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Intercultural Sensitivity as a Factor in Perceived Culturally Responsive Teaching of Teachers in Northern Thailand

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Abstract

This study examined the relationship of teachers' intercultural sensitivity to their in-class culturally responsive teaching. A total of 168 teachers with teaching experience in multicultural classrooms in northern Thailand answered a questionnaire with two psychological scales: the intercultural sensitivity scale and the culturally responsive teaching practice scale. To supplement quantitative findings, 19 teachers from the total number of participants were included in the semi-instructed interview. By conducting factor analysis, intercultural sensitivity perceived by teachers with multicultural facilitation experience in northern Thailand was extracted into three components: interaction engagement, interaction confidence, and respect for cultural differences. The results from structural equation modelling indicate that teachers' intercultural sensitivity significantly affects teachers' perceived culturally responsive teaching practices with the largest coefficient size. This study also discussed the associations between teachers' culturally responsive teaching practices and other significant background factors based on the local context, including school size, non-local student enrolment frequency, overseas travel experience, and the existence of intercultural colleagues.

INTRODUCTION

The increasing migration flows worldwide lead to the rise of cultural diversity in educational institutions, especially in popular destinations for migration, as children make up a considerable percentage of migration as dependents. In the United States, for instance, the government Census Bureau estimated that non-white children would make up the majority by mid-2020 (Vespa et al., 2018). Thailand, one of the most famous migrant destinations in Southeast Asia, is home to more than 400,000 migrant children and 155,000 stateless children from neighbouring countries (Tyrosvoutis, 2019; United Nations Children's Fund, 2023). Teachers in these countries will likely encounter cultural and ethnic diversity in classrooms. As a result, teachers' ethnic and cultural identities, such as languages, religions, and code of manners, may differ from those of students. Therefore, culturally responsive teaching (CRT) became a prerequisite competency for teachers to handle multicultural classrooms (Szlachta & Champion, 2020).

CRT was defined by Gay (2002b) as a teaching pedagogy "*using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively*" (p. 106). According to a synthesis study by Aronson and Laughter (2016), CRT had been associated with minoritised students' increased educational achievement, engagement in school, and learning motivation. Therefore, multicultural education literature started investigating factors that would improve teachers' CRT (e.g., Abacioglu et al., 2020; Gay, 2013; Kim & Connelly, 2019). Among various determinants, such as school administration supports and professional development (Min et al., 2022), previous qualitative research suggested teachers' intercultural sensitivity as the essential competence to enhance CRT (Leventhal, 2012; Marx, 2016; Ormsby, 2021; Szlachta & Champion, 2020). Intercultural sensitivity enhances an individual's willingness to recognise, understand, respect, and appreciate cultural differences, which leads to a choice of proper behaviours when interacting with counterparts from diverse ethnic backgrounds (Chen & Starosta, 1997). For that reason, interculturally sensitive teachers are believed to have positive attitudes toward learning about and engaging with ethnically diverse students, which induces the effective selection of teaching practices and the removal of cultural biases in class.

Despite the increased spotlight on teachers' intercultural sensitivity as an essential quality for culturally responsive teachers, its relationship to CRT remains underexplored in quantitative approaches. As a result, this study aims to provide statistical evidence to the existing literature by investigating whether teachers' intercultural sensitivity is a significant factor in CRT, along with other factors related to teachers' personal experiences and school inputs. The study questions were as follows:

- Does teachers' intercultural sensitivity influence their perceived CRT practices? If so, to what extent?

- What factors influence teachers' CRT practices besides intercultural sensitivity?

LITERATURE REVIEW

The association between teachers' teaching pedagogy in multicultural classrooms and their intercultural attitudes can be captured through Gay's (2000) culturally responsive teaching model and Chen and Starosta's (1997) ideologies of intercultural sensitivity. This study was theoretically grounded in these two concepts.

CRT is a pedagogy where educators incorporate cultural identities, characteristics, values, and perspectives of students with distinct ethnic backgrounds into the learning design and class facilitation. The ideology was created based on the assumption that the learning will be meaningful and engaging if it relates to minoritised students' lived experiences (Gay, 2000, 2002b). Two of the most established scholars of the field, Hollins (1993) and Gay (2002a), identified several components for teaching ethnically diverse students, including effective communication, creating a supportive environment, establishing relationships, reflective teaching, resource identification, ensuring cultural congruity in classroom instruction, and

creating an inclusive learning community. Thereafter, through exploratory factor analysis, Hsiao (2015) re-classified critical overlapping practices of CRT from the two aforementioned studies into three main components: curriculum and instruction adjustment, interpersonal relationship establishment, and group belonging formation in multicultural classrooms.

CRT was argued to be essential when teachers teach students with marginalised ethnicities, races, religions, and genders (Heitner & Jennings, 2016). Studies have proven relationships between teachers' CRT and ethnically diverse students' academic achievement, social adjustment, confidence, and learning interest (e.g., Aronson & Laughter, 2016; Hubert, 2014; Martell, 2013). Given the positive outcomes of CRT on students, multicultural education advocates have consistently studied ways to cultivate CRT in teachers who work in culturally diversified areas by identifying its influential factors (Abacioglu et al., 2020; Gay, 2013; Kim & Connelly, 2019; Min et al., 2022). Teachers' attitudes and beliefs toward cultural diversity were centralised in Gay's (2000) CRT model, as it directs teachers' willingness to carry out CRT in practice without biases toward specific groups of students (Gay, 2010, 2013). Based on this assumption, studies in the recent decade examined the connection between CRT practices and teachers' intercultural sensitivity, the affective domain of an ability to function effectively in multicultural environments.

Intercultural sensitivity – an individual's ability to encourage positive emotion toward cultural differences with understanding, respect, and enjoyment (Chen & Starosta, 1997), emerged along with the rise of globalisation during the 1980s (Spitzberg, 1989). It became an imperative feature of individuals who engage in the multicultural workplace as an interculturally sensitive person tends to have positive attitudes and motivation toward cultural differences, leading to proper behaviour selection during interaction with people with culturally diverse backgrounds (Altan, 2018). Intercultural sensitivity was assumed to be crucial for CRT as it enables the 'willingness' of teachers to embrace cultural differences, resulting in their effective choice of behaviours as a teacher. The study by Leventhal (2012) argued that teachers with high levels of intercultural sensitivity are more willing to reflect minoritised students' cultural backgrounds in their decisions in learning facilitation, teacher-student relationship establishment, and in-class cultural inclusivity cultivation.

Intercultural sensitivity helps teachers address their own cultural perspectives to avoid cultural blindness and unintentional bias toward minoritised students. Marx (2016) described that less interculturally sensitive teachers might design teaching instruction and evaluation through an ethnocentric lens, which imposes their own cultural standards and considers students' cultural attributes inconsequential. For instance, Tuangratananon et al. (2019) discovered that migrant children are often blamed first if they fight with Thai students. These phenomena occur due to the negative stereotypes of migrants among Thai people, who believe that labour migrants from neighbouring countries are aggressive and unmannered (Areeprachakun, 2020). Thus, intercultural sensitivity helps teachers recognise their own cultural standpoint to avoid blending negative beliefs toward particular groups of minority students into their choice of teaching practices.

