

INFUSING CHARACTER AND CITIZENSHIP EDUCATION IN ACADEMIC SUBJECTS IN SINGAPORE SECONDARY SCHOOLS

SURVEY REPORT



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EXECUTIVE SUMMARY

Character and Citizenship Education (CCE) is an important aspect of the curriculum in Singapore schools. It involves the teaching of values, social-emotional competencies and citizenship dispositions. A survey on how secondary school teachers in Singapore infused CCE in their academic subjects was conducted between May to July 2022. 585 teachers from 10 secondary schools participated in the survey across a range of subject disciplines.

The survey focused on what teachers perceived were important character capabilities and how they infused CCE in their subject disciplines via classroom culture, lesson planning and lesson enactment.

It is evident that teachers are moving away from didactic teaching of values such as by telling

students directly the values they should learn. Instead, teachers most frequently encourage the modeling of values and intentionally explain why certain values are beneficial.

Teachers are also encouraging more active engagement with values. The main strategies they use involve incorporating whole-class and pair discussion as well as the use of authentic experiences to help students develop character.

At the same time, teachers tended to mainly focus on an awareness of values when engaging students in the academic subjects. Moving forward, teachers can consider how to deepen students' engagement by expanding their awareness of positive values to empowering them to analyze values and act constructively for the good of others.



BACKGROUND

The world today is drawn closer together by the effects of the fourth Industrial Revolution characterized by the explosion and infusion of digital technologies in all spheres of society (Schwab, 2016).¹ Despite the intensification of global interconnectedness, there has also been a rising trend of political and economic anti-globalization characterized by the rise of ultra-nationalist groups and growing instances of racism, xenophobia and other forms of intolerance. The prevalence of social media and artificial intelligence has also precipitated the spread of post-truths which potentially leads to reactive forms of “cancel culture” among increasingly “woke” citizens.

Within such a climate of volatility and consciousness of diversity, values education is more urgent and needed than ever before. In 2020, the Ministry of Education (MOE) launched an enhanced Character and Citizenship Education (CCE) syllabus. The CCE2021 syllabus would anchor students on a strong foundation of values recognizing that schools “serve a critical function as they provide rich learning platforms and opportunities for students to be equipped with the knowledge, moral and civic

values, skills and dispositions to understand who they are and who they can become” (SDCD, 2020, p. 1)². Then Minister of Education, Ong Ye Kung, reiterated the point that “every school experience can be a CCE lesson, and every teacher can be a CCE teacher, and every school a good school. It should become a whole-school approach” (Ong, 2020, para. 91-92)³.

Given this context, this research seeks to explore how teachers infuse CCE in the classroom. While there have been multiple studies on the connection between CCE and co-curricula activities, service learning and experiential learning, less research has been conducted into the ways CCE has been integrated into the teaching of academic subjects in school. Many teachers are passionate about their subject discipline. They have invested many years (through their tertiary and teacher education programmes) growing their interest, honing their skills and deepening their knowledge in their fields of expertise. What is of particular interest to scholars, policymakers and educators is whether teachers perceive that their teaching subject is connected to CCE and how they infuse CCE into their lessons.

¹ Schwab, K. (2016). The fourth industrial revolution. World Economic Forum.

² Student Development Curriculum Division. (2020). Character & Citizenship Education Syllabus: Secondary. Ministry of Education, Singapore.

³ Ong, Y. K. (2020, March 4). MOE FY2020 Committee of Supply debate: Reply. Retrieved from <https://www.moe.gov.sg/news/speeches/20200304-moe-fy2020-committee-of-supply-debate-response-by-minister-for-education-ong-ye-kung>



RESEARCH AIMS

The survey aims to provide a contextual overview of how secondary school teachers in Singapore infuse CCE in the academic subjects. There are two key research questions:

1. What do teachers believe are important character capabilities they hope to develop in students?
2. How do they do so through classroom culture, lesson planning and lesson enactment?

RESEARCH METHOD

Prior to administering this survey, the research team conducted an extensive literature review and designed a values pedagogic framework to inform the analysis of the survey items. The framework comprises personal character capabilities and relational character capabilities (which we elaborate in the following sections).

In May 2022, the research team conducted a pilot testing of the survey on pre-service teachers at the National Institute of Education. The initial survey also incorporated feedback from the research team and collaborators. The pilot survey and feedback was used to refine the final survey which was then administered to the target sample.

RESEARCH SAMPLE

Schools were randomly invited to participate in the survey and all full-time teachers were invited to participate in the survey in order to ensure a diversity of teaching experiences and subject disciplines. Altogether, 585 teachers of diverse subject disciplines from 10 secondary schools in Singapore participated in the survey between May 2022 and July 2022.

Based on a sample size calculation, the sampling size of this survey was deemed adequate.

RESEARCH VALIDATION

Statistical analysis of the items was conducted. Through several rounds of Exploratory Factor Analysis, items that were loaded less than .6 or cross-loaded were removed leaving 94 items tied to the six constructs. The suitability of the items for factor analysis was assessed and all six constructs showed sufficient validity and reliability across the question categories aligning with the theoretical conceptions of the construct. Confirmatory Factor Analysis was used to test the structure leading to further removal of items that did not fit the model. The final 80 construct items were statistically significant and a good/adequate model fit was achieved.



SURVEY DESIGN

The survey comprises 35 close-ended and open-ended questions in total. This report is divided into four sections. The first two sections explore how teachers develop personal and relational capabilities in relation to four areas: objectives of teaching, classroom culture, lesson planning and lesson enactment. The third and fourth sections explore the roles, strategies and challenges of the CCE teacher and demographics.

SECTION I

SUPPORTING PERSONAL CAPABILITIES THROUGH CCE IN ACADEMIC SUBJECTS

- 1.1 Objectives of Teaching
- 1.2 Classroom Culture
- 1.3 Lesson Planning
- 1.4 Lesson Enactment

SECTION II

SUPPORTING RELATIONAL CAPABILITIES THROUGH CCE IN ACADEMIC SUBJECTS

- 2.1 Objectives of Teaching
- 2.2 Classroom Culture
- 2.3 Lesson Planning
- 2.4 Lesson Enactment

SECTION III

THE CCE TEACHER: ROLE, STRATEGIES AND CHALLENGES

- 3.1 Role of the Teacher in Infusing CCE in Academic Subjects
- 3.2 Instructional Strategies Frequently Used
- 3.3 Contemporary Issues Frequently Discussed
- 3.4 Challenges of Integrating CCE in Teaching Subjects
- 3.5 Implications for Practice

SECTION IV

SURVEY DEMOGRAPHICS

- 4.1 Years of Teaching Experience
- 4.2 Current Position in School Held by Teachers
- 4.3 Levels Taught by Teachers
- 4.4 Subjects Taught by Teachers



SUPPORTING PERSONAL CAPABILITIES THROUGH CCE IN ACADEMIC SUBJECTS

SECTION I

“Education should serve to prepare students for the future so that they are ready to take on problems and contribute positively to the world.”

– Teacher, Biology, 6-10 years of experience

“Values are the basis of education. With good values, students would have the right attitude towards learning.”

– Teacher, Art, 11-20 years of experience



WHAT ARE PERSONAL CAPABILITIES?

The notion of capability is based on the philosopher Amartya Sen's conception of what an individual is able to do or be in order to flourish in life. Personal flourishing goes beyond striving to accumulate material resources or pursuing sensual pleasures but encompasses the development of one's cognitive, aesthetic, social and spiritual dispositions necessary to live well and fully.

How do teachers cultivate students' personal capabilities through infusing CCE in their academic subjects? This occurs at three levels – awareness, analytical and agency – which include but are not limited to the descriptors below:

Table 1. Personal Capabilities Pedagogic Levels



Awareness Level

- Awareness of self (one's actions, values, emotions, habits)
- Recognition of self-worth (self-respect, self-esteem)
- Recognition of self-efficacy (belief in one's competency; awareness of one's strengths)



Analytical Level

- Analysis of self-concept or how one's identity is constructed or perceived by oneself.
- Critical reflection about one's values, decisions, and behavior.
- Metacognitive capacity to monitor own's comprehension and cognitive processes.



