Nurturing Teamwork, Intercultural Competence, and Belonging in First-Year STEM Students

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Developing a professional STEM workforce with a high degree of intercultural competence is essential in today's globalized world. To this end, Higher Education Institutions incorporate reflection to help students make meaning of their learning experiences. In this study, we investigated the development of intercultural and teamwork skills among undergraduate first-year STEM students enrolled in a global living- learning community. The goal of the community was to help students develop intercultural competence and teamwork skills by engaging them in active learning environments and reflection. The study used an inductive thematic approach to characterize the impact of the learning community on intercultural competence and teamwork skills. The themes for intercultural competence showed that students develop cross-cultural communication skills, cultural self-awareness, and respect for people from other cultures. The themes for teamwork indicated that students learned to work in multicultural teams and developed the ability to recognize cross-cultural conflict and manage time. An additional theme of a sense of belonging emerged during the analysis; students mentioned that they felt a sense of connectedness and made new friends. Overall, the results of the study underscore the importance of reflection, engaging students in a living-learning community, and fostering intercultural competence and teamwork skills in first-year students. Also, the development of a sense of belonging among first-year students highlights the value of embedding reflection and creating living-learning communities within higher education settings.

BACKGROUND

Creating a global STEM workforce is one of the primary goals of Higher Education Institutions (HEIs). In the twenty-first century work environment, teamwork skills, including oral and written communication, cooperation, and the capacity to take on challenging tasks in a global context, are recognized as essential soft skills and valued by STEM-based employers (de Prada Creo et al., 2021; Banares & Conesa, 2017). However, ensuring that STEM students interact and work in culturally diverse teams is not enough to develop the intercultural competence and teamwork skills they will need in the global marketplace. The literature highlights the dire need to encourage students to reflect on their experiences and to cultivate psycho-social skills such as interpersonal communication and collaboration (Karimi & Pina, 2021). Both experiential education models and the scholarship of teaching and learning emphasize that programs must be intentionally structured to encourage interaction and provide opportunities for student reflection (Bharucha, 2022; Cruz, 2019; Dewey, 1986; Kolb, 1984). More specifically, McLeod and Orta-Ramirez (2018) identified that to succeed professionally in a STEM career, graduates need to have had adequate opportunities to interact with diverse others and to reflect on their experiences in order to build cultural self-awareness and embrace multiple perspectives in a work setting – key components of intercultural competence. A recent survey conducted with STEM employers confirmed that fresh STEM graduates lack some of these professional skills, adversely impacting their work on teams (Hurrell, 2016). This gap is largely attributed to the absence of a comprehensive curriculum and reflective practices that address the development of intercultural competence and teamwork skills (de Prada Creo et al., 2021; Karimi & Pina, 2021).

Surprisingly, fewer than ten percent of undergraduates enroll in courses dedicated to fostering intercultural competence, which is key for effective teamwork (Plough, 2016). Only a limited number of STEM undergraduate courses promote reflection, teamwork or intercultural competence (Wickenhauser & Karcher, 2020); there is a need to develop curricula that foster these professional skills. Recent studies have demonstrated that co-curricular activities such as mentored research and study abroad can be effective in integrating intercultural competence into STEM fields (Bosman et al., 2022; Ji, 2020).

Another co-curricular approach that has been found effective in helping students develop teamwork skills (Blondin, 2015) and intercultural competence (Starr et al., 2022) is by engaging them in a living-learning community (LLC). LLCs allow students to interact constantly with peers with similar interests, and faculty serve as guides to motivate them to pursue these interests and to provide them with resources for accomplishing their goals (Dunn & Dean, 2013). LLCs have been identified as high-impact practices that allow students to learn from one another in an informal setting (Brower & Inkelas, 2010; Caviglia-Harris, 2022; Kuh, 2008) and to reflect on their experiences. Reflection is one of the primary methods to help students make meaning of their experiences (Adams et al., 2014; Knouse, 2022). Reflection fosters metacognitive thinking (Jaiswal, Lyon, Zhang, et al., 2021), intercultural competence and deep engagement with the learning environment (Jaiswal et al., 2024; Wilbur, 2016). For example, two cohorts of students who participated in an LLC and were engaged in regular reflection activities made significant gains in intercultural competence as measured by the Intercultural Development Inventory (Starr et al., 2022).

