Transforming Teaching through Collaborative Reflection: A Singaporean Case Study

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ABSTRACT

Educational success has been largely defined by academic scores in many educational systems, and teachers are frequently held accountable for their students’ scores. These accountability-driven school systems impinge on teachers to enact time-tested effective and efficient pedagogical approaches. In such a context, it is onerous for teachers to adopt alternative approaches. This paper traced how an experienced language teacher, schooled in the discourses and practices of neoliberalism, made a transformation into a teacher of constructivist bent. It explored the transformation of the teacher’s beliefs and practice as a result of reflecting collaboratively with a small team. The findings help to provide a broad understanding of how collaborative reflection can develop teachers’ ability to engage in reflection, and illuminate the potential it has in transforming the teaching practices set against the background of neoliberalism. This finding has relevance for Asian countries which are similarly engulfed in a neoliberal discourse.

KEYWORDS: Collaborative reflection, ethnography, Philosophy for Children (P4C)
**Introduction**

In many countries, educational success has been largely defined by academic scores and teachers are held accountable in such educational systems. These accountability-driven school systems often impinge on teachers to enact time-tested effective and efficient pedagogical approaches, i.e. transmissive approaches of teaching to prepare their students for the all-important high stakes examinations through intensive work load of topical worksheets and practice papers. Rarely is there time for constructivist approaches or teacher reflections.

Test-driven instruction has led to a transformation of some teachers to compromise their own ideals in order to survive. This accountability trend has a huge impact on teachers and their teaching around the world (Loh, 2016; Loh & Hu, 2014; Piller & Cho, 2013), leading to teacher burnout, increasing attrition rates and regimented way of teaching.

For teachers who treasure their professional thinking, and who celebrate the space for students to enquire, they struggle with this conflict between their right to exercise professional judgment in what and how to teach and the accountability pressures to conform to a certain way of teaching. Studies over the years have demonstrated the importance of reflection (Larrivee, 2000; Loughran, 2002). In this ethnographic case study, the impact of reflection on the development of a teacher is explored. The main question which is dealt here is whether reflection will lead her to reform her way of teaching. Insights from this study may be of use for systems that are held captive by the tyranny of accountability. This paper looks at how a teacher’s pedagogical change happened within a curriculum innovation through the use of reflection. This paper begins with an overview of the literature on reflection and teaching. Then, the context of this study and the research methods are delineated. Subsequently, the teacher is followed through a series of narratives, before ending with the discussion and concluding remarks.

**Reflection in teaching**

*Reflective practice*

With the call by Donald Schon (1983) to connect reflection and practice, reflective practice became a criterion for teaching professionals in many countries (Larrivee, 2008). Its goal is also “to create deeper understanding and insight”, from which to form the basis for teachers to take “continuous action to improve practice throughout one’s teaching career” (Larrivee, 2009, p. 9). In the face of increasing debilitating demands for accountability, reflective practice enables teachers to take control of their teaching lives. Reflective practice enables teachers to “more effectively” respond to the various teaching dilemmas and tensions they encounter daily (Larrivee, 2009, p. 9). Furthermore, it empowers the teacher to become change agents who understand the existing situation, and who are able to work towards a positive change.

There are many tools for reflection found in the literature (see Korthagen & Vasalos, 2005; Larrivee, 2000; Loughran, 2002), but there is currently no generally accepted terminology with which to define the various levels of reflection. Larrivee (2008) reviewed the extensive literature on reflective practice, and in her conceptual framework for assessing reflection, four levels of
reflection were proposed: *Pre-reflection, Surface reflection, Pedagogical reflection, and Critical reflection.*

**Four levels of reflection**

The Pre-reflection level is one at which teachers respond to situations with a ‘knee-jerk’ reactions; they do not think through the situations, nor do they consider alternatives or adaptations. The Surface reflection level is commonly known as the technical level of reflection. Teachers at this stage are concerned with ‘what works’ – strategies and methods from tried and tested experiences which allow them to meet predetermined goals. The Pedagogical reflection level is a level at which teachers seek to improve their practice by combining and applying their teaching knowledge with theories and research they have encountered. The Critical reflection level is the level at which teachers think about the consequences of their practices on students. Their focus now is no longer on themselves, but on the impact their practices have on the wider community.

