Provoking reflective thinking in post observation conversations

1. Introduction

Teacher reflection is an accepted part of teacher education and professional development efforts, although there continue to be questions over definition, purposes, outcomes and processes (e.g., Akbari, 2007; Atkinson, 2012; Fendler, 2003; Otienoh, 2011; Walsh, 2013; Zeichner, 2008, 2009). In a recent analysis of the notion of reflection in teacher education, Clarà (2015) recognizes scholarship that attempts to define and refine concepts of reflection in education (e.g., Davis, 2006; Loughran, 2002; Postholm, 2008), but he returns to the foundational sources of Dewey (1933) and Schön (1983) to generate an overarching definition: “a thinking process which gives coherence to a situation which is initially incoherent and unclear” (p. 263). This definition captures the essence of reflective thinking in teacher education and professional development. It resonates with a view of teachers as professionals with their own knowledge base and impetus to improve their own practice (Cochran-Smith & Lytle, 1993) through their own thinking processes and understandings of situations relevant to their practice.

While reflective thinking can occur spontaneously as part of normal, daily thinking, it may be beneficial to encourage individuals to reflect. Dewey (1910), for example, wrote of the need to ‘train thinking’ as a part of deliberate and intentional activity. Schön (1988) recommended ‘reflective supervision’ or ‘reflective coaching’ in which a coach helps, provokes, encourages a teacher to reflect on her own practice. A coach supports her reflection on her own reflection-in-action; that is her effort to make explicit to herself what she is seeing, how she interprets it, and how she might test and act on her interpretations (p. 22).

Following Schön, we refer to ‘provoking reflection’ as a way to encourage teachers to reflect on aspects of their own practice. While agreeing with other scholars that reflective
thinking can, and should, be part of teacher professional development (e.g., Cornish & Jenkins, 2012; Farrell, 2012; Husu, Patrikainen & Toom, 2007), there can be a delicate balance between provoking reflection (from the teacher) and providing a critique (to the teacher); between acknowledging teachers’ expertise and professionalism and insisting on changes and innovations. Because of the primacy we place on the teacher’s way of thinking and expertise, and because of our understanding of conversations as a particular type of structured interaction (see below), we refer to ‘conversations’ (Orland-Barak, 2006) rather than ‘coaching’.

Prior research has suggested that collegial reflection can be fruitful (e.g., Attard, 2012; Bevins, Jordan & Perry, 2011; Glazer, Abbott, & Harris, 2004); however, preliminary viewing of our data suggested that attempts to provoke reflective thinking occasionally led to moments of tension and fell short of aspirations for reflection to emerge. Copland (2010) has noted that tension in post observation feedback sessions can result from multiple causes including feedback processes (i.e. “phases, participatory structures, and discourse practices” [p. 471]). The focus of our post observation conversations was not primarily on feedback; however, the suggestion that tension can arise from discourse features led us to put the data of post observation conversations under the micro-analytic lens of Conversation Analysis (henceforth CA) to better understand what was happening within these conversations. In this article, we present our findings as we walk readers through the CA approach and what it can reveal about interactions for professional development. We conclude by suggesting ways in which conversations designed to facilitate teacher reflection can be better managed.

2. Reflection and post observation conversation
Many have suggested that reflection with others is beneficial, perhaps more beneficial than individual reflection. Schön (1988), as above, believes that coaching (between a teacher and ‘supervisor’) is valuable. Taking a stronger stance, Husu, et al. suggest that “… reflective practice does not come naturally; it requires dialogue” (2007, p. 130). Others stress the importance of dialogue and sharing to foster useful reflection (Jones, et al, 2009; Tillema, 2005; Walsh, 2011, 2013). Mann and Walsh (2013) have suggested that reflection should be collaborative, make greater use of oral forms (rather than relying on written), and that research on reflection should provide more detail on tools used (pp. 292-293). In addition, they recommend that our understanding of reflection should be based on data from spoken reflections as these might better encourage on-going, reflexive thought and shed light on the process of reflection rather than generating a recording of thought (p. 99).

Other research has suggested that the specific features of interactions intended to encourage reflection can be crucial. For example, Copland (2011), referring to ‘post observation feedback conferences’, found there were ‘rules of the game’ which included trainers having the ‘right’ to offer critiques to trainees while trainees could offer only self-critiques. Vásquez (2004) examined how supervisors handled potential ‘face threats’ (tension or embarrassment) during ‘post observation meetings’ intended to encourage reflection and offer feedback to teaching assistants, and found evidence of politeness strategies (e.g. use of modal auxiliaries, indirectness, positive evaluations) used as mitigations. Waring (2013) considered two types of mentor comments, assessments and advice, as ways to elicit reflections of teacher trainees in a practicum setting without explicit solicitations by the mentor.

2.1. Teacher-mentor relationship
Aspfors, Fransson & Heikkinen (2012) commented that views of mentoring differ internationally, with some systems, as in Finland, viewing the teacher-mentor relationships as reciprocal while in other systems, such as the UK, mentoring is seen as part of a larger induction and assessment system. Much of this research examines mentor-novice relationships and focuses on the multiple roles of mentors (e.g. Aspfors, Fransson & Heikkinen, 2012; Awaya, McEwan, Heler, Linsky, Lum & Wakukawa, 2003; Gabel-Dunk & Craft, 2004). Orland-Barak has noted that mentor roles range “from modelling and instructing to being information sources, co-thinkers and inquirers, evaluators, supervisors and learning companions” (2006, p. 14).

Our concern is for reflection between experienced teachers and mentors as part of professional development. In the project discussed, mentors are seen as information sources, co-thinkers and learning companions with teaching professionals, rather than as supervisors or evaluators. This mentor role was built into the overall research design, developed through discussion among research team members prior to the start of the study and with teacher participants at the beginning of the study. From the research team’s perspective, the collaborative (rather than evaluative) nature of the mentorship was crucial: a long term goal was that the teachers would take ownership of the strategies and show leadership in introducing the strategies to other teachers in the school. With this in mind, we analyze interactional details of post observation conversations between teachers and mentors, adopting a fine-grained, micro-analytic approach. We advance the research agenda by considering how structural features of these conversations can provoke or inhibit reflection.