Another core aspect of CRT is establishing interpersonal relationships between teachers and students. Intercultural sensitivity enables teachers to respectfully communicate and interact with ethnically distinct students in order to build trustful teacher-student relationships

(Wang & Du, 2014). Ormsby (2021) discovered that teachers with high intercultural sensitivity are more receptive to learning the lived experiences of ethnically diverse students despite the language barrier. The study also revealed that minoritised students became comfortable sharing personal stories with their teachers after the teachers showed interest in their identities by incorporating students' culture into the teaching content and encouraging them to value their own cultural background.

The formation of inclusivity in multicultural classrooms highly depends on how teachers facilitate the class. Allport's (1954) contact theory argued that positive attitudes toward other ethnic groups are generated through co-existence only if it is supervised by the groups' authorities, which are 'teachers' in the classroom context. Teachers with positive attitudes towards cultural diversity are likely to shape local students' mindsets and class norms about minorised peers, which minimises bullying victimisation among students (Arphattananon, 2015; Schwarzenthal et al., 2018). Likewise, Szlachta and Champion (2020) found that teachers with high intercultural sensitivity are likely to recognise and respond to group dynamics in classrooms effectively. The study explained that these teachers facilitate the dynamics by monitoring how students treat each other, ensuring a safe space for all students, and being confident in their own cultural perspectives first before modelling respectful behaviours toward students' diverse perspectives.

According to the literature mentioned above, intercultural sensitivity was argued to be essential for teachers engaging in CRT in three aspects: adjusting instruction based on students' lived experiences, creating meaningful relationships with each student, and cultivating inclusivity and unity in the classroom. However, the connection between these two ideologies has not yet been examined quantitatively. Therefore, this research will investigate whether intercultural sensitivity level is associated with the perceived frequency with which teachers perform each aspect of CRT practices by providing statistical evidence.

The study concentrated on the northern region of Thailand as it hosts the most significant number of non-Thai students, including migrant and ethnic minority students. According to the Office of the Basic Education Commission (2022), the northern region accommodates around 47% of the total number of non-Thai children across Thailand. Within this figure, Chiangmai makes up 19%. Hence, teachers in this region have a high chance of engaging in multicultural classrooms.

Nawarat (2019) found that teachers struggled in classroom facilitation because migrant children often enter schools with a lack of Thai language proficiency and differences in cultural background, general knowledge among the majority, and the contents of schooling they received in the origin country. This indicated a need for CRT training among Thai teachers to secure educational equity by providing a culturally responsive learning environment for all students. The standard of the teacher profession of the Teacher Council of Thailand (2019) mentioned accepting learners' differences, community-based education, and coexisting based on cultural differences. However, the Council did not announce any concrete conceptual frameworks and practices for CRT in multi-ethnic settings (Warapongpipat & Saifah, 2015). Likewise, CRT cultivation among preservice teachers across the country was still at its beginning stage (Saenghong, 2022).

An investigation of the teacher education curriculum of five top universities in Thailand discovered that there was only one university where 'multicultural education' was provided as a mandatory course (Rupavijetra et al., 2019). At the same time, studies on both CRT and intercultural sensitivity among teachers in Thailand are limited. Most studies on teachers' intercultural attitudes and practices are only associated with foreign language teachers and teachers in Muslim communities (e.g., Fungchomchoei & Kardkarnklai, 2016; Laopongharn & Sercombe, 2009; Yongyuan et al., 2011).

Moreover, little is known about the components of CRT and intercultural sensitivity in the context of Thailand. Therefore, this study not only contributed quantitative evidence of the association between teachers' intercultural sensitivity and CRT but also investigated whether the grounded concepts can be applied to multicultural education in Northern Thailand. It also provided pedagogical implications for cultivating teachers' CRT in the school context of Northern Thailand.

RESEARCH METHODOLOGY

The author mainly employed a mixed-method, using quantitative approaches to investigate its research questions and semi-constructed interviews to supplement statistical findings based on the actual context. The study's research participants in the quantitative part were school teachers with teaching experience in multicultural classrooms in the northern region of Thailand, which includes 17 provinces. This section details data collection, study variables, research instruments, participant characteristics, and analytical framework.

Data collection and research participants

The data set applied in this study was collected using Google Forms from May to December 2022. The study used a simple random sampling to recruit teachers from 17 provinces in the northern region. The recruitment posters were distributed to 130 public schools that accept non-Thai student enrolment across the region. Despite the government's cabinet resolution of Education for All, a number of schools still refuse migrant children for several reasons, such as cultural prejudice, insufficient per capita grants, and the high dropout rate of migrant students (Nawarat, 2019). At the same time, the policy only applies to public schools (Office of the Education Council, 2018); therefore, at the recruitment stage, the author targeted public schools where there a number of migrant, stateless, and ethnic minority students. However, the recruitment poster was also announced on teacher community-related groups on Facebook to reach broader targets, such as those who work with ethnic minorities or migrant students in private schools. Only teachers with teaching experience with migrant, stateless, or ethnic minority students were qualified to participate in the study. All research participants signed the participation consent after the study's explanation was provided online. The participants were provided with an online questionnaire, which took approximately 20 minutes to complete. The questionnaire, which was in Thai, includes teachers' demographic and educational backgrounds, personal and work experience, and two psychometric scales measuring intercultural sensitivity and CRT frequency perceived by the teachers. Before the

actual data collection, the research instruments were piloted with 50 teachers with teaching experiences with minoritised students. The Cronbach's alpha scores of .87 and .97 indicated the internal consistency of intercultural sensitivity and CRT scale, respectively.

According to the teacher-student ratio in northern Thailand (Regional Education Office 15, 2023) and the number of non-Thai students in the region (Office of the Basic Education Commission, 2022), around 1,600 teachers were estimated to encounter non-Thai students. At the end of the recruitment, the study secured 168 teachers who voluntarily participated. The sample size comprised approximately 10 per cent of the population, capturing the statistical representation and sufficient data for multivariate analysis (Roscoe, 1975, as cited in Memon et al., 2020). The participants were from both private and public schools ($n_{private}$ = 46, and n_{public} = 122), including kindergarten, primary, and secondary level teachers ($n_{kindergarten}$ = 13, $n_{primary}$ = 111, and $n_{secondary}$ = 44). According to the enrolment data of migrant students in Thai schools by level provided by the Office of the Basic Education Commission (2022), 67% are at the elementary level, while 19%, 12%, and 2% are in kindergarten, lower and upper secondary levels, respectively. This resulted in a large number of primary grade teacher participants.

In Thailand, it is common for teachers to teach more than one subject, especially in primary schools (Mattavarat et al., 2017). 41 per cent of the participants reported being in charge of multiple subjects (n_{single} = 98, and $n_{multiple}$ = 70). Based on eight subjects for basic education listed by the core curriculum of Thailand, the number of participants taught in each subject are: $n_{Thai\ language}$ = 54, $n_{Mathematics}$ = 48, $n_{Science}$ = 42, $n_{Social\ studies}$ = 42, $n_{Art\ and\ music}$ = 36, $n_{Health\ and\ physical\ education}$ = 24, $n_{Career\ and\ technology}$ = 32, and $n_{Foreign\ language}$ = 60. The data indicated the comprehensiveness of the population across all subjects.