Larrivee (2008) created this four-level reflective instrument to provide a more concrete structure with which to guide teachers to think about their teaching and promote ways to reframe their perspectives and experiences, thus leading to positive change. One of the practices for such a reflective process that Larrivee (2000) suggests is solitary reflection. However, teachers in a neoliberal school system are inundated with an intensification of accountability measures. As such, what little time available is usually spent on meeting these accountability requirements. Solitary reflection is a luxury that such teachers do not have. As a replacement, *collaborative reflection* was utilized in this study.

**Collaborative reflection**

Boud, Keogh and Walker (1985) suggest that reflections can “take place in isolation or in association with others” (p. 19). Reflection is neither easy nor automatic. Sometimes the help of critical others allows one to be able to identify the issue(s), and hence ascertain possible solutions. As such, collaboration with colleagues is critical in such a situation. Colleagues provide the necessary external perspective and feedback; in addition, they act as a sounding board for alternative ideas. Moreover, they can offer suggestions to improve certain established practices (Parsons & Stephenson, 2005). Such collegial support, scaffolding and differing perspectives in group reflection have been shown to be essential for change (Puchner & Taylor, 2006) as internal reflections are explicitly articulated and, in so doing, critically examined.

Collaborative reflection in this study is defined as reflection done *in association* with a small group of people in a non-threatening setting. The teachers thus *collaborate* in questioning the status quo and/or innovations, and in searching for meaning as they examine assumptions in their classroom practices. In such a setting, questioning is non-confrontational, and hence lowers the risk of being in conflict with the school’s priorities.

A recent study (Gün, 2011) highlights the fact that teachers tend to ‘react’ rather than ‘reflect’, unless they are specifically guided to do so. Day (2013) attests to this observation that teachers need explicit guidance and coaching to be able to reflect. Both Lee (2007) and Cole, Raffier, Rogan, and Schleicher (1998) found that it is through dialogue with others that teachers learn to reflect.
and improve their practices. This is due to the fact that they have a real audience for their reflections, are able to understand their situations better through such dialogues, and are able to support each other as a result of such dialogues. Moreover, such a supportive atmosphere, where constructive and open responses are shared, also promotes deeper thinking about practice (Parsons & Stephenson, 2005). Collaborative reflection brings together these elements that are essential for personal and professional growth: dialogue, understanding though dialoguing and mutual support.

Methodology of this study

Research participant and context

Susan (all names in this study, whether participants or institutions, have been anonymised to ensure confidentiality) is one of the teachers in the implementation team in Rainforest Primary School. She favours the transmissive mode of instruction, where she lectures from the front of the class and demands on-task seatwork from her students. For the subject of English Language (EL), at the Primary Three (P3) level which Susan was teaching, there was a worksheet booklet and an assessment book for each component of writing, grammar, vocabulary and reading comprehension. This was in addition to the worksheets provided by the national literacy programme. All the worksheets had to be completed within the two weeks allocated for each unit of study. At least two exercises in each assessment book had to be completed within that same timeframe.

The implementation team met every week on Friday. The implementation team comprised seven members: two teachers; one EL Level Head (LH) – assistant to the Head of Department (HOD); one Teaching Assistant (TA) hired to support the team; and three researchers. The team, led by the LH, decided to adopt Philosophy for Children (P4C) as a curriculum innovation. This was one of the school’s responses to the Ministry of Education’s call to develop 21st Century Competencies (21CC), particularly that of ‘Critical and inventive thinking’ (Ministry of Education, 2010). The team met weekly to revise the school’s P3 EL curriculum, so as to incorporate the use of P4C for teaching and learning, and also to pilot test this curriculum. It was a weekly curriculum design and feedback session. The weekly curriculum planning meetings also served as collaborative reflection time, where every member contributed their ideas, opinions and suggestions.

