Culturally Relevant Education for a Multicultural Singapore

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Abstract

With an increasingly diverse Singapore population, there is a need to consider if Singapore teachers are sufficiently equipped with the relevant skills and knowledge to cater to the needs of a more diverse student population. A literature review was conducted to examine and learn from the experiences of other countries and education systems. The literature review identified three major approaches to teaching culturally diverse students through culturally relevant education: multicultural education (ME), culturally responsive teaching (CRT), and culturally relevant pedagogy (CRP). This paper provides a summary of each approach, and its implications for teachers, their practice, as well as for teacher education. Finally, the paper will look at the implications for Singapore's multicultural society.

Introduction

Singapore's goals of education include nurturing our students to become good persons in character, nurturing responsible citizens who promote social cohesion and contribute to society, and guiding all our students to realise their full potential in both academic and non-academic areas (Heng, 2011; Ministry of Education, 2016b; Tan C. & Tan, C.S., 2014). In our efforts to educate our students, we constantly seek to improve by learning from other education systems. In this paper, we seek to understand and assess the relevance of culturally relevant education (CRE) to our Singapore context, particularly how CRE can enable us to cater better to the needs of an increasingly diverse student population, continue to nurture students who are socio-culturally sensitive and to contribute to maintaining racial harmony in Singapore (Tan C. & Tan C.S., 2014).

Singapore's History and Multicultural Context

A nation built through the hard work of early immigrants (Yeoh & Lim, 2012), Singapore prides herself on her ability to maintain harmony amongst her different ethnic, racial and religious groups (Channel Newsasia, 2016; Lee, 2015). As a result of below-replacement fertility rates and longer life expectancy, Singapore, similar to many other developed countries, is facing the prospect of an ageing population (National Population & Talent Division, Singapore Department of Statistics, Ministry of Home Affairs, & Immigration & Checkpoints Authority, 2016). Together with the effects of globalisation and in order to sustain economic development, Singapore has been experiencing a steady growth in the population of both residents and non-residents due to the increasing need for immigrants and a larger foreign workforce. In 2014, Singapore took in about 29,000 new citizens, with plans to take in 15,000 to 25,000 new citizens each year (National Population & Talent Division, Singapore Department of Statistics, Ministry of Home Affairs, and Immigration & Checkpoints Authority, 2015). At the end of June 2016, Singapore had about 3.93 million residents, of which 0.52 million were permanent residents (Singapore Department of Statistics, 2016). In addition, there were 1.67 million non-residents in June 2016, including foreign domestic workers, dependents and international students (National Population & Talent Division et al., 2016).

Although the ethnic mix of Singapore has been kept stable by the government from 2005 to 2016, there has been an increase in the percentage of Indians, from 8.3% in 2005 to 9.1% in 2016, and an increase in 'Others' from 2.0% to 3.2%, with a drop in the Malay and Chinese percentages (Singapore Department of Statistics, 2016). While the ethnic mix has remained stable, there has been anecdotal and social media evidence of tension between the 'native' Chinese and the 'imported' Chinese, particularly those from mainland China (Chan K.O.K., 2013; Jacobs, 2012; Sim, 2015b). Similarly, there are both articulated and unexpressed tensions between the 'native' Indians and Indian expatriates (Noor & Leong, 2013; Teh, 2009). The Prime Minister of Singapore, Mr. Lee Hsien Loong, has raised the issue of potential new fault lines, such as those between existing citizens and new citizens (Loh & Han, 2014; Lee, 2014). Interestingly, in a rare local

study on our teachers' perceptions of cultural diversity in Singapore, three of the six teacher participants highlighted a cultural divide which the researchers suggested may not be addressed by our existing formal curriculum – the divide between Singaporeans and new immigrants (Alviar-Martin & Ho, 2011). Similarly, social anthropologist Lai Ah Eng has observed that native Singaporeans of various races believe they have more in common amongst themselves than with immigrants from similar ethnic backgrounds (as cited in Sim, 2015b). Recent literature has also noted that Singapore's discourse on cultural diversity has shifted from a discourse focusing on race to a discourse on how immigrants have changed the cultural fabric of Singapore (Lim, Yang, Leong, & Hong, 2014; Noor & Leong, 2013).

However, while the focus recently might have been on Singaporeans' unhappiness with immigrants, there are signs that racial harmony has not been fully achieved. Although a 2016 survey by the Institute of Policy Studies revealed that 96% of the Singaporeans surveyed respect other races and believe that all races should be treated equally, about half of the respondents held negative stereotypes of other races (Mathews, 2016). There is still in-group preference, with respondents preferring to associate more closely with people of their own race (Mathews, 2016). This state of affairs, together with the changes in demographics and the aftermath of '9/11', suggests that racial harmony, defined by the government as appreciating and celebrating diversity in culture while remaining united as one people, is becoming increasingly more difficult to sustain (Ismail & Shaw, 2006; PM Lee in Nair, 2016). The challenge, particularly important for a young nation, is how to preserve and celebrate the different cultures while building a common sense of identity as Singaporeans. This challenge resonates with the challenge in multicultural education, which is to promote both a common sense of citizenship and the plurality of cultural identities (Dvir, Aloni & Harari, 2015; Gay, 2013; Ho, 2009: Tan & Tan, 2014; Vavrus, 2008). Spring (1995) notes that multicultural education is especially critical, given the current global migration of peoples which can lead to tension, as seen in Singapore, between local and newly arrived immigrant cultures. He further notes the role of multicultural education in helping immigrants adjust to and integrate into new cultures.

Multiculturalism in Singapore

Singapore's official narrative on diversity is reflected in the national pledge: "We, the citizens of Singapore, pledge ourselves as one united people, regardless of race, language or religion…" (National Heritage Board, n.d.). This is reinforced by Singapore's emphasis on building a just and fair society based on meritocracy, in which people achieve success through their ability and hard work, and not based on their background or the colour of their skin (Lim et al., 2014; Lee, 2015; Tan & Low, 2016). In the area of housing, Singapore has implemented an ethnic integration policy to prevent the development of ethnic enclaves, and to ensure that people from different races live in close proximity and have opportunities to interact in common spaces (Noor & Leong, 2013). In addition, Singapore has various structures in place to maintain racial and religious harmony, including a Steering Committee on Race and Religious Harmony, Inter-racial and Religious Confidence Circles (IRCC), inter-faith dialogues, and the Community Engagement Programme (Low, 2016; Lee, 2015).