3. Theoretical framework

1 We acknowledge that our data does not always portray the collaborative nature of the mentorship we had envisioned (as has been pointed out by one of the reviewers). In fact, this was one of the impetus for conducting the current study.
3.1 Conversation Analysis

This study draws on the theoretical framework of CA (Sacks, Schegloff, & Jefferson, 1974) to gain a better understanding of the interactional structures of post observation conversation. This derives from our belief that post observation conversation, as a space where teacher reflection is elicited and generated, warrants close scrutiny of its interactional properties, which in turn, allows us to gather insights on how to better manage conversations for teacher education and professional development.

CA has established itself as one of the main research methods in social sciences over the past three decades (Drew & Heritage, 2006). CA’s strengths in analysing interaction at the micro-level of detail has brought fruitful research outcomes, enhancing our understanding of various types of workplace practice, e.g., medical communication (Heritage & Maynard, 2006), business communication (Asmuß, 2008), news interviews (Clayman & Heritage, 2002), job interviews (Button, 1992), practice consultation (Heath, 1992), psychiatry session (Anssi Peräkylä, Antaki, Vehviläinen, & Leudar, 2011), and classroom discourse (Markee, 2015; Seedhouse, 2004). However, use of CA in teacher education is still emergent (c.f. Farr, 2011; Walsh, 2011; Waring, 2012, 2013). The current study showcases the potential of CA for teacher education.

One of CA’s fundamental understandings is that interaction is not a “structureless medium” (Schegloff, 1989, p. 140). In the CA view, interaction comes with its own inherent structural organization which shapes “opportunities to deliver a message in the first place” (Sidnell, 2010, p.157).

CA uses video/audio recordings of naturally occurring interaction as the main data source along with carefully produced transcripts. CA transcription is very different from conventional
transcription in that interest is not only on what has been said, but in how it was said (ten Have, 2007). Micro-analytic details of talk are made available for observation and examination through particularly designed transcription conventions (Appendix 1) as well as repeated listening to and watching of the recorded interaction. With its capacity to zoom in on the micro-analytic details of interaction, a CA approach makes it possible to investigate how the action of eliciting reflection and providing feedback is sequentially organized in post observation conversations.

One area of CA that requires a brief explanation, as it is repeatedly mentioned in the analysis, is repair organization. Repair refers to "an organized set of practices through which participants in conversation are able to address and potentially resolve such problems of speaking, hearing, or understanding" (Sidnell, 2010, p. 110). One important distinction in repair organization is repair initiation and repair solution. Repair can be initiated by the speaker of the trouble source (self-initiated repair) or the recipient (other-initiated repair). Depending on who provides a solution, it is also divided into self-repair vs. other-repair. Repair organization represents one of the most important aspects of sequential organization as it is positioned at the crossroad of two fundamental requirements of interaction: sequential progressivity and intersubjectivity. Repair serves to address problems of intersubjectivity, but it hinders progressivity. It is in this sense that sequences with too many repair initiations can be described as “turbulent” or “not smooth”. The most basic use of repair is to manage a problem in speaking, hearing, and understanding talk. However, repair can also be used in the service of other actions. In particular, other-initiated repair is often used to "signal an upcoming dispreferred response or other form of nonalignment" (Kitzinger, 2012, p.253). One interactional feature that contributes to making other-initiation of repair serve as a harbinger of a dispreferred response is that it breaks the continuity between the first pair part and the expected second pair part or at least
delays the expected next action/response (Sacks, 1987; Schegloff, 2007). An example of other-initiation of repair serving as a precursor to an upcoming dispreferred response is illustrated in the following excerpt.

(1) West and Zimmerman (1983):

1 A: how wouldja like to go to a movie later on tonight?
2 B: huh?
3 A: A movie y’know like a flick?
4 B: yeah I uh know what a movie is (0.8) It’s just that you don’t know me well enough?

B’s repair initiation, line 2, is treated as if she has a problem ‘understanding’ A’s preceding turn. However, as it is revealed in line 4, B’s repair initiation indicated her perception that what A had said in line 1 was problematic, thus serving as a harbinger for an upcoming dispreferred response (rejection to the invitation). As shown in this example, other-initiation of repair often serves to indicate a disaffiliating stance by the recipient (Sidnell, 2010).

3.2 Questions in workplace practice

Many activities in workplace practice are constituted by questions, thus questions have been the main focus of inquiry in previous research that examined how workplace practice is interactionally constituted (Atkinson & Drew, 1979; Dillon, 1982; Freed & Ehrlich, 2010; Goody, 1978; Steensig & Drew, 2008; Tracy & Robles, 2009). These studies look at question design and document how questions convey different stances in terms of affiliation/disaffiliation with the recipient (Monzoni, 2008; Steensig & Drew, 2008; Stokoe & Derek, 2008; Waring, 2012) as well as how questions can manipulate the direction of response (Heritage & Roth, 1995). Some studies have focused more on the general preference structure built into the design features of the question form (Enfield, Stivers, & Levinson, 2010; Raymond, 2003) whereas other studies
focus on functions of questions in specific institutional contexts. For example, Heritage (2003) shows how journalists manage to strike a balance between impartiality and adversariality in their question design as well as how negative interrogatives are used as vehicles for assertions in news interviews (Heritage, 2002). Stokoe and Derek (2008) demonstrate how silly questions such as “Did you have permission to smash your neighbour’s door?” can serve the institutional purpose of attributing criminal intentions to a suspect. In medical discourse, there is a robust body of research demonstrating how one word differences in medical practitioner’s opening questions can bring about different degrees of patient satisfaction after a visit (Heritage & Robinson, 2006; Heritage, Robinson, Elliott, Beckett, & Wilkes, 2007; Robinson & Heritage, 2006).

In the field of language teaching, Koshik (2002) shows how yes-no questions are used to indicate what is problematic about a student’s writing; Waring (2012) demonstrates the use of yes-no questions by a teacher to convey a critical stance in the language classroom; and Le and Vásquez (2011) examine how mentor questions encourage participation and promote thinking with teaching interns. Skill in question design seems to be at the heart of effective institutional practices and professional conversations. Although there is an increasing body of CA-based studies done in educational settings, most of them focus on classroom discourse and interaction (see, e.g., Gardner, 2013 and Markee, 2015), rather than professional development. Some exceptions include the work of Garton and Richards (2008) and Richards (2006), examining teacher identity and professional development through micro analysis of discourses of teachers.