Among 168 teachers, 19 were randomly selected to participate in the semi-constructed interviews. All of them were homeroom teachers during AY2022. Interviewees' details are illustrated in Appendix 1. The interview mode was primarily face-to-face at the participants' school, while four participants preferred online interviews through Zoom Video Communications. The interview was conducted in Thai. The average interview time of 42.2 minutes was recorded, transcribed, and translated for analysis by the author, who is a native Thai. The interview captured the participants' stories regarding teaching experience with migrant and ethnic minority students and CRT practices through open-ended questions. The interview questions are listed in Appendix 2. This study used qualitative data to explain specific statistical findings based on local contexts. The average age of interviewees is 34.7 years old. To confirm the interview participant representation of the whole research population, the author conducted an independent-sample *t*-test between the mean score of intercultural sensitivity of the survey-only population (n = 149, Mean = 3.89) and the interview population (n = 19, Mean = 3.99). Consequently, the result revealed a Sig of *t*-test of .555, indicating that the interviewed participants can be generalised among the whole population. The interview data was coded using thematic analysis.

Research instruments and validation

The study employed two psychometric scales: the intercultural sensitivity scale (ISS) and the culturally responsive teaching practice scale. Both scales were translated from English to Thai by the author, a native Thai.

The ISS was adopted from Chen and Starosta's (2000) 5-point Likert scale (from strongly agree to strongly disagree), measuring individual intercultural sensitivity. Initially, Chen and Starosta (2000) discovered five components from 24 items (see Appendix 3): Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness, constituting intercultural sensitivity. The author adopted this scale to measure teachers' intercultural sensitivity levels as it has been utilised in studies associated with teachers' cultural attitudes (Demir & Üstün, 2017; Köroğlu, 2017; Onur Sezer & Bağçeli Kahraman, 2016). The scale was first validated by university students in the United States. However, it has been validated and modified in several Asian contexts, such as in the Philippines, Taiwan, China, and Thailand (Reungthai, 2012; Ruales et al., 2020; Wang & Zhou, 2016; Wattanavorakijkul, 2020; Wu, 2015). Therefore, this study applied the ISS as exploratory variables to investigate the factors influencing teachers' CRT practices.

The study adopted the culturally responsive teacher preparedness scale Hsiao (2015) developed to measure teachers' CRT practice. The 18-item psychometric scale is a 6-point Likert scale, ranging from highly prepared to unprepared (see Appendix 4). By the validation with pre-service teachers, Hsiao (2015) concluded three components as follows: curriculum and instruction, relationship and expectation establishment, and group belonging formation. As the study's targeted population is in-service teachers, the author conducted the preliminary modification by revising the form of question items and scale headings to measure self-reported teaching practice frequency (see Appendix 5). The scale heading was also reduced from six to five points to prevent inconsistency between the two scales.

To validate whether the original components of intercultural sensitivity and CRT apply to the context of teachers in northern Thailand, the author conducted the second-order Confirmatory Factor Analysis (CFA) through Structural Equation Modelling (SEM). The measurement of the CFA model in SEM methodology confirms the links between observed variables' scores and the underlying constructs (latent variables) they were proposed to evaluate (Byrne, 2001). The ISS and CRT are psychological phenomena that solely rely on how participants perceive themselves. Hence, the author applied the second-order CFA modelling to test the connections between each question item, the original components, and the latent variables, teachers' intercultural sensitivity and CRT.

In case the CFA model of the initial scale is not adequate, the study will apply a Principal Components Analysis (PCA) to explore possible unique components of the teacher population. Once the new components that emerged from the teacher context in Thailand are constructed, the study will test their internal consistency and presumed representations with the CFA again.

1. Components of teachers' intercultural sensitivity

The initial goodness-of-fit indices of the second-order CFA using three original components of the 24-item ISS needed to be revised. Therefore, the study first conducted a PCA to reduce the dimension of 24 items. Before the PCA, the value of Bartlett's Test and Kaiser-Meyer-Olkin (KMO) were analysed at .847 and significant at .000. Hence, this data set is suitable for the factor analysis.

The PCA results revealed four components where its Eigenvalue is more significant than one. The question items did not perfectly match the initial components. However, the items in each component constitute a meaningful definition hence the authors renamed the four components as follows: Negativity toward cultural differences (items 2, 4, 7, 9, 12, 15, 18, 20, and 22), Interaction engagement (items 11, 14, 17, 19, 21, 23, and 24), Interaction confidence (items 1, 3, 5, 6, and 10), and Respect toward cultural differences (items 8, 13, and 16).

The author used an SEM second-order CFA to test the constructed component's structure. The result indicates that the path coefficient of the intercultural sensitivity (IS) towards the *Negativity toward cultural differences* was only .004. Likewise, this component barely has internal consistency with other components. All the items in this component are portrayed negatively. Social science researchers discovered the dilemma of including negative wording items in psychometric scales, as they seriously influence the scale's internal consistency (Salazar, 2015). Alternatively, Vigil-Colet et al. (2020) argued that the respondents tend to answer the reversed items in a higher level of agreement as they must respond in an opposite way, which causes confusion.

Moreover, the target population who carry teacher status under education institutes can be extra careful with the negative statements, which form a concern regarding their performance evaluation. To reduce this acquiescence bias, several studies suggest not combining positive and reversed items (Józsa & Morgan, 2017; Suárez-Alvarez et al., 2018). Given these arguments, the author eliminated reversed items in the first component from the model testing.

After deleting nine reversed items, all goodness-of-fit indexes, as displayed in Table 1, are accepted based on the commonly used criteria (Hu & Bentler, 1999). Therefore, the CFA model of teachers' intercultural sensitivity with three components was considered adequate. The standardised path coefficient of each question item on their component is significant at $P < .05$ and .001 (see Table 1). In the second order, the intercultural sensitivity's path coefficient on Engagement, Confidence, and Respect are .948, .700, and .891, respectively. The p-value of each path is less than .001, indicating that the hypothesised paths were supported. Besides, the reliability of the modified 15-item scale is promising, with a Cronbach's Alpha value of .86.

Table 1

Second-order confirmatory factory analysis of teacher intercultural sensitivity

		β	b	S.E.	R-squared
Engagement	← IS	.948***	1.000		.899
Confidence	← IS	.700***	.885	.173	.489
Respect	← IS	.891***	.806	.154	.794
is14	← Engagement	.635***	.809	.123	.403
is24	← Engagement	.536***	.891	.127	.288
is23	← Engagement	.706***	.904	.125	.499
is21	← Engagement	.748***	1.000		.560
is19	← Engagement	.487***	.795	.142	.238
is17	← Engagement	.694***	.871	.131	.482
is11	← Engagement	.193*	.351	.148	.037
is10	← Confidence	.687***	1.000		.472
is06	← Confidence	.679***	.886	.121	.461
is05	← Confidence	.712***	.947	.124	.507
is03	← Confidence	.714***	.985	.127	.510
is01	← Confidence	.598***	.735	.110	.358
is13	← Respect	.607***	.878	.151	.369
is08	← Respect	.386***	.711	.174	.149
is16	← Respect	.626***	1.000		.391

Chi-Square = 72.073; df = 67; Relative Chi-Square = 1.076; *p*-value = .341
TLI = .989; CFI = .993; RMSEA = .021; RMR = .027

Note: * p < 0.05; ** p < 0.01; *** p < 0.001

The teachers' intercultural sensitivity in the northern region context consists of three components as follows:

- Interaction engagement – Measure teachers' level of engagement, commitment, and ownership toward the interaction with culturally distinct people.
- Interaction confidence – Measure teachers' self-confidence and enjoyment during the interaction with culturally distinct people.
- Respect toward cultural differences – Measure teachers' respect and openness toward culturally distinct people.