The study presented here aims to look at how a global LLC called the Transnational Learning Community (TLC) helps students to develop both teamwork skills and intercultural competence. Specifically, we aim to investigate how these twenty-first-century professional skillsets develop among undergradu-

ate first-year STEM students enrolled in a global LLC by pursuing the research question: **How do students enrolled in a global LLC characterize their intercultural learning and teamwork skills?** Our study contributes to the growing body of literature that emphasizes the importance of reflective practices and evidence-based teaching strategies in improving student learning outcomes. It provides valuable insights into how an introductory course on intercultural collaboration, structured co-curricular activities and a living-learning community can nurture the key professional skills related to teamwork and intercultural competence in STEM education.

METHODS
Participants
The participants in this study are 25 first-year undergraduate students enrolled in the residential TLC and ranging in age from 17-19 years old. In the Fall 2022 cohort, students hailed from seven different countries and seven US states. One third were international, about one third came from outside the state, and one third came from within the state. The countries represented were Singapore, India, Jamaica, Spain, UAE, Azerbaijan, and the US. The states represented were California, Georgia, Illinois, Indiana, New Jersey, New York, and Ohio. Approximately two thirds of the students were female and one third were male. There was representation from all major departments in the College of Science. Students self-selected into the TLC, choosing from among multiple LLC possibilities.

Having students from various countries and states adds a significant intercultural element to the Learning Community as students bring different perspectives, experiences, and cultural backgrounds into their shared academic and social experiences. From a STEM perspective, this intercultural mix enhances collaborative projects and problem-solving tasks, as students can approach scientific and technical challenges with varied viewpoints and methodologies. The exposure to different educational backgrounds and scientific approaches from around the world helps students develop a well-rounded understanding of STEM disciplines. This intercultural dynamic enhances the learning experience and also prepares students for future professional environments where they will likely work in diverse and global teams.

Aim, Design and Setting of the study
The aim of the study is to understand the impact of the residential TLC on the development of intercultural competence and teamwork skills of the students. The TLC is an LLC housed in a large Midwestern university. Open to all first-year undergraduate students enrolled in the College of Science, it has three major components: shared campus housing in a residence hall, a one-credit course and a program of co-curricular and social activities. The course introduces students to concepts of culture, cultural differences, bridging intercultural conflict, and intercultural leadership. As part of the course, the Intercultural Development Inventory is used as a formative assessment to inform students of their orientation toward difference, and students explore their individual orientation with a Qualified Administrator who helps them make sense of their results in terms of their backgrounds, experiences and opportunities. Students also hear from faculty as to the collaborative and cross-cultural nature of science and complete classroom exercises and homework assignments that encourage them to pay attention to culture and to reflect on

its meaning. The idea that perceptions of science differ among cultures is explored, and differences in value dimensions (Hofstede, 2011) are examined for their impact on both personal interactions and on science as a profession. For co-curricular and social activities, these first-year LLC students are partnered with upper-level students—usually in the same major—from the College of Science. Initially, these partnerships aid in the transition to college, and eventually informal mentoring relationships develop.

Intergroup contact theory serves as the theoretical foundation for the TLC (Allport, 1954). The four principles of intergroup contact theory that operate to mitigate cultural barriers and develop a collaborative environment in LLCs include equal status of group members, intergroup cooperation, common goals, and support from the authorities. Members of the community work with each other in a cooperative manner and do not compete with each other. Together they determine shared goals in which they are all stakeholders. There is institutional and social support that fosters positive contact among members, enabling them to work collaboratively and embrace intercultural skills and attitudes and reduce prejudice and stereotyping. When applied, the principles of intergroup contact theory have been shown to reduce prejudice, hostility, threat and anxiety when working with people from diverse cultures (Allport, 1954; Sherif & Sherif, 1965). Meleady et al. (2021) reported that such intergroup contact not only helps to improve intergroup attitudes but also serves as a learning platform to enhance individuals' communication and behavior in cross-group situations. Likewise, Meng et al., (2017) found that the contact among a diverse body of students resulted in an increase of global competency.