4. Methodology

4.1 Setting and Participants
The data we discuss are drawn from a multi-year project on reading comprehension and
discussion using principles of Questioning the Author (QtA) (Beck & McKeown, 2006; Beck,
McKeown, Sandora, Kucan & Worthy, 1996). Briefly, QtA teaches developing readers that
authors are fallible; struggling while reading might be due to lack of clarity in the text, rather
than the inability of readers to comprehend; and, questioning while reading is essential to discern
the author’s meaning and identify possible gaps in the information. Development of a QtA lesson
requires teachers to prepare a text by ‘chunking’ it into meaningful segments, identify the ‘major
understanding’ of each segment, and draft potential ‘queries’ for each segment (e.g. “Why do
you think the author used this word/phrase?”). During reading, the teacher strives to develop
student reading comprehension through use of the queries and follow-up moves in the class
discussion. The queries are intended to guide student thinking and scaffold students’ construction
of meaning around the text. The follow-up moves are used to probe student understanding and
highlight crucial information in the text (e.g., “Where do you see that information?”).

Teachers in Singapore routinely engage in Professional Learning Communities (PLCs) as
part of school-based professional development. The use of PLCs in Singapore schools was
launched in 2009 with the support of the Academy of Singapore Teachers, an organisation
affiliated with the Ministry of Education and tasked with teacher professional development.
PLCs have since been integrated into the professional development plans of almost all schools in
Singapore Hairon & Dimmock, 2012). The PLC model in Singapore is based on “3 Big Ideas”
adapted from DuFour, DuFour and Eaker (2006): ensuring students learn, building a culture of
collaboration, and focusing on student outcomes (Academy of Singapore Teachers, 2012). The
exact nature of the PLCs is determined by each school, often with some leading vision from
school leaders. Teacher collaboration is emphasized with at least one hour each week set aside as
‘white space’ which cannot be used for teaching or regular administrative duties. Typically, teams of 4-8 teachers are formed for a one year project with each team selecting the specific focus. Though participation is mandatory, there is no teacher assessment associated with the PLCs. In some cases, a team works with an outside consultant or a university-based researcher who is considered to be a mentor, offering guidance but with no supervisory or evaluative role. This was the case in the project we discuss – a school-based PLC team collaborated with university-based researchers who provided training on class discussion strategies which the teachers could then adopt or adapt for their own classes (Silver & Png, in press).

Six teachers self-selected into the project after an information sheet was sent to the school and distributed to the staff. An information session was held for those interested, with explanation of project expectations: a minimum one-year commitment, participation in weekly group meetings during school terms; co-planning of lessons\(^2\); presentation of demonstration lessons to the PLC members (including the research team) for feedback and lesson plan revision (if needed); observations of classroom lessons with audio and video recording\(^3\); group discussions after lessons with teacher-selected video segments; one-on-one post observation conversations with a mentor; and periodic, individual, written reflections. Lesson observations and the post observation conversations were scheduled according to the convenience of each teacher. All teachers gave consent to participate individually, in writing. The project was reviewed and approved by the Institutional Review Board at the authors’ institution.

\(^2\) In general, teachers co-planned with others teaching at the same grade level. While planning, teachers added notes on possible variations based on their perceptions of their own students’ needs, abilities, and interests. 

\(^3\) Due to complications in the school time table, research team members observed the live lessons and participating teachers viewed excerpts of each other’s video recorded lessons. In most cases, the teachers themselves chose excerpts to show to colleagues and discuss.
Of the six teachers, five were female and one was male.⁴ There were only three requirements for participation: voluntarily opting in, currently teaching English Language at the middle primary grade levels (grades 3, 4, or 5), and at least two years of teaching experience. All teachers were highly proficient English users, although, like many Singaporeans, they might also use another language in their daily life (e.g. Mandarin Chinese or Malay). All of the teachers were familiar with some form of reflection (individual or group, typically written) from their pre-service courses and in-school professional development programmes. However, the type of oral reflection and the process used during post observation conversations was new to them.

For the post observation conversations discussed in this article, two mentors from the research team were involved: the PI, a university-based researcher and lecturer (²nd author on this article), and a Research Associate who was seconded to the university for a three-year research stint from her usual position as a English Head of Department at a different primary school in Singapore. These two members of the research team worked most closely with the participating teachers throughout the entire project, joining in all PLC meetings and engaging in the post observation conversations.

### 4.2 Data collection

The conversations discussed in this article took place after the teachers and mentors had been working together approximately eight months, in the school’s third term (Table 1). All of the teachers had engaged in at least one round of post observation conversations earlier in the year.

⁴ For the sake of anonymity, all teachers are referred to as ‘she’ and given female pseudonyms.
Each teacher had been observed and video-recorded while teaching one class of students (primary grade 3, 4, or 5, as chosen by the teacher) for one 30-60 minute lesson. Each post observation conversation was conducted while watching the video of the observed lesson. These conversations took place at the teachers’ convenience. Due to their busy schedules, these were usually one or two weeks after the observed lesson. The purpose was not to conduct a stimulated recall, but to foster professional development through reflection while viewing the recorded lesson. A secondary purpose was to provide the mentors with information on the teachers’ developing understanding of discussion strategies for reading comprehension.

Each post observation conversation was audio recorded with two recorders, one each for the mentor and teacher, using clip-on microphones. Video recording of each session was done with a tripod in a close, fixed location pointed at the teacher and mentor to capture visual and gestural details (Figure 1). Screen capture software was used to indicate where the lesson video was stopped and started during the conversation.

Each post observation conversation began when a laptop with the video of the lesson was passed to the teacher. The teacher had control of the video, choosing where to stop and start, and raising topics for discussion (Erickson, 2006). The mentor could also stop the video and raise questions if needed (e.g., for clarification or feedback). The explicit purpose of the conversation was for mentors to encourage teacher reflection through discussion of the lesson viewed in the video. The protocols for the conversations emphasized that the mentors should encourage the
teacher to comment, listen carefully to the teacher, and give the teacher time to think rather than prompting continuously (Silver, 2012).