Agency Level

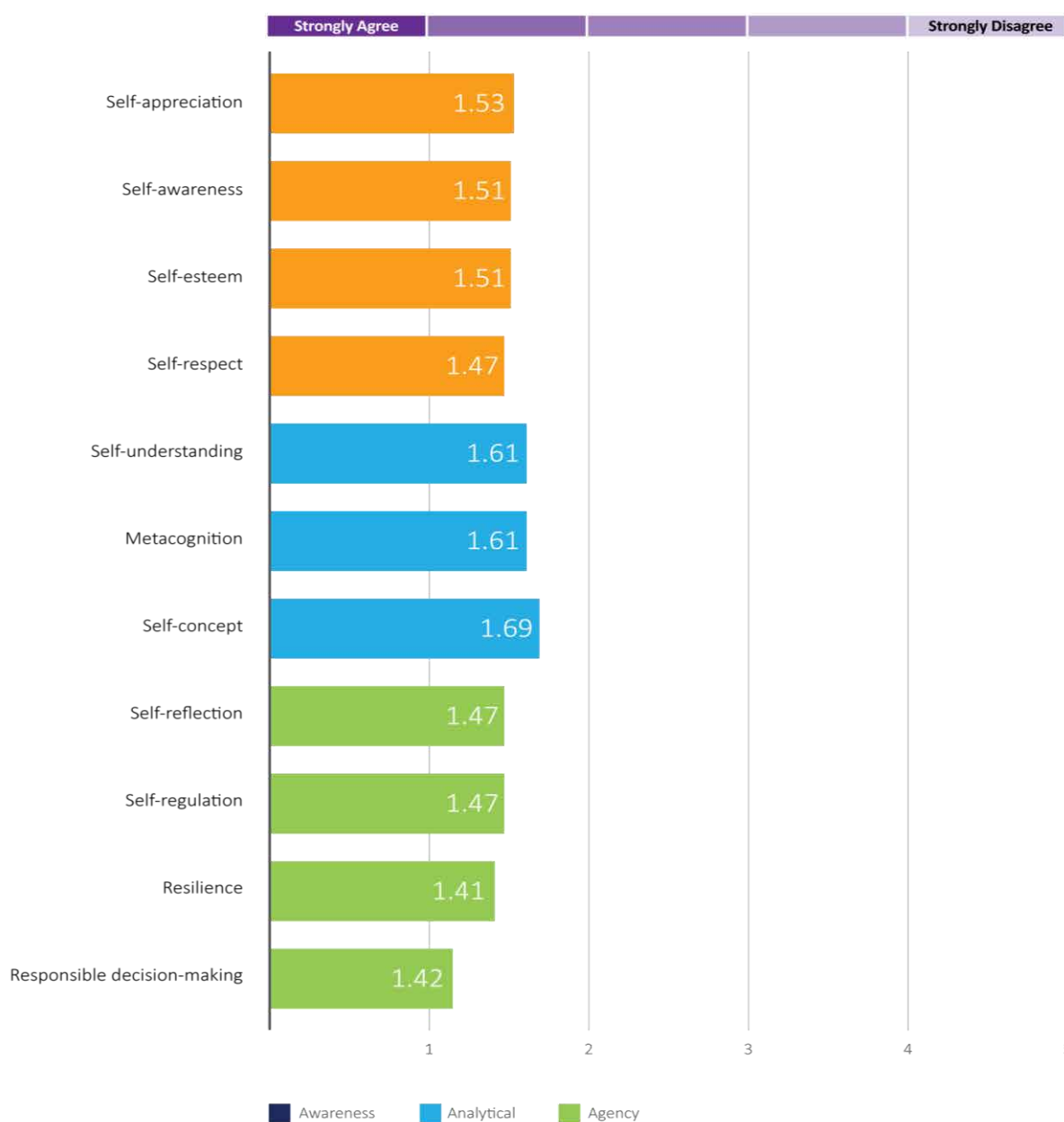
- Self-regulation – Capacity to control and manage one's behavior to accomplish one's goals.
- Self-actualization – Capacity to effect changes in order to flourish and live the life one values.
- Responsible decision-making – Capacity to make responsible decisions to effect positive changes in one's life and well-being.

1.1 Objectives of Teaching

The most important personal capabilities that teachers hope to develop in students are related to the Agency level: resilience and responsible decision-making.

The least important personal capabilities are related to the Analytical level: self-concept, self-understanding, metacognition.

Table 2. Overall, what are the important personal capabilities that teachers hope to develop in students?
Mean of 1 is closest to Strongly Agree.

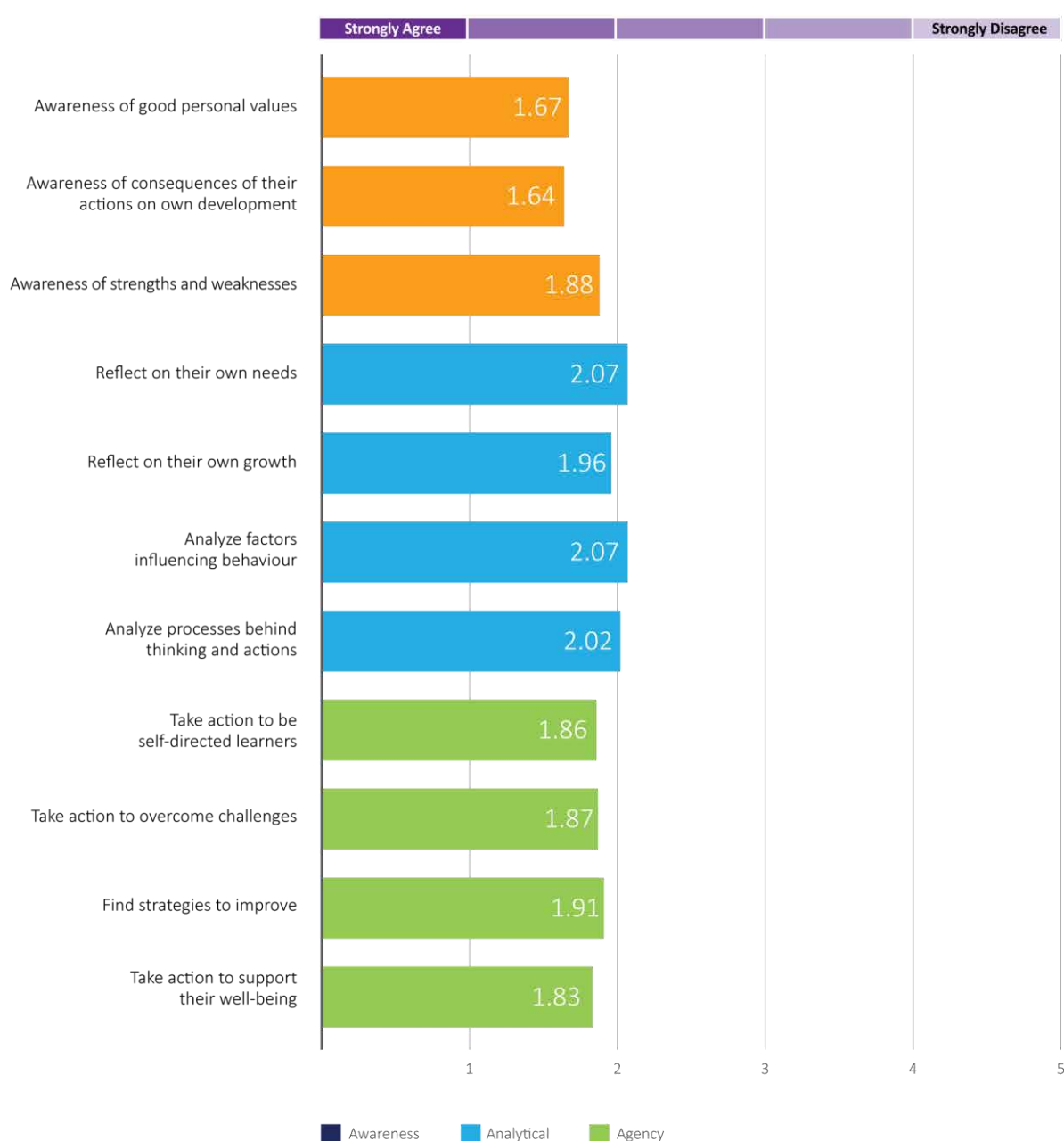


1.2 Classroom Culture

In creating a positive classroom culture, the most important personal capabilities that teachers emphasize are related to Awareness level: developing awareness of the consequences of one's actions on one's own development and awareness of good personal values.

The least important personal capabilities are related to the Analytical level: enabling students to analyse their own needs and factors influencing their own behaviour, beliefs & decisions.

Table 3. What are the important personal capabilities that teachers hope to develop in students through creating a positive classroom culture? Mean of 1 is closest to Strongly Agree.

