



# Applying Polarity Thinking as a pedagogical approach for Character and Citizenship Education (CCE)

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This is an unpublished conference paper for the 13<sup>th</sup> Annual Jubilee Centre for Character and Virtues conference at Oriel College, Oxford University, Thursday 9<sup>th</sup> – Saturday 11<sup>th</sup> January 2025.

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## Abstract

Polarity Thinking, a framework developed by Barry Johnson<sup>1</sup>, is a key pedagogical approach applied in the Character and Citizenship Education (CCE) curriculum for students at the Pre-University level (17-18/19 years old) in Singapore. It focuses on developing students' ability to think about and manage polarities – ideas that are seemingly opposite but are in fact complementary. Polarity thinking enables students to be agile in decision-making while grappling with complexity in a balanced way.

This paper shares findings from a study on the use of Polarity Thinking on students' ability to understand and navigate complex issues discussed during CCE lessons.

Keywords: Polarity Thinking, Curriculum, Pedagogy

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<sup>1</sup> Barry Johnson is the chairman of Polarity Partnerships, LLC. <https://www.polaritypartnerships.com/certified-polarity-practitioner-directory/barry-johnson>. He developed the first Polarity Map© and set of principles in 1975.

# **Applying Polarity Thinking as a pedagogical approach for Character and Citizenship Education**

## ***Character and Citizenship Education (CCE) in Singapore***

Character and Citizenship Education (CCE) is an important aspect of Singapore's education system and provides an integrated approach to addressing our students' development of values, social-emotional well-being, and citizenship dispositions in a coherent and holistic way. Teachers are encouraged to use developmentally appropriate, process-based pedagogies such as dialogic teaching, moral dilemmas, and experiential learning to facilitate learning in CCE. There are several learning platforms where CCE is enacted with intentionality in our schools. These include CCE lessons and other subject lessons during curriculum time, as well as planned school experiences beyond the classroom such as camps, community service activities, learning journeys and co-curricular activities such as sports, games and clubs.

## ***Introduction of Polarity Thinking as a pedagogical approach in CCE***

When the Pre-University CCE curriculum was reviewed in 2020, data from Focus Group Discussions (FGDs) with students and teachers pointed towards the importance of enabling Pre-University students to navigate complexity, particularly as they transit from late adolescence into young adulthood and grow into greater independence in various aspects of their lives such as in relationships, education and career decisions, finances, or in exercising their beliefs on a range of issues. The FGDs also revealed students' concerns about making decisions with longer-term implications, suggesting a need to enable them to manage the increasing complexities of modern life.

Furthermore, a scan of the literature on adolescent cognitive development suggests that older adolescents are capable of integrating information and knowledge from disparate experiences and understanding uncertainty, and ambiguity (Griffin, 2017). Additionally, a stronger ability in perspective-taking, moral reasoning and moral judgement in older adolescents is a result of their growth from literal and linear reasoning to non-linear and complex reasoning (Nucci & Turiel, 2009). Older adolescents thus have the cognitive capacity to comprehend, and reason based on nuanced positions and are better at developing informed perspectives and original insights (Malin, Ballard, & Damon, 2015).

In exploring potential solutions to help Pre-University students engage more deeply with CCE topics and better navigate complexity, we explored the world of leadership coaching and organisational development. Leaders and organisations are often supported with frameworks and tools that help them become more effective in navigating complex issues and decisions, and to better achieve outcomes (e.g., to become a more compelling leader, or to better balance competing needs such as profit and sustainability). One of the many tools used in this field is Polarity Thinking.

## ***Polarity Thinking (PT)***

Polarities are everywhere in a complex world, and the ability to think in terms of polarities and manage them is key to leadership and making sound choices. A polarity is a paradox, conundrum, or dilemma that is unsolvable and contains seemingly opposite ideas that cannot exist without the other. Examples of polarities include activity and rest; risk and safety; structure and flexibility; control and freedom; and continuity and change. While the two ideas in each polarity seem to be in conflict, they are, in fact, complementary and interdependent, and we cannot do without either.

Thinking in terms of polarities helps one navigate life's challenges and the tension of opposites in the real world. This is a critical skill to develop in late adolescence in preparation for greater complexity and independent decision-making in adulthood. Instead of seeing these polarities as problems that are meant to be solved, people who are familiar with the idea of polarities learn to ride the ebbs and flows of each polarity and look for solutions that are not "either/or" but "both/and" (Johnson, 2012; Kise, 2014; Wesorick, 2014).

## ***Applying PT in CCE lessons***

PT, introduced in 2021 in the teaching of CCE for Pre-University students, was applied in a range of CCE topics. This includes reconciling tensions at different levels:

- individual (e.g. income AND passion in career choice);
- group (e.g. focusing on task AND relationship as a leader); or
- systemic (e.g. asserting one's views AND listening to others' views).