In the TLC, the principles of intergroup contact theory are applied in both curricular and co-curricular activities. In the course, at the beginning of the semester, students are assigned to teams that are intentionally diversified in terms of nationality, residency, gender, and major. They are introduced to elements that may impact cross-cultural teamwork, including communication styles, cultural dimensions, and conflict styles. Toward the end of the semester, each team of students completes a video project in which the students illustrate a scientific principle for middle schoolers. All members of the team are equal participants in the project. They jointly choose a topic from the fourth or fifth grade science curriculum and compose a team contract in which they designate communication channels, frequency of contact, meeting times and days and how decisions will be made. The evaluation of the finished product is for the team, with points deducted for an individual student if they fail to participate fully. In the co-curricular realm, students carry out service learning together with their mentors. The most ambitious of these activities is planning and implementing games for young children in conjunction with a trunk-or-treat (Halloween) program at the local YMCA (non-profit community center). Students collaborate in choosing games to introduce to the children. Often, what they have prepared in advance needs to be altered to fit the circumstances of the event (for instance, wind or rain if held outdoors, size of space if held indoors), requiring joint decision-making on the spot. Students work together to ensure that all children come out "winners" and have fun.

Guided reflection is a crucial component of the TLC and is integrated into both curricular and co-curricular activities. Reflecting on their team interactions and service learning activities both in writing and through discussion allows students to gain

insights into their own cultural assumptions and biases, improve their cross-cultural communication skills and learn to appreciate diverse perspectives. In assessing their reflection, the goal is not to judge students but to help them advance their intercultural competence beyond where they started. By emphasizing personal development, students learn to prioritize their growth as culturally-aware and interculturally-competent individuals. This approach encourages students to value professional development, collaboration and adaptability over traditional academic performance metrics, preparing them for success in a diverse and globalized world.

DATA COLLECTION
Student reflections from three asynchronous online modules that focus on intercultural teaming skills and a final reflection completed at the end of the semester serve as the data for this study. Pseudonyms are used to protect the identity of participants and ensure the confidentiality of data.

Asynchronous Online Modules
Each one of the modules is an autonomous learning experience housed in a learning management system. They can be completed in 60-90 minutes, engage learners with activities like videos, quizzes and reflections, address specific intercultural learning outcomes such as cultural self-awareness, verbal and non-verbal communication, openness and empathy, and conclude with a capstone activity. Modules were developed by intercultural learning experts from the Center of Intercultural Learning at the university and tested and improved over several iterations. The first module focuses on helping students understand aspects of communication, e.g., direct/ indirect and conversational pacing styles, with the goal of helping students identify their own communication norms, reflect on the communication patterns of other team members and consider strategies for bridging differences. An understanding of differences in communication styles and patterns can help students interact effectively with others who don't share their norms. The second module teaches students about constructs relating to authority, time and individual vs. collective mindsets. Students identify their own values and attitudes in relation to these constructs so as to recognize how differing values and attitudes may lead to conflict on a team. The third module then focuses on how response to conflict itself is culturally motivated and on strategies for identifying the source of conflict and for navigating across differences. Students learn about different conflict styles and the value of productive conflict. The responses of the students to the capstone assignments at the end of each of the three modules constitute qualitative data for the study.

Final Reflection
The other set of qualitative data was the final reflection essay that students completed at the end of the semester. In this essay, they reflected on their experience working with their team on the video project described above and on participating in the TLC.

Qualitative Data Analysis
The qualitative data was analyzed using inductive thematic analysis following the steps delineated by Braun and Clarke (2012). Inductive thematic analysis is a widely used approach in education research that allows researchers to identify emerging themes from the data. The positionality of the raters was at the outsider

continuum, as they were neither involved in data collection nor did they interact with the students at any point. For this study, we analyzed student reflections and final essays following three rounds of coding: descriptive coding, axial coding and generating final themes. During the initial descriptive coding, raters identified similarities and differences in emerging themes from the students' anonymized reflections, enabling them to categorize and label the codes. In the axial coding, raters further refined and categorized the emerging themes, engaging in comparative analysis among the reflections. In the final coding round, the research team collaborated to develop final themes based on axial coding.

To ensure the trustworthiness of the data, peer-debriefing was conducted. In the first stage of the analysis, the two raters were required to code the same set of data independently. Then the raters met an expert in qualitative research and shared their code. The expert discussed the codes that both the raters found, gave them feedback and helped them develop a codebook. The raters recoded the data using the codebook and again met the expert for additional debriefing. The constant discussion with the expert helped the raters achieve consistency with the coding process.