Multiculturalism in education

In the education field, Singapore progressively brought the separate vernacular English, Chinese, Malay and Tamil schools together, and all schools now use English as the main medium of instruction (Lee, 2015). This was a deliberate policy decision to develop schools as common spaces to support social integration, where the various races could interact and develop bonds (Ministry of Education, 2010) as one people. However, to enable the different communities to maintain their sense of identity, culture and values, Singapore has implemented the mother tongue language policy which requires every child to study his/her mother tongue as a second language (Noor & Leong, 2013). Textbooks are used by mother tongue teachers to teach not only the language but also cultural values, folklore and traditions (Ang, 2008). Students who are interested in learning another language other than their mother tongue may choose to attend Conversational Malay/ Chinese classes. As part of the National Education initiative, which was launched in 1997 to emphasise meritocracy, and multiracial and multi-religious harmony, Singapore schools observe Racial Harmony Day and International Friendship Day (National Library Board, 2016). Racial Harmony Day commemorates the communal riots that

broke out on 21 July 1964 between Malays and Chinese, reminding Singaporeans of the critical need to develop interracial understanding so as to preserve harmony (Loh & Han, 2014). To celebrate Racial Harmony Day, schools organise various cross-cultural activities in which students dress up in ethnic costumes, sample ethnic food, or learn more about other cultures and their heritage. The literature indicates that at the policy level Singapore already practises multiculturalism, which has two key dimensions: recognition of cultural diversity, and social equality for all, including members of minorities (Castles, 2004).

Students of different ethnic groups attend the same schools, taught by teachers from various ethnic groups, including new immigrants from countries such as China and India. To date, there have been no major issues arising from this ethnic diversity in both teacher and student populations. However, given the more diverse Singapore population and the differences in cultures, values and worldviews amongst even people of the same race, it is pertinent to ask if there is a need for our increasingly culturally diverse educators to be aware of the corresponding increase in student diversity, and to consider how to cater to such diversity. Is it sufficient for our teachers to teach as per the norm, "regardless of race, language or religion", or is it timely to review this assumption and question if there is a need to equip our teachers with additional skills or knowledge to teach a more diverse student population, particularly immigrant children who may have difficulty fitting into a new culture (Spring, 1995). Similarly, is there a need for our students to learn how to relate to increasingly diverse classmates? In a 2004 study of six primary schools in Singapore, it was found that inter-ethnic mixing amongst students was minimal in nature, with over 70 percent of students spending their break time with friends of the same race (Lee et al., 2004, cited in Tan, C., 2011).

Variance in Performance
In addition, although Singapore has consistently been amongst the top countries in global school rankings (Goy, 2015; Ng, J.Y., 2015), and students across all races have generally performed well by Singapore's own indicators (refer to Annex A), there are concerns that the Malay community still lags behind the other races in education and thus

employability (Association of Muslim Professionals, 2011; Ismail & Shaw, 2006; Stimp, 1997; Sim, 2015a). For example, although there was an improvement in the percentage of Malay PSLE students scoring A* to C grades in Standard Mathematics (from 58.9% in 2006 to 61% in 2015), the percentage was the lowest amongst the four races (Chinese, Indian, Malay and Others) (Ministry of Education, 2016a). Similarly, although Malay students improved the most in terms of the percentage of O level students achieving at least five O level passes (from 60.3% in 2006 to 66.5% in 2015), this percentage was again the lowest amongst the four races. At the national level, income wise, while Malays, similar to the other races, have seen an increase in income, the increase has occurred at a slower pace than that of the other races (Association of Muslim Professionals, 2011).

In summary, the changing demographics together with some unevenness in academic performance amongst the races suggest that there is a need to question if our education system is still meeting the needs of our students, and how a culturally relevant education approach might help us to better fulfil the potential of all our students, whilst enabling Singapore to maintain the social cohesion which is critical to the survival and progress of our nation (Ho, 2009). According to the literature, culturally relevant education enables students to maintain (and affirm) their cultural integrity and supports their efforts to succeed academically (Hernandez, Morales, & Shroyer, 2013).

Overview of Multicultural Education and Culturally Relevant Education

With the above questions in mind, the authors conducted a literature review to learn from the experiences of other countries and other education systems in catering to the needs of a culturally diverse student population. Local literature was also reviewed, but there is currently limited relevant literature. From the literature review, although there is an expansive variety of approaches and terminologies, there appears to be three major approaches to teaching culturally diverse students: multicultural education (ME), culturally responsive teaching (CRT), and culturally relevant pedagogy (CRP) (Aronson & Laughter, 2016; Hernandez et al., 2013). Aronson and Laughter coined the inclusive term of Culturally Relevant Education (CRE), to include both

CRT and CRP. This paper provides a summary of each of the three approaches and its implications for teachers as well as for teacher education. Finally, the paper will look at the implications of CRE for multicultural Singapore.

Despite the differences in approaches and terms, many researchers refer to the concept first originated by Moll and colleagues (1992) that students' homes and community offer "funds of knowledge", both cultural and cognitive resources, which can be used by teachers to help students learn more effectively by relating new knowledge/skills to their existing knowledge/skills. The different approaches (ME, CRT & CRP) aim to help students learn better by affirming and harnessing their cultural strengths. Another common thread amongst the various approaches is a push for social justice and equity in education, with the classroom as a site to achieve social change (Aronson & Laughter, 2016; Banks, 1993). In addition, the work of both Ladson-Billings on CRP and Gay on CRT evolved from multicultural education, with a corresponding overlap in goals (Gay, 2015; Ladson-Billings, 1992; Vavrus, 2008). In examining the literature on ME, CRT and CRP, we need to be cognisant of their origin in the unique history of the United States, which is different from Singapore's.

Much of the literature assumes an understanding of culture, which is generally referred to without being defined. Nieto (2000, p. 138) provides a useful broad definition of culture, which is a complex concept: "the values, traditions, social and political relationships, and worldview created, shared, and transformed by a group of people bound together by a common history, geographic location, language, social class, and/or religion" (cited in Vavrus, 2008, p. 53). In Singapore, references to cultural diversity are similarly varied: multiracial, multi-racialism, multi-religious, multilingual, multicultural and multi-ethnic (Channel Newsasia, 2016; Ismail & Shaw, 2006; Loh & Han, 2014; Low, 2016; National Library Board, 2016). In addition, while much of the literature examined implies a reference to ethnic culture, we need to bear in mind the concept of a national/community culture. Being Singaporean in itself constitutes a culture, so should our education cater to the different ethnic cultures or to our joint culture as Singaporeans? Can we articulate or pin down what constitutes a

Singaporean culture? These are questions we need to keep in mind while examining the literature on ME, CRT and CRP.

Multicultural Education

Of the three approaches identified, multicultural education (ME) had the earliest beginning in the 1960s, rooted in the Civil Rights Movement for educational equality in the United States (Banks, 2004; Gollnick & Chinn, 2013; Sleeter & Grant, 2009; Vavrus, 2008). During the late 1960s and early 1970s, under the African American ethnic studies movement, African Americans pushed for African American teachers and administrators, and the integration of ethnic content, particularly Black history and culture, into the curriculum. During this period, the demand was for separate courses; demand for the integration of ethnic content into the mainstream curriculum emerged only in the 1980s and 1990s. Although the demand for educational equality originated with the African Americans, over time other ethnic groups of colour who felt victimised by institutionalised racism and discrimination in the United States, such as the Mexican Americans, American Indians and Asian Americans, began to speak up. The first phase of multicultural education began when educators with an interest in the history and culture of ethnic groups initiated effort to incorporate theories and concepts from the ethnic studies movement into school and teacher education curricula. The second phase emerged when educators realised that just integrating ethnic content into curricula was not sufficient, and that it was necessary to make structural and systemic changes at the school level to achieve educational equality.

