective] planning of the topics and classes, not overcomplicating IVE/COIL projects with heavy subject matter, and having a plan for potential technological and other challenges; 2) preparation of students for IVE/COIL projects, including what to expect and how to engage with other students across different time zones, languages and cultures; and 3) provision of sufficient time and meaningful content and methods for practising intercultural learning and engagement.

Limitations of the research

This research project experienced several challenges which meant the researchers did not achieve all they set out to do. The challenges and limitations included the delays with the institutional ethics approval, which delayed surveys and interviews by four months. The timing of this research and the timing of the IVE/COIL projects across international partner institutions were out of alignment and this impacted on the availability of projects, students and academics for participation. The members of the research team that conducted this project are not academics with their own COIL projects and had to rely on other academics at the institution to assist by embracing Story Circles methodology. This had a limited success rate despite facilitation of a number of workshops to encourage academic participation. When it comes to Story Circles, the methodology is not easily facilitated in a virtual environment, particularly when dealing with large classes, different languages and technological challenges. Finally, IVE/COIL projects are by their nature short-term projects of 6-8 weeks on average. Academics try to include as much as they can into their projects and Story Circles engagement was given limited synchronous time.

Conclusion

IVE/COIL projects can contribute to development of students' intercultural competencies. However, methods and tasks to develop these competencies are not always embedded in projects. This research project started with the premise that it is not enough to bring students from different countries and institutions together to engage on a specific topic and expect them to develop intercultural competencies. We need to enable students to purposefully practise and develop intercultural competencies. In our project, we explored whether IVE/COIL can be improved to better contribute to development of intercultural competencies through incorporation of Story Circles methodology. Our aim was to assess the effects of the incorporation of Story Circles in the process of development of intercultural competencies among university students involved in IVE/COIL projects between Durban University of Technology and some of its international partners.

Due to challenges experienced during the implementation of the research project and limited quantitative data from students, we were unable to assess whether the incorporation of Story Circles leads to an effective development of intercultural competencies. Our survey findings indicate that students had good motivational CQ, meta-cognitive CQ and behavioural CQ, but weaker cognitive CQ. The qualitative data and findings highlight the need to engage with academics and international partners working on IVE/COIL projects on a more effective planning, preparation and provision of intercultural learning in projects. Most importantly, our findings indicate that there is a need for a provision of sufficient time and meaningful content and methods for practising intercultural learning and engagement between students who participate in IVE/COIL projects.

Institutions and organisations which might be interested in incorporating Story Circles as a methodology to intentionally infuse an intercultural component into their IVE/COIL projects should consider additional training for academics in the IVE/COIL pedagogy and development of intercultural competencies. In particular, academics need support during the planning stage of projects and for preparation of students before the projects commence, and for the provision of intercultural tasks during projects.

Recommendations for IVE/COIL practitioners

One of the main recommendations to IVE/COIL practitioners interested in assisting students develop and practise intercultural competencies is to plan sufficient time for Story Circles. As noted by Deardorff (2020), to lead to meaningful engagement, Story Circles require 75-120 minutes. This may require a longer session than what typical IVE/COIL classes have. Other recommendations include the need to reinforce the planning of IVE/COIL projects, preparation of students, and the provision of intercultural components alongside the disciplinary content in the professional training for academics. Finally, the weakness of the cognitive construct in CQ can be highlighted for academics planning an IVE/COIL project and they can meaningfully infuse tasks into their project which could help to develop this intelligence in students.

Recommendations for future research

Our initial plan was to explore and assess the effects and outcomes of a typical IVE/COIL project (mainly focusing on a subject matter) on the development of intercultural competencies among students and compare this with an IVE/COIL project that incorporates Story Circles for the development of intercultural competencies. While we were unable to do this, this is an area that still requires significant work. More research is needed on an effective incorporation of Story Circles in IVE/COIL projects, and particular focus on time given to Story Circles and the challenges such as technological constraints and different languages spoken by students. This project will continue at Durban University of Technology as the researchers see it as worthwhile research. As we build capacity for the incorporation of Story Circles into IVE/COIL

projects, we hope to collect more data and gain more insights. The continued use of the adapted CQ scale (Schwarzenthal et al., 2019) will enable researchers to test it for validity and reliability in the DUT student population.