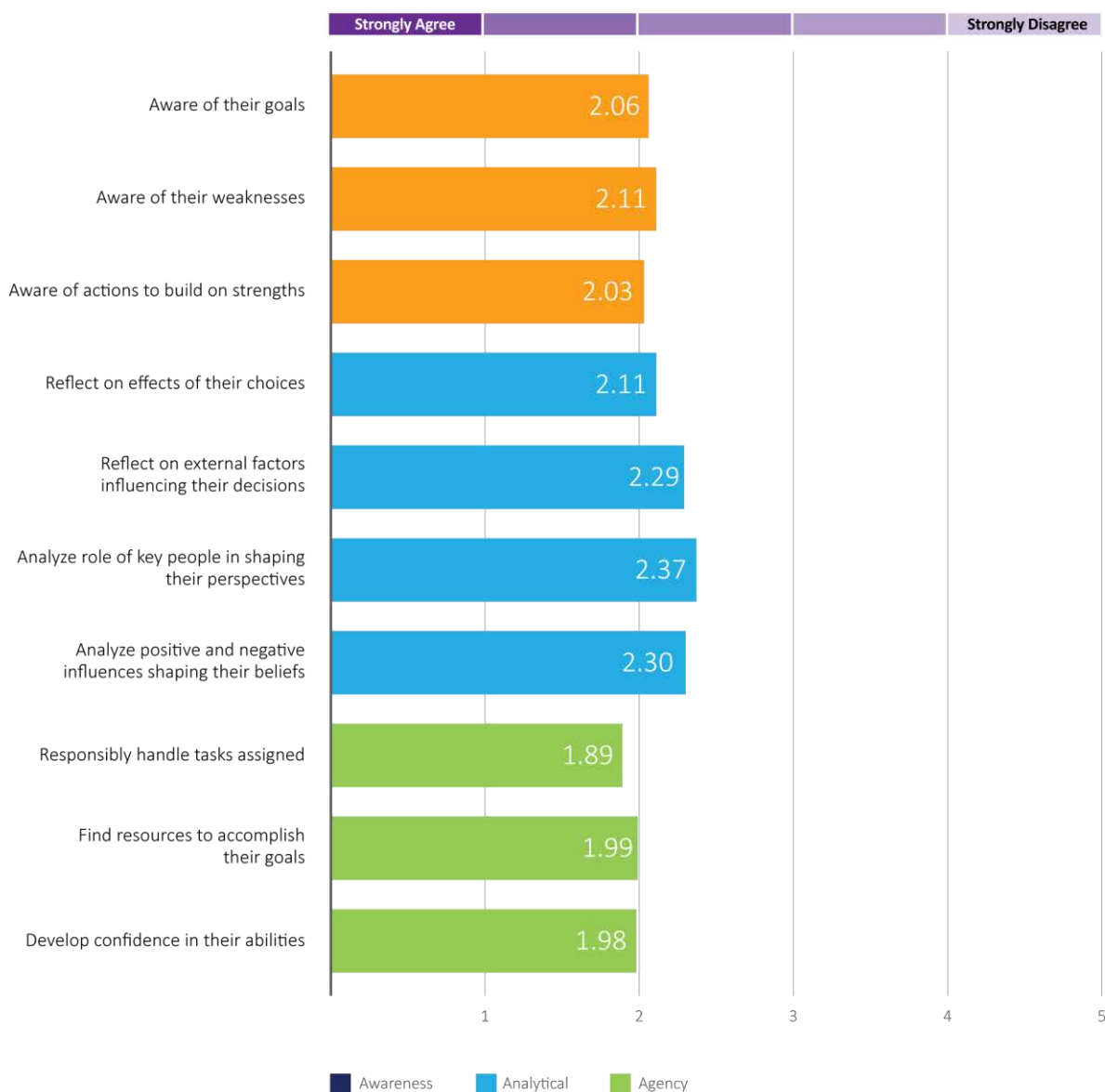


1.3 Lesson Planning

In planning lessons, the most important personal capabilities that teachers emphasize are related to the Agency level: enabling students to take action to responsibly handle tasks assigned, find resources to accomplish their goals, and develop confidence in their abilities.

The least important personal capabilities are related to the Analytical level: enabling students to analyse the role of key people in shaping their perspectives and the positive and negative influences shaping their beliefs.

Table 4. What are the important personal capabilities that teachers hope to develop in students when planning lessons?
Mean of 1 is closest to Strongly Agree.

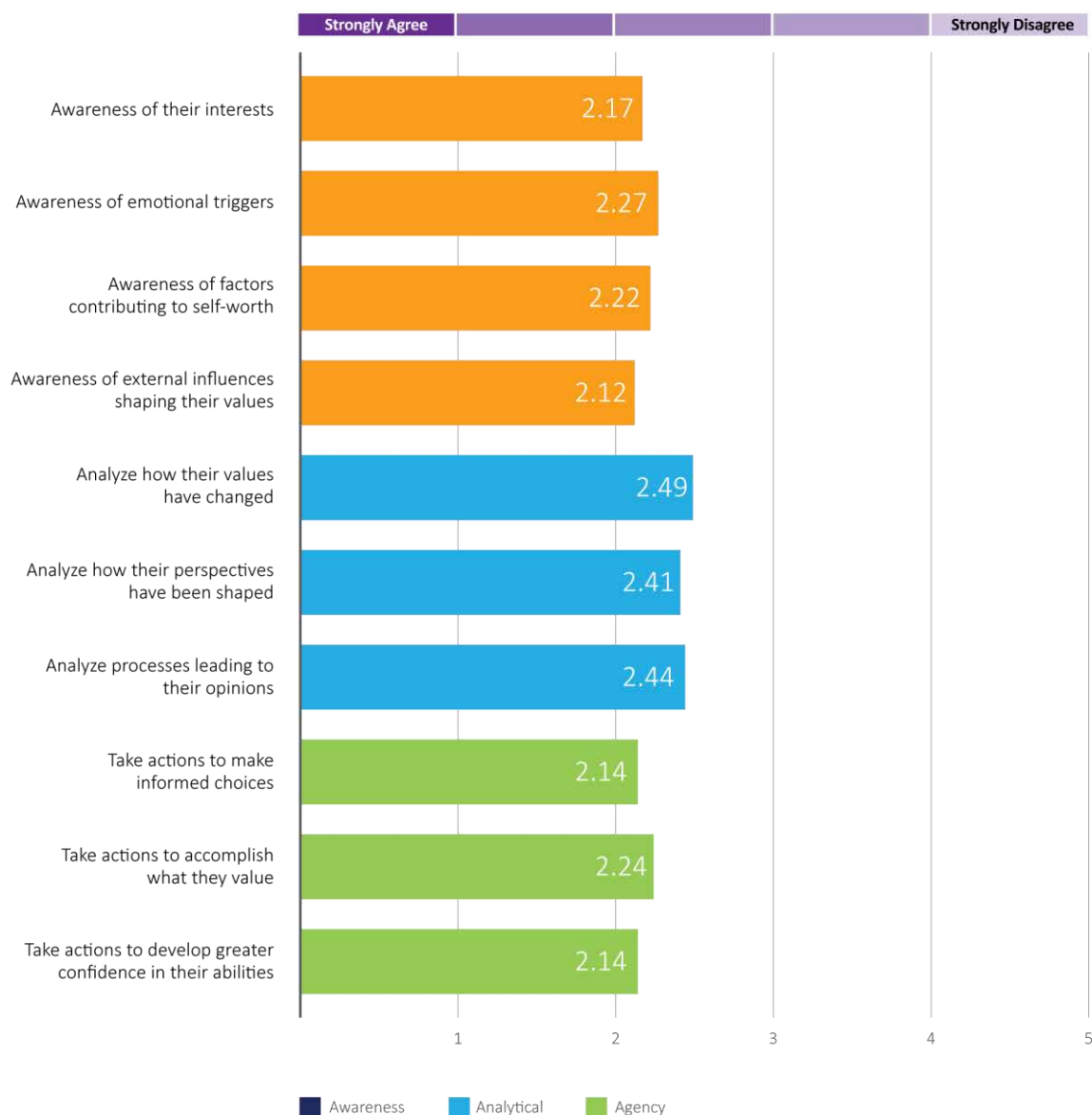


1.4 Lesson Enactment

In enacting lessons, the most important personal capabilities that teachers emphasize are related to the Awareness and Agency levels: enabling students to be aware of external influences shaping their values and to take actions to make informed choices and develop greater confidence in their abilities.

The least important personal capabilities are related to the Analytical level: enabling students to analyse how their values have changed, the processes leading to their opinions, and how their perspectives have been shaped.

Table 5. What are the important personal capabilities that teachers hope to develop in students when planning lessons?
Mean of 1 is closest to Strongly Agree.



SUPPORTING RELATIONAL CAPABILITIES THROUGH CCE IN ACADEMIC SUBJECTS

SECTION II

“I believe that education is more than just imparting knowledge. It is about shaping young minds, teaching them how to think, how to bounce back from setbacks, how to work with others positively and respectfully, how to be discerning with the huge amount of information they have, how to lead a meaningful life with integrity and making a positive contribution to society.”

– Teacher, Home Economics, 11-20 years experience

With the infusion of CCE, “students will be aware of [contemporary] issues and could be guided to discuss these issues in a more sensitive way.”

– Teacher, Science, 11-20 years experience



WHAT ARE RELATIONAL CAPABILITIES?

While personal capabilities are integrally related to personal well-being and flourishing, relational capabilities are premised on the intersubjective view that human beings are innately bound up in social networks. One's sense of self is also influenced by the larger community comprising the family, the school, community, nation and world. The notion of human flourishing encompasses the view that the individual flourishes in order to help another flourish in the world. In this way, individuals are also

responsible and accountable to others in their society and world.

How do teachers cultivate students' relational capabilities through infusing CCE in their academic subjects? Once again, this occurs at three levels – awareness, analytical and agency – which include but are not limited to the descriptors below:

Table 6. Relational Capabilities Pedagogic Levels



Awareness Level

- Awareness of physical environment (nature, culture) including its present state and transformation over time.
- Awareness of social and global environment including opportunities, tensions and vulnerabilities.
- Cross-cultural awareness including the appreciation of diverse traditions, beliefs and practices.