Since then multicultural education has continued to evolve in order to adapt to changing needs. Modern conceptions of multicultural education cover racial, language, social, cultural, and gender issues (Sleeter & Grant, 2009). The universal goal expressed in multicultural education is that regardless of their race, culture, gender, sexual orientation, or socioeconomic status, all students should enjoy equal opportunities to succeed in their academic pursuits (Banks, 2013).

In a review of the historical development of multicultural education in 2004, as well as in a more recent publication in 2013, Banks (2004,

2013) proposed that the various approaches to ME be organised under five dimensions:

a)   Content integration

b)   The knowledge construction process

c)   Prejudice reduction

d)   An equity pedagogy

e)   An empowering school culture and social structure

Content integration refers to the effort to integrate examples and information from various cultures to illustrate theories and concepts in subject disciplines, mainly to affirm the culture and heritage of minority groups, facilitate students' understanding of the subject discipline, and help all students develop more democratic racial attitudes and values by exposing them to other cultures. Banks proposed four approaches to integrating ethnic content into the curriculum: contribution, additive, transformation and social action (Banks, 1993). The contribution approach focuses on holidays, folklore and other discrete cultural elements. In the additive approach, ethnic content or perspectives are added to the curriculum, like an appendix, without changing its actual structure. In the transformation approach, the structure of the curriculum is changed to incorporate the perspectives of various ethnic and cultural groups. Finally, in the social action approach, students are involved in examining various social issues, and taking action to solve these issues (Banks, 1993).

The dimension of knowledge construction requires teachers to help students understand that knowledge does not consist of purely objective and neutral facts. Instead, knowledge is constructed by human beings who are naturally influenced by their own cultural lens, perspectives and biases. An example that would be familiar to Singapore teachers is the Japanese version of the Second World War, as illustrated in textbooks used in Japanese schools. Banks (2004) argues that it is important to go beyond the contribution approach to

content integration, which simply teaches students about discrete cultural elements, to move towards the transformational approach, in which the structure of the curriculum is changed to enable students to view concepts and issues from the perspective of various cultural and ethnic groups.

Prejudice reduction refers to the effort to help students reduce prejudices which research suggests children develop from a very young age (Stathi, Cameron, Hartley, & Bradford, 2014). One strategy to help students develop positive racial attitudes is to expose them to content about various cultures (content integration). Another strategy proposed is to encourage cooperative learning, in which students from different ethnic groups have to work together.

An equity pedagogy exists when teachers deploy different strategies to enable culturally diverse students, particularly those from low income families, to achieve academically. The assumption is that students have cultural strengths and specific learning styles which can be harnessed to enable them to learn more effectively.

Finally, Banks (2004) argues that, beyond the classroom context, it is important to create an entire school climate that makes culturally diverse students feel empowered to grow and to learn. For example, to achieve an empowering school culture, all teachers must believe in and communicate high expectations for all students to achieve, regardless of race, language or religion. Schools must provide the time and space for teachers to get to know their students and their families, develop culturally responsive instructional materials, and reflect on their own biases and how these might impact their instructional practice.

It must be noted that Banks (2004) acknowledged that while his five dimensions serve as a useful way to organise the literature on ME, they are not meant to be exclusive. Indeed, he views the dimensions as interrelated and thus overlapping, just as ME requires institutional changes to be made at various levels including changes in the curriculum content, in teaching materials, in instruction, in the teachers' beliefs and attitudes, and in the culture of the school.

Culturally Relevant Education

In their recent synthesis of research on the teaching of culturally diverse students in different content areas, Aronson and Laughter (2016) proposed the inclusive concept of culturally relevant education (CRE). Aronson and Laugher (2016) identified two primary strands in CRE, one focusing on teaching practice, as illustrated in the work of Geneva Gay on culturally responsive teaching (CRT), and one focused on the teacher's philosophy and beliefs, as exemplified in the work of Gloria Ladson-Billings on culturally relevant pedagogy (CRP). This paper will first explain briefly each strand, and then combine both strands and translate them into what it means for teachers in the classroom as they implement a culturally relevant education (CRE).

Culturally Relevant Pedagogy

Ladson-Billings' concept of culturally relevant pedagogy is predominantly a theoretical and philosophical concept. Her focus is not so much on what teachers should do but on how teachers should think (Ladson-Billings, 2006; Schmeichel, 2012), not so much on a set of strategies as on the need for teachers and students to develop a critical consciousness of social injustices and inequalities, and thus the motivation to address these issues. In 1995, Ladson-Billings published "Toward a theory of culturally relevant pedagogy" (1995a). In that landmark article and in Ladson-Billings (2014), Ladson-Billings suggested that culturally relevant pedagogy must meet three criteria: it must develop students academically and intellectually, develop students' cultural competence to help students understand and honour their cultural identity while acquiring access to the dominant culture, and develop students' critical socio-political consciousness to recognise and challenge social inequities perpetuated by schools and society. Ladson-Billings' study of exemplary teachers of African American students led her to conclude that while their teaching strategies differed, there were similarities in the teachers' ideologies and beliefs which influenced the way they taught and related to their students (Ladson-Billings, 1995b). Ladson-Billings (1995a) explained the concept of CRP using three categories: conceptions of self and others, social relations, and conceptions of knowledge. With respect to conception of students, these exemplary teachers believed that all students were capable of academic success and challenged them to succeed through

a rigorous curriculum. The teachers perceived themselves as members of the larger community, and their pedagogy as an art which they had to continually develop and adapt based on their understanding of their students. With regard to social relations, these exemplary teachers cultivated an equitable and reciprocal relationship with their students, and encouraged their students to learn collaboratively as a community of learners. Finally, with respect to conception of knowledge, in findings similar to Banks' (2004, 2013), Ladson-Billings found in her exemplary teachers the belief that knowledge is socially constructed and thus should be viewed critically, and that assessment should be varied in nature to enable students to represent their understanding in diverse ways.

Although Ladson-Billings' original theory focused on teachers' ideology and beliefs, in response to practitioners' questions on how to implement CRP, she published a book chapter titled "Yes, but how do we do it?" in which she provided some guidelines on how to implement CRP (Ladson-Billings, 2006). In addition, other researchers have built on her original theory and derived from it practical strategies, leading to similarities with strategies advocated under culturally responsive teaching (CRT) (Brown-Jeffy & Cooper, 2011; Howard, 2003; Siwatu, 2007). These strategies will be presented in more detail in the section "Implementation of Culturally Relevant Education".

