

Teachers' Infusion of Social Emotional Learning

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Abstract: This study is part of a larger study that examines the infusion of social emotional learning in the classroom. For this paper, teachers' infusion of social emotional learning will be examined more explicitly. A three full-day Social Emotional Training programme equipping teachers in infusing social emotional learning (SEL) in their curriculum content areas was conducted. Twenty-nine videotaped lessons of 15 primary teachers and 47 videotaped lessons of 26 secondary teachers in the experimental group were transcribed and assessed based on 5 domains, namely, their scaffolding of instruction, teacher-student rapport, classroom climate, their infusion of SEL and their teaching competencies. The inter-rater reliability for primary and secondary teacher videos were .88 and .92, respectively. In general, teachers were found to be able to infuse SEL in their Character Education and English curriculum content areas better than in their Mathematics and Science subject areas. Also, teachers were able to generate more self-awareness and social awareness questions and less on relationship management or self-management questions. The manner of scaffolding instruction and spontaneous response to their students' inappropriate responses to SEL scenarios may require more time for practice. Implications for infusion of SEL in academic subjects are discussed.

Keywords: teachers, SEL infusion, self-awareness, social awareness, self-management, relationship management, responsible decision making, lessons.

INTRODUCTION

In this new global internet age, student learning must go beyond mastery of core subjects and include the integration of the 21st century skills so that they are able to meet the demands of the global world as well as engage in good citizenship and be confident, concerned, active members in the community. In a recent Ministry of Education Work Plan Seminar, the Education Minister of Singapore, Mr Heng Swee Kiat recognized the changing context that we are living in and indicate that many jobs today may be obsolete tomorrow. He stressed the importance of putting values and character development at the core of our education system.

*“We need personal values to enable each of us to have the **confidence** and **self-awareness**, and the **grit** and **determination** to succeed. We need moral values, such as **respect**, **responsibility**, **care** and **appreciation towards others** to guide each of us to be **socially responsible** person. In particular, for our multi-cultural society, a sense of shared values and respect allows us to appreciate and celebrate our diversity, so that we **stay cohesive and harmonious**. We need values of citizenship. As a young nation with a short history of independence, we must have informed, rugged and **resilient citizens** who can stay united to overcome crisis and adversities which we must expect to happen from time to time.”*

Indirectly, teachers must be change agents in igniting this change in the classroom as they have the greatest potential in making a difference in their student's learning (Heng, 2011). Researchers are also

aware of the crucial roles teachers play in the social emotional development of their students (e.g. Hamre & Pianta, 2006). According to Jennings and Greenberg (2009), teachers influence their students not only by how and what they teach but also by how they relate, teach and model social and emotional competencies, and manage the classroom. Teachers with high social emotional competencies (SEC) have the ability to engage their students to interact in socially skilled and respectful ways. Teachers' prosocial skills will assist their students to contribute ethically and responsibly to their peers, family members and the community and prompt them to be responsible for the consequences of their actions as they develop positive basic competencies, work habits and values for meaningful employment. La Paro and Pianta (2003) maintained that such teacher behaviours are associated with low levels of conflict and disruptive behaviour, smooth transitions from one activity to another, appropriate expressions of emotions, respectful communication and problem solving, strong interest and focus on task, and supportiveness and responsiveness to individual differences and students' needs. Marzano, Marzano, and Pickering (2003) indicated that when teachers lack the resources to effectively manage the social emotional challenges within the classroom, children are likely to display lower levels of on-task behaviour and performance. As the classroom climate deteriorates, teachers may become emotionally exhausted and may resort to reactive and punitive responses that do not enhance student self-regulation (Osher, Sachne, & Zelazo, 2007). Hence, for teachers to ignite and maintain a highly positive classroom climate, it is essential for them to model high levels of SEC and be also able to nurture students' SEC by infusing social emotional learning (SEL) in the learning process.

Developing Social Emotional Competencies through Classroom Instructions

In developing the intervention programme, this study took account of five theoretical rationale and conceptual models into consideration. First, the ABCD (Affective-Behavioural-Cognitive-Dynamic) Model of Development focuses on the promotion of optimal developmental growth for each student. The second model incorporates an eco-behavioural systems orientation and emphasizes the manner the teacher uses the curriculum and generalises the skills to build a healthy classroom atmosphere. The third model involves the domains of neurobiology and brain structuralization that addresses our emotions, thought processes and actions. The fourth dimension involves the psychoanalytic theory where the teacher is a powerful role model in relating and imparting prosocial values to students in the classroom. Finally, the fifth model includes the psychological issues related to emotional intelligence. In attempting to develop a more integrated model that takes into account the individual factors of the child (e.g. social-cognitive skills, temperamental characteristics), the quality of interactions (e.g. positive teacher-child relationship etc.) with the environment (e.g. home-classroom-school and community relationship etc.), the SEL teacher intervention programme was conceived.

Jennings and Greenberg's (2009) *prosocial classroom model* attempts to provide this integrative approach by illustrating how teachers can infuse SEL through (1) quality of teacher-student relationships, (2) student and classroom management and (3) effective SEL program implementation bearing in mind the student factors. They illustrated how deficits in teacher SEC and well-being may have devastating effects on classroom relationships, management, and climate, which in turn leads to negative student outcomes. In contrast, a teacher who recognizes an individual student's emotions, understands the cognitive appraisals that may be associated with these emotions, and how these cognitions and emotions motivate the student's behaviour can effectively respond to the student's individual needs. With the consideration of the above theories, the following techniques were found to promote SEC in classrooms.

Healthy Teacher-Student Relationships. Firstly, in developing a healthy teacher-student relationship, a teacher with high SEC will be able to appraise an individual student's desirable emotions and provide relevant cognitive and emotional responses to address their positive behaviour. For example, if a teacher understands that a student's challenging behaviour is a result of some personal family issues, he or she may show greater concern and empathy and be better able to help the student learn to self-regulate rather

than resort to punitive tactics. Marzano et al. (2003) found that teachers who had high quality relationships with their students had 31% fewer behaviour problems over the course of the school year unlike their colleagues. Wentzel (1998) found that students' perceptions of teacher support have a direct effect on their interest and motivation. Furthermore, Jussim and Harber (2005) found that teachers' expectations can affect students' motivation, self-perceptions and achievement. Patrick and colleagues (2001) also found that teachers' care, concern and classroom mastery goal orientations are other aspects that will enhance student learning. Murray and Greenberg (2000) and Watson (2003) further elaborated that when teachers are warm and supportive, they provide a sense of security for students to explore new ideas and take risks which are fundamental to student learning. Lynch and Cicchetti (1992) further substantiated that a teacher's support and sensitive reactions to students' challenging behaviours have lasting positive effects on students' social and emotional development. Thus, teachers' relationship management plays an important role in developing and maintaining care and supportive relationships with their students, which leads to desirable student outcomes.