Analytical Level

- Analysis of local and global issues including the social, political, economic and historical contexts informing these.
- Perspective-taking – Analysis of issues from the perspectives of different groups (class, gender, ethnicity etc.) and their values.
- Ethical dilemmas – Analysis of complex ethical problems alongside the various competing actors and their ideological agendas.



Agency Level

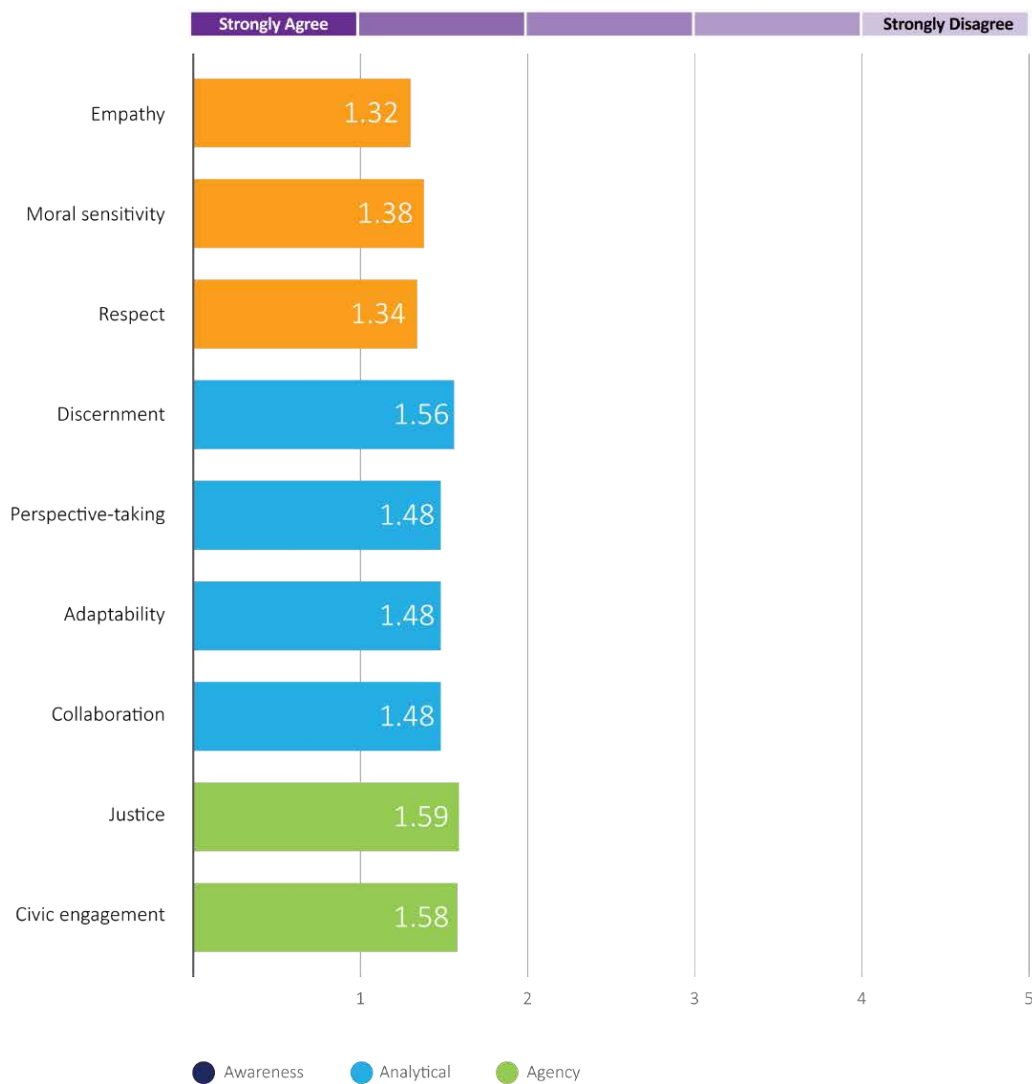
- Relationship building – Capacity to forge empathy and understanding with others who may have different beliefs.
- Civic participation – Capacity to contribute to social change and improvements through active participation such as community service and advocacy work.
- Active global citizenship – Active participation such as in democratic discussions or intercultural collaborations on social and global problems.

2.1 Objectives of Teaching

The most important relational capabilities that teachers hope to develop in students are related to the Awareness level: empathy, respect, moral sensitivity.

The least important relational capabilities are related to the Agency level: justice, civic engagement.

Table 7. Overall, what are the important relational capabilities that teachers hope to develop in students?
Mean of 1 is closest to Strongly Agree.

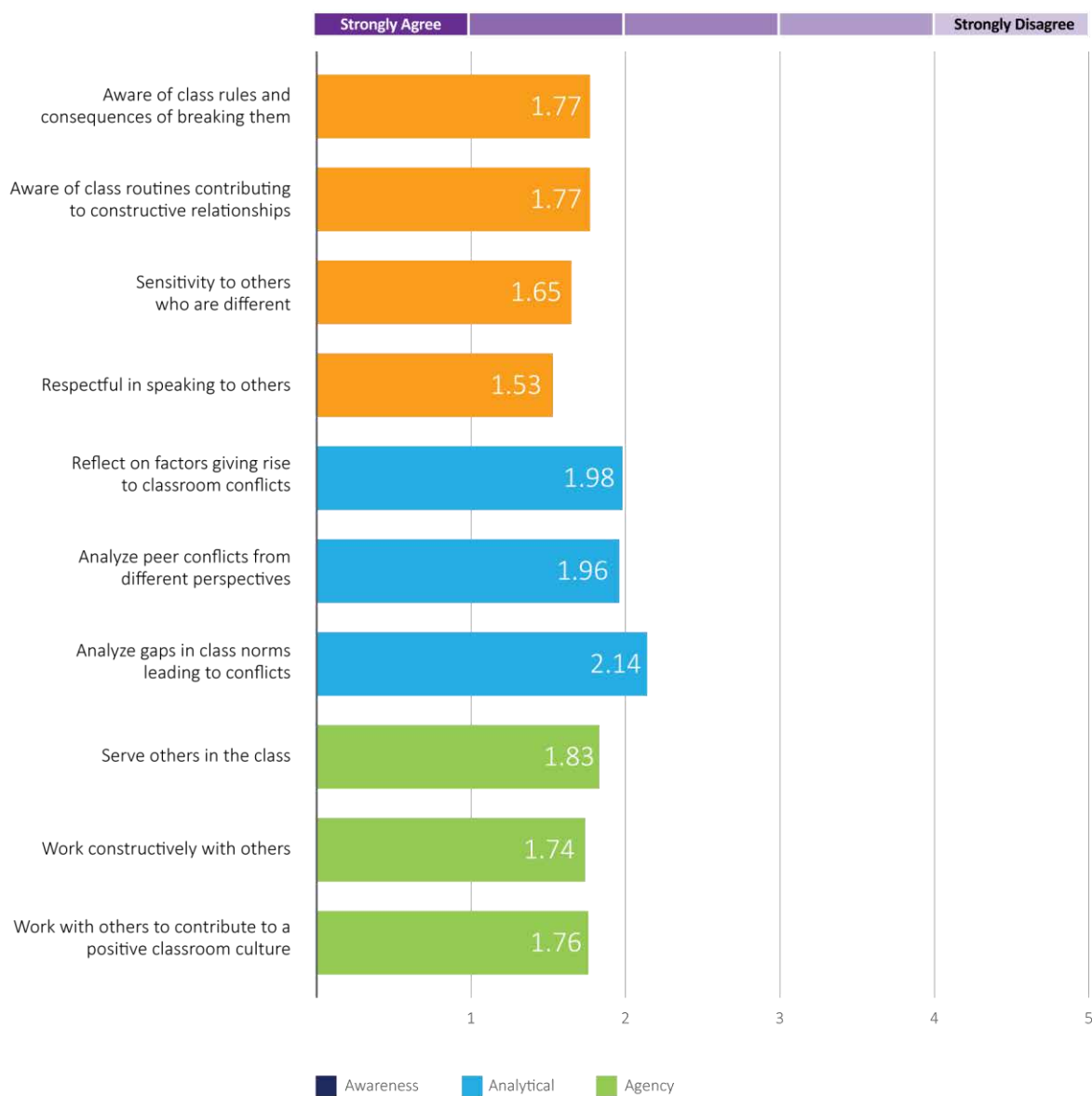


2.2 Classroom Culture

In creating a positive classroom culture, the most important relational capabilities that teachers emphasize are related to Awareness level: respect, sensitivity to others who are different.

The least important relational capabilities are related to the Analytical level: analyze gaps in classroom norms and factors giving rise to classroom conflicts.

Table 8. What are the important relational capabilities that teachers hope to develop in students through creating a positive classroom culture? Mean of 1 is closest to Strongly Agree.