RESULTS
The results of the study are presented below. Using an inductive thematic analysis approach, we identified two broad themes – intercultural competence and teamwork – and several sub-themes in student essays.

Themes for Intercultural Competence

T1: Learned to appreciate and adapt to the communication styles of others.
Under this theme, students described their intercultural experiences and the competencies they developed by participating in the TLC. A key competency was an understanding of cross-cultural communication styles. For example, in analyzing the reflections from the module on communication, we observed that students understood different pacing styles in conversation and also indicated the strategies that they would use if they found a pacing style challenging. Sam reflected on his experience of working with someone with a different pacing style and proposed strategies to deal with an overlapper:

> For me the overlapping style is most challenging in a team setting, because it can prevent practitioners of the other styles from communicating effectively. One way of dealing with this problem is by encouraging others to slow the pace of conversation, and using your own voice to create openings for other people to share.

Similarly, Joey mentioned their perception of direct communication and their strategy for dealing with it:

> I feel like a direct person would be someone a bit difficult to deal with on a team, as [I am] an indirect communicator. If I had a direct communicator on my team, I would remember that they are probably not trying to sound rude and I would hear them out on the remarks they make, even if they annoy me at first.

T2: Developed mindfulness towards cultural differences.

In their globally-focused LLC, students were provided multiple opportunities to interact and work with others from diverse backgrounds. In the student final essays, the theme of openness and mindfulness stood out as students reflected on their intercultural journey. For example, Alia said,

> I believe that I have made progress towards my goal of becoming interculturally competent. As I have been able to communicate and work with more people from different cultures than I ever have before. I have gotten to learn about their cultures and have also learned how to work through any challenges our cultural differences have shown [sic].

Students demonstrated openness to embrace and acknowledge cultural differences. They mentioned that being non-judgmental and adaptive is crucial while working in a diverse setting. Lin said,

> Keeping an open mind and being willing to adjust is crucial to working in a group of people that are different from me and have different values.

T3: Developed Cultural Self-Awareness.

This theme is particularly salient as students not only learned to work and interact with different others but also mastered the ability to introspect and reflect on their own intercultural abilities. Cultural self-awareness entails developing a deeper understanding of one's own cultural norms and values. For example, Eitan wrote a poem for the capstone assignment in the self- and other-awareness module in which he reflected on his communication style and preferences for power and time orientation. His poem showed that he was aware of his pacing style, preferred low power distance and had a polychronic time orientation. Eitan also mentioned the instances where he mirrors others.

> I am a pauser and turn taker, but when in a group of friends I tend to overlap. I do not mind being overlapped. I am fine if someone interrupts me. I am a mirror of email and text: if you are formal, I am formal. If you're high-context, I'm high-context too. I like to talk to new people. In a group, I like everyone to be involved. I think I am in a society that belongs to a low power distance. I like to multitask, which makes me polychronic. I like to maintain peace and harmony.

T4: I am proud of who I am.

This theme showcases that developing an understanding of intercultural competence helped students realize the importance of their own culture, and students expressed pride in their own cultural backgrounds and confidence in educating others about these. For example, Christina said,

> The intercultural development goal that I set for myself was to not try to hide my cultural and ethnic background in order to assimilate. I have made lots of progress in achieving this goal as I have joined clubs pertaining to my culture and made more friends of similar cultural backgrounds that are not ashamed of sharing their culture with their peers. Next semester I want to become more comfortable sharing my culture with more people like roommates.

Students developed an understanding of "self" by reflecting on their cultural values and gaining new awareness of how these values impact their ability to interact with others.

Themes for teamwork

T1: Learned to manage conflicts in a team setting.

As a part of the curriculum, students were engaged in various team activities both inside and outside the classroom. For instance, as a team, students completed a video project and had opportunities to work with children. Students reflected on how working in teams helped them to develop the ability to manage conflicts in a team setting and learn real-world skills. For example, Natasha mentioned that while working on the video project, her team resolved a scheduling conflict:

> We sometimes had scheduling conflicts, as we all had very busy schedules. We resolved our scheduling issues by working separately and communicating clearly on who would do what.