Effective Classroom Management. Secondly, a teacher with high SEC has effective classroom management skills as they are more proactive in using emotional expressions and verbal support to promote enthusiasm and enjoyment in learning, and to guide and manage student behaviour. For example, they are more likely to be aware of the student dynamics in the classroom and will be responsive to negative behaviours in an appropriate manner. Weinstein (1999) suggested that the shift from teachers' managerial practices to their fostering self-regulation in students implies the use of some SEC skills to help their students self-regulate. This act requires a high degree of self-awareness, sensitivity and thoughtful decision making as they observe, understand and respond respectfully and effectively to individual student behaviours. Weinstein (1999) further stressed the need to move from merely teaching rules to a combined cognitive-affective perspective that recognizes the need to establish caring, trusting relationships between students and teachers and among students. Thus, a teacher with high SEC will be able to build strong and supportive relationships through mutual understanding and cooperation and can effectively negotiate solutions in conflict situations. Teachers with high SEC know their boundaries and can assertively set limits firmly yet respectfully. In this way, students know their limits and self-regulate their behaviour in the classroom.

Effective SEL Implementation. Thirdly, the quality of teacher implementation of SEL by infusing SEL in academic subject areas will predict students' personal, social and ethical attitudes, values and motives (Solomon et al., 2000) and result in a reduction in students' problem behaviours (Battistich et al., 2000). A teacher's ability to demonstrate their own SEC and apply such skills in response to students' inappropriate behaviours, or during peer conflicts, or in situations where students are frustrated, sad or overexcited, will develop SEC in the students as they learn from good role models (Kress & Elias, 2006). It is therefore not only important for teachers to possess and demonstrate a high level of SEC, but also essential for them to capitalize on their skills to facilitate SEL in the classroom. Ultimately, it is probably the ability of the teachers to effectively implement SEL in the classroom that leads to desirable student outcomes.

Teacher SEL Intervention Programme

Infusing SEL The above model has established the importance of teachers of having a positive and conducive classroom climate through their adoption of pro-social skills and good teacher-student rapport and mutual respect of one another; leading to a risk-free environment for nurturing a clear direction for intervention e.g. ability to effectively appraise and regulate their students' emotions. As teachers are powerful mediators of children's learning, our teacher intervention program included strategies for enhancing metacognition and self-regulation in students through SEL with the emphasis of developing teachers' capacity in nurturing the elements of SEL and metacognition such that teachers can a) metacognitively be conscious of their own strengths, weaknesses, skills and dispositions in order to be

more effective, reflective thinkers; b) empower their students with metacognitive and self-regulated skills through the use of creative thinking and critical Socratic reasoning; c) scaffold their students' responses in a nurturing, conducive climate where mistakes are seen as part of learning; d) consider opportunities to infuse thinking and self-regulated learning skills in enhancing their students' SEC and e) to develop SEL lesson plans and reflection logs for assessing students' SEC. Five SEL pedagogical principles are also necessary in the infusion of SEL. Teachers need to not only address the emotional (e.g. their feelings) and social (e.g. social interaction and role-play) dimensions through relevant age-appropriate activities that allow for practice in the real world but also encourage student reflections and applications. The eventual goal was to help students to fully develop SEC as listed below:

- develop awareness of themselves (self-awareness) and others (social awareness);
- acquire positive habits of the mind;
- learn core thinking skills;
- develop creative, analytical and innovative perspective;
- learn self-management and relationship management;
- apply problem-thinking skills and responsible decision making skills;
- develop empathy and multi-perspective taking;
- be confident risk takers where appropriate, and to become clear thinkers who relish challenge;
- develop values that are necessary for the future.

As there is a need to infuse thinking into both the emotional and social dimensions in eliciting the SEL core competencies and values, students must be made aware of their strengths, weaknesses, feelings and other dispositions and be given opportunities to understand others' perspectives for effective negotiation and interaction as well as how to solve problems and make responsible decisions in life. Relevant thinking strategies must also be taught to encourage students to think about their thinking as they analyse scenarios in their portfolios or reflection logs. Real-life events and age-appropriate activities related to their interests also need to be used to help students to discuss issues, practise and transfer what they have learnt in a concrete manner. Above all, teachers must ensure that their classroom climate for learning is conducive and students see mistakes as a learning experience and are daring in taking risks to be more effective metacognitively, SEL thinkers and learners.

In terms of the implementation of the intervention program, consistent with the Collaborative for Academic, Social, and Emotional Learning (Devaney, O'Brien, Resnik, Keister, & Weissberg, 2006) and Emotional Literacy in the Classroom model (Brackett & Rivers, 2008), our intervention program began with a vision and a plan for program execution in participating schools with continued on-going professional development. This includes the training of teachers that focused on developing their own social and emotional skills as a teacher with high SEC has better impact on the students. Teachers were first made conscious of their own strengths and weaknesses through a series of questionnaires that helped them know their personality, resilience, personal goals, etc., and were taught to consider ways of improving their areas of weaknesses by setting goals for themselves. Teachers were subsequently provided with pedagogy skills and strategies which were essential for enhancing teaching and learning as well as self-regulation of cognition, affect, behaviour and environmental contexts. The strategy for facilitating SEL infusion fell into four dimensions:

- 1) the use of open-ended Socratic questions that encouraged elaboration of student responses wherein the teacher became the facilitator of enquiry (Lipman, Sharp & Oscanyon, 1980; Paul & Elder, 2003);
- 2) the use of thinking approaches (e.g., De Bono's Six Hats, Handy tools) as well as creative and critical thinking strategies;
- 3) the infusion of SEC in the different subject areas as well as the use of real-life scenarios through the use of dilemmas, current newspaper clippings and video-clips that enhanced

problem-solving and decision making and other SECs and,
4) various ways of assessing student SEC and thinking.