Culturally Responsive Teaching

In Banks' review of multicultural education research (1993), he noted Gay's critique of the tremendous gap between theory and practice in the field of ME. That could have been the impetus for Gay's introduction of culturally responsive teaching (CRT) which focuses on teaching practice and is more practitioner friendly. Gay defines culturally responsive teaching as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (Gay, 2010b, p. 31). This is based on the assumption that when teachers situate academic knowledge and skills within the lived experiences and frames of references of students, students are more likely to find the knowledge and skills meaningful and interesting, which supports their learning (Gay, 2010b). Gay refers to the use of

students' cultural experiences, heritage and experiences as "conduits" or "filters" (2015, p. 124) for the teaching of academic skills and knowledge to enable student achievement. Gay (2002) outlines five key elements in CRT:

a)   Developing a knowledge base about cultural diversity

b)   Including ethnic and cultural diversity content in the curriculum

c)   Responding to ethnic diversity through the delivery of instruction

d)   Demonstrating cultural caring and building learning communities

e)   Communicating with ethnically diverse students

Although Gay focuses on practice (the teaching aspect), the premise for CRT is similar to CRP in that it is based on the assumption that teachers' beliefs impact their instruction and culture influences teachers' beliefs and how they teach which impacts how students learn, particularly students from a cultural background different from that of the teacher's (Gay, 2015). The key difference is that Gay elaborates how teachers' beliefs and knowledge about culturally diverse learners can translate into changes in their pedagogical skills and practice (Herrera, Holmes, & Kavimandan, 2012).

Similarities between CRP and CRT
The sections above have provided a summary of CRP and CRT and explained how they are distinct from each other. Despite their differences, there are similarities between the two strands. First, both CRT and CRP advocate the use of students' cultures and strengths to validate students' own experiences and help them achieve in school, both academically and socially. Both approaches aim to empower students, and are based on the premise that all students are capable of academic and learning success which is interpreted as more than just high test scores. Both aim to develop students' and teachers' cultural competence and a critical consciousness of social inequality (Aronson & Laughter, 2016). Both emphasise the importance of a strong teacher-student relationship. Both view knowledge as constructed in nature, and

posit that teachers must build bridges to students' existing knowledge and cultural experiences to facilitate learning. For the rest of this paper, the authors will use the inclusive term of culturally relevant education (CRE) in a description of strategies for implementing CRT and CRP.

Implementation of Culturally Relevant Education

This section explains how culturally relevant education (CRE) can be implemented in schools. While the approaches are taken mainly from the literature on CRT, some of these approaches are also advocated by researchers who subscribe to CRP, as indicated in the citations. This section will be organised under headings familiar to teachers and which are also supported by the literature.

Teacher-student relationship (TSR)

Brown-Jeffy and Cooper (2011), in proposing a conceptual framework for CRE using Gay's, Ladson-Billings' and Nieto's principles, suggested five themes. One of the five themes is student-teacher relationships. In Singapore, teachers are more familiar with the term "teacher-student relationship" (TSR).

In Brown-Jeffy's and Cooper's interpretation of this theme, the relationship should involve the teacher caring for the students, and this care would permeate their interactions and create a safe and positive classroom atmosphere. Ladson-Billings (1995a) highlights the importance of social interactions in the classroom, particularly the importance of teachers maintaining "fluid", equitable and reciprocal teacher-student relationships and being able to connect with their students (p. 480). Care for students would include getting to know them intimately as "culturally located individuals" (Savage et al., 2011, p. 183), whether through reading up on their students' cultures, getting to know them and their families, or providing students with opportunities to share how their personal experiences link to what they are learning (Morrison, Robbins, & Rose, 2008).

Teachers should also have and express high expectations of all their students, and encourage them to learn collaboratively as a community of learners (Aronson B.A., 2016; Ladson-Billings, 1995a). In addition, Gay (2010b), Savage and colleagues (2011) highlight the

importance of caring, indicating specifically that caring cannot be a mere feeling or emotion felt by the teacher. Instead, teachers' care for their students must translate into teachers making the effort to cater to students' needs through curriculum content, pedagogy or assessment. Indeed, Gay (2002) argues that "Caring is a moral imperative, a social responsibility and a pedagogical necessity" (p. 109). In general, CRE advocates the importance of teachers communicating high expectations and rejecting the deficit theory that minority students are underperforming due to problems in their homes or cultural environments (Bonner & Adams, 2011; Ladson-Billings, 2006).

In brief, the literature on CRE agrees that first and foremost teachers need to care about ethnically or culturally diverse students and have high expectations of these students, both academically and in their social behaviour (Ford, 2013; Hernandez et al., 2013; Herrera et al., 2012; Morrison et al., 2008; Parker-Jenkins & Masterson, 2013; Vavrus, 2008). This need to both build rapport with students through care and respect and maintain high expectations of students has been aptly described as the "warm demander pedagogy" (Ware, 2006, cited in Billings, 2015; Bonner & Adams, 2011). High expectations are translated into teacher's design of challenging academic curricula, provision of modelling and scaffolding, and creation of a nurturing co-operative learning environment (Morrison et al., 2008).

Interaction between teachers and students from diverse cultural backgrounds requires teachers to learn how to communicate differently with diverse students, informed by knowledge of how their students normally socialise in their cultural settings. Billings (2015) shares research findings on students' discourse or communication styles, which may differ from the social and cultural norms of their school. For example, Billings (2015) reports that African American students engage in a highly interactive style which mirrors conversation styles common in their communities and homes. While not meant to be disrespectful, such a communication style can be misinterpreted by teachers who are not African American. Another example provided is how Apache children show respect by not looking directly at adults, while White children are taught to show respect by looking at the person they are talking to.

It is important that while teachers respect students' culture and heritage, they also help students from different cultural groups develop the necessary cultural and social capital in order to survive and achieve in a school setting (Gay, 2010b, 2015; Howard, 2003; Siwatu, 2007). This would arguably constitute part of teachers' caring for their students, by empowering the latter with the skills to succeed in a school setting, and ultimately in society. For example, teachers might need to teach students the appropriate ways to speak, study and behave in school instead of assuming that they already have the cultural and social capital to do so, or labelling them as disruptive or ill-disciplined when they do not.

Content integration

Integrating ethnic and cultural diversity content into the curriculum is one of Banks' five dimensions of ME (see p. 11) as well as one of Gay's five key elements of CRT (see p. 14). While Ladson-Billings (1995a) did not refer to the integration of content, she observed the need for teachers to help students build bridges in order to facilitate their learning. To address the question teachers were asking, "how do we do it [CRP]?", Ladson-Billings (2006) suggested deconstruction, construction and reconstruction of the prescribed curriculum. Other researchers built on CRP to include the use of students' cultures and heritage as teaching resources to serve as a 'bridge' connecting students' life experiences and their school learning (Young, 2010). Content integration involves teachers' design of curriculum content or learning materials to integrate into the curricula the contributions of various cultures to the subject discipline, or it could involve teachers using students' cultural experiences or frames of reference as a platform to discuss or apply subject skills or content (Hernandez et al., 2013; Morrison et al., 2008; Sparrow & Hurst, 2012; Vavrus, 2008). The rationale for the integration of such content is to make learning more meaningful to students (Gay, 2010b). Douglas (2015) observed that "curriculum that connects to the learner through culture motivates and encourages students to learn" (p. 399).