PT aims to promote dialogue and inquiry specifically directed towards uncovering the polarities faced at each level.

During some CCE lessons, a basic understanding of PT is introduced to the students. They learn what polarities are and the importance of approaching complex situations from a 'both/and' perspective. They are also introduced to the process of polarity mapping. This process comprises a series of steps<sup>2</sup> adapted for our students to

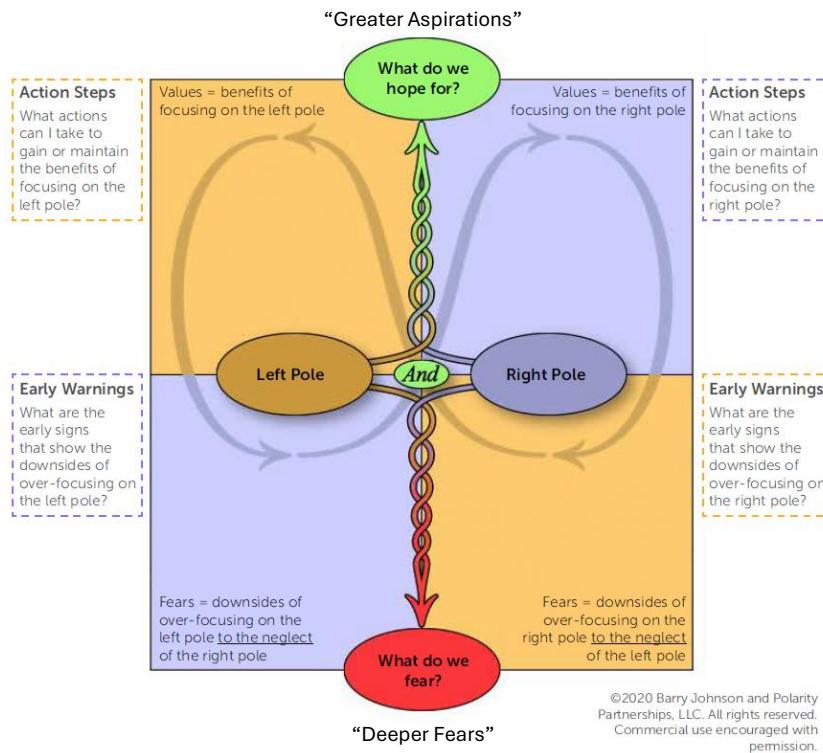
- (i) **See** the polarity at work in a situation and recognise the poles/ideas/concepts within the polarity;
- (ii) **Map** out the benefits of each pole, and the potential downsides of over-focusing on one pole to the neglect of the other, as well as their greater aspirations and deeper fears; (refer to *Figure 1 Polarity Map*<sup>3</sup>); and
- (iii) **Learn** about themselves and their own preferences or habits in navigating this polarity, as well as identify early warning signs and commit to action steps they can take.

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<sup>2</sup> The steps presented in this Teaching and Learning Guide is a simpler adaptation of their fuller See-Map-Assess-Learn-Leverage (S.M.A.L.L.) process, which is typically used in organisational leadership and coaching contexts. The process has been simplified for our students.

<sup>3</sup> Adapted from the Polarity Map®, a registered trademark of Barry Johnson & Polarity Partnerships, LLC.

Figure 1. Polarity Map



In a lesson where students learn about how to engage and respond to online discussions on current issues, PT is used to help them take stock of the pole which they typically express a preference for – “asserting one’s views” OR “listening to others’ views”. Using the polarity map, students consider the benefits of asserting their view AND listening to others, discuss the downsides and early warning signs when they overfocus on either pole, and the action steps to take to achieve a better balance. Teachers facilitate the discussion and help students to understand that, while it is important to articulate one’s views confidently, one must do so without neglecting the need to also listen to other views. Similarly, one should listen to other views carefully, while also not neglecting to assert one’s own views.

Another example of a lesson using PT is on empowering students to make thoughtful, informed education and career decisions. Students discuss the polarity of ‘passion’ and ‘income’, and what happens when they over-focus on one pole and neglect the other. Students also articulate their greater purpose (to achieve a “meaningful and financially rewarding work life”) and deeper fear (“meaningless and / or financially unsustainable work life”) as they navigate this tension between ‘passion’ and ‘income’. The lesson focuses on helping students to recognise that, while seemingly competing work values can appear to be “either / or” choices, there are ways to focus on both values over the longer term.