The validation of ISS in Serbia also revealed a significant factor structure different from the original scale, recommending the elimination of 9 items (Petrović et al., 2015). Most extracted components and their items from the Serbian population were comparable. However, the author could not compare the findings with the studies that used ISS in the Thai context, as the existing studies utilised all original items without component extraction analysis (Bosuwon, 2017; Chocce, 2014; Semchuchot et al., 2021; Wattanavorakijkul, 2020).

2. Components of teachers' CRT practice

The study structured a second-order CFA approach to explore the teachers' CRT practices' components. The overall result is indicated in Table 2. This data set was capable for the CFA as the KMO value was .955, and Bartlett's Test reached the significance level at .000. The result suggested that all goodness-of-fit index passed the acceptable levels, signifying that the

hypothesised model was supported. The CFA model indicated three components from 18 question items as follows: Curriculum and instruction (items 1, 2, 3, 4, 5, 6, 7, and 8), Engaging communication (items 9, 10, 11, 12, and 13), and Group belonging formation (items 14, 15, 16, 17, and 18). The path coefficient of CRT toward each component is .945, .993, and .946, respectively, as provided in Table 2. Likewise, the p-value of all paths in both first and second order was smaller than .001, indicating that all path coefficient was statistically significant. Cronbach's Alpha of 18 items is .97, confirming the scale's excellent reliability.

Items in each component are mainly identical to the original scale, except for item 14 (originally in Component 2), which migrated to Component 3. Question 14 stated: *I establish expectations for appropriate classroom behaviour in considering students' cultural backgrounds to maintain a conducive learning environment*. The item was perceived as more related to building a supportive classroom for culturally distinct students. This indicated that Thai teachers perceive the appropriate behaviours in the classroom as the key to forming minority students' sense of belonging. Furthermore, Warapongpipat and Saifah (2015) discovered that some teachers require non-Thai students to adjust themselves according to the local norms of the majority to be a part of the class.

Since the only question item about expectation was moved, the author renamed the second component from Expectation establishment to Engaging communication. As a result, the teachers' CRT practice in the context of northern Thailand comprises three components, as listed below:

- Curriculum and instruction - Measure teachers' self-perceived practices of adjusting teaching instruction, facilitation, and evaluation culturally responsively.
- Engaging communication - Measure teachers' self-perceived practices of engaging communication for establishing positive and supportive relationships with all students and parents.
- Group belonging formation - Measure teachers' self-perceived practices of building an inclusive and supportive classroom environment for all students.

The extracted components expressed identical structures discovered in other studies, where communication, inclusive classroom creation, and instructional help were addressed (Gay, 2002; Siwatu, 2007).

Table 2

Second-order confirmatory factory analysis of CRT practice

		β	b	S.E.	R-squared
Curriculum and instruction	← CRT	.945***	.933	.066	.894
Engaging communication	← CRT	.993***	1.000		.986
Group belonging formation	← CRT	.946***	.944	.059	.893

		β	b	S.E.	R-squared
CRT08	← Curriculum and instruction	.892***	.934	.069	.796
CRT07	← Curriculum and instruction	.902***	.979	.068	.813
CRT06	← Curriculum and instruction	.854***	.950	.065	.729
CRT05	← Curriculum and instruction	.859***	.943	.063	.738
CRT04	← Curriculum and instruction	.866***	1.000		.750
CRT03	← Curriculum and instruction	.817***	.923	.067	.668
CRT02	← Curriculum and instruction	.790***	.951	.074	.624
CRT01	← Curriculum and instruction	.717***	.869	.073	.514
CRT13	← Engaging communication	.784***	.851	.065	.614
CRT12	← Engaging communication	.642***	.789	.076	.412
CRT11	← Engaging communication	.883***	1.000		.779
CRT10	← Engaging communication	.765***	.942	.056	.585
CRT09	← Engaging communication	.886***	.967	.059	.785
CRT18	← Group belonging formation	.929***	1.000		.863
CRT17	← Group belonging formation	.851***	.992	.059	.724
CRT16	← Group belonging formation	.886***	.967	.047	.785
CRT15	← Group belonging formation	.876***	.948	.052	.768
CRT14	← Group belonging formation	.846***	.973	.059	.716
Chi-Square = 108.961; df = 91; Relative Chi-Square = 1.197; *p*-value = .097					
TLI = .991; CFI = .995; RMSEA = .034; RMR = .029					

Note: * p < 0.05; ** p < 0.01; *** p < 0.001

3. Statistic analytical framework

This study addressed the research objective of investigating factors influencing teachers' CRT teaching practice. Intercultural sensitivity was hypothesised to be the significant factor affecting the CRT. However, to explore other possible leading factors, the author first used Multiple Linear Regression (MLR) to explore the coefficient size of each potential variable. Consequently, SEM was employed to analyse the regression structure of the CRT using IBM SPSS AMOS 29.0 software. The common goodness-of-fit indices of SEM are as follows: Relative Chi-square < 2, *p*-value > .05, TLI > .95, CFI > .95, RMSEA < .06, and RMR < .08 (Hu & Bentler, 1999). The full latent variable SEM model demonstrates the causal direction among observed and latent variables (Byrne, 2016). At the last stage, as the dependent variable (CRT) and the primary exploratory variable (Intercultural sensitivity score) are unobserved variables, the study tested exploratory variables with a significant standardised coefficient size from the MLR into a complete latent variable SEM model predicting the CRT score.

RESULTS AND DISCUSSIONS

The association between teachers' intercultural sensitivity and CRT practice

The study tested the hypothesis that teachers' intercultural sensitivity significantly affects responsive teaching scores. At the same time, it also examined other co-factors affecting teachers' perceived CRT practice. The study conducted an MLR as a preliminary analysis to explore potential covariates of the CRT score, which will be included in the full structural model. Table 3 illustrates all variables used in the preliminary MLR. Also, years of teaching

experience and income data were collected. However, there was an extreme multicollinearity between years of teaching experience and age, and professional position and income. Hence, the author used age as a proxy variable of the teaching experience, while position was a proxy variable for income.

Table 4 summarises the descriptions and values of dependent variables, explanatory variables, and covariates included in the analysis. The average age of the participants was 38.2 years, with a standard deviation of 10.07. The data set suggests a gender imbalance (n_{male} = 43, and n_{female} = 125). This reflects the dominance of female staff in the Thai educational system, in which the number of female teachers is 2.7 times greater than that of male teachers (Equitable Education Fund, 2016). All participants had at least bachelor's degrees. The percentage of participants from different school sizes is illustrated in Table 5. The school size is categorised based on the number of students defined by the Office of the Basic Education Commission (2023).