In her book, "Culturally responsive teaching: Theory, research, and practice", Gay (2010b) included several examples across different subject areas of how content integration could be achieved. For

example, she suggested that teachers could show paintings of different ethnic artists to illustrate various artistic techniques, or use specific cultural contexts to create mathematics problems for students to use algebra to describe real world phenomena. Castagno and Brayboy (2008) suggested that a more culturally responsive science curriculum could include Native American knowledge of nature and plants, a knowledge that would also illustrate a different way of knowing from the traditional scientific way of knowing. Refer to Annex B for selected examples of how teachers have implemented CRE across different subject areas.

An equity pedagogy and assessment

Banks (2004; 2013), in proposing the five dimensions of ME, suggests that an equity pedagogy exists when teachers deploy different strategies to enable culturally diverse students, particularly those from low income families, to achieve academically. The assumption is that students have cultural strengths and learning styles which can be harnessed to enable them to learn more effectively. In order for teachers to apply a plurality of instructional methods to cater to diverse groups, teachers need to develop a knowledge base about cultural diversity, one of five key elements of CRT (Gay, 2002). Similarly, Ladson-Billings (2006) observed that teachers must have a wide repertoire of teaching strategies so as to enable all students to access the curriculum.

Research on learning styles suggests that people from similar cultural backgrounds share common learning styles or interaction patterns (Castagno & Brayboy, 2008; Heffernan, Morrison, Basu, & Sweeney, 2010; More, 1990). The argument is that teachers should be aware of these learning or communication styles, and adapt their instructional methods to cater to students' needs (Kim & Slapac, 2015). For example, co-operative group learning apparently suits the communal cultural systems of African, Native, Asian and Latino American groups (Billings, 2015). Morrison and colleagues (2008) observed how teachers used their understanding of students' discourse and interaction patterns to communicate with and instruct their students, such as by using humour which students could relate to, using rap to help African American students revise content, or using students' native non-English languages to assist students in their learning.

Generally, the literature on CRE promotes a constructivist approach to teaching and learning to help bridge students' cultural experiences to academic knowledge/skills, on the premise that knowledge is socially constructed and teachers thus need to involve students in actively constructing new knowledge by building on their prior knowledge (Dover, 2013; Gay, 2010b; Hernandez et al., 2013). Differentiated instruction is also mentioned by some CRE researchers (Brown-Jeffy & Cooper, 2011; Douglas, 2015; Gay, 2010a; Herrera et al., 2012).

Beyond an equity pedagogy which advocates content integration and a plurality of instructional strategies, the CRE literature also suggests the need to review how assessment can cater to the needs of ethnically and culturally diverse learners, and provide them with opportunities to demonstrate mastery of learning in different ways and beyond standard test scores. For example, Gay (2013) suggested providing various platforms to enable students to show they have mastered learning, such as oral storytelling, photo collages and animation. Similarly, Ladson-Billings (1995a) observed that assessment should be 'multifaceted' and allow for multiple forms of excellence.

Cultural competence and critical consciousness

Developing students' cultural competency and awaking critical or sociopolitical consciousness are two of the three criteria that Ladson-Billings (1995a) has indicated culturally relevant pedagogy should meet. (The three criteria are listed on p. 13.) By cultural competency, Ladson-Billings (1995a) was referring to students' capacity to "maintain their cultural integrity while succeeding academically" (p. 476). The teacher plays a role in helping students to do so, partly through their instructional methods and integration of ethnic or culturally related content. Ladson-Billings (1995a) gave the example of a teacher who used the lyrics of rap songs to teach students the elements of poetry, in the process giving African American students who were adept at rap the opportunity to demonstrate their skills and competency.

Gay (2013) similarly expressed the importance of helping students to acquire cultural competence. She further related this to the importance of teachers developing a knowledge base of different cultural

groups' heritages, experiences and contributions to their subject disciplines (Gay, 2002). Beyond the United States, in Australia, with an increasingly diverse population, intercultural competency for teachers has become a necessity (Buchori & Dobinson, 2015). In the latest theory related to CRE, culturally sustaining pedagogy, Paris (2012) advocated that teachers help young people to sustain the cultural and linguistic competence of their communities.

Developing students' critical or sociopolitical consciousness to enable them to recognise, critique and, where possible, address social injustices and inequities, is another key tenet of CRE (Aronson & Laughter, 2016). Ladson-Billings (1995a) noted that the teachers she observed understood that knowledge is a socially constructed concept, and thus what is presented as 'knowledge' needs to be viewed critically by them and their students. These teachers involved their students in critically analysing and questioning the way knowledge is presented, and how it might reinforce existing social inequities. Brown-Jeffy and Cooper (2011) built on Ladson-Billings' idea by advocating the importance of using the analytical lens of critical race theory, which requires teachers and students to critically analyse how racism might be enacted through the curriculum, school structures or processes.

Many researchers in CRE support the need to develop students' critical consciousness so that they are able to identify, understand, critique and address social injustice and inequities (Codrington, 2014; Dover, 2013; Gay, 2013; Jun, 2016; Kim & Slapac, 2015; Paris & Alim, 2014; Schmeichel, 2012; Tan, C., 2011). Dover (2013) provided an example from Gutstein's study (2003) in which students used mathematics to analyse racial and socioeconomic trends in data like food distribution and the number of times a person is pulled over by the police (also known as traffic stops). Students' critical consciousness can be developed through a subject discipline or through discrete and explicit teaching on and discussion of social injustice and inequities, racism, and stereotypes (refer to Annex B for examples). Gay and Kirkland (2003) further argued for the need to develop teachers' own critical consciousness during pre-service teacher education, which will be discussed in more depth in the section on how to prepare teachers to implement CRE.

Summary of CRE

To summarise, CRE permeates the curriculum, instruction and assessment. It involves the nurturing of a reciprocal, respectful relationship between teachers and students, and amongst students. Beyond teaching students academic skills and knowledge, teachers empower students to think critically about knowledge, and to be aware of how institutions, including schools, may reinforce social injustice and inequities, so that they may learn how to address such inequities to succeed in life. Teachers lead, care for and inspire students in order to develop them as confident people who can think critically and independently, and concerned citizens with a strong sense of civic responsibility who take action to better the lives of fellow citizens (Ministry of Education, 2016b).
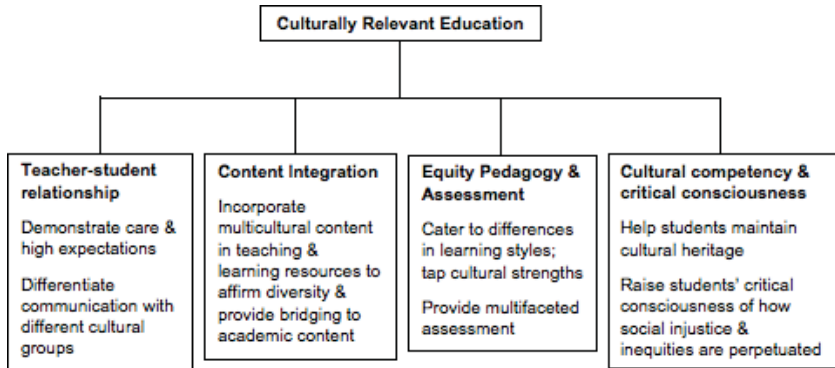

