

Research Article

CULTIVATING COMPETENCES FOR DEMOCRATIC CULTURE THROUGH COLLABORATIVE VIRTUAL EXCHANGE AMONG THAI AND JAPANESE PRE-SERVICE EFL TEACHERS

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Phayao Nusen^{1*} Motoko Abe² Piyanat Chantakhat³ and Jutiyanee Permthanjit⁴^{1,4}Faculty of Humanities and Social Sciences, Chiang Mai Rajabhat University²Faculty of Education and Graduate School of Education, Tokyo Gakugei University³Faculty of Education, Chiang Mai Rajabhat University

*Corresponding author's email: phayao_nu@g.cmru.ac.th

Abstract

As the classrooms become culturally and linguistically diverse, teacher education programs are required to provide future teachers with appropriate competences to effectively interact across cultures. One such pedagogical practice is virtual exchange, which may be used as a tool for the development of intercultural and democratic competences of the learners through online cooperation between people coming from different cultural backgrounds. This research aimed at examining the effectiveness of virtual exchange in building competences for democratic culture (CDC) of Thai and Japanese pre-service EFL teachers. The research focused on the identification of competences which are being developed through virtual exchange; examination of the factors which facilitate such development; as well as on exploring the areas where improvement is still needed. The sample consisted of 22 pre-service teachers from Thailand and Japan collaborating online to create an ideal school. The participants filled out the CDC questionnaire before and after seven collaborative sessions, made a group video presentation, provided reflection sheets, and participated in semi-structured interviews ($n = 22$). Questionnaire data were analyzed using descriptive statistics, while data from reflection sheets and interviews were examined through content analysis based on the Reference Framework of Competences for Democratic Culture (RFCDC). The findings revealed significant improvements in knowledge and critical understanding of language and communication ($M = 3.46$, $SD = 0.63$, $t = 12.84$, $p < .001$, $d = 2.737$), followed by linguistic, communicative, and plurilingual skills ($M = 2.81$, $SD = 0.72$, $t = 11.01$, $p < .001$, $d = 2.348$), and openness to cultural otherness and to other beliefs, world views, and practices ($M = 2.12$, $SD = 1.03$, $t = 5.79$, $p < .001$, $d = 1.233$). However, improvements in critical and civic competences remained limited. The effectiveness of

virtual exchange depended largely on thoughtful pedagogical design that balanced collaboration with criticality, and interaction with reflection. Furthermore, virtual exchange can help develop pre-service teachers to be globally aware and prepare to address the challenges of diverse and multicultural classrooms in the future.

Keywords: Virtual Exchange, Competences for Democratic Culture, Pre-Service Teacher

Introduction

In recent years, there have been growing levels of cultural and linguistic diversity in several educational settings (Gkaintartzi and Katsara, 2024; Landini, 2025). Therefore, there has been a shift in language teaching away from focusing primarily on the learners' linguistic competence towards creating a opportunity for students to meaningfully engage with people from other cultural backgrounds (Gediel, 2025). The focus of language teaching and learning has shifted to intercultural and transcultural awareness rather than merely learning about grammatical structures, syntax, and vocabulary or phonology (Baker, 2022; Petosi & Karras, 2020). The English as a foreign language (EFL) classroom provides great opportunities for the practice of intercultural competences not only as an object of study, but as a phenomenon that should be applied and experienced by learners. The inclusion of intercultural components into the EFL teachers' pedagogical practice helps develop learners' competences as open-minded and plurilingual members of society, who will actively engage in the life of democratic communities and intercultural dialogue (Council of Europe, 2020). However, creating a favorable learning atmosphere is impossible without the involvement of EFL teachers. A sufficiently high level of intercultural awareness and intercultural competence is a prerequisite for effective intercultural pedagogy (Huttayavilaiphan, 2024; Imsa-ard, 2023; Pattaraworathum, 2025).

In this context, teachers should be trained not only to be linguistically competent but also to be effective communicators across cultures. This requires the development of both Intercultural Communicative Competence (ICC) and Competences for Democratic Culture (CDC), which are also vital for pre-service teachers. According to Choompunuch et al. (2024) as well as Pattaraworathum (2024), Thai pre-service English teachers require intercultural competences in multicultural classroom settings. In order to achieve this, the institutes of teacher training should encourage international collaborations and exchanges to allow pre-service teachers to experience different cultural settings and broaden their understanding through direct interaction (Barnett et al., 2020; Choompunuch et al., 2024).

The relevance of Thailand and Japan is explained by the fact that both countries face the issue of growing cultural and linguistic diversity and struggle to prepare future teachers for multicultural educational settings. In particular, recent educational reforms in Thailand highlight the need for global citizenship and intercultural competence (Jatuporn & Youngwan, 2026), whereas an increased cultural diversity at schools makes it necessary for teachers to cooperate across cultural differences. Likewise, Japan has become characterized by an increase in cultural and linguistic diversity associated with globalization (Saki, 2018; Takahashi, 2020); therefore, the preparation of teachers to work in multicultural classrooms has become

a necessity there. However, opportunities for intercultural interaction in EFL context remain scarce in both countries. Therefore, virtual exchange between Thai and Japanese pre-service teachers is an appropriate platform for researching the development of CDC.