Table 3

Variable included in multiple linear regression analysis and SEM

Variable	Value
Intercultural sensitivity (IS)	Average score of participants' intercultural sensitivity.
Engagement	Average score of participants' interaction engagement.
Confidence	Average score of participants' interaction confidence.
Respect	Average score of participants' respect towards cultural differences.
CRT	Average score of participants' CRT (18-item).
Instruction	Average score of participants' curriculum and instruction.
Communication	Average score of participants' engaging communication.
Formation	Average score of participants' group belonging formation.
Age	Participant age at the time of the survey.
Female	Binary term for female (1) or not (0).
Position	Participant professional position: contract (0), assistant (1), K1 (2), K2 (3), K3 (4).
Study abroad experience	Binary term for participants who have study abroad experience (1) or not (0).
School size	Participant's school size based on number of students: 5-119 (0), 120-719 (1), 720-1,679 (2), 1,680+ (3).
School type	Binary term for participants who teach in public (0) or private school (1).
Minority student enrolment	School's enrolment frequency of non-Thai students: rarely (0), some semesters (1), every semester (2).
Oversea travel experience	Binary term for participants who have overseas travel experience (1) or not (0).
Intercultural colleagues	Binary term for participants who have intercultural colleagues (1) or not (0).

Table 4

Participant information

Variables	n	Mean	S.D.	Min	Max
Intercultural sensitivity	168	3.973	0.437	3.00	5.00
Engagement	168	3.890	0.479	2.57	5.00
Confidence	168	3.834	0.590	2.00	5.00
Respect	168	4.395	0.490	3.00	5.00
CRT	168	3.632	0.826	1.00	5.00

Variables	n	Mean	S.D.	Min	Max
Instruction	168	3.569	0.858	1.00	5.00
Communication	168	3.544	0.907	1.00	5.00
Formation	168	3.775	0.894	1.00	5.00
Age	167	38.168	10.073	23.00	67.00
Female	168	0.744	0.438	0.00	1.00
Position	123	2.195	1.329	0.00	4.00
Study abroad experience	168	0.137	0.345	0.00	1.00
School size	168	1.506	0.979	0.00	3.00
School type	168	0.274	0.447	0.00	1.00
Minority student enrolment	168	1.304	0.839	0.00	2.00
Overseas travel	168	0.577	0.496	0.00	1.00
Intercultural colleagues	168	0.339	0.475	0.00	1.00

Table 5

Percentage of participants from different school sizes

School size (student number)	n	Percentage
Small (below 199)	24	14.29
Medium (120-719)	70	41.67
Large (720-1,679)	39	23.21
Extra large (above 1,680)	35	20.83
Total	168	100

The preliminary result of MLR, using the Enter method, indicates that the intercultural sensitivity score significantly affected the CRT. The summarised results are presented in Table 6. Intercultural sensitivity was statistically significant at a p-value lower than .001, with a coefficient size of .414. Three more variables significantly correlate with the CRT: minority student enrolment, school size, and intercultural colleagues. The Sig of F of the model was .000, indicating that the equation is significant. Meanwhile, the r-square of the model was .383. The independent variables explained the teachers' CRT score by 38.3%.

Additionally, the MLR yielded an interesting finding that the personal characteristics of teachers, including age, gender, and professional position (as a proxy variable of economic class), did not significantly determine their CRT. The finding was in alignment with the study of Abacioglu et al. (2020), which reported no correlations between CRT and teachers' age. This indicated that teachers' socio-cultural construction of identities plays a more vital role in their teaching practice than social identities such as age, gender and class.

According to the result, the study selected intercultural sensitivity score, overseas travel experience, intercultural colleagues, school size, and minority enrolment as explanatory variables of CRT in the full latent structural model testing. Although the effect of participants' overseas travel experience was insignificant in the MRL model, this variable has been proven to be a crucial factor for teachers' CRT in many previous studies (Gresham et al., 2014; Min et al., 2022).

Table 6

Results of multiple linear regression model of CRT

Variables	β	b	S.E.	t
Intercultural sensitivity	0.414***	0.761	0.140	5.447
Female	0.014	0.026	0.145	0.176
Age	0.102	0.008	0.008	1.055
Position	-0.058	-0.034	0.058	-0.582
Overseas travel	0.098	0.151	0.138	1.092
Study abroad experience	0.067	0.166	0.204	0.813
Intercultural colleagues	-0.200*	-0.345	0.144	-2.397
School size	-0.158*	-0.127	0.062	-2.042
School type	0.008	0.036	0.346	0.105
Minority student enrolment	0.445***	0.398	0.069	5.728
Constant		0.045	0.626	0.072
R-squared	0.383			
SEE	0.631			
F	6.866			
Sig of F	.000			
Observations	168			

Note: * p < 0.05; ** p < 0.01; *** p < 0.001

Figure 1 demonstrates the SEM diagram of the perceived frequency with which teachers perform CRT. The model involved two latent variables: intercultural sensitivity and CRT. Both variables were predicted by their observed components extracted in the research instrument validations. Other observed variables included minority student enrolment, school size, overseas travel, and intercultural colleagues. Consequently, the findings indicate that intercultural sensitivity significantly affected how the teachers perform CRT (at *p*-value =.000). The coefficient size of intercultural sensitivity was .402, the greatest among other predictors.

Moreover, minority student enrolment and overseas travel experience positively affected the teachers' CRT with values of .373 and .158, respectively. School size and intercultural colleagues affect the CRT in a negative direction at β = -.199 and β = -.162. All goodness-of-fit (see Table 7) exceeded the expectation criteria (Hu & Bentler, 1999), indicating that the hypothesised model was accepted. The r-square of CRT is .315, implying that five predictors can explain 31.5% of the dependent variable.

The hypothesis that the teachers' intercultural sensitivity is a significant factor influencing their CRT practice was supported. This finding is consistent with the arguments of other previous studies that teachers' attitudes and sensitivity toward cultural differences contribute to their operation of CRT (Kim & Connelly, 2019; Leventhal, 2012; Ormsby, 2021). Among variables related to personal experiences and school inputs, intercultural sensitivity yielded the largest effect on CRT. This finding supported Gay's (2000, 2013) model, which centralised teachers' attitudes on cultural diversity in performing each aspect of CRT.

The model confirmed that intercultural sensitivity contributes to all aspects of CRT: instruction adjustment based on students' lived experiences, receptive and engaging communication with

students and parents, and inclusiveness establishment in the classroom. According to the CFA result of intercultural sensitivity, an intercultural sensitive teacher in the context of Northern Thailand is comprised of being respectful, confident, and committed to cultural differences during the interaction with students. Therefore, this study recommends that these three components of intercultural sensitivity be prioritised when designing CRT training for teachers in multi-ethnic schools.