Figure 1. A summary of CRE for teachers

Preparing Teachers to Implement Culturally Relevant Education

The key premise underlying preparing teachers for CRE is that teachers' beliefs and perspectives about different cultural or racial groups influence their instructional practice as well as how they relate to culturally diverse students, which in turn impacts the students' sense of efficacy and confidence, which in turn impact their performance in school (Castagno & Brayboy, 2008; Gay, 2010a; Gay & Kirkland, 2003; Ladson-Billings, 1995b, Villegas & Lucas, 2002). It is therefore

important to provide opportunities for teachers to converse about, articulate, reflect on and critique their personal beliefs about their own ethnic and religious identity, about their culturally diverse students, and about how these beliefs impact their instructional practice, and how they may need to change their instructional practice andbehavior (Aronson, Amatullah, & Laughter, 2016; Berthelsen & Karuppiah, 2011; Gay, 2010a; Gay & Kirkland, 2003; Howard, 2003; Liu & Milman, 2013; Lowenstein, 2009; Young, 2010). Jovanovic, Simic and Rajovic (2013) proposed explicitly teaching student teachers the theory of labelling, attribution theory, and other theories on prejudice, while Gay (2013) suggested teaching teachers to conduct a deep cultural analysis of textbooks or other instructional materials for cultural bias (critical consciousness) and to refine or design materials to better represent diverse cultural perspectives (content integration). To effectively implement CRE, teachers need to explicitly reject deficit theorising and instead assume agency and responsibility for the learning of all their students, regardless of race, language, religion or family background (Berryman, Ford, Nevin, & SooHoo, 2015; Savage et al., 2011). A simple illustration of this difference in mindset is the difference between the teacher thinking that there is a need to conduct remediation because the students are underachieving, and the teacher thinking that there is a need to remediate his/her own teaching practice.

Furthermore, the literature suggests that teachers need a knowledge base about cultural diversity, and the cultural characteristics, discourse or communication styles, and contributions of different cultural groups to their subject disciplines (Castagno & Brayboy, 2008; Gay, 2002; Vavrus, 2008). This knowledge base, one of Gay's (2002) five key elements of CRT, is required to enable teachers to replace deficit views of culturally diverse students with more positive perceptions and a deeper understanding of their students' cultural heritage and frames of reference (Gay, 2013). The literature also suggests a need for teachers to be aware of and to understand the learning and communication styles associated with specific ethnic or culture groups (More, 1990; Yang & Kim, 2011).

In the local literature, which is scarce, Khoo and Lim's (2004) investigation of 348 student teachers' stereotypes of ethnic groups

revealed the need for teachers to engage in self-reflection in order to be aware of their own biases and stereotypes. Similarly Chan, K.O.K. (2013) and Berthelsen and Karuppiah (2011) suggested the need for our teachers to reflect on their worldviews and biases, and how these influence their teaching practice. Chan (2013) further recommended the need for teachers to develop their cultural competence and their inter-cultural communication skills. She noted that none of the 25 student teachers whom she studied indicated a need to critically examine current social and structural practices in Singapore's education system, and how these might marginalise certain students. In other words, Chan (2013) noted the need for our teachers to develop their own and their students' cultural competence and critical consciousness, which are key requirements for CRE as indicated in Figure 1. In brief, in preparing teachers to implement CRE, it is important to influence their deeply rooted beliefs about different races and cultures, as well as equip them with the knowledge and skills to develop their cultural competency.

Models for Teacher Education

Melnick and Zeichner (1995) offered two frameworks for incorporating multicultural education and diversity content within teacher education programmes: infusion or segregation, and culture-specific or culture-generic approaches. Programmes implementing an infusion approach aim to address issues of diversity in all offered courses for pre-service teachers, while the segregation approach proposes distinct courses on diversity in the classroom (Melnick & Zeichner, 1995). For example, programmes with a segregation approach may offer separate courses instructing student teachers on the theory of labelling or attribution theory (Jovanovic et al., 2013), while infusion programs integrate and teach these theories in the subject discipline courses, which is what Billings (2015) advocated. The National Institute of Education (NIE) currently adopts the segregation approach with various CRE-related courses for pre-service teachers (refer to Annex C).

Research suggests that the segregation, single course approach has limited long term effect on the beliefs and teaching practice of teachers (Lowenstein, 2009). To meaningfully infuse multicultural issues into the teacher education programme requires an extensive discussion amongst teacher educators to develop a shared vision of a culturally

relevant teacher, and a systematic integration of multicultural issues into the curriculum, to ensure that these issues are central and not peripheral (Villegas & Lucas, 2002). For example, if teacher educators feel it is important that trainee teachers know their students, one requirement during the practicum could be for trainee teachers to build profiles of their students and to explain how this 'fund of knowledge' was used to help them design their lesson plans. As another example, if teacher educators feel that it is important for teachers to develop socio consciousness of their own sociocultural identities and how they perceive other cultures, the teacher educator programme would need to allocate time and space for teachers to engage in autobiographical reflection.

In the second framework of a culture-specific or culture-generic approach, teacher preparation programmes can either teach trainee teachers how to cater to specific cultural groups, or equip teachers with the skills to engage students from any cultural background. A culture-specific programme aims to raise teacher's cultural sensitivity to the specific community of students that they will be teaching, for example, the Navajos. This is peculiar to some US schools which have more homogeneous student populations. On the other hand, a culture-generic approach focuses on understanding factors that impact cross-cultural interactions, be sensitive to what may contribute to cross-cultural misunderstanding, and thus develops teachers' ability to communicate more effectively with their culturally diverse students and parents. A potential issue with a cultural specific approach, as highlighted in the literature, is that exposing teachers to specific cultural information about students could have the unintended outcome of the teachers generalising and prejudging students (McDiarmid & Price, 1990, cited in Lowenstein, 2009). This sounds a note of caution as to what cultural information teacher educators provide to trainee teachers and how this information may be perceived by the trainee teachers. In addition, it has been suggested that the provision of information (the typical transmission kind of pedagogy) is not sufficient, and that we need to engage trainee teachers through field experience, case studies, reading, and continuous dialogue and reflection on cultural diversity and its implications for pedagogy and instruction (Ellerbrock, Cruz, Vásquez, & Howes, 2016; Lowenstein, 2009).

In addition, while researchers indicate the need to prepare teachers for CRE during pre-service training, Griner and Stewart (2012) emphasised the need for in-service teachers to continue engaging in reflective practice in order to be prepared for the continual changes in student diversity, and to know their students and the latter's community at a deeper level. Vavrus (2008) also stressed the need for teachers to continually engage in deep self-reflection to examine their own beliefs and values about cultural diversity, and to adjust their professional dispositions if necessary. Given that culture is constantly evolving and that there is variety and fluidity even within cultural groups (Ladson-Billings, 2014), teachers need to continually expand their knowledge base about cultural diversity. Gay (2010a, p. 149) provided a good summary of the goals for preparing teachers for CRE, which are to help "move student teachers ideologically from claims of colour blindness to cultural consciousness, pedagogically from awareness of cultural differences to culturally responsive educational actions, morally from tolerance to advocacy of ethnic and cultural diversity".