Rhea described a time when her team had to deal with an intercultural issue related to time orientation:

> One intercultural problem that we faced was that some members had different senses of time. We all contributed equally and everyone was willing to put in extra work to make our project better. If I had to do anything differently, I would say we could manage our time better. I learned through this project that even with cultural differences like a sense of time, it doesn't mean that any group member is less hardworking than the others and minor changes could be made to accommodate everyone.

T2: Productive conflicts allow you to grow.

Students identified conflict as productive as it helps to develop understanding among team members. For example, Ryan noted:

> I learned a lot while working with my team. Working with a team lets you explore a lot of ideas that you may have never thought about individually. I also realized that it is natural to have some conflicts while working in a team. Because of some of the conflicts we had while working together, I believe we were able to better understand each other and learn about our respective cultures.

T3: Time was not managed well.

Working in teams helped students learn the importance of time management. Some students described how they failed to manage time and felt rushed while working on their final project. Sia shared her experience:

> We met up once outside of class, online. Not everyone in the group pulled their weight. Some issues that arose were the differences in time management. We didn't schedule or manage our time to complete the project. We finished the project last minute because our group didn't communicate a lot. I also had to do most of the slideshow since my group didn't discuss when or how we were going to finish the project.

T4: Developed the skills to solve problems in multicultural team settings.

Living in a social environment and collaborating with students from seven different countries, students realized that they developed problem-solving skills and that communication is crucial to solve any problems. For example, Siri reflected on challenges and emphasized the importance of how developing a mutual under-

standing of goals and keeping communication clear can help to avoid misunderstandings:

> I learned that team projects can be challenging when working with people that are different. In the future, I think communication and mutual understanding of what needs to be done are some approaches I can take to solve problems related to misunderstandings due to differences in culture.

Additional Findings

Although not explicitly related to intercultural competence and teamwork skill development, our analysis also brought out themes related to sense of belonging. Sense of belonging refers to a psychological feeling of belonging or connectedness to a social, spatial, cultural, professional or other type of group or community so that individuals feel themselves to be an integral part of that group or community (Hurtado & Carter, 1997). A sense of belonging is an important factor that drives student retention and student engagement. Specifically in STEM, student attrition is a challenge, and creating structures to help students develop a sense of belonging mitigates this issue.

Themes for a Sense of Belonging

T1: Felt a sense of connectedness.

An LLC serves as a socio-learning center for students by fostering interaction with their peers and mentors in a non-traditional learning environment. Prior studies have shown the impact of LLCs in helping students develop a sense of belonging. TLC provides numerous opportunities for students to socialize and feel connected. Students reflected on how they felt a sense of connectedness while they worked with their team. For example, Eli, an international student, noted,

> I had a very fun time working with my team. I felt a connection that I had not felt in a very long time after coming to the United States.

T2: Made new friends.

Students also shared their experiences of meeting people from different countries and making new friends in the learning community. For example, Ish shared how the program helped them to form a close bond with their mentor:

> I became close friends with my learning community mentor Elan. We would get lunch by ourselves and we hung out at the fall festivities on campus lawn. During that, we played games, got our faces painted. Since Elan has been in her home country for the past few weeks, we have chatted on social media and made plans to video call after finals.

Similarly, Rishi reflected how making new friends helped him to learn about different cultures:

> I have made so many friends from different parts of the world. I have also learned more about other's cultures and traditions through these friendships.

DISCUSSION

This study was conducted in the context of a global living-learning community where first-year STEM students learned to reflect, developed an understanding of intercultural competence and experienced working in a multicultural team environment. The study used an inductive thematic analysis approach to analyze student reflections and final essays. The qualitative analysis helped to identify the themes of intercultural competence and teamwork. The theme of a sense of belonging emerged as an additional finding for the study. The themes of intercultural competence revealed that students developed an understanding of cross-cultural communication and showed openness to differences in communication styles. Students also gained an awareness of other cultures, reflected on and expressed pride in their own culture and appreciated and showed willingness to embrace cultural differences. The themes that emerged for this study align with prior studies that used an intentionally-structured curriculum to help students develop intercultural competence. For example, Krishnan et al. (2021) incorporated online intercultural modules into a curriculum followed by a series of reflection activities. Debriefing was conducted to help students understand and internalize the concept of intercultural competence. Student reflections were qualitatively analyzed, and the development of cultural self-awareness, openness, and understanding of verbal and non-verbal communication styles were among the prominent themes. Results from recent studies (Jaiswal, Karabiyik, et al., 2023; Jaiswal, Sapkota, et al., 2023; Jaiswal, Starr, et al., 2023; Jaiswal, Thomas, et al., 2023) showed the effectiveness of using asynchronous online modules in helping STEM students develop intercultural competence. The results of the studies illustrate that upon completion of the modules, students were able to identify different communication pacing styles, improved upon their ability to mirror and adapt to the communication styles of others, and developed intercultural skills such as cultural self-awareness, openness, and empathy.