Table 7

SEM estimation of teachers' CRT

Predictors	β	b	S.E.
Intercultural sensitivity	0.402***	0.794	0.172
Minority student enrolments	0.373***	0.378	0.073
School size	-0.199**	-0.172	0.063
Overseas travel	0.158*	0.272	0.124
Intercultural colleagues	-0.162*	-0.29	0.133
R-square	0.315		
Chi-Square = 26.313; df = 22; Relative Chi-Square = 1.196; *p*-value = .238			
TLI = .986; CFI = .993; RMSEA = .034; RMR = .016			

Note: * p < 0.05; ** p < 0.01; *** p < 0.001

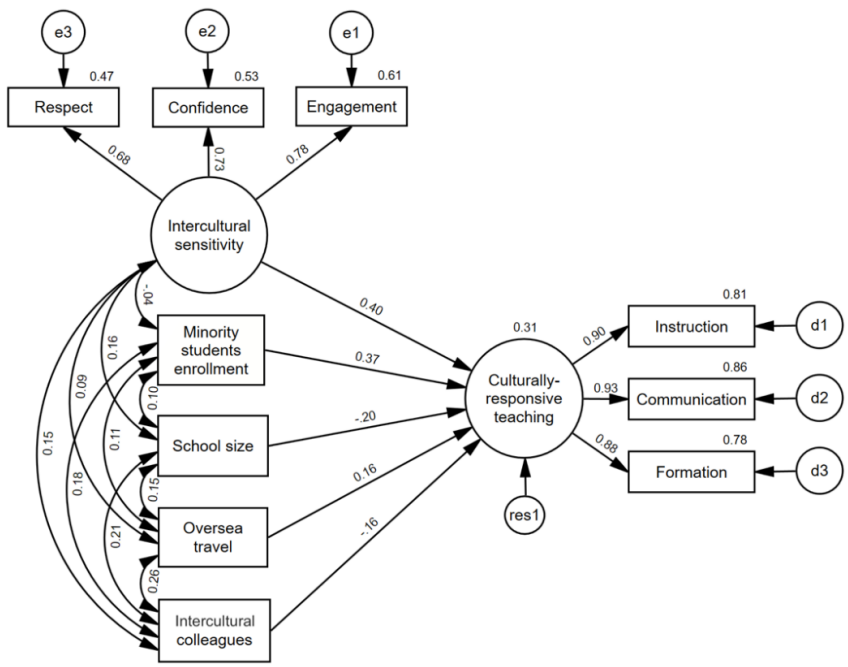

Figure 1 Structural equation model of teachers' CRT

Other determinants of teachers' CRT practices

Although teachers' intercultural sensitivity plays a crucial role in CRT, their personal experiences and school inputs are also influential. Based on the SEM result, other factors of CRT were classified into two levels: school level (school size and non-Thai student enrolment frequency)

and individual level (overseas travel experience and international colleague existence). These phenomena were discussed based on the themes from the interviewees' narratives.

First, the school type does not affect CRT, but the school size does. The study discovered that curriculum and instruction adjustment in small schools in remote areas is more flexible than in larger schools. Small and medium schools are likely to prioritise cultivating students' life skills over average academic achievement, such as the Ordinary National Educational Test (O-NET) (Wannagatesiri et al., 2014). A female interviewee from a medium school, Teacher N, said, "*My school principal told me to teach slowly with only the basics and not expect too much from them, just to emphasise reading and writing literacy. The officers of our educational service area also understand the situation. They said that we do not have to expect much.*" This indicated that teachers, schools, and local education authorities share the same perception that minority students from remote areas are unable to compete academically with local students with sufficient resources. Hence, many schools emphasise their strength in non-academic learning indicators, such as the ability to cook, repair, and sell products, which they can use to earn income. Teacher P, a female teacher from a small school in Chiangmai where most students are Hmong, shared the following narrative:

> *"Here, the principal emphasises vocations…for example, here they live their Hmong lifestyle, so I teach students to stitch and sell it as products… If students cannot study the academic part well, we do not have to force them. Just equip them with vocational skills. We do not think much about the academic outcome and mainstream indicators."* [Teacher P]

Teacher L, a male teacher from a small school, indicated the flexibility of the teachers in selecting teaching mediums. He shared an alternative way of using a local movie to discuss health education with Hmong students as follows:

> *"I opened a Hmong movie that students requested. The story was like a couple doing the blood oath, promising to love each other forever. They were drinking the blood from leaves, so I paused the movie to integrate health knowledge that infectious diseases spread through body fluids."* [Teacher L]

Contrarily, Teacher A, a female teacher from a large size school located in the city centre of Chiangmai, stated the following contrasting situation:

> *"This year, when I knew that there would be many stateless and migrant students in my class…I thought the O-NET score would definitely drop because they cannot understand a thing. Then, as expected, the score extremely dropped…I was very stressed…I tutored them hard, even harder than last year."* [Teacher A]

Teachers in large-size schools in the cities are pressured to maintain the school's average academic outcomes. In contrast, all interviewees from the small ones agreed in the same direction that their schools were not expected to compete in national educational achievement scores. Thus, teachers can flexibly adjust the teaching content and speed based on the students' pace without pressure to maintain the school's cumulative academic outcome.

Second, regular enrolment of non-Thai students positively affects teachers' CRT. Teachers in schools where non-local students routinely attend have extensive opportunities to engage with culturally distinct students. Min et al. (2022) discovered that teaching experience with students from different cultural and racial backgrounds strongly affects CRT practices. Moreover, dealing with the inevitable cultural-related situations from minority students daily leads teachers to equip them with the ability to be more culturally responsive.

On the other hand, Rulinda's (2020) study found that teachers' perceived administrative practices and school policies are vital factors in teachers' culturally responsive pedagogy. Schools, where migrant and ethnic minority children are regularly accepted, tend to have solid policies and practices for ethnic minority students. According to interviewees from schools with a massive number of non-Thai students, the existence of public schools in the northern region counts on migrant and ethnic minority students, as Thai parents in the area prefer private or provincial schools (Wei & Mhunpiew, 2020). Small and medium public schools in the cities could be sustained by the number of migrant children with parents working in the construction sites. Teacher D, a female teacher who is from a medium-sized school located close to several construction sites in the central of Chiangmai city, stated:

> *"The context of this school is that we cannot serve the local people, so we need to admit that our primary customer is Shan (an ethnic group from Myanmar) people…. We are pleased to accept them. This is our school principal's policy."* [Teacher D]

The school's reputation among non-Thai parents is spread by the word of the month. Therefore, the schools must advance the environments that suit non-local students to attract more students. The adjustment involves instructions, curriculum, and extracurricular activities according to the needs of their main customers. The policy adjustment often comes from the vision of the school principals, as illustrated by the following narrative of Teacher F, a female teacher in the school where Shan's parents play a crucial role:

> *"Every activity in the school, we try to make it collaborative with no ethnic segregation. This is the school's nature. From the principal's policy to implementing unity building at the class level… Frankly speaking, people call this school a 'Shan-sponsored school.' We will struggle if there are no Shan parents. When we ask for cooperation, donations, etc., it will take them only a while. For example, our classroom did not have enough fans. They took only a while to give us the fans after we asked for their cooperation."* [Teacher F]

In addition, some schools internalise cultural diversity in their customs and extracurricular activities. For instance, Teacher G and Teacher R from schools with regular ethnic minority student enrolments shared that they added the languages of non-Thai students to some schools' facilities, such as in the signs at toilets and school gates. Other than that, the school customs encourage teachers to blend the cultures of non-local students into their facilitations. Teacher C, a female teacher from a medium-sized school, share one of her initiatives as follows:

> *"At the retirement party, we let students from each ethnicity perform their traditional performance…we thought it might be beautiful…but the local students refused. They*

> *said it was boring. So, we taught them that it is not okay to express such things because all of us need to accept each other cultural differences. The local students need to accept minority ethnic cultures, and the minority students also need to accept the local cultures."* [Teacher C]

Likewise, Teacher O, a male teacher from a school with regular enrolment of non-Thai students, shared a school tradition that "*there is a day per week that Karen students can wear Karen traditional outfits, Hmong wear Hmong's, and Thai students wear the Thai traditional ones*".