Depending on the topic, the lesson may focus more deeply on the benefits and the downsides of each pole, the early warning signs of overfocusing on one pole to the neglect of the other, and the specific actions that one can take to reap the benefits of balancing between both poles.

## **Research Study**

This research study aimed to examine the effectiveness of PT in helping students understand issues and grapple with complexity in a range of CCE topics<sup>4</sup>.

The research questions were as follows:

To what extent are Pre-University students able to understand complex issues in CCE by applying PT?

- a) How have students' understanding of complex topics changed after lessons which had used PT?
- b) To what extent do students appreciate PT in complex issues, and are able to apply the principles<sup>5</sup> of PT in their learning of the topic?

## **Research Design and Method**

The study involved seven schools of intentionally varied school types<sup>6</sup> and student profiles.

A mixed methods research design was adopted, involving the collection and analysis of quantitative and qualitative data in two key stages:

### 1. During lessons:

- Lesson observations. Lesson writers from the Pre-University team and research team members sat in lessons and observed students' verbal and non-verbal responses during lessons involving PT.

### 2. Post-lessons:

- Student feedback surveys from students after attending CCE lessons using PT
- Focus Group Discussions (FGDs) with students to understand the extent to which students were engaged in the lesson, whether they understood more about the topic, and in general, what they thought about PT
- Teachers' written reflections and interviews to understand their perception of their students' experience of the lessons (e.g. whether they felt students were engaged, connected well to the topic, or able to follow the approach of PT)

## **Findings**

The study found that the use of PT had a positive impact on the students' ability to better understand and navigate complex issues in CCE. Students and teachers generally found PT valuable and applicable to issues discussed in CCE and in various life situations. The findings

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<sup>4</sup> The topics where polarities are explored include competing work values, tensions in student leadership situations, resilience and well-being, and online polarization.

<sup>5</sup> The principles include (i) navigating tensions and paradoxes with an emphasis on both poles; (ii) being aware of whether they are putting too much focus on one pole at the expense of the other; and (iii) being agile in navigating polarities to make better decisions over time.

<sup>6</sup> Pre-university education (for students aged 17-18) in Singapore is offered through various institution types: government-run, government-supported and independent. These include Junior Colleges (2-year pre-university programme), schools with 6-year Integrated Programmes (combining secondary and pre-university education), and institutions offering international curricula.

also indicated factors that could influence the levels of engagement and learning through PT.

The following is a summary of the key findings:

**a) Students' understanding of complex topics and issues through PT**

A significant majority (96%, n=165) of students reported that they were able to appreciate complex issues better through the use of PT in CCE lessons. In the FGDs, some students cited that they were able to see a fuller and more balanced picture of the issue, while others were more conscious that issues were not binary as no positions were exclusively right or wrong. Some also raised the importance of being open to different perspectives on such issues.

Analysis of lesson artefacts provided further evidence suggesting that students were able to use PT to consider multiple perspectives on issues relevant in their life contexts, such as online interactions and work values.

Teachers reflected on how the approach provided a structured process for discussing issues in lessons and observed that their students were able to grasp complexities with greater nuance and gain broader perspectives on what they might have presumed were simply tensions or dilemmas. Nevertheless, teachers also acknowledged that the lack of time within the lesson tended to truncate the discussion, which could result in some students underestimating the complexity of the issue even with the use of PT.

**b) Students' appreciation of PT as an approach to understanding complex issues**

Majority of the students (93%, n=164) expressed that PT as an approach helped them become more agile in their decision-making processes. Several students shared, during the FGDs, that the Polarity Mapping exercise enabled them to systematically appreciate a situation; recognise the benefits and downsides of each position in the polarity loop; gain a fuller understanding of the options they had in the situation; and navigate different positions for more adaptable decision-making. In particular, some of them appreciated how the Polarity Mapping process made visible what seemed like a relatable way to consider an issue.

Teachers shared that the subtle changes in the language that students used to describe the choices available in a situation (e.g. eschewing describing one pole as "more desirable" than the other) suggest that students had a preliminary appreciation of the value of PT.

On the other hand, a small percentage of students shared that they found the PT lessons confusing because the approach seemed abstract and overly cerebral for them.

**c) Perceptions of the value and applicability of PT**

Out of the 202 students surveyed, most found the lessons useful (95%) and were able to apply what they learnt in the lessons (96%). In addition, a large proportion (94.5%, n=164) also indicated that they could apply PT in other areas of their life. Some examples cited by students included choosing academic and/or career paths as well as, in managing relationships at home and school. In the FGDs, a few students reflected that using PT during lessons provided them with the vocabulary to describe how they had been thinking or what they should think about when making decisions. However, a small number of students found the approach to be either too



conceptual, too generic in nature, or too time-consuming for practical use in day-to-day decision-making.