The Reference Framework of Competences for Democratic Culture (RFCDC) developed by the Council of Europe (2018) is a framework to provide a new perspective on the conceptualization and assessment of intercultural competence. The RFCDC has outlined a set of 20 competences regarded as necessary for individuals to act as democratically and interculturally competent citizens (Barrett et al., 2018; Council of Europe, 2018). These are grouped into four areas: values, attitudes, skills, and knowledge and critical understanding. In addition, the RFCDC has descriptors that outline intended learning outcomes and targets (Council of Europe, 2018). These descriptors take the form of observable can-do statements that indicate levels of competence, thereby facilitating assessment and offering practical guidance for educators. Altogether, the RFCDC includes 135 detailed descriptors (Council of Europe, 2018). The four essential areas of the detailed components of the CDC are presented in Figure 1.

Competence	
Values 1. Valuing human dignity and human rights 2. Valuing cultural diversity 3. Valuing democracy, justice, fairness, equality and the rule of law	Attitudes 4. Openness to cultural otherness and to other beliefs, world views and practices 5. Respect 6. Civic mindedness 7. Responsibility 8. Self-efficacy 9. Tolerance of ambiguity
Skills 10. Autonomous learning skills 11. Analytical and critical thinking skills 12. Skills of listening and observing 13. Empathy 14. Flexibility and adaptability 15. Linguistic, communicative and plurilingual skills 16. Co-operation skills 17. Conflict-resolution skills	Knowledge and critical understanding 18. Knowledge and critical understanding of the self 19. Knowledge and critical understanding of language and communication 20. Knowledge and critical understanding of the world: politics, law, human rights, culture, cultures, religions, history, media, economies, environment, sustainability

Figure 1 The RFCDC conceptual model (Barrett et al., 2018, edited by authors)

Several studies indicate that the RFCDC positively influences ICC and CDC by increasing intercultural awareness, fostering acceptance of diversity, and promoting active citizenship (Barrett, 2026; Hytti & Sandström, 2025; Geier & Hasager, 2020; Santibanez & Hoskins, 2023). In international contexts, Peraza and Furumura (2022),

as well as Rauschert and Cardetti (2022), have examined the effectiveness of the RFCDC in virtual exchange projects. Their findings demonstrate that the RFCDC can support the development of ICC, empathy, and global citizenship, in addition to enhancing language competence. Another advantage of the framework is that it enables learners to engage in self-assessment, while also allowing instructors to evaluate students' soft skills, such as adaptability and teamwork.

The effectiveness of virtual exchange in cultivating has been researched in many fields. O'Dowd (2021) conducted a systematic review and finds similarities across those studies on large-scale virtual exchange projects from 2017 to 2020. They include high levels of students' satisfaction with virtual exchange as a learning activity, as a tool for cultivating cultural understanding and enhancing foreign language skills, in acquiring soft skills such as teamwork, flexibility, and intercultural collaboration, and finally in enhancing problem-solving skills and digital competence. Even though the virtual exchange participants reported that they had become better prepared for intercultural communication, the key element is to have students engaged in interculturally challenging tasks that demand high levels of negotiation and collaboration (Helm & Van der Velden, 2021).

Virtual exchange is a suitable environment for the development of CDC because it includes learners' interactions with people from different cultures, who communicate through collaboration and dialogue. In accordance with the RFCDC, democratic and intercultural competence develops due to cooperation, perspective-taking, critical reflection, and the negotiation of differences (Council of Europe, 2018). By completing collaborative tasks and engaging in intercultural dialogue, the participants practice such CDC components as openness towards cultural otherness, tolerance of ambiguity, empathy, cooperation skills, and critical understanding of culture. Therefore, virtual exchange should not be considered merely a communication platform but rather as an educational space, where democratic and intercultural competences are implemented in authentic interactions.

In the Asian context, especially in Thailand and Japan, virtual exchange has gradually gained popularity due to globalization. As revealed in previous studies conducted by Chanwaiwit and Mori (2024), Higgins (2024), and Unedaya (2022), the implementation of virtual exchange leads to progressive improvement in intercultural awareness, intercultural skills and confidence in speaking. Thus, virtual exchange, an innovative way of building global citizenship and ICC (Hagley, 2024; Lenkaitis & Loranc, 2021), provides promising opportunities to apply RFCDC principles within authentic intercultural contexts.

Although the number of studies that prove the potential of virtual exchange in terms of promoting intercultural learning is significant, certain gaps exist in literature. First of all, most of them consider intercultural communicative competence, language learning outcomes, and learner attitudes but pay relatively less attention to CDC. Secondly, while RFCDC has become increasingly popular in intercultural education, empirical studies related to the implementation of RFCDC in the context of virtual exchange are quite scarce, especially outside Europe. Finally, there is not enough research about the contribution of virtual exchange into the development of CDC of pre-service teachers in Asia. In particular, no data is available concerning the impact of virtual exchange on the development of CDC of Thai and Japanese pre-service English teachers and

the factors that influence this process. In order to fill in the gap, the current study aims at investigating the development of CDC among Thai and Japanese pre-service teachers during the virtual exchange project and identifying the factors that contribute to this development within the framework of RFCDC. Figure 2 illustrates the conceptual framework for this study.

