



An Institute of



Trialing agentic curriculum making for Character and Citizenship Education: Implications for teacher professionalism

Dr Andrew Pereira, A/P Fang Yanping

andrew.pereira@nie.edu.sg

Centre for Research in Pedagogy and Practice

National Institute of Education

**INSPIRING LEARNING
TRANSFORMING TEACHING
ADVANCING RESEARCH**

Overview, Scope & RQs

- **Education issue:** addressing the “entrenched and narrow purpose of education to a more balanced purpose that focuses on the holistic development of children” (Kwek, Ho & Wong, 2023).
- **Aim:** agentic curriculum making (finding discretionary spaces within centralized curriculum) through Bildung content facilitation to engender personal meaning and significance. Enacting professional wisdom in ensuring how deep understandings of content and ideas are made relevant to students' lives (Hargreaves & Moore, 2000).
- **Definitions:**
 - **Agentic Curriculum Making:** As teachers' use of professional expertise and judgment in interpreting and modifying the curriculum to suit the needs of each student (Craig, 2013; Grimmer & Chinnery, 2008; Wallace & Priestley, 2017).
 - **Agency & Discretionary spaces:** From Schwab's (1954/1978) idea of teacher agency as power of teacher in active engagement using one's professional authority and judgment where teachers can artfully blend what is in themselves, what is present in their students, and what is reflective of their subject matters, together with what is appropriate for their given milieu in the classroom (Craig, 2017).
 - **Bildung:** German education philosophy as self-formation or self-cultivation; point of becoming an educated (*gebildet*) person; cultivation of sensibility, self-awareness, liberty and freedom, responsibility and dignity (Hopmann, 2007; Humboldt, 2000).
 - **Content Facilitation Steps (CFS)** as the core of preparation (as part of a *didactic* analysis) to facilitate and design opportunities for fruitful encounters with educational content (Klafki, 2000), where the point is to “bring out the substance of the objects of learning” (Willmann, 1957. p. 160); Decisions regarding why, what, how, and when to teach. Because *bildung* is not just education but “the world of the mind, the habits of the young person as a whole” (Klafki, 2000, p. 152).
 - CFS as an **adaptable component** of *Bildung*: Steps of 1) wider reality of phenomenon, 2) its significance, 3) significance for children's future, 4) how is content structured, and 5) special cases
- **Research Questions:** 1) How can teachers make the CCE curriculum significant and meaningful for students?
 - 1a) What are the discretionary spaces in the classroom where teachers can employ their agency to engage in curriculum making?
 - 1b) How do teachers use content facilitation steps to support the widening of the curriculum?

Methods

Instrumental case study of 7 teachers (one dropped out after pre-study interview)

- **Selection Criteria:** Aim for rich cases: more than 4 years experience. Optional: leadership positions, award winning

Intervention Protocol:

- Semi-structured interview, Workshop + Classroom observations

Research Phases:

- 1) **Pre-Study interview** (1 hour) to understand deeply each teacher's case: e.g., teaching philosophy, teaching approaches used, importance of meaning and significance to student from content and curriculum,
- 2) **Bildung content facilitation workshop** (1 hour),
Optional: additional individualized planning session if requested (30 min),
- 3) **Research lesson observation** (1 hour), and
- 4) **Post-lesson Interview** (30 min) as a lesson debrief.

Rest of Presentation Outline:

- Pre-study interview findings, Intervention, Overview of Research Lessons, T1 Exemplar (JC CCE Russia Ukraine War on National Sovereignty), T2-T4, Discussion, Implications, Recommendations, Conclusion, Annex A (Utility), Annexes B and C (Lesson Materials from T1's lesson).