Each conversation lasted somewhat more than 1.5 hours, adding up to 9 hours and 40 minutes of data. Rough transcripts were made of each conversation. Subsequently, more detailed transcripts according to CA conventions (Jefferson, 2004) were made of relevant ‘episodes’ in each conversation. As each conversation was conducted watching the video recording of the lesson, the session was either in silence (watching video) or in conversation. For our purposes, ‘episode’ refers to a round of conversation demarcated by a rather long lapse into the watching mode. Analysis is based on transcripts of all six conversations. Reflective thinking, as above, was considered to be evidence of moving from incoherence toward coherence, especially as related to the topics of the intervention.

5. Analysis

Our analysis started as an open-ended process of video watching, listening to the audio recordings, and developing detailed transcripts in an iterative cycle typical of CA. No specific analytical guidelines other than the stated dilemma of trying to foster reflective thinking, and provide feedback if needed, were provided. Instead, notes were taken during multiple viewings of the videos, reading of the transcripts and listening to the audio to identify emerging patterns in the interaction. Our presentation focuses on excerpts which serve as representative examples to showcase recurrent patterns found across the six interviews. The excerpts were selected based on clear demonstration of the pattern with some consideration for the constraints of length. The patterns described were robustly observed across all six conversations.
The first thing we noticed as we iteratively examined the data was that who initiated an episode made a difference in the subsequent development of sequential organization. Most often, when the episode was initiated by the teacher, fewer occurrences of other-initiation of repair were observed compared to when the episode was initiated by the mentor. In the latter case, overall, the interaction was characterized by more occurrences of other-initiation of repair, which in turn indicated more trouble in maintaining sequence progressivity. This seemed to be a good starting point for systematically investigating the tension we suspected in the conversations (cf. Copland, 2010), as described above. An analytic decision to focus on initiating moves of each episode was made. This, in turn, revealed the potential relationship between the structure of opening questions and elicited teacher responses.

5.1 Who initiated an episode?

The following excerpt occurred about half way through the post observation conversation between Mazian, the teacher and Regina, the mentor. It presents an episode initiated by the teacher when she stopped the video. (See Appendix 1 for transcription conventions.)

Excerpt 1. Teacher-initiated episode (Mazian: 35:00v, pt. 2)

01 MAZ: Stops video {mouse click}
02 MTR: eh? so what happened?>
03 (0.6)
04 MAZ: erm, (1.0) one girl, mentioned that e::rm (4.2) er she said
05 that. er:: <people still stayed in> the crowded huts=
06 MTR: =unhun
07 MAZ: <but there were no mention of that in the text> so I didn't
08 know why I didn't say anything (. ) there. (2.0) because
09 that’s not, that’s not the: major understanding4 of the:: (.)
10 slide.
11 MTR: okay

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5 This indicates the specific time point of the transcript used with the teacher name, time stamp of the video and whether the 1st or 2nd part of the lesson (if more than one part to the video recording).
In Excerpt 1, it was the teacher’s action in stopping the video – indicating that there was something worthy of discussion – that initiated the episode and prompted the mentor’s question "eh, so what happened?>↑ here". In lines 4-5 the teacher commented on what she saw in the video. This led to her verbalization of an incoherence she saw in her lesson (“I don’t know why I didn’t say anything (.) there”). She then explained that the student’s comment was not connected to the “major understanding” of “the slide” (the excerpt of text the students were reading). We see this as evidence of reflective thinking: the teacher generated coherence by recognizing how she would have liked to handle this type of situation. This presents a contrast to Excerpt 2, which occurred roughly one hour into the conversation between the teacher (Hazel) and the mentor (Rachel). Both of them had been silently watching the video for ten minutes when Rachel initiated her comment, slightly turning her body from facing the laptop to the teacher, and pointing at the screen with her finger.

_Excerpt 2. Mentor-initiated episode (Hazel: 7:11v, pt. 2)_
Here, the mentor's question, "so what happened for that one?" initiated the episode. As the teacher's response was not immediately forthcoming (line 3), the mentor added another question "do you recall?" (line 5) in the format of *increment* – a turn design feature which acts as a sort of 'add on', starting a new turn while also linking to the prior turn. The increment possibly served to downgrade the abrupt tone of the mentor’s initiation. Note that the increment overlapped with a thinking response, "mm:" provided by Hazel (line 4), which in turn was followed by her other-initiation of repair "what you mean what happened" (line 6). As above, other-initiation of repair is often associated with non-aligning stances, e.g., a harbinger of disagreement (Drew, 1997; Schegloff et al., 1977). This appeared to be the case in Excerpt 2 as Hazel's repair initiation seemed to address not so much the literal meaning of the mentor's question as its sequential import. i.e., *Why are you asking me this question now? What is this question leading up to?* In response to Hazel's somewhat resistant response, the mentor clarified
her question, going back to describing what Hazel had been doing at that moment in the lesson (lines 8, 10). Hazel responded by simply restating what a student had said (lines 11, 13-14, 16-18). Note that the linguistic forms of the initial question in Excerpts (1) and (2) are almost identical: “eh, so what happened here” in Excerpt (1) and “so what happened for that one?” in Excerpt (2). However, the way the teachers responded to the mentors’ initial question in Excerpts (2) and (1) draws a clear contrast. We suggest the difference lies in who initiated the query: When the teacher initiated the episode by stopping the video, the mentor question served very well to elicit what the teacher was thinking and facilitated oral reflection. However, when the mentor initiated the episode by stopping the video and inviting comments with a very similar query, the teacher seemed perplexed, at best. Based on this initial finding, further analysis focused on sequential organization of mentor-initiated episodes.

5.2 Question types

5.2.1 Question types responded with non-embracing stance

In subsequent analysis of mentor-initiated sequences, it seemed that the broader the mentor’s initiating query, the more likely it would be met with a non-embracing stance typically demonstrated by other initiation of repair and the no-knowledge claim “I don’t know”. We present examples from our data, working from most general to most specific. Excerpt 3 occurred at around ten minutes into the post-observation conversation between Hazel, a teacher and Rachel, the mentor.