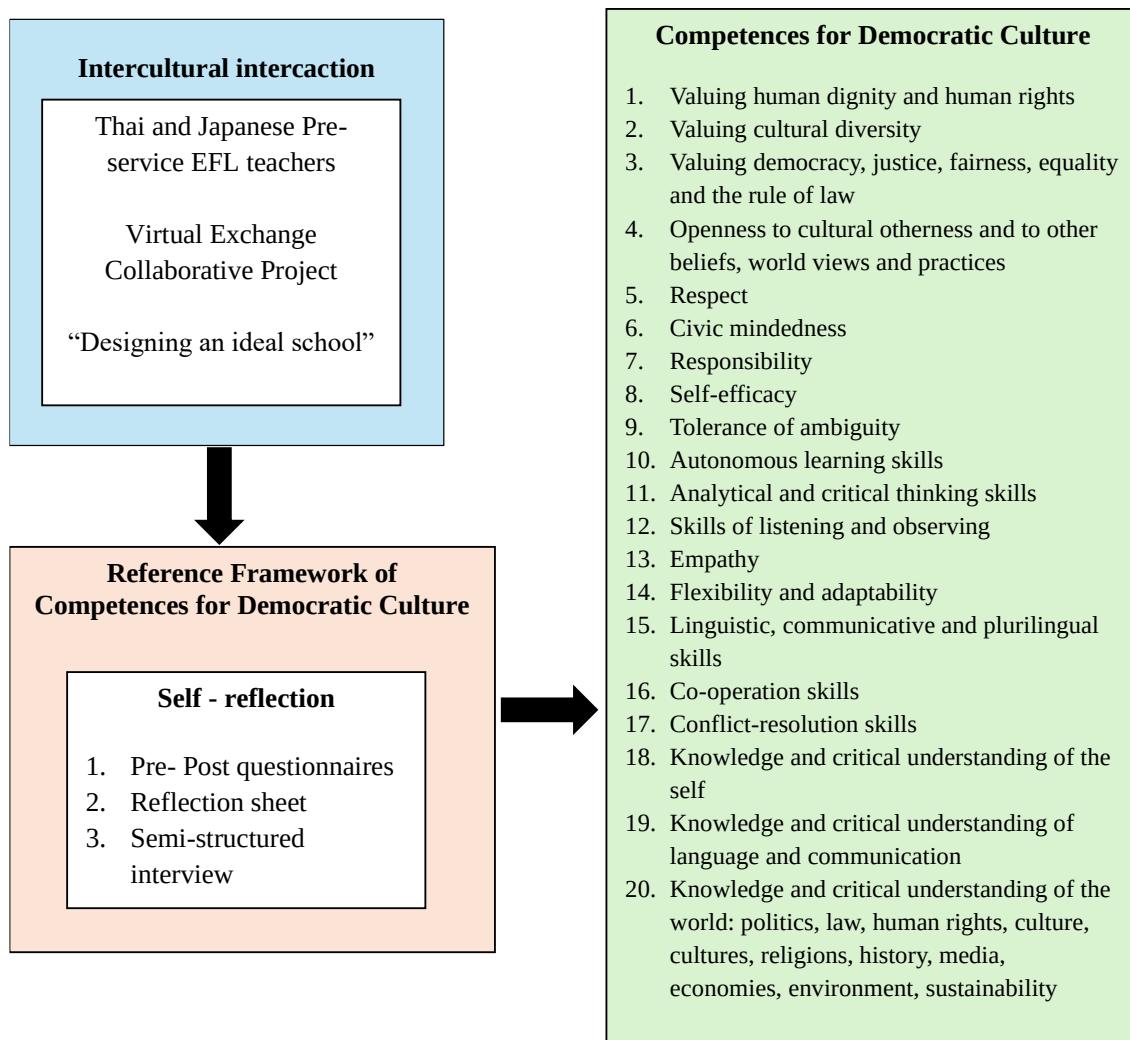


Figure 2 Conceptual Framework

Research Objectives

This study aims to examine the effectiveness of virtual exchange in enhancing CDC among Thai and Japanese pre-service EFL teachers. The specific objectives are:

1. To identify the development of CDC through participants’ engagement in collaborative virtual exchange.
2. To investigate the factors that facilitate the development of CDC.
3. To explore the areas of CDC that participants seek to further develop.

Research Methodology

1. Research Design

This study employed a mixed-methods research design to examine the effectiveness of virtual exchange in developing CDC among Thai and Japanese pre-service EFL teachers, with the RFCDC used to guide the analysis. Quantitative and qualitative data were collected through questionnaires, group presentations, reflection sheets, and semi-structured interviews. To create opportunities for the development of CDC, Thai and Japanese pre-service teachers worked collaboratively in intercultural groups to design an “Ideal School.” This task was designed to promote interaction, negotiation, and reflection on democratic values, intercultural perspectives, and English communication practices.