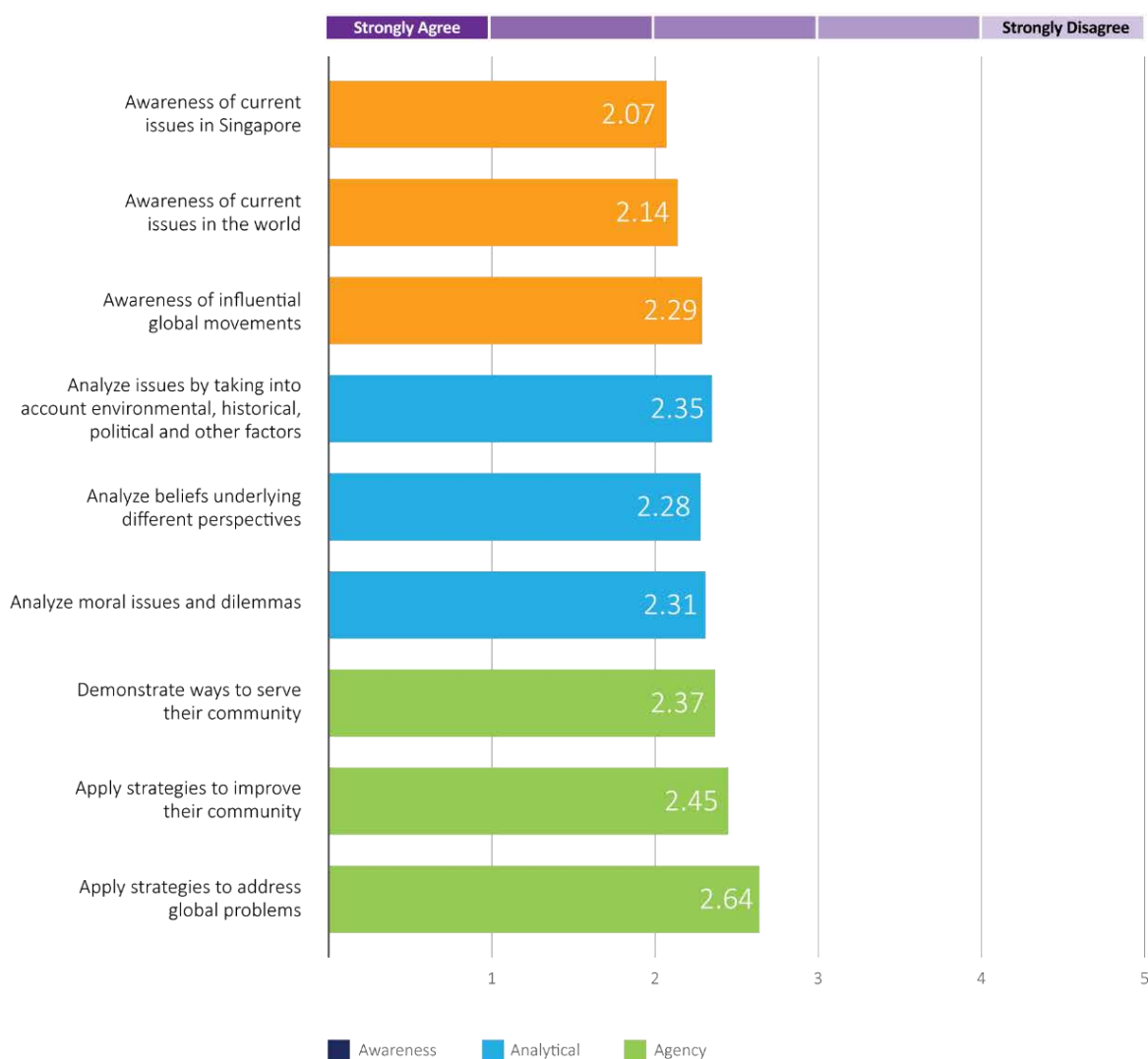


2.3 Lesson Planning

In planning lessons, the most important relational capabilities that teachers emphasize are related to the Awareness level: enabling students to be aware of current issues in Singapore and the world.

The least important relational capabilities are related to the Agency level: enabling students to apply strategies to address global problems and to improve their community.

Table 9. What are the important relational capabilities that teachers hope to develop in students when planning lessons?
Mean of 1 is closest to Strongly Agree.

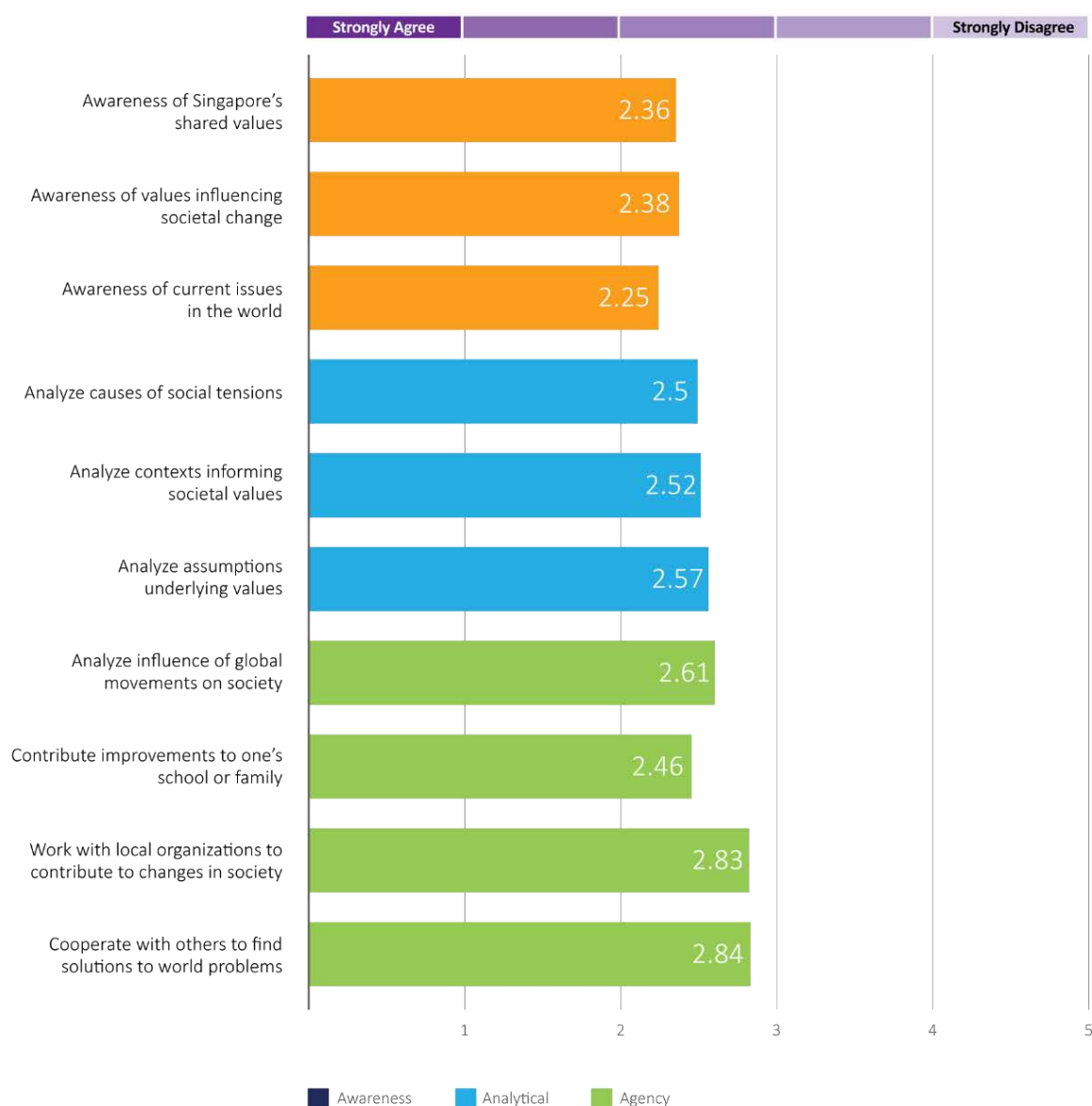


2.4 Lesson Enactment

In enacting lessons, the most important relational capabilities that teachers emphasize are related to the Awareness level: enabling students to be aware of current issues in the world and Singapore shared values.

The least important relational capabilities are related to the Agency level: enabling students to cooperate with others to find solutions to world problems and to work with local organizations to contribute to changes in society.

Table 10. What are the important relational capabilities that teachers hope to develop in students when planning lessons?
Mean of 1 is closest to Strongly Agree.



THE CCE TEACHER: ROLE, STRATEGIES AND CHALLENGES

SECTION III

“My philosophy of education is that every child can learn, and wants to learn. I feel that students learn best when they are given a conducive environment in which they feel safe and included. The purpose of education is then to equip them with the right tools, mindsets and environment so that they can live life meaningfully and in return, give back to society.”

– Teacher, History/Social Studies, 6-10 years of experience

“When the topic/theme allows for the incorporating of character education, we often have very rich discussions and students share deep reflections.”