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6 We borrow the term from literature on topic-proffering sequences in CA (Schegloff, 2007). In topic-proffering sequences, in response to the first speaker’s topic proffer, the recipient can display a stance that either encourages or discourages the proffered topic. The response types that engender expansion of the proffered topic are preferred whereas responses that curtail the proffered topic are dispreferred. Given that the sequential environment for mentor’s opening question is sequence-initial, the teacher’s response to the mentor’s opening query can be analysed in terms of whether it shows a stance that embraces it or rejects it.
Excerpt 3. You want to comment something? (Hazel: 13:08v)

01  ((video plays till 17:56a)) (13:08v)
02  MTR: “okay” mm (0.5) for this right? you wanna pause [okay?]
03  HAZ: [mm
04  (0.6)
05  MTR: for this part,
06  (1.3) ((Hazel stops the video))
07  MTR: you wanna: (.) comment something?
08  (0.9)
09  HAZ: mm ((shakes her head))[eh heh heh
10  MTR: [no a:h. okay. actually, I thought
11  (. that was a good way [for you to turn it back to the::=
12  HAZ: [mm
13  =(. text [because one of your students actually gave you=
14  HAZ: [mm
15  MTR: =your major understanding that the houses were meant to
16  last for a [long time (.)
17  HAZ: [ah mm hm
18  MTR: ↑right. and you actually picked it up. (0.5) erm and you
19  as::k the, then ↑how do you know [that right?
20  HAZ: [which part (.)
21  MTR: [ya:h
22  HAZ: [ya:h
23  MTR: ‘how do you know that from the [text and then they pointed=
24  HAZ: [mm
25  MTR: ~out [to>the (1.2) sentence.° but the only thing was=
26  HAZ: [mm
27  MTR: =because THAT girl gave that response that it lasted for a
28  long time [but. erm. ↑another student was the one who=
29  HAZ: [mm
30  MTR: pointed [the sentence.
31  HAZ: [ya
32  MTR: ya. >so I thought< while it’s good that you actually get=
33  get them to turn back to the text but (0.8) er I felt=
34  HAZ: [mm hm
35  MTR: =that maybe it should have
36  (0.8)
37  HAZ: >gone back to the girl< [mm okay
38  MTR: [you’re ri:ght. for her to explain
39  HAZ: [mm
40  HAZ: [mm
41  MTR: get[ting other students [to respond first “ya” (0.7) but
42  HAZ: [okay [mm

In Excerpt 3, line 2, the episode started with the mentor's "okay" in a lower volume, followed by a vocalization, "mm", which served to indicate the mentor's incipient speakership (Jefferson, 1993). The mentor first suggested that the teacher stop the video (“you want to pause?” line 2), and then invited comment from the teacher (“you want to: (.) comment something?” line
The invitation was turned down by the teacher verbally and nonverbally. As the teacher shook her head, she turned to the mentor and laughed a little bit, which served to mitigate and compensate for a potential negative effect from her rejection of the invitation to comment (Glenn, 2003; Haakana, 2001). The mentor also oriented to the potential distancing effect that might have been caused by the teacher's refusal, displayed in the way the mentor designed her acknowledgement in line 10 (“no a:h. okay”). ‘Ah’ is a final particle, a typical feature of Singapore Colloquial English. Previous research suggests that Singapore Colloquial English is used to enhance rapport among participants (Alsagoff, 2007, 2010; Kwek, 2005). Here, the use of “no a:h” seemed to serve a similar function, i.e., to remedy awkwardness. Both the teacher's laughter and the mentor's incorporation of Singapore Colloquial English demonstrated their orientation to the possible delicacy of the teacher's turning down the invitation to comment.

The mentor then provided her feedback, which she began with a compliment and ended with a negative comment (Asmuß, 2008; Copland, 2011; Pomerantz, 1984), pointing out what Hazel did not do (lines 35-41). The mentor's initial question in Excerpt 3 showed one of the broadest question types in that she asked the teacher to stop the video and elicited a comment without giving any signpost of where she was heading. The episode proceeded with the mentor providing her feedback, but did not lead to the teacher’s oral reflection. The teacher merely acknowledged the mentor’s feedback (lines 17, 20, 22, 24, 26, 29, 31, 34, 37, 40, 42).

In Excerpt 4, a similar pattern is observed, i.e., the teacher displays a non-embracing stance in response to the mentor’s initiating query, though the question is slightly more specific. *Excerpt 4. What do you think about the ending? (Hazel: 11:48v, pt 2)*
In Excerpt 4, line 2, the mentor initiated an episode by asking a tag question, "I think i' was the end, right?", to which the teacher responded with an affirmative token “ya” (line 3). Then, the mentor delivered a wh-query that sought to elicit Hazel’s comment on the ending (line 4). Hazel’s less-than-embracing stance was already indicated by the 1.5 second pause in line 5 and clearly marked by her initiation of repair, "mmm what you mean" (line 6). In the face of a long stretch of silence (1.5 seconds), during which the mentor stopped the video, the mentor further narrowed the target of her query by adding an increment (“mmm, about the way you ended. (. ) the lesson?”) (line 8). Hazel’s response in lines 10 and 12 (“cos usually that’s what we will do. hor after lesson we will go (. ) go back to the worksheets:)” provided grounds for reading her previous repair initiation “mmm what you mean?” as challenging the assumption implied in the mentor’s question (Steensig & Drew, 2008; Hayano, 2013) that there was something amiss or room for improvement. The mentor acknowledged Hazel’s response with
"okay" (lines 11 and 14), then, provided the reason why she initiated the episode, presenting her assessment that the lesson had ended abruptly (line 16).