2. Participants

The study included 22 third and fourth-year English education students from Thailand and Japan. Participants were recruited through voluntary response sampling and included 15 students from Chiang Mai Rajabhat University (CMRU) in Thailand and 7 students from Tokyo Gakugei University (TGU) in Japan.

The seven-session virtual exchange program, conducted in collaboration between CMRU and TGU, involved students from English education programs to ensure that the participants had a shared academic background for effective group work. As English majors, all participants had intermediate to advanced English proficiency levels, so English served as the medium for communication in this collaborative project.

The study was approved by the Institutional Review Board (IRB) of CMRU, ensuring compliance with ethical standards. Before participating, all participants received consent forms outlining the study’s purpose and privacy protections, ensuring they fully understood and voluntarily agreed to take part.

3. Research Instruments

3.1 Questionnaire

A questionnaire was employed as a self-assessment instrument to measure participants’ CDC before and after the virtual exchange. The instrument was adapted from the descriptors of the Council of Europe’s RFCDC descriptors (Barrett, et al. 2018; Council of Europe, 2018). The questionnaire included all 20 RFCDC competences and consisted of 123 items in total. Each item corresponded to a sub-competence descriptor within the RFCDC. The number of items per competence ranged from five to nine, depending on the descriptors specified in the RFCDC. Table 1 presents the distribution of items across the 20 competences.

Table 1 The distribution of the 123 questionnaire items across the 20 RFCDC competences

Competence	Number of items	Competence	Number of items
1	6	11	6
2	5	12	6
3	9	13	6
4	6	14	6
5	6	15	6
6	6	16	6
7	6	17	6
8	6	18	6
9	8	19	5
10	6	20	6

3.2 Semi-structured interview

Semi-structured interviews were conducted face-to-face in a quiet room at the participants' universities to provide a comfortable environment and minimize interruptions. All 22 participants were interviewed individually in a quiet meeting room at their respective universities. All 22 participants were interviewed individually using a common interview protocol consisting of three guiding questions:

- 1) What CDC did you develop through participation in the virtual exchange?
- 2) What factors helped you develop these competences during the virtual exchange?
- 3) Which competences would you like to further develop?

The questions were asked sequentially in the same order for all participants to ensure consistency across interviews while allowing participants to elaborate on their responses. Each interview lasted approximately 10–15 minutes. With participants' prior consent, the interviews were audio-recorded using a computer-based recording program and subsequently transcribed for analysis.

3.4 Reflection sheet

Reflection sheets were employed to gain a deeper understanding of the participants' experiences during the virtual exchange and to support the interpretation of the interview data. They were designed to encourage participants to reflect on their meaningful experiences throughout the virtual exchange process.

4. Validity and Reliability

Content validity was established by designing all research instruments in accordance with the core components of the RFCDC. Three experts in intercultural communication, curriculum design, and English language teaching reviewed the instruments to assess their relevance and consistency with the research objectives. Item-Objective Congruence (IOC), as suggested by Koonkaew (2023), was employed to evaluate content validity. The results revealed that the IOC scores of the questionnaire ranged between 0.67 and 1.00,

the IOC scores of the semi-structured interview ranged between 0.67 and 1.00, and the IOC scores of the reflection sheet ranged between 0.67 and 1.00. All scores were above the acceptable level of 0.50, indicating satisfactory content validity for all instruments. Based on the experts' feedback, two items in the reflection sheet and interview questions were reviewed and revised to improve clarity and comprehensibility.

All research instruments were piloted with 10 English education students who were not included in the main study to ensure readability and minimize ambiguity in each item. The reliability of the questionnaire was examined using Cronbach's alpha, which yielded a coefficient of 0.82, indicating acceptable internal consistency. The pilot results also suggested that the instrument items were clearly understood by the respondents.

5. Data Collection

In this study, procedures and data collection methods followed and adapted from the framework described by Abe and Beecroft (2023). Data was collected through multiple sources to ensure methodological rigor and data triangulation. English was used in the questionnaires, and participants' reflection sheets. However, the interviews were conducted in Thai, Japanese, and English, depending on the language in which the participants felt most comfortable. The data collection procedures were implemented in these following phases.

Phase 1: Planning

First, the questionnaire was administered to explore the participants' backgrounds of CDC. The participants from both universities were introduced to the objectives and format of the virtual exchange. Then, they formed small transnational groups and identified their project themes.

Phase 2: Action

The participants worked collaboratively in their transnational groups to create video presentations conceptualizing an "Ideal School" that would represent RFCDC. Over 7 sessions of 1–2 hours each, participants engaged in discussions and negotiations to design an ideal school. Before the last session, each group recorded the presentation of their ideal school and uploaded it for asynchronous sharing across cohorts. Table 2 shows the activities in each session.