Next, as the factors at the individual level, teachers with overseas travel experience and no international colleagues are likely to perform CRT practices. The study of Gresham et al. (2014) also discovered a positive correlation between teachers' abroad experiences and CRT. Intercultural experiences, such as travelling abroad, affect teachers' positive initial attitudes toward CRT. In contrast to overseas experiences, having intercultural colleagues negatively affects teachers' CRT practices in northern Thailand. Their intercultural colleagues in Thai public schools are likely to be the bilingual assistant teachers and administrative staff hired locally to look after specific groups of students, such as migrant students with poor Thai language proficiency (Nawarat, 2019). Subsequently, Teacher P shared the following excerpt about her colleagues who were Hmong:

> *"We have school staff who are Hmong from the village. When I want students to do some tasks, I will ask the staff to check for me… When I have to visit students' families, some parents want to talk, but they cannot speak Thai. I will ask these colleagues to go with me."* [Teacher P]

Similar to Teacher P, certain interviewees explained that if such staff was around, they often relied on those co-workers when encountering cultural diversity-related tasks. Likewise, when asked to recommend necessary support for teaching in a multicultural setting, Teacher E, a female teacher, stated as follows:

> *"I need bilingual teachers who are fluent in the students' language to help us on the ground. It is faster…because if they send us to the training…well, it may work...but we will not use it so much…it is better to just let those teachers handle it."* [Teacher E]

Given this discourse, teachers tend to perform CRT less if intercultural co-workers are available, especially in communication domain. The findings do not suggest that having bilingual teachers would worsen Thai teachers' ability to perform culturally responsive teaching because the CRT variable in the model represented teachers' self-reported frequency of implementing culturally responsive pedagogy. The negative associatetion could be explained by the phenomenon that Thai teachers' tasks that need to be culturally responsive adjusted, such as translating teaching contents to students' preferred language or find non-traditional communication strategies to talk with non-Thai parents, were heavily lighten by bilingual co-workers.

In summary, the study found that intercultural sensitivity was the most significant factor influencing teachers' perceived frequency of adjusting instruction, communicating with

students and parents, and setting up an inclusive classroom environment. Intercultural sensitivity perceived by teachers engaging with migrant and ethnic minority students in northern Thailand involves interaction engagement, interaction confidence, and respect for cultural differences. Likewise, other than teachers' attitudes, their personal experience and schools' characteristics also determine CRT practices.

CONCLUSION AND IMPLICATION

This current study contributed statistical evidence of the influence of teachers' intercultural sensitivity on the perceived frequency with which they perform CRT. The more teachers embrace positive attitudes toward cultural differences, the more they take ethnically diverse students' lived experiences into account for teaching and class facilitation. Consequently, the study's findings suggested that teachers examine their perception of cultural diversity to ensure students' learning efficacy under the inclusive education framework. On the other hand, as a policy implication, teacher education and training institutes could conceptualise a framework for intercultural competence-related courses and training based on the components of intercultural sensitivity discovered under the school context of Northern Thailand. Moreover, teacher education curriculums may encourage pre-service teachers to expose themselves to overseas environments, such as incorporating short-term exchange study programmes and cultural exchange activities with culturally distinct counterparts.

At the school level, school administrators of large-size schools and schools with a minimal frequency of ethnic minority students' enrolments are recommended to initiate administrative policies supporting non-Thai students, such as creating a support network among teachers, accommodating cultural inclusivity in schools' facilities, and encouraging multicultural extracurricular activities. Furthermore, this study emphasised that teachers from large schools have less flexibility in instruction adjustment due to a strong focus on the school's average academic performance. Therefore, to encourage teachers' CRT practices, the schools are suggested to consider alternative learning indicators and measurements when students' ethnical backgrounds are highly varied, in cooperation with the educational service area office.

This study validated the importance of cultivating intercultural sensitivity in teachers to reinforce teaching practices that are responsive to ethnic minority students' identities and lived experiences. However, the study has some limitations. First, the actual CRT practices in the classrooms were beyond the scope of this research. It is essential to observe how CRT is practised differently among teachers with different levels of intercultural sensitivity. Hence, for future studies, CRT practice observation protocols for Thai schools' context can be invented based on the CRT's components found in this study and utilised for measuring actual CRT practices in classrooms. Also, the study sample was limited to a regional population. The recommendations can be used in provinces adjacent to Myanmar, Lao PDR, and Cambodia, as the combination of students' ethnicities in schools is similar to this study's. Nevertheless, future research is recommended to scale up with a more extensive and diverse population to compare the effect of intercultural sensitivity on teachers' teaching practices with regions that host a more complicated mixture of ethnic and religious differences, such as the southern region where Muslims and Buddhists coexist.

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APPENDIX 1

Interviewees' information

Interviewee	Age	Gender	Education	School type	School size	Minority student enrolments	Teaching subject
A	40	Female	B.A.	Public	L	Every year	English
B	39	Female	M.A.	Public	M	Every year	Thai language, English, Social studies
C	39	Female	M.A.	Public	M	Every year	Thai language, Math, Science
D	38	Female	M.A.	Public	S	Every year	All subjects
E	33	Female	B.A.	Public	S	Every year	All subjects
F	43	Female	M.A.	Public	M	Every year	P.E.
G	32	Male	M.A.	Public	M	Every year	English
H	29	Female	B.A.	Public	M	Every year	Thai language
I	30	Female	B.A.	Private	XL	Every year	Social studies
J	27	Male	B.A.	Public	M	Every year	Thai language
K	34	Female	B.A.	Public	M	Rarely	Thai language, P.E., Music and Art
L	24	Male	B.A.	Public	S	Every year	Science
M	27	Female	B.A.	Public	S	Some year	All subjects
N	36	Female	B.A.	Public	M	Every year	Math, Music and Art
O	27	Male	B.A.	Public	M	Some year	Science, Career and Technology
P	26	Female	B.A.	Public	S	Every year	English
Q	45	Male	M.A.	Public	M	Every year	English
R	35	Female	M.A.	Public	M	Every year	Math
S	55	Female	B.A.	Public	M	Rarely	Math

APPENDIX 2

List of interview questions

• Have you ever worked in a monoethnic classroom? If so, compared with experiences teaching in a class with only Thai students, do you find any differences in teaching in multicultural classes?

• Do you do any special preparation if an ethnic minority or migrant student will be joining your homeroom class in the upcoming academic year? If so, how?

• Does ethnic or cultural diversity in the class affect how you adjust the teaching or facilitating approach? If yes, could you elaborate on the decision in detail?

• How do you support or help your students who could not catch up with the lesson because of their Thai language proficiency?

• Do you usually adjust the curriculum or learning contents? If yes, in what sense and how would you decide on the adjustment?

• Do you usually adjust the learning measurement and the evaluation of learning success from the core curriculum? If yes, could you elaborate more on the decision in detail?

• How would you handle students who barely communicate in the language you can speak?

• How do you usually build personal relationships between you and your homeroom students?

• Could you elaborate on the interaction or relationship between students in your class?

• Do you use any strategies to encourage unity among students in your class?

• What do you usually do during your visit to students' families for a mandatory observation?