The mentor's initial query, "what do you think about the ending of the lesson?" (line 4) is very similar to a question type reported in medical interactions between a child parent and a pediatrician: Perspective Display Series (PDS) (Maynard, 1991). Maynard shows that opinion queries of this kind not only invite recipients to provide their views, but also lead to a display of the asker's own opinion. Maynard reports how PDS are deployed by pediatricians when they deliver diagnoses to parents whose child shows symptoms of mental development issues. Ideally, the recipient provides the pediatrician with material which the doctor can use to present his/her diagnosis as being in agreement. This maximizes the potential for presenting the diagnosis in "a publicly affirmative and non-conflicting manner" (p.189). In our data, mentor questions such as "what do you think about the ending?" can be understood as a similar strategy. As she wants to deliver a negative assessment, which is a dispreferred action (Copland, 2011; Vásquez, 2011), the mentor would want to present it as agreeing with the teacher's perspective or at least as something that is related to the teacher's self-reflection. In Excerpt 4, the mentor might have wanted to provide an opportunity for the teacher to reflect on a particular point. However, when the recipient came back with a non-embracing stance, (e.g., "mmm what you mean"), followed by a generic statement ("usually that’s what we will do"), the sequential route made it more difficult for the mentor to provoke reflection. Instead, the mentor moved quite quickly to negative feedback. "What about ...", a shortened version of "what do you think about ..?", was also found to be used in a similar pattern: to elicit a teacher's views on a target point before the

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7 Consider the following as an example. (Maynard, 1989, p.167)

A: So what do you think about the bicycles on campus?
B: I think they're terrible.
A: sure is about a million of 'em
mentor presented her own feedback. Our data show that the shortened version is also often met with repair initiations and culminate in a negative assessment from the mentor rather than serve to elicit reflection from the teacher.\(^8\)

So far, we have been looking at cases in which the teacher responded with a rather non-embracing stance, which, in turn led to no or little reflection. In the next section, we present more successful cases.

5.2.2 Question types responded with a more embracing stance

While teacher-initiation was likely to lead more smoothly to reflection, there are times when the mentor needs to initiate (e.g. if the mentor needs clarification; if there are long stretches without comment). One type of successful query was found when the mentor’s initiating move was cued by the teacher’s body language or other signal.

*Excerpt 5. You’re nodding? (Mazian: 14:57v, pt2)*

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\(^8\) Due to space constraints, we do not present an extract here; example sequences can be provided on request.
In Excerpt 5, the mentor's initiating query is cued by the teacher's nodding. By making a recipient-centered comment (line 2), and inquiring for the reason (line 4), the mentor effectively pulls out the beginning thread of teacher's reflection (lines 5 and 12 onward). Note that Mazian offers her reflection on the importance of phrasing the question and taking student proficiency into account coupled with a specific example - how she could have used the word “dirty”, which was provided by one of the students earlier, to elicit the more advanced word “hygienic” (lines 12 onward). The mentor’s first query (noticing) and the second query (asking why) can be combined as shown in line 2 of Excerpt 6, a second episode of the same conversation.

Excerpts 5 and 6 show the mentor's successful initiating queries, cued by the teacher's nonverbal sign. When those signs are not detected, the mentor can still effectively initiate an episode by framing the query with a recipient-centred perspective as can be seen in the following sequences.

*Excerpt 7. What are you noticing? (Sheila: 1:50:34a)*
After watching the video for around four minutes, the mentor initiated an episode by asking “what are you noticing? or what are you thinking about?” (line 2). Prefaced with a vocalization that suggested she was thinking (“mm:”, line 3), the teacher shared what she observed at that point of the lesson, i.e., she was feeling rushed for time. This led to her reflection that she could have made use of one of the principles from QtA, but did not: “so I realize that (0.7) a lot of questions now I: hh didn’t turn back to them” (lines 6-7). ‘Turning back’ to students is an important strategy used in QtA to turn responsibility back to students, often by asking them for explanation of their own prior statement. The mentor’s question at this particular point successfully provoked the teacher’s recognition of what she did not do (the incoherence), in comparison with what she would normally do and what the possible reasons were (i.e. the emerging coherence as part of the reflection process). Note that the mentor’s, Regina’s, initiating
query was not framed in a way that indicated she had a point in mind (cf. Excerpts 3-4). Instead it was designed to elicit whatever was in the teacher’s mind at that point. We refer to this as a “recipient-oriented query” because it orients to the recipient’s idea rather than pushing the recipient to guess the mentor’s (implied) idea.

As can be seen in Excerpt 7, designing a question in a way that focuses on what is in the teacher’s mind rather than one which implies that the mentor has a specific point in mind seems to be an effective starting strategy which could lead to more open sharing, which, in turn, can allow oral reflection from the teacher to flow. Another successful strategy involved the mentor building up the talk toward the feedback point by sharing her own observation and asking specific and factual questions. This seemed to provide sequential 'space' for the teachers to reflect on their teaching practices in a publicly observable manner (Orland-Barak, 2006) as shown in Excerpt 8-1 and continued in 8-2.

*Excerpt 8-1. What I notice now is that (Mazian: 22:41a)*
In Excerpt 8-1, after suggesting to stop the video (line 1), the mentor begins by sharing her observation of what was going on in the lesson (“what I notice now is that”) (line 3). As she said this, the mentor took over the mouse and using it, pointed to the students' raised hands on the screen (“here” in line 5). She verbalized a description (“you get a lot of students wanting to answer the question”, lines 5-6) and asked the teacher if it was typical (line 8). Receiving confirmation from the teacher (lines 10 and 13), the mentor suggested watching a little bit more (lines 16-17). Having watched 9.6 seconds more, the mentor, Regina, stopped the video, again described what
was going on in the lesson (lines 20-21) and sought the teacher's confirmation, indicated by the
epistemic clause “I guess” (Kärkkäinen, 2003), and rising intonation at the end of her turn.
However, the teacher misinterpreted Regina's question and reiterated the answer the student had
provided during the lesson, rather than confirming Regina's observation (line 23). After one
round of repair initiation (lines 24-25) and its acknowledgement (“mkay so that was the student's
guess.” line 26), Regina asked the key question, "what happens next?" (line 28). Regina
repeated the question after recapping what they had been observing thus far (lines 28-30). By
verbalizing what was going on at the current point of the lesson and asking the teacher to
verbalize what happened next, the mentor built up the talk toward the point she eventually
wanted to reach (Excerpt 8-2). She achieved this by eliciting the teacher's participation in the talk;
hence the process of building up the talk was co-constructed (Jacoby & Ochs, 1995; Jones, et al,
2009). After a long pause accompanied with a verbalization indicating that she was thinking (line
32), Mazian responded by proffering her guess at where this question was leading (“are you
asking like why, (0.3) why is that question, (.) necessary?” lines 34-35). Rather than answering
the mentor's question, Mazian asked a counter-question that served to inspect the intent of the
mentor's preceding question. Mazian’s response shows that teachers orient to where the mentor’s
question is leading. Hence, when they cannot see the sequential import, or where the mentor’s
question is leading, they seem to be perplexed and respond with repair initiations like “what do
you mean?” (compare Excerpt 4). Regina provided an answer to Mazian's repair initiation by