During the implementation, teacher skills were further enhanced through periodic coaching sessions during which program facilitators who observed their lessons would provide critical feedback on one to one basis to address questions, concerns, infusion of SEC and pedagogy skills to further enhance the teachers' SEC. Pitfalls for preventing effective thinking (e.g., bias, stereotypical views, procrastination, fuzzy thinking, etc.) were cautioned, and teachers were encouraged to perceive mistakes as part of learning and to nurture an environment that allows for risk-taking. The teachers practiced the SEL infusion skills to their students for one or two years depending on the grade level of the students. This was to enhance the teachers' personal abilities which also allowed them to reflect on areas that they needed to improve and to consider strategies for improving them during this process. Overtime, the researchers worked with the "master trainers" who are the SEL coordinators of the schools, who were expected to be experts who would keep the program alive even after the program phased out. Eventually, our objective was to turn the *intervention* into an *invention* such that the school can sustain the program independent of the program developers.

The interest in SEL has been growing very quickly in Singapore, primarily as a response to requests from Singapore's global business community for 21st century equipped workforce; and in support of the Desired Outcomes of Education which envisions the person who is schooled in the Singapore education system to have a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future. In sum, the person is 1) a **confident person** who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically, and communicates effectively; 2) a **self-directed learner** who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning; 3) an **active contributor** who is able to work effectively in teams, exercises initiative, takes calculated risks, is innovative and strives for excellence; and 4) a **concerned citizen** who is rooted to Singapore, has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around him.

According to the SEL Framework adopted by the Ministry of Education (MOE, 2008) in Singapore, SEC should be taught to students to ensure that they acquire the skills, knowledge and dispositions that will help them face future challenges. With this focus, schools have taken a variety of approaches to provide students with opportunities to develop their social and emotional competencies. In addition, workshops on different SEL approaches and resource packages have been provided by the Guidance Branch of the Ministry of Education. There are success stories of ongoing, coordinated efforts to explicitly teach social and emotional learning, but empirically supported programmes are works-in-progress. Challenges in facilitating SEL, often cited by teachers include, competing demands, greater confidence and skills in facilitating to ensure customization to students, ownership by students, clarity in delivering to the desired outcomes in the specific dimensions of SECs, and ensuring quality of skills and assuring an effective positive affective learning environment.

THE PRESENT STUDY

In focusing on the desired outcomes of the Singapore education system, the major foci of the current study are developing the individual and the citizen anchored in values where they need to be responsible not only for themselves, their family, and friends but also their community and country if Singapore is to be seen as the channel for values transmission and the platform for strengthening national identity and loyalty (Heng, 2011). Unfortunately, there has been no intervention study that examines how values can be nurtured, how teacher SEC can be effectively developed, and how school culture and environment can be improved to facilitate SEL in Singapore schools. Also, the infusion of SEL across various academic

areas is still a relatively new initiative in Singapore and in many other countries. The purpose of the current study was to elucidate how well teachers may be able to infuse SEL into their curriculum subject areas in classrooms and to explore the likely issues and difficulties that may affect the effectiveness of infusion.

According to the SEL Framework adopted by the Ministry of Education (MOE, 2008) in Singapore, SEC should be taught to students to ensure that they acquire the skills, knowledge and dispositions that will help them face future challenges. The five SEC domains are self-awareness (SA), social awareness (SocA), self-management (SMgt), relationship management (RMgt) and responsible decision making (RDM). As students' SEC are enhanced, they will be able to control their emotions, develop care and concern for others, establish positive relationships and make responsible decisions, and handle challenging situations effectively with others. In the process, students will develop civic literacy, global awareness and cross-cultural skills, information and communication skills and critical and inventive thinking to be confident, self-directed learners, active contributors and concerned citizens for our 21st century community.

Research Questions

The specific research questions addressed were:

1. How do the teachers infuse SEL into their daily teaching?
2. How different was teachers' performance in SEL infusion across grade levels and curricular subjects? and
3. What are the contributing factors to successful SEL infusion into daily teaching?

By answering these questions, we would be able to elucidate the implications for models of classroom teaching. We may also identify ways to better facilitate SEL in school settings.

METHOD

Participants

Two primary schools and two secondary schools in Singapore participated in the current study. The target group for the study was Primary 4 and Secondary 1 & 2 teachers. Curricular subjects chosen for the infusion of SEL and metacognitive skills were English, Mathematics, Science and Character Education. Lessons of 15 primary teachers (1 male, 14 females) were video-taped, with a total of 29 lessons (10 English, 7 Maths, 4 Science and 8 Character Education lessons). Lessons of 26 secondary teachers (16 males, 10 females) were video-taped, with a total of 47 lessons (13 English, 11 Maths, 17 Science and 6 Character Education lessons). Some teachers were observed in two or more different subjects during the given duration of time.

Procedures

Two videotapings were carried out simultaneously by a researcher and a research assistant for each lesson, one focusing on the teachers' teaching and interactions with the students and the other focusing on students' responses and engagement in class.

To gain a broader and deeper understanding of teachers' perceptions of infusing SEL in daily teaching, 5 primary teachers and 14 secondary teachers were invited for an interview after the videotaping was finished. A semi-structured interview protocol, comprising 18 open-ended questions, was used to ensure consistency among interviewers. The interview questions were designed by the researchers of this study. All teachers were asked to answer the questions while building on their experiences with the lessons they were currently conducting with SEL components. Specifically, they were asked about their experience of

incorporating SEL to their lessons, and concerns or difficulties they have been confronted during this practice. When a certain question was not well understood by the interviewee, more explanation was given by the interviewer. All teachers were interviewed individually. Each interview lasted for about 45 minutes to one hour. Additional questions were asked to clarify related issues or to explore unique experiences of the interviewees where such situations occurred. The interview questions were included in Appendix II.

Data Analysis

In order to assess participating teachers' capabilities of infusing SEL into daily teaching, we adopted two measurements that encompassed both the process and outcome of SEL infusion. First, the videos were manually analysed by counting the frequency of each SEL-related question posed by the teacher. The questions were then mapped onto one of the five social emotional dimensions. This is deemed as a process variable which focuses on how teachers proceed the SEL infusion. Second, a 22-item rubric was developed to assist the evaluation of teaching performance. It included 5 dimensions (see Appendix I): teachers' ability to scaffold instruction (items 1 to 4), teacher-student relationship (items 5 to 6), classroom climate / management (items 7 to 8), infusion of SEC (items 9 to 14), and general teaching competencies (items 15 to 22). We deemed these dimensions relevant to teachers' capabilities of infusing SEL in daily classrooms at different levels. Two researchers rated each lesson independently. The inter-rater reliability for primary and secondary teacher videos were .88 and .92, respectively. This is deemed as an outcome variable wherein each teacher received a composite score (in letter grade) for his or her performance in infusing SEL.

Teacher interview data were analysed to complement the video data analysis. Each teacher's interview transcript was read multiple times to identify patterns of beliefs expressed by each teacher. Following this, interview responses were used to support espoused beliefs and explain enacted practices. Direct interview quotes, wherever necessary, were added to support these findings.