Table 2 The sessions, activities, and technology in each session

Session	Activities	Digital Tools
1	Self-introductions and orientation to the virtual exchange project.	Padlet, ZOOM
2	Formation of international groups and selection of "Ideal School" themes.	Zoom
3	Collaborative research and intercultural information sharing.	Zoom
4	Collaborative research and intercultural information sharing.	Zoom
5	Development of group presentations on the "Ideal School" project.	Zoom, Instagram
6	Finalization, recording, and submission of group presentations.	Zoom, Flip
7	Peer feedback, reflection, and evaluation of the virtual exchange experience.	Flip, Zoom

Phase 3: Reflection

The participants viewed and commented on other groups' presentations prior to the final synchronous session on ZOOM, then discussed the presentations with their peers. Afterwards, the participants completed a questionnaire and submitted reflection sheets. Each student then completed a semi-structured interview to share insights on CDC improvement and future development areas.

6. Data Coding

To identify the CDC data, the researchers used RFCDC and assigned codes to each competence as CDC1 to CDC20 to correspond with those previously presented in Figure 1.

To ensure confidentiality and protect the participants' data, all questionnaires, reflection sheets, and interview responses collected from the 15 CMRU participants and 7 TGU participants were anonymized. Codes CMRU1 to CMRU15 and TGU1 to TGU7 were assigned to the participants, respectively.

7. Data Analysis

Data analysis in this study employed both quantitative and qualitative approaches to examine the development of CDC among the participants throughout the virtual exchange project. The analysis was conducted through several stages to provide a comprehensive understanding of the participants' CDC.

7.1 The questionnaire data were analyzed quantitatively using descriptive statistics to provide an overview of the participants' development of CDC. As the maximum score varies across items, all the average scores have been standardized to a scale of 10. The scores derived from the pre- and post- questionnaires were analyzed using the SPSS program. The differences between the mean scores (*M*) and standard deviations (*SD*.) of the pre- and post-questionnaires were then analyzed using paired-samples *t*-test, and the effect size was reported using Cohen's *d* (Sukamolson, 2010). The criteria for interpreting effect size were as follows: a small effect size when *d* was less than .20, a medium effect size when *d* ranged from .20 to .80, and a large effect size when *d* was greater than .80.

7.2 The qualitative data, including the participants' semi-structured interviews and reflection sheets, were analyzed through content analysis. The data were identified, coded, and categorized based on RFCDC descriptors (Barrett, et al. 2018; Council of Europe, 2018). Category frequencies were calculated to identify the CDC that was most frequently stated by the participants. When presenting the participants' statements, the original punctuation, spelling, grammar, and vocabulary were retained to preserve authenticity.

7.3 Four researchers independently coded the data through several rounds. Agreement among coders was achieved through discussion of any disagreements that existed in their coding decisions. After further developing the coding scheme, all coders came to agree on the coding of the information.

7.4 Data triangulation was employed by comparing evidence from reflection sheets, semi-structured interviews, and questionnaire results. By examining these sources together, the researchers were able to identify recurring patterns and confirm consistent evidence of CDC development throughout the virtual exchange project.

Results

This section addresses the research objectives by presenting an analysis of the participants' CDC based on data collected from questionnaires, reflection sheets, and interviews. The results are presented in Table 2 and 3.

1. Identifying the development of CDC

A comparison of pre- and post-questionnaire findings indicated that participation in the virtual exchange sessions contributed to improvements across all dimensions of CDC. To illustrate the extent of development, the three highest and three lowest scoring dimensions, as determined by mean differences and effect sizes, are presented in Table 3.

Table 3 The participants' CDC development scores

CDC	Pre- Questionnaires	Post-	<i>M</i> (Difference)	<i>SD</i> (Difference)	<i>t</i>	<i>df</i>	<i>Sig.</i>	Cohen's <i>d</i>
CDC19	5.09	8.55	3.46	0.63	12.84	21.00	<.001*	2.737
CDC15	5.30	8.11	2.81	0.72	11.01	21.00	<.001*	2.348
CDC4	6.82	8.94	2.12	1.03	5.79	21.00	<.001*	1.233
CDC17	6.36	6.44	0.08	1.59	0.13	21.00	0.89	0.029
CDC11	6.74	6.89	0.15	1.69	0.25	21.00	0.80	0.054
CDC2	6.82	7.09	0.27	1.46	0.44	21.00	0.665	0.094

* $p < .05$

The results in Table 3 reveal that the highest development was in knowledge and critical understanding of language and communication (CDC19), with $M = 3.46$ and $d = 2.737$, followed by linguistic, communicative, and plurilingual skills (CDC15), with $M = 2.81$, and $d = 2.348$, and openness to cultural otherness and to other beliefs, world views, and practices (CDC4), with $M = 2.12$, and $d = 1.233$. These results indicate a large effect size, indicating significant improvement in communication-related competences and openness to cultural differences.

In contrast to the areas of highest development, the lowest development scores are found in conflict resolution skills (CDC17), analytical and critical thinking skills (CDC11), and valuing cultural diversity (CDC2). These areas show only slight changes and are not statistically significant, with very small effect sizes of 0.029, 0.054, and 0.094, respectively. This suggests that virtual exchange had less influence on these competences.