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9 This provides a useful contrast to Excerpt 2. In Excerpt 2, the mentor initiated an episode by asking the teacher
what happened at that moment. With the response indicating a challenging stance “what you mean what happened?”,
however, the mentor ended up in a sequential position where she had to provide her own observation of what was
going on at the moment (after you ask your initiating query . . . ). In Excerpt 8-1, the query, “what happens next?”
came after the mentor herself offered her own observation of what was going on, which apparently served to prime
the teacher to reflect on the particular point of the lesson (see also, Waring, 2013). The sequential trajectory in
Excerpt 2 goes backward compared to that of Excerpt 8-1.
telling her where her question was coming from (“I’m thinkin’ about the way students respo:nd” line 36), but without revealing her final destination for feedback.

The talk about this particular part of the lesson continued for ten more minutes, in which Regina constantly provided her observations and asked questions (“what is happening here?” is a typical one) in a way that led Mazian to talk about what was going on in the lesson, what more there could have been and, thereby, her reflection. This involved a great deal of repeating and reformulating what had been said before. Finally, the talk reached the point where the mentor revealed what she thought was missing at the particular point of the lesson. This is presented in Excerpt 8-2 which occurs 10 minutes and 50 seconds after Excerpt 8-1. Only the relevant portion is produced below due to space constraints.

Excerpt 8-2. But the other part of QtA is ... (Mazian: 34:35a)

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>MTR: and so far you've got no problems.</td>
</tr>
<tr>
<td>40</td>
<td>(the lapse of 10 min. 50 sec.)</td>
</tr>
<tr>
<td>41</td>
<td>MAZ: okay.</td>
</tr>
<tr>
<td>42</td>
<td>MTR: so, so that’s good. (0.9) But the other part of que</td>
</tr>
<tr>
<td>43</td>
<td>tee ei, (...) is, i:s (0.5) opening up the discussion</td>
</tr>
<tr>
<td>44</td>
<td>(...) to <a href="">explo:re</a> students’ ideas mo:re, (0.3) and part</td>
</tr>
<tr>
<td>45</td>
<td>of that is making connections.</td>
</tr>
<tr>
<td>46</td>
<td>MAZ: mkay=</td>
</tr>
<tr>
<td>47</td>
<td>MTR: =so, (...) in this case, a:ll three students talked</td>
</tr>
<tr>
<td>48</td>
<td>about housing in the past, but each of the students</td>
</tr>
<tr>
<td>49</td>
<td>just talked to you. (0.8) right? you: asked and they</td>
</tr>
<tr>
<td>50</td>
<td>answered you. And then y- somebody e:lse answered you</td>
</tr>
<tr>
<td>51</td>
<td>and the third person answered you. And there wasn’t</td>
</tr>
<tr>
<td>52</td>
<td>any mechanism to help the students see (...) that (...)</td>
</tr>
<tr>
<td>53</td>
<td>their three comments actually related to each other.</td>
</tr>
<tr>
<td>54</td>
<td>(1.1)</td>
</tr>
<tr>
<td>55</td>
<td>MTR: Does that make any sense?</td>
</tr>
<tr>
<td>56</td>
<td>MAZ: m hm.</td>
</tr>
<tr>
<td>57</td>
<td>MTR: .hh &quot;eh&quot; let’s just watch a little bit of it agai:n.</td>
</tr>
</tbody>
</table>

Having generated extensive amounts of talk on the particular part of the lesson, Regina finally arrived where she had been heading (lines 43-46, 48-54). The mentor explained what was missing in the lesson, i.e., making connections between students’ ideas (lines 43-46, 48-54).
With no immediate uptake from the teacher (line 55), Regina checked how it was received by asking whether it made any sense to the teacher (line 56). It should be noted that this was only the beginning of the explicit feedback and, as Regina suggested that they watch the part of the lesson again (line 58), the episode continued for another eight minutes during which oral reflection from Mazian was further generated. For example, nine lines later she commented “Okay um I realise now that actually the first one who said it …” and “maybe I could ask them like why do you think that, why do you think we are just going to read about houses in the past”. In this case, the reflection is provoked through an extended discussion starting in Excerpts 8-1.

What we learn from successful cases of mentor-initiated episodes is that the mentor first offered her own observation of what was going on in the lesson after stopping the video rather than trying to elicit the teacher’s comments right away. She gradually built up the talk toward the feedback point as she elicited the teacher's observation through more specific and factual queries. Again, this provides a useful contrast to Excerpts 2, 3, and 4, where the episode was initiated in the same manner, the mentor stopping the video, but was immediately followed by queries intended to elicited teacher comments. As can be seen in Excerpts 8-1 and 8-2, guiding the teacher toward the feedback point by sharing mentor observations seemed to create space where the teacher could think about what was going on at the particular point of lesson, thus leading to reflection.

Initially, we suspected that a key feature that characterizes successful vs. unsuccessful question types involves the specificity of the questions. Upon further examination of the data, we realized that some questions (Excerpt 7), though broad, when framed in a recipient-oriented manner, served to elicit the teacher’s reflection. When the mentor had a feedback point in mind

10 The full section of the transcript can be provided upon request.
and stopped the video and elicited the teacher’s reflection by asking “what do you think about it?”, it made the interaction rather like a mind-reading game and the question was treated like a display question. The mentor could more effectively guide the reflection by asking preliminary (often factual) questions, through which the teacher could verbalize what was going on at the point, which served to prime the teacher’s reflection. Excerpts in this section suggest that recipient-orientation might be a crucial feature for successful question types.