Pre-study Interview Findings

	1) Meaning/Significance	i) Discretionary Spaces	ii) Content Facilitating
T1	Has bildungsroman understanding “as character evolution, visible growth over time, to be more informed, discerning, and stronger person”. Teaching viewed as process of metamorphosis for the students.	Utilize diverse resources like GP lessons and personal narratives to engage students and encourage critical thinking.	Employ pedagogical methods such as Socratic questioning and forum theatre to cultivate empathy and resolve issues collectively.
T2	Meaning and significance is foremost: Also, as bildungsroman: character growing up, facing obstacles, and growing (a literature device)	Listen for teachable moments and leverage relevant personal anecdotes to spark student interest.	Encourage independent thinking and exploration of different perspectives without imposing beliefs, fostering deeper understanding and personal reflection.
T3	Has a proto-bildung view: how students need to “connect with the world”, ability to navigate world, need “certain self-development in ourselves”, not just “knowledge-seeking” and “winning that debate”, but a personal response in a responsible way	Engage students in topical discussions to broaden their understanding of societal issues and education policies.	Utilize visual aids and multimodal approaches to contextualize learning and promote critical thinking, fostering awareness of broader social contexts.
T4	Meaning: e.g., not just history knowledge but moral consideration: e.g., was the use of the atomic bomb justifiable? Did the civilians deserve that fate?	Customize lessons to cater to students' backgrounds and anticipate potential sensitivities or challenges.	Implement pedagogies like problem-based learning and privilege walks to encourage empathy and respectful discourse, acknowledging diverse perspectives.
T5	As “enriching the lives of students” and belief that “every child is a source of improvement for our world”	Adapt lesson content to address relevant topics beyond the curriculum, such as mental health, promoting holistic development.	Utilize structured academic controversies and role-playing activities to facilitate experiential learning and challenge assumptions, fostering active engagement and reflection.
T6	As walking the talk: PE teachers should look the part, meaning, they should look.... fit, able to do a lot of demonstration, be passionate about their subject.	Tailor lessons to align with students' aspirations and backgrounds, providing a comprehensive learning experience.	Navigate controversial topics with sensitivity, leveraging lesson packages to facilitate discussion and exploration within the constraints of the education landscape.
T7	Geography, not just volcanoes, but how eruption affects the region; COVID: how it affects lives, economy, jobs.	Modify lesson content to accommodate diverse perspectives while maintaining instructional integrity.	Employ role-playing and case studies to encourage empathy and perspective-taking, facilitating deeper understanding of societal issues and cultural differences.

Intervention: Content Facilitation

Pre-study Interview Findings Summarised

- 1) **Meaning/Significance:** Teachers feel that meaning and significance (and not just grade attainment) is also important. Some have *bildung* or *proto-bildung* understanding of self-cultivation/formation.
- i) **Discretionary Spaces:** From expectations that teachers are expected to modify the lesson to suit students' (learning) needs. Discretion to put in more personal (to teacher and student) examples. Also, important concepts that arise during class and dialogic interaction.
- ii) **Content Facilitating:** More towards being pedagogically-led (e.g., Socratic questioning), and not from the curriculum design perspective).

Workshop Intervention:

- **Addressing gaps** of teachers' untheorized understanding of curriculum making and content facilitation; conflation between curriculum planning vs. curriculum making.
- **Aim:** Situating teachers as pedagogical designers to interpret curriculum: Explained key concepts like *Bildung* focusing on CFS and decisions regarding why, what, how, and when to teach along with critical components and processes (of relevance, content, practice, and sequencing).
- **Case study examples**
 - Food path in geography: Wider implications for production/consumption/ destruction flow, impact on landscape, environment, people and society.
 - Quadratic Equation Example: Not just solving math problem but calculating area of rooms/plots of land.
 - Others: Figuring a profit, usage in sports (e.g., throwing a ball), car-accident investigation, artillery (curve on a Cartesian grid: moral implication of usage of science/math for warfare).

Overview of Research Lessons

0	Lesson and Subject	Content Facilitation and Pedagogical Approaches
1	CCE lesson on The Ukraine war Content focus: National sovereignty, implications for smaller nation states, social justice, fairness	Content facilitation through emotive media analyses (photographs, blogs, videos). Dialogic discussion and Socratic questioning with students
2	CCE lesson on time management and timetabling for examination preparation Content focus: Personal effectiveness, priorities, stress reduction	Targeted and differentiated customization of timetabling. Example: Hourly schedules for students with time management issues
3	General Paper lesson on Singapore and Climate Change Content focus: Student agency, battling sense of "doomerism"	Use of inventive thinking, gaining fresh perspectives, altering present course of action, considering constraints and alternative action and thinking
4	History Lesson on World War 2 Specific focus: Chamberlain's appeasement policy, wider significance of crisis and conflict management	Scenario decision-making role-playing game (PowerPoint) and role-playing (students as diplomats and policy spokespersons)
5	General Paper lecture on media-related issues. Content focus: Media and social advocacy, power, weaponization, control of media	Exploring "new" ways of understanding media: shift from Fourth to Fifth Estate, navigating governmental power and control, democratizing influence of new media
6	CCE lesson on respectful relationships and safety Content focus: Wider significance of making informed choices to the theme of "love yourself, love others"	Appeal through a relationship traffic light game, focus on student agency in preparing for dating relationships

T1: An emotional pedagogy to understand the Russia-Ukraine War

Relevant Pedagogy

- An Emotional Pedagogy using Media-based analysis (photographs, blogs, videos), to evoke emotional responses beyond facts and figures to gain understanding of the conflict through human consequences. (See Annex B)

Prompts and dialogic questions:

- “Not my backyard?”, What does the situation in Ukraine mean for us in Singapore?
- Given the impact of the situation in Ukraine, what can small states like Singapore do to protect her sovereignty?