– Teacher, English Language, 20-30 years of experience



3.1 Role of the Teacher in CCE

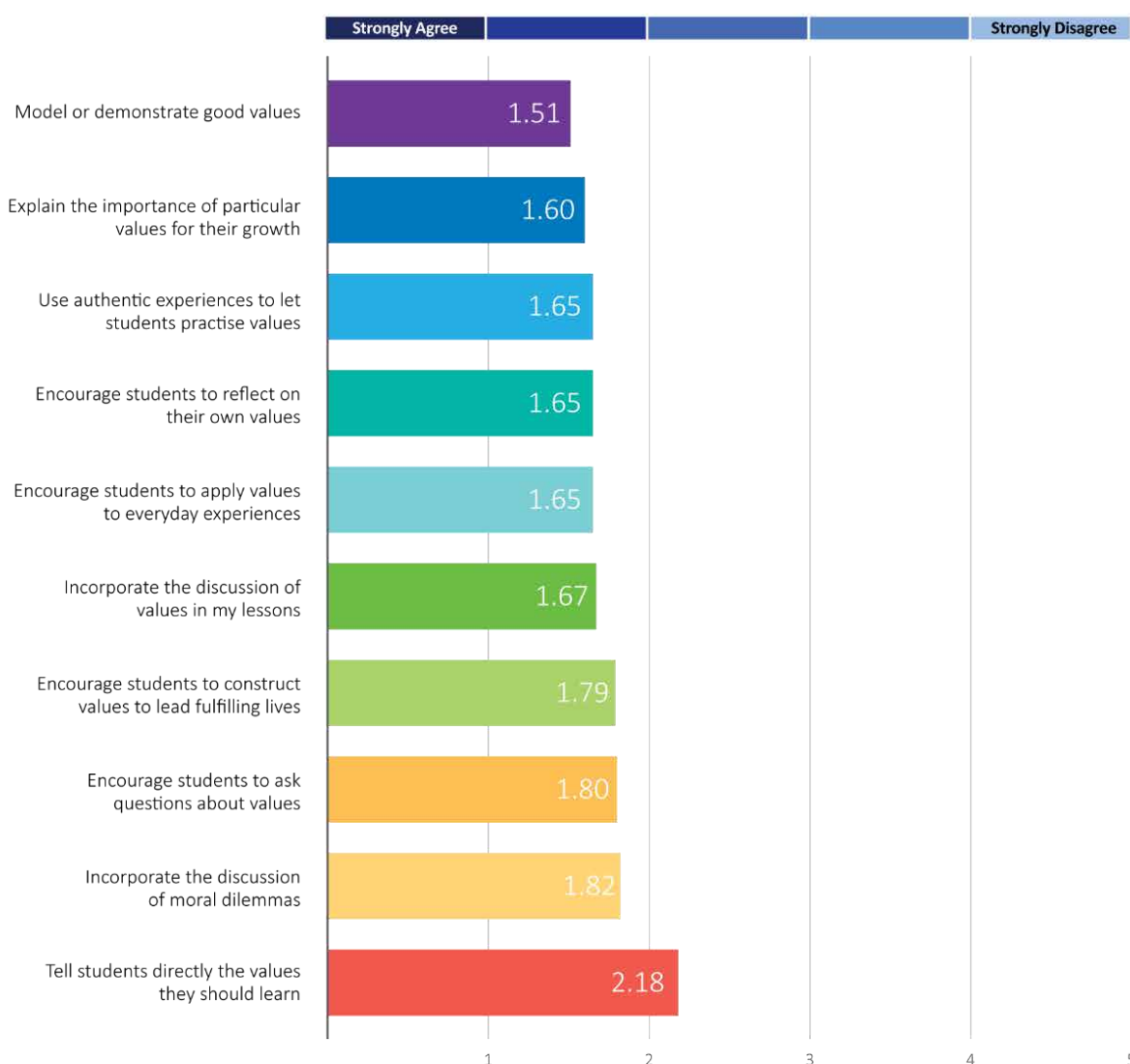
In integrating CCE in the teaching of subjects, the most important roles adopted by teachers are those that encourage the modeling of good values and the explanation of the importance of particular values for students' own growth.

The least important are those related to telling students directly the values they should learn as well as encouraging students to ask questions

about values and incorporating discussions of moral dilemmas.

Thus, it is evident that teachers are moving away from didactic teaching of values but more analytical strategies could be used to encourage students to question and discuss values more critically.

*Table 11. What role do teachers adopt in enabling students to develop character in the classroom?
Mean of 1 is closest to Strongly Agree.*

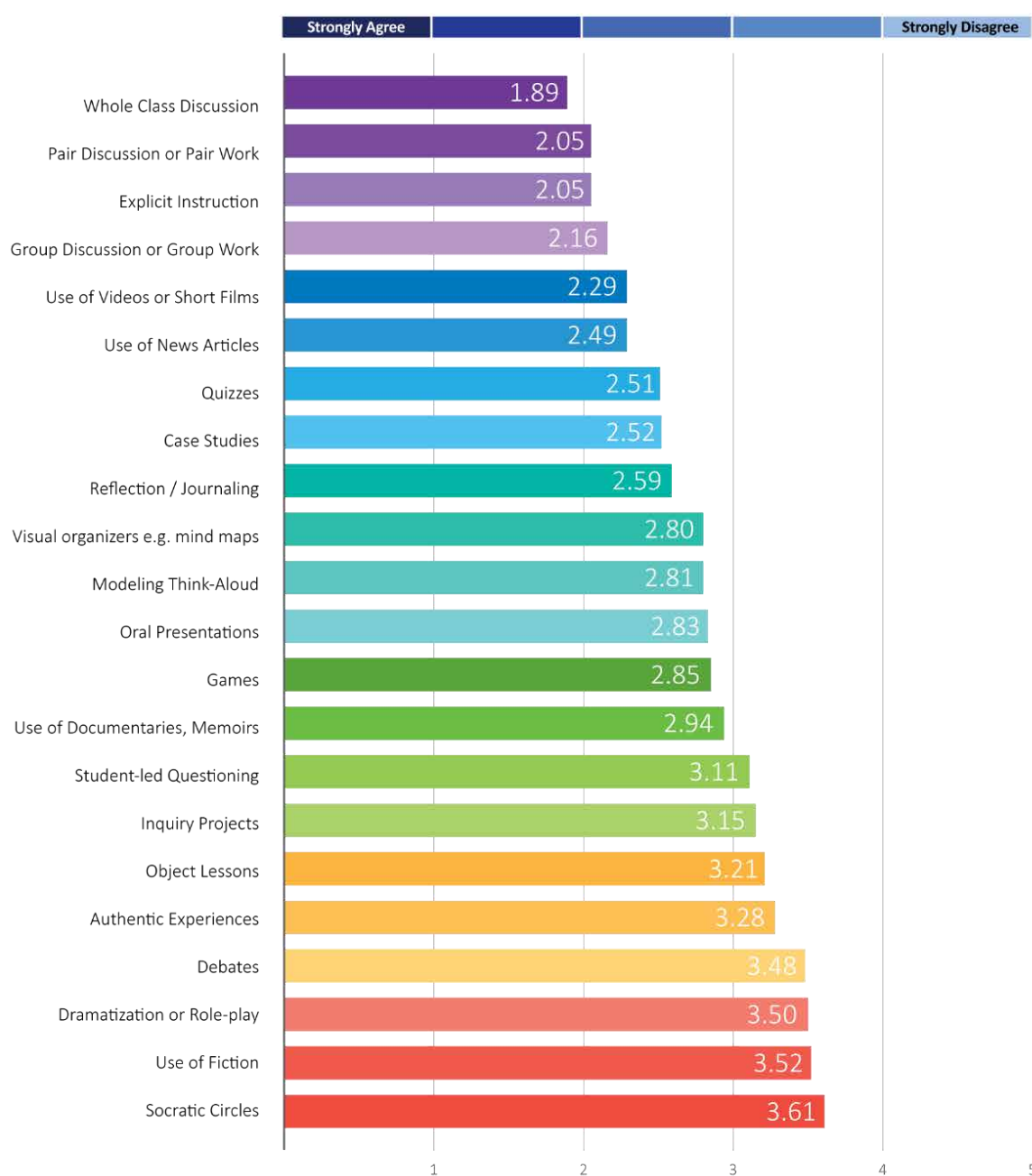


3.2 Instructional Strategies Frequently Used

In integrating CCE in the teaching of subjects, the most frequently employed instructional strategies involve whole-class discussion, pair discussion, and explicit instruction.

The least frequently employed instructional strategies involve dramatization or role play, use of fiction and Socratic circles.

Table 12. How often do teachers use the following instructional strategies to enable students to develop character in the classroom? Mean of 1 is closest to Almost Always.