ISSUES OF VALIDITY AND RELIABILITY

As suggested by Lincoln and Guba (1985), qualitative results be evaluated using the standard of "trustworthiness," as established by credibility and confirmability. In this study, credibility was gained through triangulation of multiple data sources (i.e., interviews and videos of lessons). The use of multiple researchers also strengthened the confirmability of the data (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). Regularly scheduled meetings were held among the research team to establish and clarify the research questions, develop our interview protocol and rubrics for evaluating teachers' SEL lessons. After data were collected, each team member examined the data individually and then collaboratively to review the ratings of each participating teacher's performance in conducting SEL lessons. Wherever consensus was not reached, the team discussed and verified for further agreement.

RESULTS

The analysis addressed the three research questions.

1. Strategies Teachers Use to Infuse SEC in Daily Lessons

In general, teachers used a variety of strategies to foster SEL in the classrooms. These ranged from class discussions triggered by news reports, videos and movie clips, to role plays and research projects. Other strategies and activities included scenario-writing, reflection worksheet and logs, graphs, animation, debates, storyboards, case studies, short stories, pictures, acronym based activities, analogies, and student observing activities. The following is a brief discussion on significant practices used by teachers for infusing SEL in the classrooms.

a) Effective SEL questioning

Teacher-led discussions and questions were the main methods used by teachers to instruct social and emotional skills. Open-ended questions were used to address social emotional competencies (SEC) by assisting students to build complex conceptualizations by considering their own and others' perspective which assisted them to make responsible decisions. Notably, two ways of SEL infusion were observed: intentional infusion and in-action or natural infusion. The integration of SEL with course content was evident when teachers intentionally planned towards triggering pupils' reflections. This requires good SEL knowledge and lesson planning in terms of when to invoke SEL questions and which SEC the questions tap on. For example, in a Primary English lesson involving discussion on a scenario in which Alan, a student, shouted at the noodle vendor when he found a cockroach in his noodle soup, Teacher C (TC) scaffolded students' SEC with the following questions:

- TC: *How had Alan's violent behaviour affected the way the noodle stall vendor reacted? (SocA)*
Would she have reacted this way if Alan had spoken to her differently? (SocA)
How would you feel if someone had behaved like Alan towards you? (SocA)
How do you think Alan had controlled his emotions from the way he talked to the noodle vendor? (SocA)
How would you have controlled your emotions differently from the way Alan had displayed his emotions? (SMgt)
What would suggest for how Alan could approach the vendor to settle the issue of the dead cockroach in his noodle? (RMgt)
What would you do if you were Alan? (RDM)

Teachers were able to scaffold student's learning by linking SEC content to student's real life experiences. For example, in a Secondary Science lesson, the teacher used Dr Hwang, the disgraced stem cell researcher, as a trigger for an SEC perspective.

- T: *"Can you tell me what you think about integrity? What is integrity?"*
T: *"In order to cover one lie, what follows?"*
T: *"If you get back the results on your test, and you realize that you have just passed with 15 marks, but that I had mistakenly given you 3 marks more, what will you do?"*
T: *"So you say you won't come forward to inform me about the mistake because you do not want to be retained. But marks provide objective feedback. What about that?"*
T: *"How do you think your parents feel when you cheat?"*

In 33% of the primary lessons and 68% of the secondary lessons, teachers displayed expertise in scaffolding appropriate questions in a sequential and logical manner to infuse SECs in their students' learning. However, some teachers (e.g., 10% of primary lessons observed in particular), were still observed to have found difficulty trying to infuse relevant SEC questions to scaffold SEC thinking during the instruction on the content knowledge. Post hoc teacher interviews indicated that the obstacles that prevent effective SEL infusion in classrooms could be on two aspects. One was related to teachers' lack of awareness of SEC as a critical part of student development, their disbeliefs in the usefulness of SEL as well as their non-positive attitudes towards SEL. The other stemmed from the environment, for example, the lack of time to be allocated to SEL during lessons due to the need to cover content as required by the curricula. In the rush to complete the syllabus, there was inadequate time to plan, deliver and facilitate SEL in lessons. Some teachers expressed the hope for a less emphasis on academic excellence expectations, but for a greater focus on holistic education. This may allow for more time and focus on SEL than be constrained by an extremely packed content curriculum.

For example, in another English lesson, Teacher G teaching English Comprehension on “A Nasty Accident”, described that Officer Lim was trying to assess the distance between the accident and the children’s observations to ascertain the accuracy of the reported information at the police station. At this juncture, Teacher G (TG) asked a content-relevant question,

“Why did Officer Lim ask the boys how far they were from the accident?”

Yet, she did not follow up with further SEL questions which could elicit the value of honesty and integrity when making an accident report, as children need to know the importance of reporting the truth and providing accurate information. She missed this SEL teachable moment. Again, later in the class, she showed a video-clip on a car crash with a child thrown out through the front screen of a car for not wearing safety belt. Some children were laughing over the scenario. She did not probe them with relevant SEL questions to help them empathise with the scenario as well as to assist them to realize the importance of using safety belt in the car. On hindsight, SEL was thought to have been possibly facilitated by such questions as,

“Why do you think the video is funny?” (SA);

“Would you laugh if this happened to someone close to you?” (SocA);

“How would you feel if it was you who was thrown out of the car?” (SA).

But, none of these types of questions were addressed.

b) Responsiveness in addressing inappropriate responses

Good instances of SEL infusion are not only dependent on the teachers’ ability to ask effective thought-provoking questions, but also on their awareness of students’ low level responses and their capabilities to probe further to enable greater reflection for elaboration and divergent thinking. In this study, teachers were generally able to follow on students’ inadequate answers and use teachable moments to improve students’ SEL thinking. Typically, teachers either chose to ask the same question from a different perspective or break down the question into lower levels. Take the previously cited Teacher C’s questions for example. She asked *“How had Alan behaved towards the food vendor?”* thus, leading the students to reflect on Alan’s inappropriate behaviour. This was followed up with *“Do you consider this his strength or weakness?”* to elicit a reflection on socially acceptable behaviours. Another example of question followed by further probing is *“How had Alan’s violent behaviour affected the way the noodle stall vendor reacted?”* and *“Would she have reacted this way if Alan had spoken to her differently?”* These exemplified quality scaffolding and such scaffolding enabled the students’ initial responses to be used as platforms for further SEL-themed discussions.