• How do you communicate with student's parents if they do not speak your language well?

• At the current school, do you receive any support or advice from your colleagues or supervisors regarding teaching or facilitating in classes where students come from different ethnic backgrounds?

APPENDIX 3

Original Intercultural Sensitivity Scale (ISS) of Chen and Starosta (2000)

Please rate your opinion regarding each statement on a scale from "Strongly disagree (1)" to "Strongly agree (5)" by cycling the number listed.

	Strongly disagree ← → Strongly agree				
1. I enjoy interacting with people from different cultures.	1	2	3	4	5
2. I think people from other cultures are narrow-minded.	1	2	3	4	5
3. I am pretty sure of myself when interacting with people from different cultures.	1	2	3	4	5
4. I find it very hard to talk in front of people from different cultures.	1	2	3	4	5
5. I always know what to say when interacting with people from different cultures.	1	2	3	4	5
6. I can be as sociable as I want to be when interacting with people from different cultures.	1	2	3	4	5
7. I don't like to be with people from different cultures.	1	2	3	4	5
8. I respect the values of people from different cultures.	1	2	3	4	5
9. I get upset easily when interacting with people from different cultures.	1	2	3	4	5
10. I feel confident when interacting with people from different cultures.	1	2	3	4	5
11. I tend to wait before forming an impression of culturally-distinct counterparts.	1	2	3	4	5
12. I often get discouraged when I am with people from different cultures.	1	2	3	4	5
13. I am open-minded to people from different cultures.	1	2	3	4	5
14. I am very observant when interacting with people from different cultures.	1	2	3	4	5
15. I often feel useless when interacting with people from different cultures.	1	2	3	4	5
16. I respect the ways people from different cultures behave.	1	2	3	4	5
17. I try to obtain as much information as I can when interacting with people from different cultures.	1	2	3	4	5
18. I would not accept the opinions of people from different cultures.	1	2	3	4	5
19. I am sensitive to my culturally-distinct counterparts' subtle meanings during our interaction.	1	2	3	4	5
20. I think my culture is better than other cultures.	1	2	3	4	5
21. I often give positive responses to my culturally different counterpart during our interaction.	1	2	3	4	5
22. I avoid those situations where I will have to deal with culturally-distinct persons.	1	2	3	4	5
23. I often show my culturally-distinct counterpart my understanding through verbal or non-verbal cues.	1	2	3	4	5
24. I have a feeling of enjoyment towards differences between my culturally distinct counterpart and me.	1	2	3	4	5

APPENDIX 4

Original Culturally Responsive Teaching Scale of Hsiao (2015)

Please rate your practice regarding each behaviour on a scale from "Unprepared (1)" to "Fully prepared (6)" by cycling the number listed.

I am able to:	Unprepared ← → Fully prepared					
1. infuse the curriculum and thematic units with the culture of students represented in the classroom.	1	2	3	4	5	6
2. review and assess curricular and instructional materials to determine their multicultural strengths and weaknesses, and relevance to students' interest and instructional needs, and revise them if necessary.	1	2	3	4	5	6
3. develop a repertoire of instructional examples that are culturally familiar to students to serve as a scaffold for learning.	1	2	3	4	5	6
4. find ways to support language acquisition and enhance culturally and linguistically diverse students' comprehension of classroom tasks.	1	2	3	4	5	6
5. use a variety of assessment techniques, such as self-assessment, portfolios, and so on, to evaluate students' performance in favour of cultural diversity.	1	2	3	4	5	6
6. design assessments to complement the culturally responsive pedagogical strategies that were employed during instruction.	1	2	3	4	5	6
7. assess culturally diverse students' readiness, intellectual and academic strengths and weaknesses, and development needs.	1	2	3	4	5	6
8. utilize a variety of instructional methods to match students' learning preferences in learning the subject matter, and maintaining their attention and interest in learning.	1	2	3	4	5	6
9. know how to communicate with culturally diverse students and their parents or guardians.	1	2	3	4	5	6
10. structure classroom-based meetings that are comfortable for parents.	1	2	3	4	5	6
11. foster meaningful and supportive relationships with parents and families, and actively involve them in their students' learning.	1	2	3	4	5	6
12. use non-traditional discourse styles with culturally diverse students in an attempt to communicate in culturally responsive ways.	1	2	3	4	5	6
13. communicate expectations of success to culturally diverse students.	1	2	3	4	5	6
14. establish expectations for appropriate classroom behavior in considering students' cultural backgrounds to maintain a conducive learning environment.	1	2	3	4	5	6
15. develop and maintain positive, meaningful, caring, and trusting relationships with students.	1	2	3	4	5	6
16. create a warm, supporting, safe, and secure classroom environment for culturally diverse students.	1	2	3	4	5	6
17. create a community of learners by encouraging students to focus on collective work, responsibility, and cooperation.	1	2	3	4	5	6
18. provide students with knowledge and skills needed to function in mainstream culture.	1	2	3	4	5	6

APPENDIX 5

Revised Culturally Responsive Teaching Scale of Hsiao (2015)

Please rate your practice regarding each behaviour on a scale from "Never (1)" to "Always (5)" by cycling the number listed.

	Never ← → Always				
1. I infuse the curriculum and thematic units with the culture of students represented in the classroom.	1	2	3	4	5
2. I review and assess curricular and instructional materials to determine their multicultural strengths and weaknesses, and relevance to students' interest and instructional needs, and revise them if necessary.	1	2	3	4	5
3. I develop a repertoire of instructional examples that are culturally familiar to students to serve as a scaffold for learning.	1	2	3	4	5
4. I find ways to support language acquisition and enhance culturally and linguistically diverse students' comprehension of classroom tasks.	1	2	3	4	5
5. I use a variety of assessment techniques, such as self-assessment, portfolios, and so on, to evaluate students' performance in favour of cultural diversity.	1	2	3	4	5
6. I design assessments to complement the culturally responsive pedagogical strategies that were employed during instruction.	1	2	3	4	5
7. I assess culturally diverse students' readiness, intellectual and academic strengths and weaknesses, and development needs.	1	2	3	4	5
8. I utilize a variety of instructional methods to match students' learning preferences in learning the subject matter, and maintaining their attention and interest in learning.	1	2	3	4	5
9. I know how to communicate with culturally diverse students and their parents or guardians.	1	2	3	4	5
10. I structure classroom-based meetings that are comfortable for parents.	1	2	3	4	5
11. I foster meaningful and supportive relationships with parents and families, and actively involve them in their students' learning.	1	2	3	4	5
12. I use non-traditional discourse styles with culturally diverse students in an attempt to communicate in culturally responsive ways.	1	2	3	4	5
13. I communicate expectations of success to culturally diverse students.	1	2	3	4	5
14. I establish expectations for appropriate classroom behavior in considering students' cultural backgrounds to maintain a conducive learning environment.	1	2	3	4	5
15. I develop and maintain positive, meaningful, caring, and trusting relationships with students.	1	2	3	4	5
16. I create a warm, supporting, safe, and secure classroom environment for culturally diverse students.	1	2	3	4	5
17. I create a community of learners by encouraging students to focus on collective work, responsibility, and cooperation.	1	2	3	4	5
18. I provide students with knowledge and skills needed to function in mainstream culture.	1	2	3	4	5