Curriculum innovation - P4C

Pioneered by the American philosopher Matthew Lipman, the P4C approach aims to develop critical thinking in children through philosophical dialogue (Lipman, 2003). In P4C, critical thinking is cultivated within and through a process of interactions with peers. The philosophical inquiry within a community (whole class or small groups) is conducted with the teacher facilitating the extended dialogue. The teacher’s role as facilitator is central to the advancement of the students’ philosophical inquiry and critical thinking. This is transformative teaching against a backdrop of accountability-driven pedagogy. For a teacher to be able to effectively facilitate such a philosophical and critical inquiry, the teacher must be willing to apportion an adequate amount of time for the dialogue and be able to ask appropriate questions to extend the exchange. Biesta (2011) posits that the key teacher practice for P4C to succeed is ‘reflection’; it is only through reflection that “significant changes of thought and action” on the part of the teacher will occur (p. 308). Through such reflections, the teacher will be able to extend the dialogic exchange and thus critical learning.
thinking. Therefore, this study aims to examine the potential for pedagogical change in the midst of an accountability-driven school system using collaborative reflection.

**Research questions and methods**

This study was guided by the following research questions: *Can collaborative reflection stimulate pedagogical change? If so, how does collaborative reflection promote such a change?* To explore these questions, an ethnographic case study approach was adopted. This study lasted a year, and multiple methods of data collection were used: video recordings of Susan, participant observation during the weekly meetings, interviews with Susan and key informants, analysis of the weekly minutes, and the researchers’ field notes.

We attended the school’s weekly Friday meetings, and contributed to the planning discussion as full participants. Initially, the teachers were guarded in their responses during the discussions, but after two months, they were able to contribute, respond and joke during the meetings, oblivious to our presence. Field notes were taken and reflected on immediately after these meetings. In addition, Susan’s lessons were video recorded daily on alternate weeks, when she was teaching EL using the P4C approach. The video recordings were viewed by the three researchers, and notes were taken based on her enactment of the lessons, and how the enactment changed over two school semesters.

All the interviews\(^1\) with Susan were semi-structured and focused on the respective issues during the span of the one-year study: educational/work experiences (1) before the curriculum innovation; (2) during the curriculum innovation; (3) critical events encountered during the curriculum innovation enactment; and (4) perceptions of the critical events. Each interview lasted between 60 to 100 minutes, and was audio-recorded and transcribed. The transcriptions were then sent to her for member checking. Field notes were taken immediately after the interviews. Semi-structured interviews were also conducted with key informants: Meredith, the school’s LH for EL; Chris, the school’s TA, who worked closely with Susan; and Katherine, a full-time research assistant in the school. Their interviews provided a source of triangulation.

**Data analysis**

The data were analysed to identify the points of change in Susan’s teaching and her level of involvement during the weekly meetings. The analysis and interpretations of the data were done in a recursive and iterative manner. During the iterative and interactive process of data collection and analysis, it became clear that Larrivee’s (2008) four levels of reflection provided a particularly insightful framework with which to help locate Susan’s growth in her reflection in this study. Consequently, this theoretical framework was used to “think with [the] data” (Jackson & Mazzei, 2013, p. 261). Individual quotes (words, phrases, sentences or paragraphs) from the data which appeared to answer the relevant research questions and which displayed commonalities were identified, coded and tagged. A series of vignettes were then constructed to illustrate the results of

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\(^1\) IRB clearance was obtained from both the University’s ethics review board and Singapore’s Ministry of Education before data collection started. As part of the IRB clearance, consent from the school principal and the teachers were obtained before any ethnographic observation or interview was conducted. This is a standard operating protocol for all research conducted under the purview of Singapore’s universities.
the analysis. Vignettes are narrative interpretations of particular themes and findings of real-world investigations. They offer a snapshot of actual situations using the said words or phrases of the participant (Ely, Vinz, Anzul, & Downing, 1997). The vignettes serve to highlight “particular findings” or “summarize a particular theme or issue in analysis and interpretation” (Ely et al., 1997, p. 70). What follows are four vignettes: the first two are those of Susan in Semester One, at the onset of the study, and the next two for Semester Two. The vignettes reveal the change in Susan in her teaching and in her level of reflections. A layered account approach (Ronai, 1995) is used to present the vignettes. Organizational asterisks and italicized font are used to separate Susan’s vignettes from our interpretations in the layered account.