6. Discussion and Implications

Our analysis shows the minutiae of interaction can influence the way in which space for reflection is created and reflective thinking emerges in interaction. As evidenced in Excerpts 1 and 2, teacher initiations were more likely to lead smoothly to oral reflections as the teachers self-identified incoherence as a starting point for discussion. Even when teachers did not initiate an episode, mentors could initiate successful by attending to the teachers’ nonverbal reactions to the video. In these cases, mentors were able to find opportunities to provoke reflection by helping the teachers notice incoherence and move toward coherence (e.g., by noticing not only what occurred but also considering why it occurred, how it compared with other lessons, and/or how it might be done differently). In addition, while reflection, as it emerges within the constraint of interaction, is influenced by a variety of interactional features (e.g., turn-taking, politeness, conversational triggers), the format of mentor’s opening queries is one important feature that can influence the flow of a teacher’s oral reflection. Open questions are often recommended as a prompting move (e.g., Dillon, 1982; Roulston, 2011) and are specifically recommended to encourage reflection (e.g., York-Barr, Sommers, Ghere & Montie, 2006). However, we found that open wh-questions such as “What do you think about it?” or "What happened for that part?” when used as an initial query, were often met with a non-embracing
stance, treated as a display question or a prelude to negative assessment, and led to little if any reflection (see also Le & Vásquez, 2011).

When seen in the sequential context of interactional organization, teachers’ non-embracing stance to some mentor questions and comments is eminently reasonable. Our analysis suggested ways in which mentors might facilitate emergent reflection. Specifically, teachers were not only more embracing of recipient-centered comments (see especially Excerpts 5 and 6) but of what might be seen as a ‘recipient orientation’ – an orientation to the needs, interests, concerns, thoughts, and expertise of the recipient. Questions such as “What are you noticing?” (see Excerpt 7) or building up feedback in a sharing of observations (see Excerpts 8-1 and 8-2) seemed to foster a recipient orientation. This orientation, which was in keeping with the original conception of the project, created a context in which potentially discomfiting episodes could instead allow reflective thinking to emerge. It directly addresses the issue of the ‘suspected tension’ we intuitively felt with a way to better manage post observation conversations for professional development.

These findings not only offer implications for undertaking professional conversations, they also suggest the potential of CA as a methodological approach in teacher education. CA has been increasingly widely used for analysis of classroom interaction (Walsh, 2011; Markee & Kunitz, 2015; Richards, 2006; Seedhouse, 2004) and talk in educational settings (Kasper & Kim, 2015; Richards, 1999). We have shown that it also provides a useful means of understanding the details of sequential organization of post observation conversations undertaken for teacher development.

On a methodological note, the excerpts presented in this paper are representative examples that showcase the recurrent pattern found across six interviews. Given the admittedly
small sample size (six teachers), however, we are not claiming “distributional” generalizability (Peräkylä, 2004, p. 296). On the other hand, in CA analysis, each instance constitutes a product of machinery that is culturally available (Psathas, 1995). Therefore, we present our findings “not as descriptions of what other mentors and teachers do, but as what any other mentor or teacher can do” (Waring, 2013, p.115).

Borrowing one of the reviewers’ words, we believe that the current study sheds light on some issues regarding the mentoring process and demonstrates possible ways to open the dialog between teacher and mentor. In addition, our study responds to Mann and Walsh’s (2013) call for more data-based accounts of teacher reflection, and the need to incorporate more spoken and collaborative reflection. Issues related to potentially asymmetrical relationships between the mentors and the teachers have not been addressed in this article as they are beyond the scope of this analysis. We note that investigation of the potential impact of different hierarchical relationships and other contextual factors would be of interest for further investigation. For now, we believe our analysis has showcased the benefit of data-led accounts of teacher reflection as it emerges in and through dialogue.

In conclusion, our study supports the view that post observation professional conversations built up through a dialogic approach (Jones, et al, 2009; Walsh, 2011, 2013) can be fertile settings for reflective thinking. Mentors can facilitate reflection; however, we suggest that they need to be mindful that these conversations are not a straightforward information-seeking and -providing activity, but interactional events which take place within the constraints of sequential organization, as shown by our micro-analysis.

References:


Stokoe, E., & Derek, E. (2008). 'Did you have permission to smash your neighbour's door?' Silly questions and their answers in police-suspect interrogations. *Discourse Studies, 10*(1), 89-111.


Table 1

Overview of transcripts used

<table>
<thead>
<tr>
<th>Teacher*</th>
<th>Mentor*</th>
<th>Date**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheila</td>
<td>Regina</td>
<td>Aug-12</td>
</tr>
<tr>
<td>Charlotte</td>
<td>Regina</td>
<td>Aug-12</td>
</tr>
<tr>
<td>Mazian</td>
<td>Regina</td>
<td>Sep-12</td>
</tr>
<tr>
<td>Alicia</td>
<td>Regina</td>
<td>Sep-12</td>
</tr>
<tr>
<td>Rashida</td>
<td>Rachel</td>
<td>Aug-12</td>
</tr>
<tr>
<td>Hazel</td>
<td>/Rachel</td>
<td>Sep-12</td>
</tr>
</tbody>
</table>

*All names are pseudonyms

**The school year in Singapore runs from January to December.

Figure 1. Snapshot of the post observation conversation
Appendix 1.

Transcription Conventions

[ ] overlapping or simultaneous talk

= a “latch” sign, that is, the second speaker follows the first speaker with no discernible silence between them

:: an extension of the sound or syllable it follows.

° A degree sign indicates a passage of the talk which is quieter than the surrounding talk

(.5) length of pause

(.) micro-pause

. a stopping fall in tone, not necessarily the end of a sentence

? rising intonation, not necessarily a question

, continuing intonation

¿ The inverted question indicates a rise stronger than a comma but weaker than a question

↓ marked falling shifts in intonation

↑ marked rising shifts in intonation

- a cut-off or self-interruption

hhh audible aspirations: It may represent breathing, laughter, etc.

.hhh audible inhalations

( ) Transcriber’s description of events

( ) uncertainty on the transcriber’s part