Additionally, Table 4 presents the results of the semi-structured interview analysis conducted to explore the CDC developed through participation in collaborative virtual exchange. The occurrence of each CDC was identified from the participants' responses to Question 1: "What CDC did you develop through

participation in the virtual exchange?” Frequency counts were used to determine which competences mentioned by the participants.

Table 4 The occurrence of CDC from the semi-structured interview questions 1-3

Semi-structured interview questions	Competences for Democratic Culture																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Question 1	0	4	0	4	1	0	1	2	3	1	4	4	2	2	9	6	0	4	4	5
Question 2	1	7	0	8	4	0	2	0	5	2	4	1	2	1	4	9	2	1	2	4
Question 3	2	2	1	2	1	1	0	1	1	2	2	0	2	0	2	1	2	5	8	4

* The numbers in the table represent the frequency of the CDC occurrence

The findings indicate that linguistic, communicative, and plurilingual skills (CDC15) were the most frequently mentioned competence (n = 9), followed by co-operation skills (CDC16) (n = 6), and knowledge and critical understanding of the world (CDC20) (n = 5).

Regarding CDC15, several participants described how they adapted their communication strategies to address linguistic limitations. For example, one participant noted, *“I tried to compensate for our lack of English communication skills by using different strategies, as the virtual exchange was conducted in our non-native languages.”* (TGU1). Similarly, another participant reported, *“One of the biggest skills I developed was communication I used many methods to make my English understandable”.* (CMRU9).

On the contrary, the three least frequently mentioned CDCs are valuing human dignity and human rights (CDC1), valuing democracy, justice, fairness, equality and the rule of law (CDC3), civic mindedness (CDC6), and conflict-resolution skills (CDC17), each with 0 frequency.

Comparison between the findings of the questionnaire and interviews shows similar patterns regarding the participants’ development of CDC, especially competences related to communication skills. Both instruments recognize linguistic, communicative, and plurilingual skills (CDC15) as the most developed competences. However, the responses from questionnaire results identify knowledge and critical understanding of language and communication (CDC19) and openness to cultural otherness (CDC4) as the second and third most developed competences, whereas the interview data foreground more practice-oriented dimensions, notably co-operation skills (CDC16) and knowledge and critical understanding of the world (CDC20).

2. Investigating factors facilitating the development of CDC

The results of the interviews regarding the facilitating factors of CDC development during the virtual exchange are reported in Table 4. Thematic content analysis of the data was performed based on participants' answers to Interview Question 2 that focused on the factors that participants perceived to play the largest role in their learning process.

Three major factors facilitating CDC development were discovered through thematic analysis. First, collaborative interaction with peers was listed by 9 respondents. Participants indicated that working together, communicating with people, and collectively completing tasks are critical factors that help them gain knowledge and grow professionally. Second, being exposed to alternative cultural views was mentioned by 8 participants as a facilitating factor that allowed the participants to learn new things. Third, interacting with culturally diverse partners (n=7) was listed as a factor helping participants understand and value cultural differences.

Collaborative discussion and exchange of ideas were among the central aspects of the virtual exchange that were emphasized by participants. For instance, CMRU10 mentioned that *“Our brainstorming sessions were incredibly useful because they allowed us to exchange ideas and learn from each other”*. Thus, it is clear that interaction possibilities provided by virtual exchange have played an essential role in learning and personal development of the participants.

Democratic participation, civic engagement, and conflict resolution are mentioned rather rarely compared to intercultural interaction. In other words, participants did not mention that the exchange offered any opportunities related to controversial issues or civic topics. As a consequence, competencies related to these themes such as civic mindedness (CDC6), valuing democracy, justice, fairness, equality, and the rule of law (CDC3), and resolving conflicts (CDC17) are not mentioned by participants at all.

Thus, we can state that the participants view collaborative discussion and intercultural interaction as the main factors facilitating their CDC development during the exchange.

3. Exploration of CDC for further development

Findings of interviews concerning CDC for further development after completing virtual exchange activities are also presented in Table 2. These results are obtained based on the participants' interview responses to question 3.

The results indicate that competences in knowledge and critical understanding were the most frequently mentioned. Among these, knowledge and critical understanding of language and communication (CDC19) was mentioned most frequently (n = 8), followed by knowledge and critical understanding of the self (CDC18) (n = 5) and knowledge and critical understanding of the world (CDC20) (n = 4).

In contrast, responsibility (CDC7), skills of listening and observing (CDC12), and flexibility and adaptability (CDC14) were not referenced in the interview data nor the reflection sheets. This may indicate that participants regarded these competences as already developed during their participation in the virtual exchange activities. Such an interpretation is supported by an earlier response from one participant, who stated, *“The skills I’ve developed are mainly listening and speaking because I got to talk with international friends and work together with them”* (CMRU3).