**Findings: Susan’s vignettes**

**Semester One**

Starting the lesson, Susan asked the P3 students “Are childhood games easy to play?” This was to serve as an initial prompt for the P4C discussion. After trying to elicit responses for a few minutes, she instructed “I want deep thinking, deep thinking”, with the hopes that that would spur the students to think deeply and respond appropriately. Almost immediately after, she asked, “Games like hop-scotch and skipping are easy to play right?”. These rhetorical questions were posed and then answered by herself. There was silence from the class; students fidgeted in their seats and looked bored. Getting exasperated, she exclaimed “Do we need to think deeply?” Repeating this question three times, the class finally responded with a loud “Yes!” Interspersed throughout the lesson, Susan used procedural language for giving commands and instructions. There was no time given for reflection and response. The lesson ended with her giving instructions for the day’s homework.

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The teaching platform had changed, i.e. use of P4C. However, Susan still adopted the transmissive mode of instruction in her lessons. She viewed the lesson as content that needed to be delivered, rather than a skill that needed to be elicited, encouraged and honed. She saw the lesson as one where students merely needed to recall and reproduce information. It was evident that she had not adopted the P4C approach in her lesson enactment. As she recounted the way she taught reading comprehension, she admitted that it was “quite boring”. Her focus was to complete the school’s considerable load of worksheets and prepare the students for the termly pen-and-paper assessments.

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Susan did not look forward to the weekly team meetings that discussed the P4C lessons. The meeting was regularly attended by Alicia (the other teacher involved in the curriculum innovation), Meredith (LH for EL), Chris, and the three researchers from the university. In semester one, when the curriculum innovation project started, Susan was quite reticent during the meetings. She did not contribute to the discussions or suggest any ideas. Most of time, she was in quiet conversation with Alicia. When asked about her lesson, she talked about the technical issues that cropped up or pointed out the difficulties of teaching P4C when there were so many worksheets to complete.

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Susan, together with Alicia did not participate in any of weekly team meetings. They felt forced to use the new P4C pedagogy; they would rather use the drill-and-practise worksheets, to prepare the students for the examination. This suggested a Pre-reflection level where a ‘knee-jerk’ reaction exists; in this case, resistance, to the aforementioned changes. Her level of commitment was
palpably low – there was no sense of ownership. All Susan wanted to do was to be excused from the meetings and get back to her marking.

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**Semester Two**

Starting the lesson with a Disney clip as a tuning-in, Susan prompted the class about gender stereotypes. She provided time for students to digest the initial question. Soon after, hands shot up. The students connected gender stereotypes to other animated movies they had watched, as well as certain roles that were perpetuated in society. Susan elicited responses from different segments of the class, and encouraged the students to elaborate with examples. She acknowledged their responses, and affirmed them after they gave their responses. She did not insist on using the perspective or examples she had in mind. She let the discussion proceed as the students led. Students shared their categories, and agreed or disagreed with each other’s categories, and shared their reasons. Some groups changed their perspectives and explained their reasons for doing so, after hearing the other groups.

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There was a transformation in Susan’s teaching. She was no longer as teacher-directed as she was in the previous semester. She had longer wait-time for the students, and the students correspondingly had more responses to share. She encouraged the students to respond to and build on each other’s perspectives. She had moved to a higher level of instruction, where the students are led to connect different ideas, synthesize them, and create new ones.

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During the weekly team meeting, Meredith asked the teachers for feedback about the curriculum innovation thus far. Without hesitation, Susan shared, “It’s tough to teach with P4C. It’s challenging! Especially when we have so many school worksheets and assessment exercises to complete. We don’t have enough time to finish all the worksheets.” Susan suggested that the school replace some of the existing worksheets with the P4C discussion and categorization. Meredith concurred, especially since the P4C activities elicited better understanding. Susan enthused, “Yes, we should! The children are talking more and thinking more. I’m having fun with the P4C lessons!” Her experience with using P4C in her EL lessons and the responses from her students had opened her eyes to a totally different way of teaching.