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Appendices

Appendix 1: Frequency of responses to questions on the CQ questionnaire

Questions	Strongly disagree n= (%)	Disagree n= (%)	Neither disagree or agree n = (%)	Agree n= (%)	Strongly agree n= (%)
Motivation construct					
1. It is fun for me to interact with people from other cultures.	1 (1.2%)	1 (1.2%)	7 (8.1%)	43 (50%)	34 (39.5%)
2. I think it's exciting to interact with people from other cultures.	3 (3.5%)	-	5 (5.8%)	45 (52.3%)	33 (38.4%)
3. I find it interesting to talk to people who have a different perspective than I do.	1 (1.2%)	1 (1.2%)	7 (8.1%)	44 (51.2%)	33 (38.4%)
4. I think I can get along with people from another culture I'm not yet familiar with.	1 (1.2%)	1 (1.2%)	10 (11.6%)	51 (59.3%)	23 (26.7%)
5. I think I can work well together with people from completely different cultures.	2 (2.3%)	1 (1.2%)	7 (8.1%)	51 (59.3%)	25 (29.1%)
6. I think I could solve any problems that might arise between myself and people from other cultures.	-	2 (2.3%)	28 (32.6%)	41 (47.7%)	15 (17.4%)
Cognition construct					
7. I can describe festivals and traditions from various cultures.	-	26 (30.2%)	27 (31.4%)	20 (23.3%)	13 (15.1%)
8. I can describe what is important in various religions.	2 (2.3%)	19 (22.1%)	26 (30.2%)	27 (31.4%)	12 (14%)
9. I can describe how daily life looks for people from various cultures.	3 (3.5%)	24 (27.9%)	31 (36%)	19 (22.1%)	9 (10.5%)
10. I can describe how parents treat their children in various cultures.	4 (4.7%)	23 (26.7%)	28 (32.5%)	22 (25.6%)	9 (10.5%)
11. I can describe what's expected of men and women in various cultures (for instance regarding how they are supposed to behave or what tasks they are expected to do)	4 (4.7%)	19 (22.1%)	28 (32.6%)	23 (26.7%)	12 (14%)
12. I can describe what people from various cultures think about certain issues.	4 (4.7%)	20 (23.3%)	29 (33.7%)	25 (29.1%)	8 (9.3%)
Meta-cognition construct					
13. Before I meet people from another culture for the first time, I try to remember what I know about their culture.	-	8 (9.3%)	15 (17.4%)	47 (54.7%)	16 (18.6%)
14. Before I meet people from another culture for the first time, I think about how I should act (for instance, how I should greet them).	1 (1.2%)	5 (5.8%)	12 (14%)	48 (55.8%)	20 (23.3%)
15. When I meet people from another culture, I try to find out	1 (1.2%)	4 (4.7%)	20 (23.3%)	40 (46.5%)	21 (24.4%)

how to act appropriately in that culture.					
16. If I don't understand the behaviour of people from another culture, I try to find out why they might have acted the way they did.	1 (1.2%)	8 (9.3%)	9 (10.5%)	53 (61.6%)	15 (17.4%)
17. When I meet people from another culture, I try to better understand them by imagining how things look from their perspective.	1 (1.2%)	4 (4.7%)	19 (22.1%)	44 (51.2%)	18 (20.9%)
18. If I don't understand the behaviour of people from another culture, I try to think about how their culture might have influence the way they were acting.	-	9 (10.5%)	18 (20.9%)	47 (54.7%)	12 (14%)
Behavioral construct					
19. When I talk to people from another culture, at first I pay more attention to how I am acting.	2 (2.3%)	4 (4.7%)	22 (25.6%)	43 (50%)	15 (17.4%)
20. When I talk to people from another culture, sometimes I adapt what I say (for instance, regarding which topics I bring up).	2 (2.3%)	6 (7%)	15 (17.4%)	44 (51.2%)	19 (22.1%)
21. When I talk to people from another culture, I am considerate regarding their traditions and ways of living.	1 (1.2%)	3 (3.5%)	14 (16.3%)	47 (54.7%)	21 (24.4%)
22. When I talk to people from another culture, I am careful not to say anything that could hurt them.	2 (2.3%)	1 (1.2%)	4 (4.7%)	39 (45.3%)	40 (46.5%)
23. When people from another culture have a different point of view than I do, I try to find a compromise.	-	5 (5.8%)	19 (22.1%)	43 (50%)	19 (22.1%)
24. If there is a misunderstanding between people from different cultures, I try to clear it up.	2 (2.3%)	9 (10.5%)	22 (25.6%)	36 (41.9%)	17 (19.8%)

Appendix 2

Questionnaire for students

Thank you for participating in this research study. Please answer **all** the questions below.

Information about yourself

Age in years					
Programme of study					
Module/course					
Year of study (eg. 1st)	1st	2nd	3rd	4th	Other
Home language	isiZulu	English	Other: please specify		
Home country					

The next section asks you a variety of questions, which are used to assess your cultural intelligence (CQ). There are no right or wrong answers, just your own experience so please feel free to answer honestly. Please mark, with a cross, the answer, which most represents your experience.

	Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
1. It is fun for me to interact with people from other cultures.					
2. I think it's exciting to interact with people from other cultures.					
3. I find it interesting to talk to people who have a different perspective than I do.					
4. I think I can get along with people from another culture I'm not yet familiar with.					
5. I think I can work well together with people from completely different cultures.					

6. I think I could solve any problems that might arise between myself and people from other cultures.					
7. I can describe festivals and traditions from various cultures.					
8. I can describe what is important in various religions.					
9. I can describe how daily life looks for people from various cultures.					
10. I can describe how parents treat their children in various cultures.					
11. I can describe what's expected of men and women in various cultures(for instance regarding how they are supposed to behave or what tasks they are expected to do).					
12. I can describe what people from various cultures think about certain issues.					
13. Before I meet people from another culture for the first time, I try to remember what I know about their culture.					
14. Before I meet people from another culture for the first time, I think about how I should act (for instance, how I should greet them).					
15. When I meet people from another culture, I try to find out how to act appropriately in that culture.					

16. If I don't understand the behaviour of people from another culture, I try to find out why they might have acted the way they did.					
17. When I meet people from another culture, I try to better understand them by imagining how things look from their perspective.					
18. If I don't understand the behaviour of people from another culture, I try to think about how their culture might have influence the way they were acting.					
19. When I talk to people from another culture, at first I pay more attention to how I am acting.					
20. When I talk to people from another culture, sometimes I adapt what I say (for instance, regarding which topics I bring up).					
21. When I talk to people from another culture, I am considerate regarding their traditions and ways of living.					
22. When I talk to people from another culture, I am careful not to say anything that could hurt them.					
23. When people from another culture have a different point of view than I do, I try to find a compromise.					
24. If there is a misunderstanding between people from different cultures, I try to clear it up.					

Survey adapted from Schwarzenthal et al. (2019).