Discussion

This study aimed to investigate which CDC could be cultivated through collaborative virtual exchange project between pre-service EFL teachers from Thailand and Japan. It was also intended to determine what factors facilitated such CDC development and which competences participants thought they would like to develop further in the future. Results of this study revealed that virtual exchange contributed to the development of competences associated with communication, intercultural awareness, and co-operation but could not foster critical and civic competences such as civic mindedness, analytical and critical thinking, and conflict resolution. Based on these findings, and in alignment with the research objectives, the discussion can be organized into three main themes as follows:

1. Virtual exchange as a means for developing intercultural communicative competences

One of the most significant findings of this study is the strong development of pre-service teachers' communication competences, particularly linguistic, communicative, and plurilingual skills, as well as knowledge and critical understanding of language and communication. From the viewpoint of RFCDC, such competences are defined as fundamental resources that allow individuals to communicate and interact within intercultural and democratic settings (Council of Europe, 2018). The results show that the use of virtual exchange provided authentic contexts where participants had to negotiate meanings and understand each other's culture and modify their strategies for doing so by working with international peers.

While virtual exchange was aimed at the development of learners' intercultural communication skills, it could also be perceived as experiential learning that made communication not only an instrument but a goal of learning. In other words, virtual exchange allowed learners to acquire communication competences through practical experience rather than just theory. It appears that, due to this feature, the learners managed to improve their competences more intensively than other democratic competences. Namely, while communicating, they learned how to overcome barriers associated with linguistic differences and to gain confidence in the use of English in their communications. Thus, the findings provide further evidence of the competence development through authentic social interaction and situational learning (Dooly & Vinagre, 2022; O'Dowd, 2023).

However, another important finding refers to the higher development of communicative than critical intercultural competences. Namely, while interacting with international peers, the participants showed increasing confidence and fluency, there were few instances when they critically considered cultural assumptions, education-related beliefs, and other perspectives. Specifically, according to the RFCDC, such competences presuppose the opportunity to analyze, evaluate, and reflect on various perspectives rather than exchanging information (Council of Europe, 2018). As a result, intercultural contacts without a proper framework of activities are not sufficient enough for promoting more advanced democratic competences in the participants (Byram, 2021; Porto, 2024).

The Thai-Japanese context may also help explain this outcome. Educational cultures in both Thailand and Japan generally emphasize respect, harmony, and the maintenance of positive interpersonal

relationships. Consequently, participants may have prioritized politeness, cooperation, and consensus-building during interaction. While these cultural orientations supported smooth communication and positive relationship-building, they may simultaneously have reduced opportunities for critical disagreement, argumentation, and perspective confrontation. Previous virtual exchange research has shown that participants from collectivist educational cultures often favor harmonious interaction and avoid open conflict during intercultural communication (O'Dowd, 2021; Helm & Van der Velden, 2021). This finding demonstrates that cultural communication norms can influence which competences are most likely to emerge during virtual exchange participation.

Finally, the particular nature of the Thai–Japanese context can also serve as an explanation. As previously noted, Thai and Japanese educational cultures are characterized by a relatively high value attached to harmony and interpersonal respect. Therefore, during their interactions with each other, the participants tried to demonstrate politeness, cooperation, and consensus-building instead of critical discussions and conflicts. While such a context made communication more comfortable and effective, it could have also decreased participants' opportunities to consider alternative perspectives critically. In turn, in previous studies dedicated to virtual exchanges involving collectivist educational cultures, researchers also mentioned that participants preferred harmony to open arguments (Helm & Van der Velden, 2021; O'Dowd, 2021).

2. The “Ideal School” as a mediating factor in CDC development

The interview analysis indicated that pre-service teachers viewed co-operation skills as the key factors influencing their success in the virtual exchange program, particularly through the collaborative task of designing an “Ideal School.” In accordance with the findings, co-operation is considered the main prerequisite of successful communication due to the development of a feeling of shared responsibility (Scoular et al., 2025). In other words, virtual exchange encourages the development of co-operation skills because of its requirements for coordination of perspectives and communication style (Hackett et al., 2023).

Creation of an ideal school implies division of responsibilities among the participants, discussion of practical issues, coordination of their viewpoints, and constant communication. All these aspects imply the activation of competences related to co-operation, empathy, responsibility, and intercultural interactions. The obtained findings support the idea that communication and co-operation competences were formed simultaneously and interacted with each other during the project implementation, confirming the interconnected character of democracies mentioned in the RFCDC (Council of Europe, 2018).

Nevertheless, while the “Ideal School” task effectively promoted teamwork and harmonious interaction, its contribution to broader CDC development was more limited. Previous studies have shown that collaboration alone does not automatically lead to the development of critical and democratic competences unless these are intentionally embedded in the task design (Byram 2021; Helm & Van der Velden, 2021). In many Asian educational contexts, collaboration in virtual exchange often prioritizes harmony, task completion, and conflict avoidance rather than critical discussion or democratic deliberation (O'Dowd, 2021). According to Helm and Van der Velden (2021), the most impactful virtual exchange tasks were those in which

negotiation, discussion, and problem-solving had to occur between different viewpoints. In other words, it may be concluded that the task designing an ideal school used in the current virtual exchange project was effective only in terms of promotion of intercultural interaction and co-operation. Nonetheless, competences requiring deeper reflection, such as tolerance of ambiguity, analytical and critical thinking, civic-mindedness, and responsibility toward democratic participation, remained underdeveloped.