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Susan seemed to have transformed into a totally different person from the previous semester. She was now very engaged during the weekly team meetings. She reflected on the lessons most willingly, and was very forthcoming in sharing her views on what could be improved to enact that change. She articulated her views and confidently shared how she hoped to see the following week’s lesson pan out. She thought about the consequences of her teaching practices on her students and also actively raised concerns for next year’s teachers and the impact on the students’ learning for next year. It seemed that she was now reflecting at the Critical Reflection level.

**Discussion**

From the vignettes spread out over two semesters, there seemed to be a reform of Susan’s teaching. But was it because of collaborative reflection? If it was, why and in what ways did it effect that change?

During Semester One, when the curriculum innovation was enacted, Susan seemed resistant about changing her way of teaching. Her teaching behaviour remained status quo – relying on the tried-and-tested exercises. She felt “that the time is not being used wisely” and the innovation was “rather unnecessary.” Her reluctance to engage in any form of reflection was partly because she felt alone in the enactment and did not see any value in it: “I felt that I didn’t have much of a say in the project”. She was at the Pre-Reflection stage. Her practices did not have the students’ needs in mind; they were focused on efficient use of time.

However, in Semester Two, Susan was more cognizant of the collaborative team she was in. She realized that she had ‘comrades’ in which she could dialogue with and share freely. During the meetings, she started bouncing ideas off the team: “I felt I had a sense of ownership, so I started suggesting tweaks for the lesson plan”. The meetings focused on improving the P4C lessons, and areas of dissatisfaction with the lesson plans were raised and highlighted. Improvements were then made to the subsequent lesson plans. Susan found teaching to be “more meaningful with the usage of P4C,” because she found “more time clarifying with the students, getting their responses, getting them to speak up.” It seemed she had moved to the next level of reflection – that of Surface reflection, where her beliefs and practices are supported with evidence from her experience in class. Her focus was on what was working in her class, and the P4C lessons were developing her students’ ability to respond and articulate their opinions.

In that same semester, an enlightening moment revealed itself when Susan shared: “When the children are given the platform to express their thoughts, the quality of their inputs is really amazing … they take over their learning, they take charge of their own learning. And their interest in English is heightened.” Her focus is no longer on what works, but on improving her practice to engage all students. Susan was thinking about the consequences of her practice on her students, i.e. Critical Reflection. The defining example of her change was when she disclosed that “it is the teacher’s perception that needs to be addressed” in order for change to occur.

Teachers traditionally work alone in their own classrooms. Hence, the collaborative feature in this implementation team was crucial in ensuring a possibility of change. Reflecting against a backdrop of result-accountability is difficult to engage in. Because the focus is on getting things done in a time-efficient manner, it is particularly hard for Susan to look for problems and solutions. By collaborating with a team of teachers, this makes the process much easier; with a team collaboratively looking at the possible issues in the P4C lessons, there is a greater likelihood to highlight certain weaknesses, provide constructive feedback and identify strengths that can be further improved on and expanded. This collaborative reflection process empowers Susan to confidently share her thoughts about the weaknesses of her own classroom practices, enables her to be open to feedback for improvement, and helps her to reform her own way of thinking and teaching.

Because each team member knew Susan in different capacities and contexts, the team was able to help facilitate the process more effectively than would be possible if she were to do it alone. This is what Larrivee (2009) posited - that a teacher’s thinking can be “confirmed, modified or stimulated” to deeper levels of reflection by reflecting aloud with peers and critical friends (p. 16), i.e. collaborative reflection. It is within such a safe environment that teachers can be vulnerable and ask for help. Such a collaborative setting provides a dialogue so that teachers do not feel...
isolated facing the situation, and helps them to be more aware of the commonality that they take for granted. This collaborative reflection spurred and supported the change in Susan. The contribution of each different member of the team, with vastly different experiences, could possibly have helped Susan to see her classroom practices from different perspectives. Meredith, with her management viewpoint, the researchers, with our research perspective, and Chris, with his non-teacher and untrained perspective, might possibly have helped Susan to question her own assumptions and beliefs, and hence led her to articulate and develop new ideas. This was due to the fact that Susan could access and draw on from a repertoire of experiences and viewpoints which exists in the collaborative team. And that is the key element in a collaborative reflection team – allowing one to think out loud, not be judged and be supported in making a change; this was attested to by Susan: “That’s one of the factors that lead to success ... the support from the team, the whole team.”