Still, teachers showed incapability in about one third of the lessons to encourage students to elaborate their responses in addition to simplistic yes/no answers – 35% (primary) and 44.7% (secondary) of them failed to address inappropriate responses but simply repeated the same question to other students until expected answers were provided. Teachers’ ability to address inappropriate responses were rarely observed in the lessons even though addressing inappropriate responses is one important factor that teachers need to address to enhance the right values and perspective-taking and responsible decision-making and competencies of the students. For instance, Teacher O (TO) questioned how students would feel if their friend took their new watch without permission in a Character Education lesson. One student responded “I will beat him up”, TO ignored the inappropriate answer provided and continued the lesson.

In a Secondary English lesson, a student mentioned “arrogance” as one of the qualities that a beauty queen should possess, but the teacher did not take the opportunity to encourage a discussion on the value and validity of the importance of this trait.

One teacher in the interview attributed the failure to address students' inappropriate responses to teachers' lack of confidence, especially when they had difficulties in anticipating what students' responses might be or what SEC issues may arise. Effective responsiveness was seen to require adaptive thinking as well as a solid understanding of SEC.

2. Teachers' Performance in SEL Infusion across Grade Levels and Curricular Subjects

To answer this question, all the SEL questions teachers asked were categorized based on the **five dimensions of SEC**. Tables 1 and 2 display the frequency and distribution of questions asked in the primary and secondary settings, respectively. Results reflected a similar pattern across both primary and secondary lessons observed. In total, teachers tended to raise the highest level of questions and discussions within the SEL domain of student self-awareness (29.3% for primary and 43.0% for secondary). This was followed by student social awareness (25.3% for primary and 25.6% for secondary). SEL questions that addressed student responsible decision-making was third highest (22.6% for primary and 14.9% for secondary). SEL questions that addressed students' relationship management (16.3 % for primary and 9.5% for secondary) and self-management (6.5% for primary and 7% for secondary) were the least attempted. Interestingly, self-awareness was the easiest to infuse but self-management was the least addressed. In comparison, teachers in the secondary classrooms tended to ask more SEL questions in all the domains, except for responsible decision-making and relationship-management. We speculated that teachers were keener on delving into students' thoughts, as SEL was usually conceptualized at the level of belief. It was easier to talk students through what was good or bad about one's behavior. Yet it would be very difficult to see actual behavioral change, especially within a short period of time. This was echoed by the teacher interview wherein self-awareness was perceived the easiest and relationship management and self-management were the least and hardest to structure questions and discussion around. As one Primary teacher commented:

"Students are still quite young and they don't really know how to self-manage themselves."

Table 1
Percentages of Questions asked in the Primary classes by Subject and SEL Competencies

Subject	<u>SA</u>	<u>SocA</u>	<u>SMgt</u>	<u>RMgt</u>	<u>RDM</u>	<u>Total</u>
English	7.21	6.12	1.69	2.13	6.34	23.49
Maths	8.43	4.45	1.64	4.92	5.31	24.74
Science	2.87	5.05	0.68	1.64	3.69	13.93
CD	10.79	9.63	2.53	7.65	7.24	37.83
Total	29.30	25.25	6.54	16.34	22.57	100

Note: Data was collected from 29 class observations which generated a total of 92 SEL questions. SA = Self-awareness; SocA = Social awareness; SMgt = Self-management; RMgt = Relationship management; RDM = Responsible decision making.

Table 2

Percentages of Questions asked in the Secondary classes by Subject and SEL Competencies						
Subject	SA	SocA	SMgt	RMgt	RDM	Total
English	9.08	8.42	1.27	1.45	5.07	25.30
Maths	8.95	3.55	0.85	1.12	1.52	16.01
CD	16.30	8.81	2.90	5.43	3.87	37.31
Science	8.69	4.81	1.96	1.54	4.39	21.39
Total	43.03	25.59	6.98	9.53	14.85	100

Note: Data was collected from 47 class observations which generated a total of 69 SEL questions. SA = Self-awareness; SocA = Social awareness; SMgt = Self-management; RMgt = Relationship management; RDM = Responsible decision making.

The number of SEL questions raised in the various subject areas was also important for understanding the ease or difficulty of SEL infusion across curricular subjects. The **ease, quantity and quality of questions and discussions raised** suggested how comfortable the teachers felt integrating relevant life-related SEL experiences to the subject content. In general, most teachers had attempted to infuse SEL into the lessons, regardless of the subject areas they were teaching. However, when a summary was taken for each subject area, Character Education at both the primary and secondary levels had the highest number of SEL related questions infused into the lessons (37.8% for primary and 37.3% for secondary), followed by Maths (24.7%), English (23.5%) and lastly Science (13.9%) in the primary context, and English (25.3%), Science (21.4%), and Maths (16%) in the secondary context. This implies that teachers found it relatively easier to infuse SEL through Character Education compared to other academic content areas. One reason is that the content of the topics served as a very good context for more elaborate discussions and were better aligned. Other subjects that teachers felt were the easiest to infuse SEC are Mother Tongue, EBS, History, Geography, Social Studies, and especially English Literature. One of the teachers noted that “a lot of humanities fit nicely”, “*In History, I don't have to go out of my way to infuse SEL. It's all in my content. I can use any content of history to teach SEL.*”

In a Secondary English lesson, the teacher had used a video-clip on Vui Yong, an 18-year old male who was caught for drug-trafficking, and on how his family members tried all ways and means to try to save him as he awaits his death sentence. The teacher was able to engage students in an extensive discussion on how they would feel and how they would view the situation if they were in the culprit's shoes; or if they were his family members. Teacher asked a multitude of perspective-taking questions, such as “*How do you think she/he feels...*”

In a Secondary Geography lesson on the Haitian earthquake, the teacher was able to infuse SEL into the lesson, by exploring with the students the perspectives of the various social actors involved in a discussion triggered by a Youtube clip on “*Haitians risk their lives in post-quake looting*”. Students were encouraged to debate and discuss on the issues from the perspectives of victims, looters, law enforcers and rescuers.

In contrast, teachers grappled with the challenge of infusing SEL into content areas that were not morally focused such as Science and Math classes. They were seen as relatively more technical and procedural, with much of the content of some subjects dealing with facts, theories, or formulae. They were identified

to be difficult for SEL infusion unless they could be directly applied to daily life or focused on life skills and values issues. These challenges were also expressed in the interview with secondary teachers, for example, “*How do I try to infuse SEL when I am teaching algebra? Tough!*”; “*It feels like force-fitting when I try to infuse it in Physics*”.