Teachers said that PT helped students in strengthening social and emotional competencies such as self-management and decision-making. For example, when considering their options in different situations, they became aware of a broader set of options and considered how to “move” along a polarity loop and not remain stuck and helpless. Teachers felt that this process could develop not just problem-solving abilities, but also a sense of hope, optimism, and possibility, resulting in resilience in complex real-life situations.

Teachers also highlighted that students would be more likely to apply PT in their lives with practice and more regular use of PT in lessons. This was evident in anecdotal accounts from teachers on how some students approached them after lessons to further discuss their personal experience of the poles.

#### **d) Students’ engagement levels during lessons taught with PT**

Overall, the survey revealed overwhelmingly positive responses to the CCE lessons taught with PT. 91% of the students (n=202) reported feeling positively engaged during PT lessons, while 97% found that they could relate to what was discussed in lesson.

Through the FGDs, students shared candidly about being engaged by the novelty of the approach, ‘a new idea[way] of thinking’ or were simply hearing the polarities being discussed in a both/and manner for the first time. This was corroborated by the positive feedback from teachers who reported that students were open to and intrigued by PT. Lesson observations also provided evidence of active discussion, particularly in the process of Polarity Mapping, with even typically quieter students joining in. Students also indicated in the FGDs that they valued the opportunity for social interaction through these group discussions. Overall, both teachers and students found PT to be age-appropriate for Pre-University students, in terms of their level of critical thinking, social-emotional maturity, and life experiences.

Levels of student engagement and learning were found to be associated with several factors. Students highlighted the skilfulness of teacher facilitation, which included the style of presentation, the teacher’s ability to explain the concept of polarity, emphasis on the application of concepts, and the encouragement of critical thinking. Teachers’ reflections revealed their intentionality in the facilitation process to “provide strong scaffolding” by asking probing questions to clarify, encouraging student voice and sharing their personal stories to help students ‘make the link’ to real life.

While it would be useful to approach an issue with PT over several lessons rather than just in one, to better scaffold students’ learning, most teachers highlighted that the choice of topic to apply PT to was important as well. They suggested that topics where students had some life experience would lend themselves more easily to PT and be perceived by students to have a closer connection to their life situation and choices.

The study also found that students preferred concrete, relatable contexts and examples to bring across the value of PT as opposed to merely defining or teaching the principles of PT.

### ***Learning and Possible Application***

Through this research project, we have gathered several insights on how PT can be better integrated into the Pre-University CCE curriculum. The findings, particularly the deeper reflections and interviews with teachers, have also informed us of the subsequent support required for teachers in using this pedagogy.

Firstly, the positive student engagement and feedback has affirmed the value of including PT as a key pedagogical approach in our curriculum and that it should be continued. This approach has demonstrated its effectiveness in engaging students and fostering their ability to navigate complex polarities.

More deliberate scaffolding will be helpful for students to understand PT in CCE lessons. The lessons could include the use of concrete and relevant examples of the polarities discussed, as well as intentional discussions on applying all the steps of PT, with a particular emphasis on learning from polarities. This helps the teachers to be focused on providing students with practical and applicable insights into managing polarities in various contexts.

Our findings also underscore the importance of providing professional development opportunities for teachers to become more familiar and adept with PT in CCE lessons, as well as the value of applying PT in real-life contexts for students. This could involve targeted training and support to equip educators with the necessary skills and knowledge to effectively integrate PT into their repertoire of teaching practices.

## References

1. Griffin, A. (2017). Adolescent neurological development and implications for health and well-being. *Healthcare*, 5(4), 62.
2. Johnson, B. (2012). *The Polarity Approach to Continuity and Transformation*. Sacramento, CA: Polarity Partnerships, LLC.
3. Kise, J. A. G. (2014). Unleashing the positive power of differences: Polarity thinking in our schools. Corwin/Learningforward.
4. Johnson, B. (2014). Reflections: A Perspective on Paradox and Its Application to Modern Management. *The Journal of Applied Behavioral Science*, 50(2), 206–212.
5. Malin, H., Ballard, P. J., & Damon, W. (2015). Civic purpose: An integrated construct for understanding civic development in adolescence. *Human Development*, 58(2), 103–130.
6. Nucci, L., & Turiel, E. (2009). Capturing the complexity of Moral Development and education. *Mind, Brain, and Education*, 3(3), 151–159.
7. Wesorick, Bonnie L. (2014) "Polarity Thinking: An Essential Skill for Those Leading Interprofessional Integration," *Journal of Interprofessional Healthcare*: Vol. 1: Iss. 1, Article 12. Available at: <http://www.jihonline.org/jih/vol1/iss1/12>.