**Concluding remarks**

The story of Susan is the story of remarkable change. Susan was a very traditional “chalk-and-talk” teacher, who was “very task oriented” (Chris); she was the sort that “if she is not scolding someone, she is writing on the board” (Katherine). Not only did Susan change her teaching behaviour and ideas, she also changed the way she contributed to the team meetings and her role in the team. In the beginning, she was not keen to be observed: “in the past, if we want to see her lesson, we must ask her one, two weeks before that; otherwise, she will reject you straight” (Meredith). Now, Susan welcomes any teacher who wants to observe her lessons. “I think going in to observe her on the day [of requesting] itself is not a problem for her. She is very confident now. I’m amazed by her transformation” (Meredith).

Would Susan have made the change without collaborative reflection and support from the team? We think not. Through “powerful facilitation and mediation” within an “emotionally supportive climate”, the team created a climate conducive for her levels of reflection to deepen (Larrivee, 2008, p. 345). The collaborative reflections which took place within the workplace of learning helped Susan to make sense of her core beliefs and qualities as a teacher. Thus, this enabled her to reform her own ways of engaging the students in the context of curriculum innovation.

While four vignettes from one teacher can hardly represent all teachers in Singapore, they are sufficiently in synchrony with the vast literature on reflective practice (Larrivee, 2008; Puchner & Taylor, 2006; Schön, 1983) to suggest that collaborative reflection has an essential role to play in any reform. This case study corroborates what the literature has shown (Lee, 2007; Parsons & Stephenson, 2005; Puchner & Taylor, 2006) – it is through sharing openly with supportive and critical peers that one can grow to be more amenable to partake in the reform initiatives. This open sharing of reflections within a collaborative environment allows and encourages “an exchange of confidences and intense reflection by [all] parties leading to the revealing of deeply held, but often well-hidden views, beliefs and values” (Chivers, 2003, p. 8). This revelation of one’s ‘deeply held beliefs and values’ results in a more concrete and social examination of one’s practices in the classroom (Akyel, 2000). Teachers are inundated with increasing amount of work – time is of the essence. Individual reflection may not be a priority in the struggle for survival, and even if it were practised, *Surface* reflections are the most direct and efficient. For teachers to reflect at higher levels, it might be of benefit for schools to encourage collaborative reflection teams.

Neoliberalism as a hegemonic discourse has influenced much of Asia - Taiwan (Huang, 2012), Singapore (Loh & Hu, 2014; Loh, 2016), Korea (Piller & Cho, 2013), Bangladesh, India, Malaysia, the Philippines, and Thailand (Haque, 2008), India, Pakistan, and Malaysia (Kapoor, 2011; Thachil, 2009). Such a discourse dictates a result- and accountability-driven school system, especially in an era when international benchmark studies (i.e. PIRLS, PISA) are highly publicised and used to compare and rank nations on an ‘educational league’ (see Coughlan, 2015; OECD, 2014). The test-driven transmissive mode of instruction certainly holds influence in such systems. As such, it might be useful to be cognizant of how collaborative reflection within such a neoliberal discourse can aid and lead teachers to be more willing to incorporate a more constructivist pedagogical approach.

If Susan’s experience with collaborative reflection is representative of the process of teaching reform, and if we as teacher educators agree that reflective practice is essential for the professional growth of our teachers, then our course for action is clear. We must find ways of using reflections and collaborative reflections in our preservice and in-service programmes; not as a means of assessment but as a means of reforming teaching beliefs.

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