This finding is a valuable contribution to virtual exchange and RFCDC research since it is clear now that instead of considering how to promote democratic competences via virtual exchange, researchers should explore what particular elements of tasks contribute to developing various aspects of competence. Thus, according to the results obtained in this research, collaborative activities can be regarded as effective for forming communication and co-operation competences while the latter need to be supported by more sophisticated approaches (Byram, 2021; Porto, 2024), for example, by addressing global issues such as war and peace, environmental issues, gender inequality, and inclusive education.

3. Competence for future EFL teachers

The competences that pre-service EFL teachers aimed to further develop were those related to critical understanding of language and communication (CDC19). Analysis of the reflection sheets and interviews demonstrated that participants tended to associate CDC19 with increased opportunities to communicate and engage with other learners more confidently. For instance, TGU1 said that she believed that she had been hesitant to communicate with peers, *“I think I was shy and hesitated to talk. Next time, I’d like to speak more and try to convey my feelings and ideas as much as I can”* (TGU1).

Noteworthy, participants' reflections imply that the communicative issues experienced were related to both linguistic problems and difficulties connected with self-expression, intercultural understanding, and lack of confidence (in their linguistic skills). Thus, it can be considered evidence of developing intercultural communication competence that goes far beyond linguistic competence and implies the ability to make sense of meanings, negotiate different perspectives, and establish relationships across cultures (Byram, 2021).

It is also important to note that for pre-service teachers, who are at the initial stages of their professional identity development, such reflective awareness is very beneficial since it can facilitate their readiness to engage in increasingly globalised educational contexts. Through intercultural interaction, they had an opportunity to reflect upon their ability to effectively communicate and engage in discussions with peers from diverse cultural backgrounds, thus contributing to their professional development (Helm & Beaven, 2020; O'Dowd, 2023).

Reflection as a form of critical thinking has been shown to help future teachers become more autonomous, develop metacognitive skills, enhance professional identity, and foster lifelong learning (Li, 2024; Thammaprateep & Chartisathian, 2025; Diseth, 2025). In this regard, the current study demonstrates how through reflection on their intercultural experiences pre-service teachers can become aware of gaps in their democratic and intercultural competence development. At the same time, it needs to be noted that participants were mostly focused on personal improvement of their ability to effectively communicate with others. Therefore,

future virtual exchanges should focus more explicitly on fostering critical thinking about issues of democratic participation in civic life (Council of Europe, 2018; Porto, 2024).

Overall, the current findings add to existing knowledge on the relationship between RFCDC and virtual exchanges by showing that competences related to democracy development in particular may be promoted to a lesser extent during virtual collaborative work across cultures compared to intercultural competences, communication, and co-operation. Despite the benefits of virtual exchange as a means for fostering intercultural competences, participants still needed additional support for addressing critical and civic competences.

Limitations of the study

1. The virtual exchange program was relatively short in duration (seven sessions and off-line introductory and in-between sessions), which may have contributed to the limited development of more abstract competences such as civic-mindedness and analytical thinking.

2. In this context, the choice of ideal school as the main learning task in the virtual exchange sessions leaves room for critical reflection regarding its effectiveness in promoting deep learning.

3. This study employed a multi-method approach with data triangulation. The analysis of intercultural growth may have benefited from a deeper consideration of individual participant backgrounds which could have influenced the outcome.

Recommendations

1. Recommendation for Applying Research Findings

Educator preparation programs need to incorporate more virtual exchange activities dealing with real-life problems and stimulating critical discussion. This will assist future EFL teachers in developing both intercultural communication competences and reflective, critical and conflict management skills.

2. Recommendation for future research

2.1 Based on the implementation of the present study, a virtual exchange program lasting approximately seven weeks, with one 60–90-minute session per week, is recommended. This duration appears sufficient to allow participants to establish relationships, engage with diverse perspectives, and develop competences for democratic culture without imposing excessive workload or communication fatigue.

2.2 To ensure that the emotional state of the learners is taken care of, and anxiety is alleviated as far as English language mediated communication is concerned, virtual exchange sessions need to be planned in such a way that intervals are taken at regular intervals. For instance, interaction periods could be 20 to 25 minutes long and then an interval of 5 minutes would follow.

2.3 Future research should focus on other kinds of virtual exchange tasks such as debates, negotiations, and problem solving. Researchers should analyze how the task affects the development of deep competences including critical thinking, independent learning, and conflict management.

2.4 Further research should explore specific strategies for designing virtual exchange experiences in such a way that it will allow participants to reflect on these dimensions of democratic competence. Sharing global issues related to SDGs in the initial preparation stage could be one of the strategies so that participants will become more aware of the importance of international collaboration as an effective measurement to achieve the goals.

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