The themes for teamwork revealed that students mastered the professional skills of working in a multicultural team setting. For example, students viewed conflicts as productive and manageable. They worked together to solve problems and assumed leadership roles when necessary. Some students also reflected on time management strategies. Our results align well with the study conducted by Kim & Sheridan (2022) in which first-year engineering students developed skills such as collaboration, accountability, and intra-team communication. These researchers likewise reported that students faced issues in managing time due to the conflicting schedules of their teammates. The themes of teamwork are also consistent with the study conducted by Lau and Kwong (2016) that focused on assessing the impact of communities of practice on students' teamwork skills: students showed an understanding of skills required to work in a team setting, learned that taking on responsibilities is crucial and mastered the art of managing conflicts.

Lastly, the themes for sense of belonging revealed that students felt connected with their peers, learned about other cultures and made new friends. The themes that emerge for the sense of belonging align with the literature at the intersection of sense of belonging and LLCs: students develop a sense of connection as they interact with one another on a regular basis (Cole et al., 2017; Jaiswal, 2022; Singh, 2018). Some scholars (e.g. Hoffman et al., 2002; Jaiswal, 2022) have argued that one of the reasons that students form strong bonds in a learning community setting is like-mindedness. Learning communities serve as an excellent platform to bring people of similar interests together and provide an opportunity for the sharing of thoughts and ideas (Jaiswal, Lyon, Magana, et al., 2021; Jaiswal, Lyon, Perera, et al., 2021). This constant interaction among participants leads to meaningful engagement

that helps them to form close bonds and experience a sense of connectedness (O'Keeffe, 2013). Overall the results of the study showcases the effectiveness of LLCs in fostering intercultural and professional skills.

IMPLICATIONS FOR TEACHING AND LEARNING

The findings of this study suggest the benefits of embedding intercultural competence and teamwork skills into the regular STEM curriculum in higher education. Instructors can use discipline-specific cases to illustrate the concepts of intercultural competence and engage students in project-based learning environments to foster teamwork. Moreover, higher education institutions should create LLCs and harness their benefits to enhance student engagement and learning outcomes. LLCs can also foster a sense of community and belonging, which are linked to increased academic success and retention. Lastly, implementing intercultural competence requires instructors to receive adequate support and training. HEIs must focus on creating training programs for STEM instructors where they can professionally develop to educate an interculturally competent workforce for the future.

CONCLUSION

The study's results showed that first-year STEM students in an LLC structured along the principles of intergroup contact theory developed critical skills necessary for professional success in our globalized and culturally diverse world. Specifically, the study found that students recognized the need for intercultural skills to communicate respectfully with culturally different peers and to adapt their interaction styles. Furthermore, they acquired essential teamwork skills such as collaborating with group members, managing time effectively, demonstrating leadership qualities and resolving conflicts. The strong sense of belonging expressed by students may partly explain the impact of the LLC. However, this needs to be established through further research. We plan to conduct focus group interviews with students in the future to understand how being in the LLC fostered a sense of belonging. This study contributes to the scholarship of teaching and learning by demonstrating that teamwork skills and intercultural competence for first-year STEM students can be developed through intentional curricular and co-curricular integration. These findings highlight how intentional curriculum changes can lead to the development of professional skills necessary for students to excel in team-based and culturally diverse settings. Moreover, they underscore the value of creating a globally-focused LLC to help students develop the professional skills essential for working on teams in class and in their future careers.

LIMITATIONS AND FUTURE WORK

This study's findings are primarily based on student reflections that may be influenced by personal biases and the context in which they were written. In future work, we plan to employ a mixed-methods approach that includes focus groups, one-on-one interviews, and surveys to gather more comprehensive data. Conducting a longitudinal analysis will provide deeper insights into the long-term impact of TLC participation on the development of teamwork skills and intercultural competence.

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