1) Wider Meaning and Significance

- Gain insight into the complexity in international relations and conflict (no easy answers) (e.g., students “perplexed” that war is continuing despite international negotiations); linkages (to other conflicts, e.g., Sri Lanka + present role of social media)
- Personal significance: sense of empathy: harnessing vulnerability and “helplessness” (e.g., “I fear for those who live in the warzones”); National Sovereignty/International Justice; Pride reflecting moral stance (agree with Singapore ambassador’s strong stance) (See Annex C)

Discretionary spaces and Content Facilitation

1a) Discretionary spaces

- Harnessing Teacher's understanding of *bildung* from literary concept of *bildungsroman* (character transformation)
- From teacher's close rapport and understanding of students (e.g., how a student has family members in Ukraine; students' level of interest in international politics)
- Updated lesson materials: e.g., from current vlogs (of Singaporeans in Ukraine), recent videos (e.g., from Vice Media on YouTube)

1b) Content Facilitation

- Structuring: unsettling students in an ethical and non-manipulative manner to prompt further reflection
- Admission of vulnerability allows for open engagement to reactions of possible traumatic events (Students admit they are "strawberry generation kids") (See Annex C)
- Acquire/Retain: encouraging students to deepen their sense and meaning-making processes. note visceral emotional reaction. Allows for teacher to validate students' emotions due to "human frailty" and fallibility

Insight

- How an emotional pedagogy serves as a catalyst for profound engagement, critical thinking, and the cultivation of emotional intelligence

T2: A “Silent Pedagogy for Individualized Customization of Students’ Time Management”

Relevant Pedagogy

- Discrete pedagogical intent and execution (hence “silent”) that comes across as not being controlling or intrusive using Differentiated Learning

1) Meaning and Significance

- Beyond time-management and timetabling skills: Individualized differentiated learning for task prioritization skills, balance in life-goals, aspirations setting, dealing with social media addiction, general checking in on students with known issues (e.g., parental strife)

1a) Discretionary Spaces

- From knowledge of students (students’ needs), proximity to examinations (needed to bring less forward from original timetable). Discretion influenced by teacher’s knowledge of students & parents’ feedback.

1b) Content Facilitation

- Content structuring: From Silent Steps Pedagogy for class interaction and as physical visualizer of how students spent their time. Customized Time Commitment analysis using Circles of Control Analysis together with Priority Matrix To-Do Quadrants.

Insights

- How a silent pedagogy allows for realization of pedagogical intent without being intrusive or explicit; as opportunity for teacher to demonstrate care while enhancing students’ welfare and learning ability.

T3: Inventive Thinking to Combat Climate Crisis and *Doomerism*

Relevant Pedagogy

- Inventive thinking and dialogic interaction to understand students' beliefs and agency over climate change. Exercise of inventive thinking to derive outside-the-box and diverse solutions to vexing problems.

1) Meaning and Significance

- Beyond facts, figures, and environment policy; significance focus on student and individual agency as climate crisis implicates all humans after all. Inventive thinking leads to call to action e.g., advocate for information transparency (e.g., climate related mortality statistics), balancing between economic growth and sustainability.

1a) Discretionary Spaces

- Based on Topicality: e.g., Recent COP26 agenda/agreement. How teacher needs to deal with concepts raised in dialogic interaction: e.g., “Doomerism” as mentioned by students. Teacher needs to tackle sense of helplessness and apathy in climate crisis effort.

1b) Content Facilitation

- Personal agency focus using inventive thinking: e.g., “How would YOU alter the course that Singapore takes”. Content structuring: Updating/learning knowledge e.g., COP26, using comparative analysis building up to inventive thinking. e.g., comparisons of garden cities (Osaka vs. Singapore), teacher generated example, e.g., NEWater, desalination, vertical farming...

Insights

- Inventive thinking to think outside of the box and to seek new/diverse solutions to vexing problems. Also, in conjunction with sophisticated argumentation: e.g., using such thinking as criteria and premise for staging arguments in GP essays.