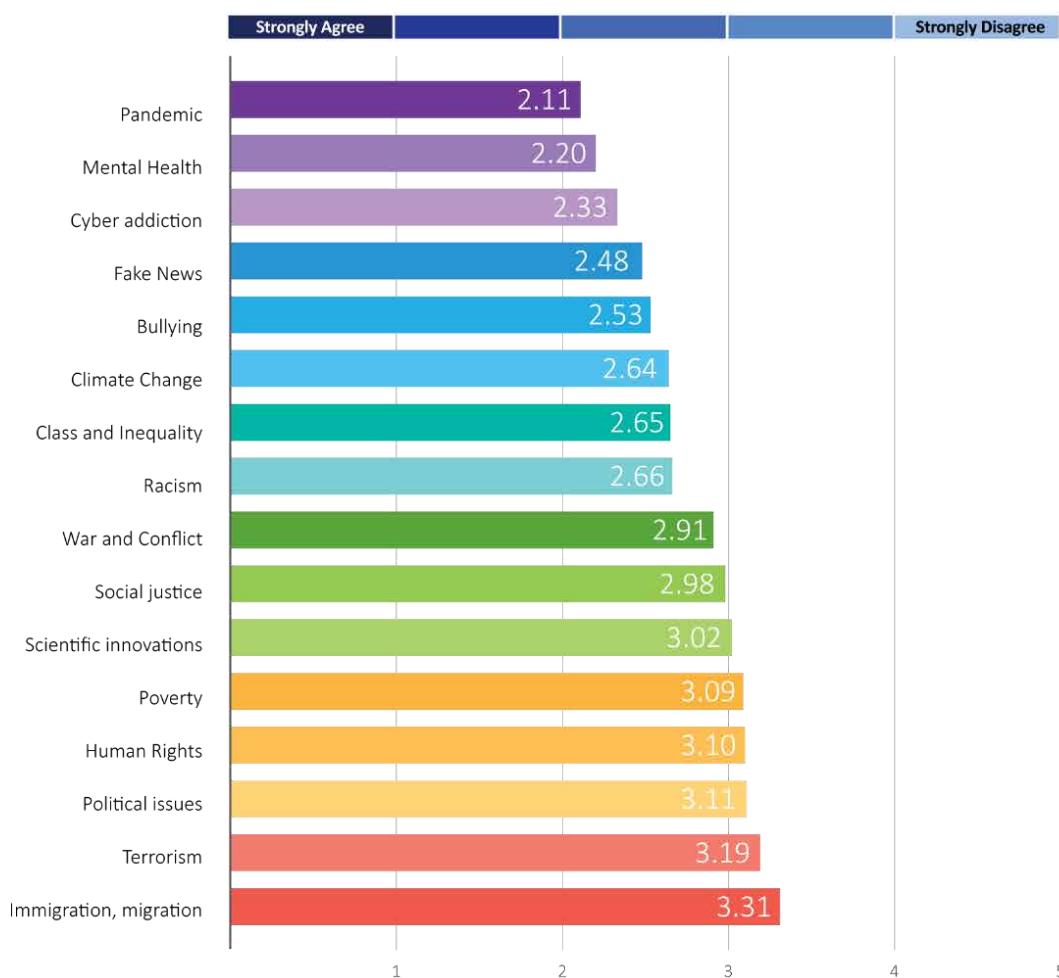


3.3 Contemporary Issues Frequently Discussed

In the classroom, the issues most frequently discussed relate to pertinent, current topics as well as topics closely related to youth/adolescent issues such as the pandemic, mental health, and cyber addiction.

The topics that are least frequently discussed relate to socio-political issues such as poverty, human rights, political issues, terrorism, immigration/migration.

Table 13. How often do teachers discuss the following contemporary issues with students in the classroom?
Mean of 1 is closest to Almost Always.



3.4 Challenges of integrating CCE in teaching subjects

In the open-ended questions, teachers articulated some of the challenges of integrating CCE in their subject areas. Three key points are highlighted:

1. Pitching to students

Some teachers feel that it is challenging to pitch CCE to the diverse maturity levels of their students. Some are afraid of triggering their students while others are less sure of how to handle insensitive remarks from students:

- “Sometimes too much discussion can be overwhelming for the students. Some topics are more sensitive than others. Some teachers are uncomfortable discussing these topics in class as well.”
- “Insensitive remarks from immature students.”

2. Disconnected from subject discipline

Some teachers feel that CCE is not naturally connected to their teaching subjects:

- “Not natural in my subject domain of Mathematics.”
- “Tough to incorporate these aspects in face of factual subjects such as Science.”
- “Difficult to reference global events in PE lessons.”

3. Students’ openness

- “Different people have different value systems and not everyone is readily open [to other views].”
- “Some students might find the topic sensitive or uncomfortable to them. They might be reluctant to share their own experiences in fear of being judged.”



3.5 Implications for Practice

This survey focuses on how Singapore secondary school teachers infuse CCE in their academic subjects and the levels of engagement they emphasize. We highlight three key implications for teachers and teacher educators.

1. Importance of an intentional approach to CCE

Values are effectively integrated in a school when it is a shared language infused across all aspects of a school's culture. This goes beyond just CCE subject-specific lessons and involves translating abstract values into concrete programmes and intentionally infusing it into all academic curricula. As such, there needs to be a more explicit and intentional connection to CCE in subject syllabuses along with curricula and lesson plans.

2. Importance of scaffolding in CCE pedagogy to deepen engagement

Character education pedagogies at the secondary level predominantly focus on the awareness level – helping students become aware of positive values for themselves and

their society. There is a need to extend this further by introducing strategies that would enable teachers to infuse ethical deliberation and agency. Thus, teachers need to be sensitized to the three pedagogic levels of CCE (awareness, analytical, agency) and be equipped to design lessons that effectively scaffold students along these levels towards more complex layers of moral knowing, thinking, feeling, and acting for the flourishing of self and others.

3. Equip teachers with a repertoire of critical and ethical pedagogic strategies

To enable students to critically analyze values, teachers could be equipped to use a repertoire of questioning strategies. To deepen students' awareness of multiple perspectives, teachers could be equipped to go beyond the contemporary issue at hand by connecting these diverse perspectives to larger moral principles and ethical purposes. This highlights the need to empower teachers with ethical literacy in order that they may facilitate more complex explorations of values. Such pedagogic approaches can be introduced to preservice and inservice CCE courses.

SURVEY DEMOGRAPHICS

SECTION IV

“I believe that every child seeks to be understood and valued as an individual, and this is necessary for learning to be at its most effective.”

– Teacher, Geography, 6-10 years experience

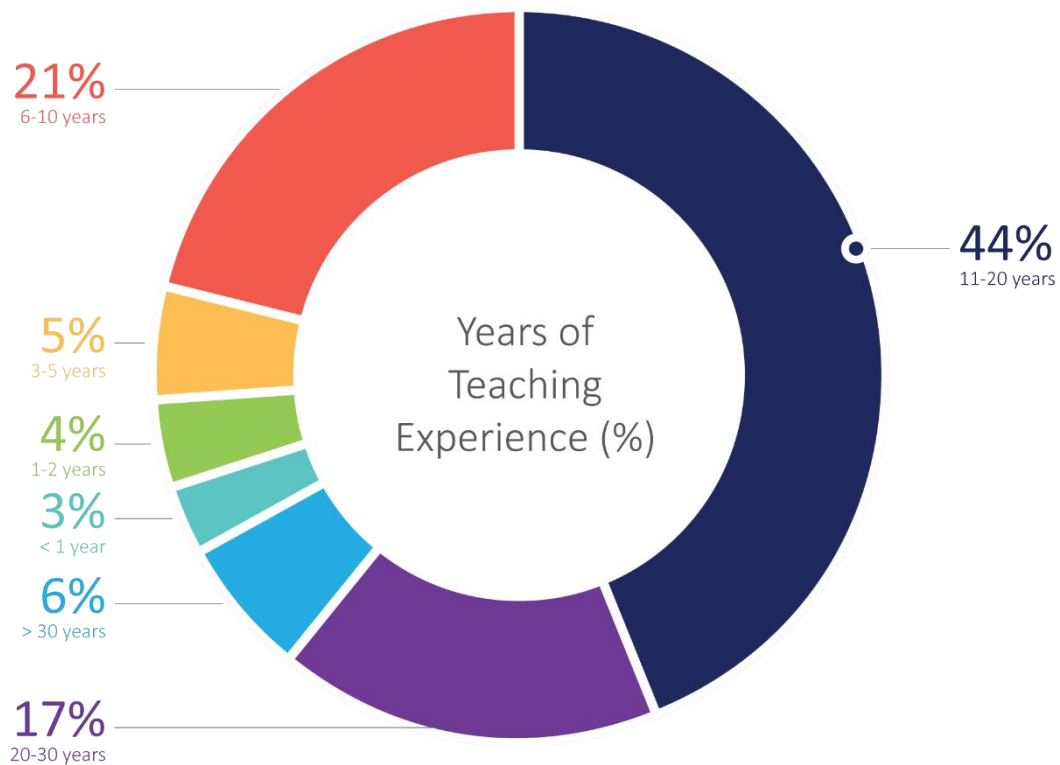
“I believe education should enable students to understand their personal strengths and identity as a citizen of the world. This means accepting how it is inherent to have certain weaknesses but also, how that should not limit students from attaining confidence. Similarly, being in multiracial Singapore, education should facilitate understanding of social differences.”