Some subjects do lend themselves easier to SEL infusion; but there are variances in teacher individual abilities to infuse SEL across the different curricular areas. Primary Teacher M, for example, in her character development lesson on problem-solving, used video clips of a physically handicapped motivational speaker to help pupils relate to what it means to be a strong and resilient problem-solver. The teacher also used stories showing contrasting behaviours to help pupils see themselves in the characters of the story. The SEC observed was more of the social awareness and self-awareness type. Another example, Teacher J, in her maths lesson on using the compass to identify directions, discussed about situations when people lost their directions and inquired on how students could help someone who was lost. Her questioning covered all the five SECs. Another illustrative example was when Primary Teacher C in teaching English comprehension, extended the comprehension passage that depicted a conflict between a student and a stall vendor and explored on how students felt about the characters' behaviours and how they would have reacted if they were in the shoes of the characters. Her lesson covered all the five SEL components as well.

3. Contributing Factors to Successful SEL Infusion

A variety of factors have been observed to contribute to the quality and quantity of SEL infusion. They were a) teacher-student relationship, b) classroom climate, c) classroom management skills, and d) general teaching competencies.

a) Teacher-student relationship

Teacher-student relationships mainly involved teachers' care and concern and rapport with their students and the positive manner they communicated, displaying their positive beliefs and expectations in nurturing their students. In nearly 70% (primary) and 50 % (secondary) of the lessons, teachers were observed to have very good rapport with their students. This was particularly evident when teachers led the class discussions centering on.

b) Classroom Climate

A positive and conducive learning environment lends support to effective SEL infusion. How well SEL can be integrated into the lesson is impacted by how students need to find it comfortable to express their positive dispositions and their willingness to take risks and respond without fear of being apprehended for their errors. 63.2% of (secondary) and 66.7% of (primary) of the lessons observed conveyed a risk-free environment that supports the infusion of SEL in the classroom. This shows that a more relaxing classroom climate that allows more student interaction would be preferable to one that is still very teacher-directed.

c) Classroom Management Skills

Teachers' ability to manage the class in terms of maintaining noise level and behaviour determined their classroom management skills. In 83% (primary) and 74.7% (secondary) of the lessons, the teachers were able to control their class well with a varied array of management strategies. These ranged from desist strategies such as clapping three times in a row to ensuring withitness with students. They contributed positively to building teacher-student rapport, which in turn affects the effectiveness of SEL infusion.

d) General teaching competencies

SEL-friendly pedagogies, such as cooperative learning groups and project-based learning experiences, lend themselves well to SEL infusion. However, most teachers in this study still preferred a teacher-centred

approach in 83% (primary) and 68.4% (secondary) of the lessons, which were geared more towards content knowledge instruction, even though some student-centered activities were incorporated as shown in the age/ability appropriate activities (92% of the lessons for primary and 36.9% for secondary), which related the activities to students' background (83% of the lessons in primary school and 68.4% in the secondary school).

DISCUSSION AND IMPLICATIONS FOR EDUCATIONAL PRACTICE

In this study, we have illustrated how school teachers infused SEL into daily lessons. While we have observed that school teachers were able to infuse SEL in most of their lessons through a myriad of strategies, it is still noteworthy that they struggled in infusing SEL into their lessons effectively in some content areas and the five dimensions of SEC were not all tapped at the same level. This can be attributed to four major reasons.

Teachers' Attitudes and Beliefs

The most significant reason is teachers' attitudes towards SEL development in students. If teachers do not believe in the value of incorporating SEL into daily lessons, or they feel it is the sole obligation of parents, it is less likely of them to allocate resources and effort to make it happen or be effective in its infusion. Another explanation, as cited by a teacher, could be that as SEL is not assessed at any level in Singapore, teachers may lack the impetus to advance its course. Some teachers may lack the momentum to instruct such skills that will not be evaluated through exams. Teachers must recognise the vital connections between social-emotional learning and academic learning and the essential challenge of "*education of the whole child*". Emerging research over the past decade, has clearly shown that SEL can have positive outcomes for students; which include making prosocial behavioral choices (Frey et al., 2005), gaining greater cognitive and social-emotional skills (Linares et al., 2005), attaining greater academic achievement (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011), and experiencing increased happiness (Weare, 2000). Teachers need to be aware of and be convicted about these positive outcomes. Teachers may also need to be acquainted with the research on SEL and the positive outcomes for teachers. An example of this would be Ransford and colleagues' (2009) work, which found that greater burnout predicted lower implementation of an SEL program's supplementary activities, and the work of Jennings and Greenberg (2009) who proposed that SEL is related to teacher social-emotional competence and well-being. Hence, teacher's SECs are to be honed so that they can be effective role models to their students. Preferably, courses may need to be organised by the Ministry of Education or at the teacher training institutions for teachers to develop their own SECs so that they are more competent in relating them to their students and have opportunities to also enhance their own SECs.

Organisation and Time Management

Teachers have expressed constraints and challenges to effective SEL fostering in the classrooms because of resource and time pressures. A very common comment heard from teachers was the lack of time in class to discuss SEL. The rush to finish the curricula left little room in class to develop other competences. As commented by a teacher: "*Time management is a real challenge in trying to infuse SEL in our lessons. Teachers are rushing to complete the syllabus and teachers have to spend a lot of time planning for infusion.*"

Professional Learning Communities are to be established to support school teachers to share lesson plans and resources. Maybe Subject Heads and subject teachers may work with their cluster schools to generate SEL infusion activities in their subject content curriculum areas to benefit the whole district rather than just their school. Also, with more like minds working together, more creative and innovative ideas may be nurtured and developed in lesson preparation for all teachers.

Adequate Linkage of SEL to Curriculum Areas

Some subjects (e.g., English, Character Education) were relatively easier to infuse SEL as the content could be directly linked to one's social emotions, whereas others (e.g., Math, Science) posed more challenges. Lastly, values and character development takes time. SEL is a long-term process, where the effect might not be demonstrated after one week's effort. This may have led some teachers to have doubts or limited confidence in the effect of their SEL instructions during class. With time and effective planning, we believe that more effective SEL infusion can be perceived by the majority of the teachers. Furthermore, with more experience and mastery over their content area, it may also be easier to relate SEL in the classroom. This echoes Gardner's (2008) emphasis that there is a need to develop a mastery or disciplined mind for the future.