T4: Game-based historical scenarios/Role-play debate for strategic, political, and humanitarian considerations

Relevant Pedagogy

- Strategy based game using historical scenarios & Role-playing debate to understand Chamberlain's appeasement policy in WWII.

1) Meaning and Significance

- Beyond WWII historical knowledge: wider discussion on morality of war: e.g., annexation as lesser evil vs. war? Justification for appeasement? What would you do if you were Chamberlain? (Empathy and inventive thinking)

1a) Discretionary Spaces

- Use of IT: Powerpoint based game using slides within Google Classroom Platform.
- Topicality of war: drawing similarities and difference with the Russia-Ukraine conflict

1b) Content Facilitation

- Specified by scenario game format (choice making)
- Dialogic interaction of students' role playing as Chamberlain's representatives.

Insights

- Strategy game shows the consequences to strategic decisions. Also attempts to make learning fun. Role-playing debate makes students think on their feet using historical knowledge. Leverage on strategic and empathy for quality answers (show human consequences for higher level of response answers).

Discussion and implications

Agentic Curriculum Making and Content Facilitation:

- As exercise of teacher agency (Schwab's teacher engagement using professional authority and judgement) where curriculum making is a combination of harnessing discretionary spaces through subject matter topicality along with students' learning needs, aspirations, preferences and interests.
- How various pedagogies (emotional pedagogy, inventive thinking, dialogic pedagogy...) enacted under agentic curriculum making lead to deeper and wider educational significance and impactful learning
- More than a checklist, CFS situates teachers as curriculum makers and designers in enacting important curriculum and teacher decisions (e.g., content structuring, access, special cases...).
- CFS as enhancing teachers' professionalism in a structured way (of a framework) where curriculum making is no longer based on gut feeling or untheorized concepts.

Implications on PD in content facilitation' Issues

Insights	Implications on Teacher PD
Unfamiliarity with bildung	Single workshop as inadequate: content facilitation as first step Need understanding of bildung tenets as well
Differing views of meaning and significance	Agree on important but differing e.g., instrumental vs. beyond-the-self meaning.
Understanding is not sufficient for expert execution	Lacking engagement in the didaktik analysis (Klafki, 2000).
Powerful content alone, is not enough	Need emphasis/ links to meaning and significance Contents of education (<i>Bildungsinhalt</i>) not linked to Educational Substance (<i>Bildungsgehalt</i>)
Conflating meaning and significance with making learning fun/interesting	e.g., instance of strategy game intent of making learning fun (with implicit assumption that it would lead to personal significance), but some students are not impressed with Powerpoint based game, seen surfing K-Pop on learning device...). Also, T5 who sought to use props (e.g., Buzzers and Toy/Model Traffic light to simulate stop, go, or maybe responses), while foregoing what could have been more dialogic interaction to certain comments and questions.

Recommendations



Currently, teachers rely on lesson packages. Moving forward, more collaboration can take place through teacher teams, network/professional learning communities, (and researchers and curriculum specialists) for more extensive negotiations and lesson planning for discretionary spaces and curriculum making for CCE.



Achieve stated curriculum aims (non-negotiable) through teacher agency (conditional planning, flexibility in agentic curriculum making). Balance between pre-packaged materials vs. teacher lesson planning white space. Harness curriculum making for teacher agency: e.g., engage in Kohlberg's moral reasoning for dialogic pedagogy



Currently, teachers employ innovative pedagogies, but these can be enhanced with curriculum making and *didactic* analysis (through CFS) , e.g., emotional pedagogy harnessing personal significance for exploration of sensitive issues.



Hence, recommend increasing familiarity with Bildung or other significance facilitation approaches with aim to design opportunities for fruitful encounters with educational content to “bring out the substance of the objects of learning” (Willmann, 1957. p. 160)

Conclusion

- **Limitations:** Small sample size/context-specific qualitative study
- **Future research:** long term impact of lessons for self-formation
- **Comparative** studies across diverse cultural and educational contexts
- Usage of **Artificial Intelligence in Education (AIED)** (as copilot for human augmentation and not human replacement), **digital media**, and **technology** for agentic curriculum making



Annex A: Assessment of Utility

Trialing Agentic Curriculum Making for Character and Citizenship Education: Implications for Teacher Professionalism

(PI: Dr Andrew Pereira)

This project aims to investigate

- How teachers can make the CCE curriculum significant and meaningful for students
- The discretionary spaces in the classroom where teachers can employ their agency to engage in curriculum making, and
- How teachers use content facilitation steps to support the widening of the curriculum.