Challenges and Issues in Implementing Culturally Relevant Education

One key challenge to implementing CRE is that what constitutes cultural diversity is highly contextualised, depending on the country, the region, and even the specific school setting (Gay, 2015). This issue, together with the fluidity and ever evolving nature of cultures particularly with globalisation, urbanisation and cross-cultural influences (Kim & Slapac, 2015; Ladson-Billings, 2014; Paris, 2012), means that it is not possible to derive best practices which can be generalised and applied to all contexts (Fraise & Brooks, 2015; Gay, 2010b; Ladson-Billings, 2014).

Another key challenge lies in the premise that different cultural groups have different ways of communicating, socialising and learning, and that teachers should adapt to these differences. However, the literature suggests that while group members may have certain tendencies in learning or communication styles, there is also substantial within group variation (Howard, 2003; More, 1990; Schmeichel, 2012). Gay (2010b) herself acknowledged that there are always exceptions to any cultural characteristic and learning styles may be influenced by other factors including the degree of ethnic affiliation, education level as well

as socioeconomic status. Philosophically, we also need to question if attributing certain learning styles to specific cultural groups itself constitutes a form of stereotyping, and could be as damaging to the student as the deficit paradigm (Banks, 1993; Kim & Slapac, 2015; Nield, 2009). Practically speaking, even if different cultural groups do possess distinct learning styles, in highly diverse schools such as those in Singapore, how is a teacher to deal with the complexity of first understanding and next addressing all the different learning styles (Dutro et al., 2008)? Alternatively, assuming that all Singaporeans belong to one cultural group, do we have one way of communicating, socialising and learning?

While a large part of this paper has focused on what the teacher could do to implement CRE in the classroom, CRE involves more than interactions within the classroom. As indicated in the literature, teachers implementing CRE need to be supported by an empowering school culture and social structure (Alenuma-Nimoh, 2016; Banks, 2013; Berryman, Egan & Ford, 2016). CRE needs to be experienced by students in their learning experiences at all times (Gay, 2015), whether in the process of being disciplined by the school discipline master, counselled by a school counsellor, or when interacting with school leaders. This underscores the important role of the school leader, who must have a critical awareness of his/her own beliefs concerning different ethnic groups/races and how these beliefs may impact the school, hold high expectations for all students, possess an ethic of care, believe in the value of CRE, and actively support its implementation (Berryman, Egan & Ford, 2016; Johnson, 2006, 2014; Khalifa, Gooden, & Davis, 2016). School leaders need to analyse existing school structures, policies and processes to determine how these might unwittingly support the deficit theory or marginalisation of certain groups of students (Fraise & Brooks, 2015; Horsford, Grosland, & Gunn, 2011). They need to provide time for teachers to develop a culturally relevant curriculum, and time for ongoing staff development and conversations related to diversity issues (Beachum, 2011; Griner & Stewart, 2012).

In addition, teachers and the school need to reach out to parents and the community (Castagno & Brayboy, 2008; Ford, 2013; Griner

& Stewart, 2012; Johnson, 2006, 2014; Ladson-Billings, 1995b; Morrison et al., 2008). Beyond knowing their students well, teachers need to know their students' family members, develop two-way relationships, harness the knowledge parents have of their children, and actively involve parents to realise the full potential of their children (Berryman et al., 2015; Griner & Stewart, 2012). Just as teacher-student relationship is important, so is the teacher-parent relationship. An inspiring example is shared by Bonner and Adams (2011) in their study of CRE in mathematics. The researchers related the case of a teacher who, on realising that her students were not getting help at home with mathematics, reached out to parents by volunteering to teach them the same mathematics content at a night course. She also visited students and their families, and integrated the 'cultural fund' she thus accumulated into her mathematics content (Bonner & Adams, 2011). This teacher's strategy to engage her students' families in supporting the students' mathematics learning is reminiscent of Moll and colleagues' suggestion to involve parents, with their funds of knowledge, as cognitive resources in the classroom (Moll et al., 1992). While desirable, this is a highly time consuming endeavour for teachers who are already struggling to meet standards and achievement targets. In addition, it is not clear how a CRE approach would help schools to work with parents who are largely absent from their children's lives, whether by choice or due to economic necessity.

Indeed, for teachers faced with teaching a standardised curriculum and preparing students for high stakes tests, while they acknowledge the value and the moral obligation to implement CRE they are often unable to find the time to implement CRE in its entirety (Aronson B.A., 2016; Morrison et al., 2008; Young, 2010). Morrison and colleagues (2008) noted that culturally relevant pedagogy is essentially a constructivist pedagogy which is time consuming to implement, and goes against the teacher's inclination to use more efficient methods to prepare students for high stakes tests.

Considering the amount of time and effort that various stakeholders must invest if schools implement CRE in the way described in the literature, the literature offers few empirical studies of teachers' actual use of CRE, and many of these studies involved largely homogeneous

classes, for example, classes consisting mainly of African Americans or of Latinos (Cochran-Smith, 2003; Gay, 2010b, 2013; Morrison et al., 2008). In addition, there is limited research that confirms the impact of CRE (Gay, 2010b; Sleeter, 2012). Although there have been studies across various subject areas which show a positive impact on student outcomes, the outcomes have been mostly in terms of increase in students' motivation, interest, self-efficacy and confidence. Moreover, these studies are usually small scale in nature and, as evident in the literature as a whole, interpret CRE in different ways (Aronson & Laughter, 2016), making generalisation of the impact of CRE difficult.

Please note that this section on implications for Singapore has been removed. If you are interested in this section, you may write to shushing.lee@nie.edu.sg.

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Annex A

Performance of Students in National Examinations

Indicator	Overall Performance (from 2006 to 2015)	Performance by Race (from 2006 to 2015)
Percentage of PSLE students eligible for Express, NA and NT	An improvement from 97.7% to 98.3%	An improvement by all races, particularly the Indians from 95.9% to 98%. Malays also improved but marginally from 93.5% to 94.1% and at the lowest percentage of the 4 races.
Percentage of PSLE students who scored A* - C in standard English Language	A slight drop from 97.5% to 97%	The largest drop was in the Malay category from 94.9% to 91.8%, followed by the Indian from 98.3% to 97.3%.
Percentage of PSLE students who scored A* - C in Mother Tongue Language	A slight drop from 98% to 96.8%	The largest drop was in the Chinese category from 98.2% to 97.0%, followed by the Malay from 99% to 97.9%.
Percentage of PSLE students who scored A* - C in standard Mathematics	A slight improvement from 84.1% to 85.4%	The largest improvement was in the Indian category from 74.7% to 81.6%, followed by the Malay from 58.9% to 61%. While Malay students showed an improvement, their percentage of passes was the lowest of the 4 races.
Percentage of PSLE students who scored A* - C in standard Science	Slight drop from 90.5% to 90.1%	The largest drop was in the Malay category from 75.4% to 72.7% and their percentage was the lowest of the 4 races.
Percentage of O level students with at least 3 O level passes	Slight increase from 95.2% to 96.0%	The largest improvement was in the Malay category from 87.1% to 90.2%, but their percentage was the lowest of the 4 races.
Percentage of O level students with at least 5 O level passes	Slight increase from 82% to 83.7%	The largest improvement was in the Malay category from 60.3% to 66.5% but their percentage was the lowest of the four races.
Percentage of O level students who passed English Language	Slight increase from 86.5% to 88.6%	The largest decline was in the Indian category from 92.4% to 90.3%, but their percentage was the second highest of the 4 races, with Others scoring the highest at 91.3%. While Malay students improved from 80.6% to 82.6%, their percentage was the lowest.