Infusion of SEL

Teachers in both primary and secondary schools may need to assist students in self-management, relationship management and responsible decision making as competency in these areas will buffer students from early behaviour problems and poor relationships with others (Walker et al, 1996). By encouraging students to apply perspective taking, problem-solving and self-management strategies through role-play, students are given opportunities to practice identifying emotions in themselves and others as well as brainstorming potential solutions to a problem e.g. their behaviour, people's feelings, safety, fairness and other values. Students may be encouraged to 1) identify the problem, 2) brainstorm solutions 3) evaluate solutions by asking, "Is it safe?", "Is it fair?", "How do people feel?", "Will it work?"; 4) select, plan and try the solution and 5) evaluate if the solution worked and decide what to do next. Teachers may role model relevant strategies and students may be encouraged through cueing and coaching as grounded in the social learning theory (Bandura, 1986) and social information processing theory framework (Walther, 1992). Teachers may use differentiated instructional procedures as well as constructive feedback and Socratic questioning to probe students' responses. Recapitulation of the lesson may also be necessary to elicit the values learnt for the day.

Schools should seek every opportunity for teachers to build on strong teacher-student relationships, e.g., through form teacher circle time periods with their classes, or curricular and co-curricular interactions. Schools may also support the implementation of SEL learning by designing strong school-wide based programmes that develop SECs in systematic ways that are responsive to students' developmental needs across the students' whole life-cycle in the school. It is crucial that all school personnel including canteen staff and cleaners work in concordance towards ensuring a nurturing and risk-free school environment that supports the acquisition of such enabling and inoculating life skills. Schools need further to involve parents and the community in close partnership in implementing SEL programmes and activities so that the positive effects arising could be enduring and pervasive. Both in-school programmes and after-school programmes could also be organised to build on students' SECs as well as reduce anti-social behaviours where there is a lack of parental guidance in today's home environment.

CONCLUSION

In summary, for effective fostering of social emotional competencies in schools, it is imperative that the teachers have a good understanding of the importance and value of enhancing students' social emotional competencies and its relevance to success in the rapidly changing demands of the twenty-first century. Teachers and stakeholders must all believe in the endeavour for holistic development of the students under their charge. Hence, it is essential to empower and enhance teachers' capacity to facilitate SEL in the schools. Professional development in the knowledge and skills for fostering SEL must be availed to teachers and opportunities for a community of teachers and stakeholders to come together to form

professional learning communities (PLC) to inquire on, support and innovate on SEL should be encouraged.

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APPENDIX I

Rubrics for Assessing Teachers' Performance in Infusing SEL in Daily Lessons

	Criteria	Expert (A)	Proficient (B)	Needs Improvement (C)	Unsatisfactory (D)
1	Use of open-ended questions	Appropriate and effective use of open-ended questions to elicit various answers to support divergent thinking and further discussions.	Appropriate use of open-ended questions to elicit various answers to support divergent thinking and further discussions.	Sometimes uses open-ended questions to seek different answers and further discussions.	Infrequent use of open-ended questions to seek different answers and further discussions.
2	Encourage elaborations on responses	Strongly encourages students to elaborate on their answers by extending their thinking through the use of "why", "how", "what if" as triggers – "Why do you say so?) <i>activating their prior knowledge and linking it to new knowledge and offers help if needed.</i>	Encourages students to try their best to elaborate on their answers by activating their prior knowledge and linking it to new knowledge through the use of "what", "when", "whom", etc. to elicit responses.	<i>Ask students to elaborate on their answers on their own without much scaffolding.</i> (Ask leading or closed questions that lead students to think in a certain way – Eg. So is not helping the right thing to do?)	Does not encourage students to elaborate on their answers.
3	Ability to scaffold responses to SEL questions	Ability to identify teachable moments through use cues, probes and relevant Socratic questions to facilitate the smooth flow of the discussion to address the SEL competencies.	Has some ability to use cues, probes to facilitate the smooth flow of the discussion to address the SEL competencies.	Cues, probes and questions were not addressed in a logical manner during the discussion to address the SEL competencies.	Inability to use cues, probes and questions to facilitate the discussion to address the SEL competencies. Tendency to pass the questions by without addressing the inappropriate responses of the students.
4	Responsive to different students' responses to SEL questions	Alert and has the ability to spontaneously address students' inappropriate responses with relevant Socratic questions to assist students to refocus on the relevant SEL competencies.	Is fairly alert and showed some ability to address students' inappropriate responses with relevant Socratic questions to assist students to refocus on some relevant SEL competencies.	Alert to students' inappropriate responses. However, lack the ability to use Socratic questions to refocus on appropriate SEL competencies.	Inability to address inappropriate responses of students.
5	Positive attitudes/beliefs to learning	Displays high expectations and persistence and convinces all students that they will master the material.	Conveys to students the message that it's okay to take risks and make mistakes; effective effort, not innate ability, is the key.	Lectures students that the subject matter is important and they need to work hard to avoid making mistakes.	Fails to convey to students the message that making mistakes is fine; effective effort, not innate ability, is the key.
6	Good teacher-student rapport	Shows warmth, care, respect, and fairness for all students and builds strong relationships.	In general, fair and respectful toward students and builds positive relationships.	<i>Fair and respectful toward most students and builds positive relationships with some.</i> (More to elicit expected	Sometimes unfair and disrespectful to the class. (eg. dismisses students' responses