– Teacher, Art, 3-5 years experience



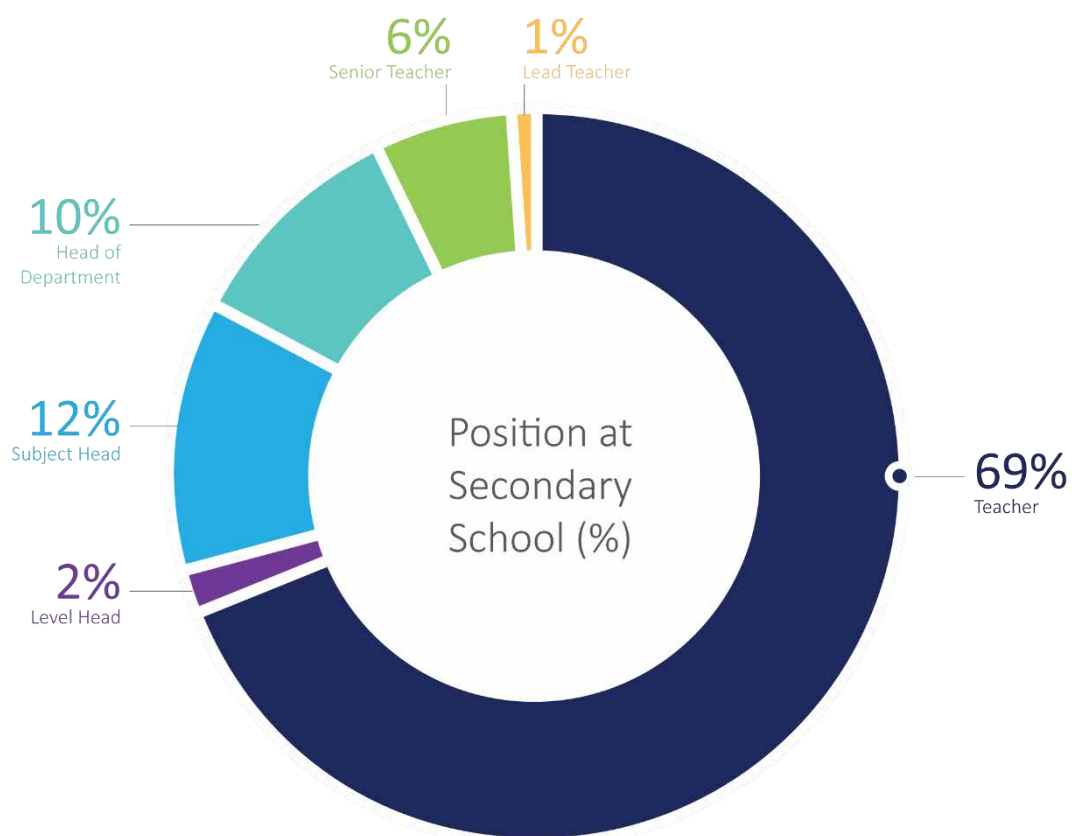
4.1 Years of Teaching Experience (N=585)

Among the teachers surveyed, 67% had more than 11 years of teaching experience in schools, 21% had between 6-10 years and 12% with 5 or less years of teaching experience.



4.2 Current Position in School Held by Teachers (N=585)

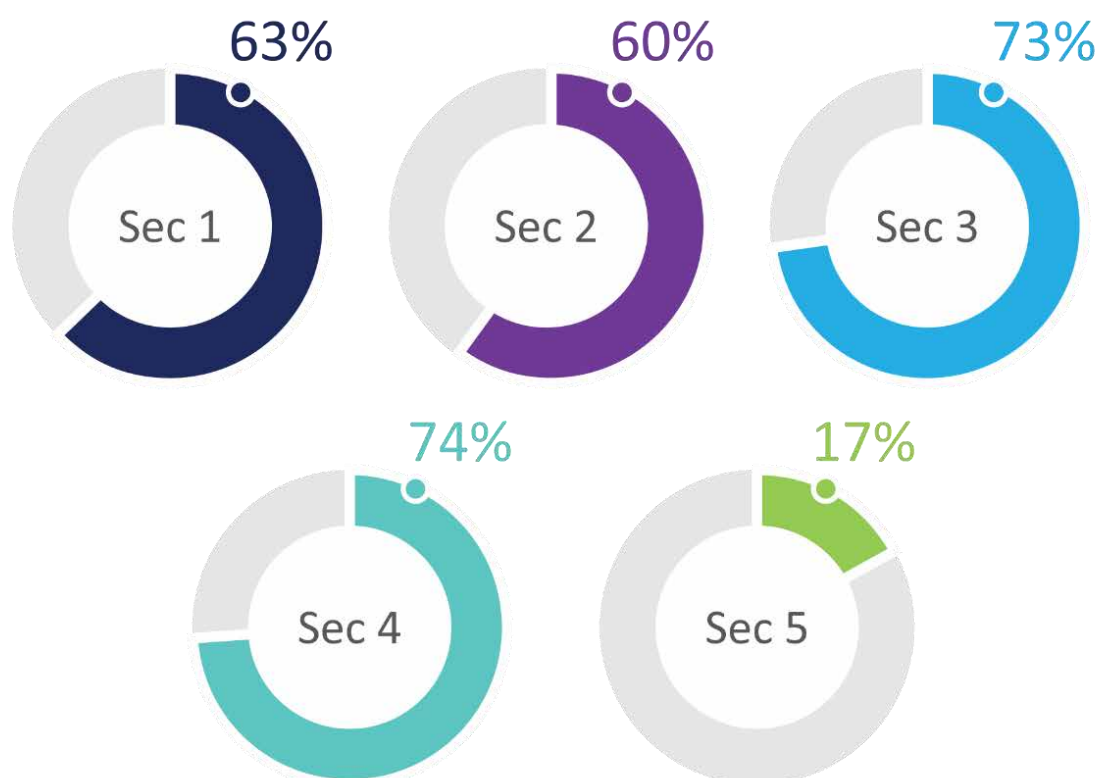
Among the teachers surveyed, the majority were in the position of a teacher (69%) while the rest (31%) held different positions such as level head, subject head, head of department, senior teacher and lead teacher).



4.3 Levels Taught (N=585)

Among the teachers surveyed, there was a good diversity of levels taught from Secondary 1 through 4, ranging between 60-74% of teachers teaching these levels. A small percentage (17%) also taught the secondary five level.

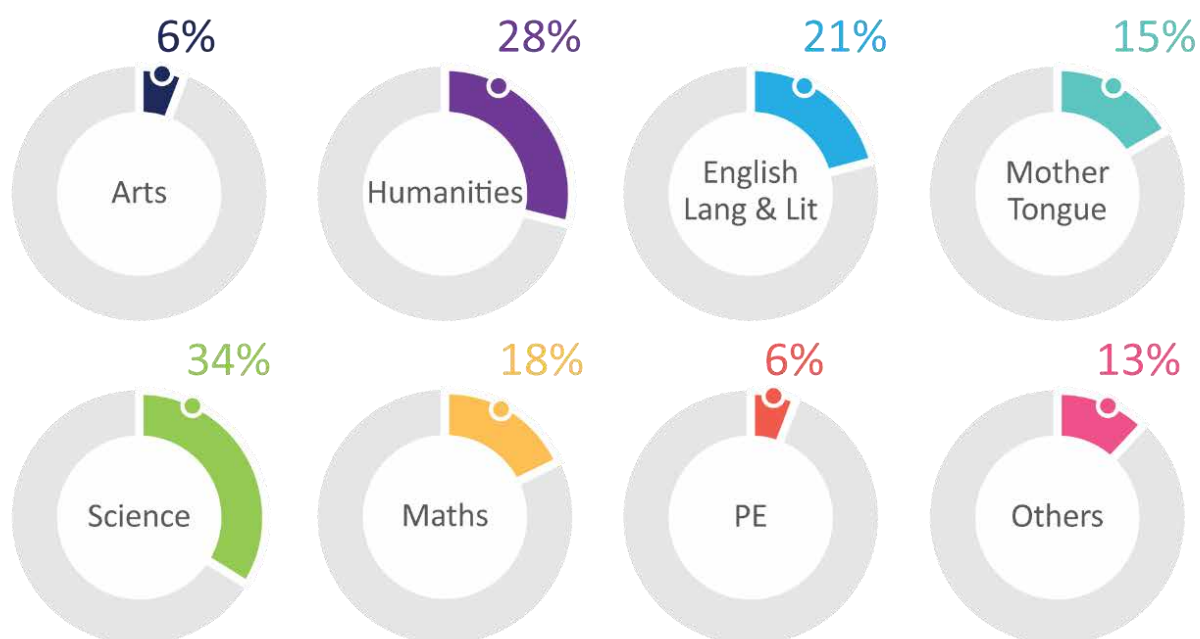
Levels Taught (%)



4.4 Subjects Taught (N=585)

Among the teachers surveyed, there was a good diversity of academic subjects taught: Arts and Humanities (34%), Languages (36%), Sciences (34%), Mathematics (18%), and Others such as Computing, Home Economics, and Physical Education (19%).

Levels Taught (%)



Note: Others includes accountancy, computing, design & technology, home economics.



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