Utility

Collaborator	Tier	Subject	Participants
1. Dr Thavamalar Kanagaratnam, SD CD1/CCEB 2. Mr Sim Swee Cheong, SD CD1/CCEB 3. Mr Osman Abdullah, AST/PXB	1	CCE	6 teachers in 4 Secondary schools

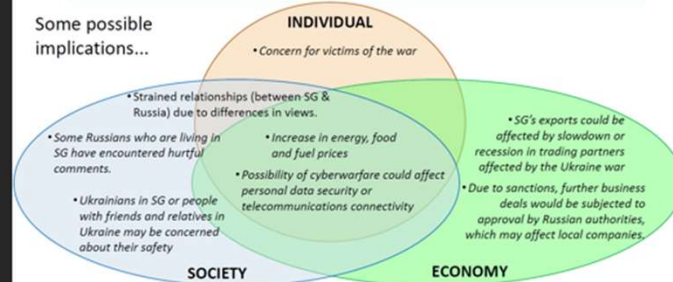
Key findings in project	How this can inform policies/programmes/translate into practice
Some of the teachers in the study were able to demonstrate agency in curriculum adaptation as they applied the content facilitation steps to enhance the learning experience of their students. <u>Key Intervention: The <i>Bildung</i> content facilitation steps</u> Five steps to enable agentic curriculum-making: - What general sense, basic phenomena or fundamental principle does this topic exemplify and open up to the learner? (Exemplary Significance) - What significance does the topic have in the minds of the students in my class? (Contemporary Significance) - What constitutes the topic's significance for the student's future? (Future Significance) - How is the topic structured? (The Structure of the Content) - What are the special cases, phenomena, situations that can make the topic interesting, stimulating and approachable for students? (Accessibility)	Recommendation While teachers need to keep their lessons within the boundaries of the key intent and lesson outcomes, they have the autonomy to modify the lesson activities and reference materials (e.g., news articles, videos, graphics, scenarios) to make the topic relatable to their students, and cater to their needs and interests. - The <i>Bildung</i> content facilitation steps provide clarity in terms of the questions to reflect on and consider when modifying CCE lessons. - The steps can also be used when designing Student Development Experiences (SDE) beyond the classroom (e.g., CCA, VIA, Learning Journeys). Plan for communicating or translating recommendation The <i>Bildung</i> content facilitation steps could be shared with - pre-service CCE course designers as part of the considerations to plan for CCE learning experiences (e.g., CCE lessons, key Student Development Experiences) - CCE course designers in SD CD1 and AST when designing and/or reviewing CCE professional development workshops - teachers at future school-based or cluster based clinics and NLCs on how to make CCE lessons and SDEs more engaging, purposeful and meaningful

Annex B: Emotional Pedagogy Materials



What does the situation in Ukraine mean for us in Singapore?

Some possible implications...



Some possible actions that you can take as:

AN INDIVIDUAL

- Strengthen our psychological resolve and willingness to stand up for our principles and values.
- Build good relations with people from other countries by participating in exchange programmes or overseas learning journeys, interacting with foreign students, etc.
- Be digitally literate in discerning information on the internet or social media.

A SCHOOL

- Develop good relations with foreign schools through organising or participating in international competitions or symposiums, etc.
- Educate our students in cyberwellness so as not to be misled by false information and deviant views.

A NATION

- Establish a strong and viable defence force.
- Maintain healthy economic growth and build up sufficient financial reserves to weather any national crisis.
- Develop strong diplomatic relations with other countries.
- Develop closer economic integration with other countries through trade and investments.

Empathy, multiple viewpoints, critical evaluation



Vice Documentary



Images



Blogs

Annex C: Student Responses

- Nuanced Complexity Realization:
 - I am perplexed as to why the war is still ongoing despite negotiations taking place. It's causing the relationship between China and the USA to tense up, which will not be beneficial to Singapore at all.
- Honesty and Empathy:
 - I think both K and I agree that we are both strawberry generation kids. There's no way we could handle torture. If they came to our school, we would most probably just sit and cry, and pray to see our families again. (Student T)
- Sense of justice and pride:
 - Singapore is supposed to be neutral, but voting against Russia in the UN is already taking sides. So taking sides may undermines our credibility, not in a bad way, but it's like we've always been neutral but now we're against someone ... Actually, I feel prouder to call myself a Singaporean now, because like I said, I didn't believe they could actually take a stand. (Student J)