				responses and moves on with lesson, lacking somewhat in building rapport)	
7	Risk-free environment	Creates a conducive learning climate where students feel safe and relaxed, with no coercion or risk or insult and that mistakes are seen as a learning process.	Creates a classroom climate in which students in general feel no coercion or risk or insult.	Creates a classroom climate in which students sometimes feel coercion or risk or insult.	The classroom is frequently chaotic and sometimes dangerous.
8	Good classroom management	Has a highly effective discipline repertoire and can capture and hold students' attention any time, and uses coherence, lesson momentum, and silky-smooth transitions to get the most out of every minute. Task focus with no avenue for student behavior distraction.	Has a repertoire of discipline "moves" and can capture and maintain students' attention for some discipline problems.	Has a limited disciplinary repertoire and students are frequently not paying attention. Tries to train students in class routines but many of the routines are not maintained.	Unsuccessful at spotting and preventing discipline problems, and they frequently escalate. Does not teach routines and is constantly nagging, threatening, and punishing students.
9	Address Self-awareness	Successfully helps students to be aware of their feeling, strengths and areas for improvement as well as the value of the lesson.	Showed some success in helping students to be aware of their feeling, strengths and areas for improvement as well as the value of the lesson.	Attempts to help students to be aware of their feeling, strengths and areas for improvement as well as the value of the lesson.	No attempt or success in fostering students' self-awareness.
10	Address social awareness	Successfully helps students sense what others think and feel as well as the other party's strengths and be able to take alternative perspectives with respect.	Showed some ability to help students sense what others think and feel as well as recognize the other party's strengths and be able to take alternative perspectives with respect.	Tendency to lack the ability to help students sense what others think and feel, the other party's strengths and be able to take alternative perspectives with respect.	No attempt or success in fostering students' social-awareness.
11	Address self-management	Successfully develops students' self-discipline or self-regulate their emotions especially in difficult situations.	Develops students' self-discipline and self-regulate their emotions especially in difficult situations.	Attempts to get students to be responsible for their actions, but many fail to manage themselves well.	No attempt to foster self-management in students; they depend on the teacher to behave.
12	Address relationship management	Successfully develops students' abilities to negotiate solutions to conflict, seek help in appropriate ways, and establish and maintain healthy and rewarding relationships with peers.	Develops students' abilities to negotiate solutions to conflict, seek help in appropriate ways, and establish and maintain healthy and rewarding relationships with peers.	Attempts to develop students' relationship management skills, but many fail to negotiate solutions to conflict, seek help in appropriate ways, establish and maintain harmonious relationships with peers,	No attempt or success in fostering students' relationship management skills
13	Address responsible decision making	Effective use of dilemmas or other approaches to teach students to take responsibility for their own actions. Assisting students to be conscious of their responses and consequences of their actions.	Teaches them to take responsibility for their own actions through reflecting simple situations	Attempts to get students to be responsible for their decisions and actions, but responses that showed a lack in decision-making skills not well followed-up. <i>many lack responsible decision making skills.</i>	No attempt or success in fostering students' responsible decision making skills.
14	SEL infusion in Subject	Ability to infuse SEL competencies appropriately in their curriculum content area with ease. Ability to integrate in a logical manner.	Has some ability to infuse SEL competencies in their curriculum content area and showed some ability to integrate in a logical manner.	Has only specific ability to infuse SEL competencies in the curriculum content area and has problem in integrating the lesson in a logical manner.	No ability to infuse SEL competencies in their curriculum content area and has difficulty in integrating SEL in a logical manner.

15	Student-centered approach	Orchestrates highly effective strategies, materials, and groupings to involve and motivate student-centred activities. Students are active learners and problem-solvers throughout the lesson.	Orchestrates effective strategies, materials, and classroom groupings to foster student learning. g. Has students actively think about, discuss, and use the ideas and skills being taught.	Uses a limited range of classroom strategies, materials, and groupings with mixed success. g. Attempts to get students actively involved but some students are disengaged.	Uses only one or two teaching strategies and types of materials and doesn't reach most students. g. Mostly lectures to passive students or has them plod through textbooks and worksheets.
16	Teacher-directed approach	Delivers knowledge and clarifies any misunderstanding effectively through lectures. Shown clear explicit, logical presentation in exploiting teachable moments.	Delivers knowledge and clarifies any misunderstanding through lectures. Follows lesson plans well with some adaptations for teachable moments.	Lectures major concepts and knowledge. Is overly focused on implementing lesson plans and sometimes misses teachable moments.	Delivers knowledge without successful clarifications of misunderstanding during lectures. Is rigid and inflexible with lesson plans and fails to take advantage of teachable moments.
17	Age/Ability appropriate activity	Activities are relevant to students' developmental stage as well as ability.	Majority of activities are relevant to students' developmental stage as well as ability.	Activities are fairly relevant to students' developmental stage as well as ability.	Activities failed to consider students' developmental stage or ability.
18	Logical sequence of Lesson Structure	The lesson's structure is crystally clear and the lesson is delivered in a logical sequence throughout.	The lesson has a clearly defined structure in general and the lesson is delivered in a logical sequence most of the time.	The lesson has a recognizable structure, although the structure is not uniformly maintained throughout.	The lesson has no clearly defined structure, or the structure is chaotic.
19	Ability to relate to students' background	Grabs students' interest and makes connections to their prior knowledge, experience, and reading.	Activates students' prior knowledge and relates their interest in each lesson by connecting with their lives.	Tries to relate it to things students already know.	Does not relate to students' interest or make connections to their lives.
20	Use of media/resources	Teacher actively seeks other materials to enhance instruction, e.g. from books, media or through the internet.	Teacher fully makes good use of all resources available to scaffold the instruction.	Teacher uses limited resources available to scaffold the instruction.	Teacher is unaware of resources available and thus fails to use any to scaffold the instruction.
21	Time management	Time of the lesson is very well under control, and time allocations are appropriate.	Time of the lesson is under control, and time allocations are reasonable.	Time of the lesson is under control most of the time, and most time allocations are reasonable.	Time of the lesson is out of control most of the time, and time allocations are unrealistic.
22	Lesson recapitulation	Has students summarize and internalize what they learn and apply it to real-life situations.	Has students sum up what they have learned in the lesson and apply it in real-life situations.	At the end of the lesson, asks students to think about real-life applications for what they have learned.	Moves on at the end of each lesson without a summarization or having students summarize.

Note: This rubric is adapted from Marshall (2009).

APPENDIX II Teacher Interview Responses

Knowledge about SEC

1. Why are social emotional competencies such as self-awareness, self-management, social awareness, relationship management and responsible decision-making important for our students?
2. What are the indicators of a socially and emotionally competent/incompetent student? Or how do you know that a student is socially-emotionally competent or incompetent?

SEL and Curriculum

1. What do you think are the benefits of infusing SEL into the curriculum?
2. How do you think SEL can be infused effectively in the curriculum?
3. What do you think can hinder the effective implementation of SEL in the curriculum?

4. What changes do you think are needed in the school system to enable a better implementation of SEL?
5. How do you think your school mission and values support the acquisition of SE competencies?

SEL in Classroom (SEL infusion)

1. How do you see your role in trying to infuse SEL into your lessons?
2. What subjects were you teaching for the infusing of SECs?
3. How confident are you in infusing SEL into the lessons? Please elaborate.
How can you improve on it then?
4. Of these subjects taught, which subject do you find most easy to infuse the SEC? Why? Which SECs do you find most relevant and easy to illustrate? Why?
5. What are some of the strategies you use to infuse the SECs in this subject? Why are these strategies chosen?
6. Of the five SECs, which are the ones you find most easy to infuse and which are the most difficult?
7. Are the students able to relate to behaviors / actions / decisions that they should manifest when triggered by your SE-related questions? Please elaborate.
8. Do you believe that by infusing SEL in your lessons, your students will become more socially and emotionally competent? Why so/not?
9. Why control did better than experimental group?
10. Who do you think is a good teacher in the control group?
11. How can we (researchers) help you to improve the SECs?