Percentage of O level students who passed Mathematics	Slight increase from 88.4% to 89.4%	The largest improvement was in the Malay category from 68.3% to 71.3%, but their percentage of passes was the lowest of the four races.
Percentage of A level students with at least 3 A Level/H2 passes and pass in GP/K & I	Improvement from 87% to 93.1%	The largest improvement was in the Malay category from 72.1% to 87.1%, but their percentage was the lowest of the four races.
Percentage of P1 co-hort that progressed to post-secondary education	Improvement from 90.8% to 96.7%	The largest improvement was in the Malay category from 82.9% to 93.4%, but their percentage was the lowest of the four races.

Source: Ministry of Education, 2016a

Annex B

Examples of CRE Strategies Across Subjects

Subject	CRE Strategies	Comments
Mathematics	• Teachers involved students in using mathematics to solve authentic community issues. (Tate, 1995, cited in Aronson & Laughter, 2015). • Students wrote journals to connect their learning of mathematics to their personal lives (Ensigh, 2003, cited in Aronson & Laughter, 2015). • Students learnt about racial profiling by using mathematics to examine traffic-stop data (Gutstein, 2003, cited in Aronson & Laughter, 2015). Gutstein involved students in explicitly using mathematics to analyse and understand injustices in society, thus developing students' socio political consciousness in the process.	Sociopolitical consciousness, social action Bridging academic learning to personal experience Content integration Sociopolitical consciousness and social action
Science	• A teacher involved students in a social action project to raise awareness of environmental problems related to a nearby river (Dimick, 2012, cited in Aronson & Laugher, 2015). • Teachers made the effort to find out about the historical contributions of different ethnic groups to the development of science (Jewell Cooper and Catherine Matthews, cited in Hernandez et al., 2013).	Content integration Social action Content integration
Humanities	• Social Studies as a content area to highlight different voices and perspectives, and to facilitate students' critical reflection on the past, or on race and power (Aronson & Laughter, 2015). • A teacher had her students discuss the accuracy of a statement in the Social Studies text "When Washington was elected president, only men who owned property or were wealthy could vote". Students did research and could elaborate on the statement – only rich white men were able to vote – poor white men, blacks and women could not vote.	Content integration Sociopolitical consciousness Content integration Sociopolitical consciousness

English and Language Arts	• In America, teachers used hip hop music and culture to teach Black students about societal issues, literacy, poetry and to provide them with an alternative voice (Aronson & Laughter, 2015). • Students read folktales from a particular culture and wrote their own tales (Dutro et al., 2008).	Content integration Sociopolitical consciousness Content integration
English as a second language	• Teachers encouraged multilingualism and code-switching. • Example of a grade 10 lesson in which students compare and contrast the experiences of early immigrants to the experiences of recent immigrants (in Alenuma-Nimoh, 2016).	Teacher-student relationship Possibly content integration
Subject independent	• Use of a problem posing, issue based approach • Example of a grade 10 lesson in which students compare and contrast the experiences of early immigrants to the experiences of recent immigrants (in Alenuma-Nimoh, 2016)	Sociopolitical consciousness

Annex C

Current courses in NIE with some links to Culture

Participants	Course Description
All Pre-service teachers	**Singapore Kaleidoscope (QED50E)** To remind and encourage pre-service teachers to appreciate Singapore's rich and diverse, natural and cultural heritage Three key strands: • Nature and Biodiversity in Singapore • Singapore's Society, Culture and Heritage • Singapore in the World: Regional and Global Opportunities and Pressures
All Pre-service teachers	**Multicultural Studies (AMX 301)** This course challenges trainee teachers to reflect on how race, ethnicity and culture have been defined, applied and managed in our society, and also to think anew about the very definitions of those terms. A central point of the course is one's sense of identity as well as how one identifies with a culture or community or nation. The course is not designed to 'understand the other races', nor is it a superficial visiting of "CMIO" that is often practised on Racial Harmony Day. It tries, for example, to dispel the notion that being ostensibly multiracial means that multicultural-ism is being practised. Students will understand that multicultural-ism is a frame of mind that considers whether a society is really open and truly embraces equality and justice. 'Multiculturalism' also speaks of difference openly, of how difference can be made to work so that society is not always understood in terms of 'we' and 'them'. Fundamentally, the course provides a critical and honest analysis of how Singapore's social and political policies have shaped the nation, and in turn how these have shaped Singaporeans, influenced their perceptions of their communities, friends and neigh-bours, and, of course, teachers' perceptions of students in the classroom. The course also places Singapore in the context of what a rapidly changing world means for Singaporeans. At the end of the course, trainee teachers will have an improved un-derstanding of the meaning of multiracialism and multicultural-ism and the dynamics of these forces on their lives. Students will also have had the chance to reflect on differences, not in terms of 'other' or 'tolerance' but as frames of referencewhich can in- voke genuine empathy, awareness, understanding, justice and respect. Essentially, trainee teachers will be equipped with the critical knowledge to be activist teachers in the classroom who champion inclusive and respectful environments for all.

BA (Education) Year 1 students taking Social Studies as an AS2	**Singapore Studies (AAL10C)** Topics include • Debates over Singapore's History and Heritage • Ideology, Politics and Power in Singapore • Social Class, Gender and Inequality • Ethnicity, Religion, Multiculturalism • Population Challenges
BA (Education) Year 1 students taking Social Studies as an AS2	**Identities in a Diverse World (AAL 10B)** This course aims to provide students with grounding in different aspects of living in a diverse world, with specific focus on the issue of identity and identities. As societies become increasingly diverse due to globalisation and migration, the conditions, factors and experiences that go towards shaping an individual's personal, local, national, regional and international identities are thus crucial in providing individuals with the ability to negotiate within such diversity. This course will therefore examine how identities and stereotypes are formed, and discuss policies of integration and assimilation in the national, regional and global contexts. Topics include the following • Nation(ality), race/ethnicity, language, culture, religion • Migration, xenophobia and racism • Social class • Assimilation, integration, transnationalism • Internet, social media, and identity

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