

## Learning from Peers: Collaborative Learning to Improve Instructional Practice

### Abstract

A Teacher Inquiry Community for staff development was formed between teachers of language programmes at a private university in Malaysia to explore the learning process within a community of teachers who took inquiry as a stance to improve their instructional practice. Data for the study was collected through participant observation, audio-recorded interactions, in-depth interviews, analyses of documents and qualitative questionnaires. Ten language teachers from various university programmes within a Malaysian private higher educational institution took part in this study. Analysis of data reveals the following: i) teacher learning in the teacher inquiry community was influenced by the dilemma raised, the protocol utilised and the evidence of practice shared; ii) new knowledge about teaching surfaced through sharing and deprivatisation of practice at various points during each session; iii) teachers would go through cycles of inquiries and individual and group reflection during each session and, iv) learning took place within these cycles and resulted in the acquisition of new knowledge and skills, changes in teachers' perspectives, new understanding about role as teacher, and reinforcement of past beliefs about teaching and learning.

### Collaborating to Learn

Significant findings in past research reflect that collaborative effort towards professional development does, to a certain extent, lead to some improvement in practice (Coronel et al., 2003; Snow-Gerono, 2005; Miller, 2008; Ermeling, 2010). Four massive scale studies involving 3,250 Australian teachers to identify the impact of professional development on teachers' knowledge, practice and student outcomes, for example, show that there is an apparent and significant relationship between professional community and the reported level of impact on knowledge and practice (Ingvarson, Meiers, &Beavis, 2005). In these studies, teachers reported the positive role that the professional community plays in shaping their learning since the community provides increased opportunities for them to "talk about the specifics of their teaching practice and student learning, share ideas and support each other" in their attempts to implement ideas from the professional development program (Ingvarson, Meiers, &Beavis, 2005, p. 14). A number of other studies on collaborative teacher learning have also reported similar positive findings on its value in fostering teacher learning and its impact on teachers' instructional practice (Coronel, 2003; Park et al., 2007; Snow-Gerono, 2005; Miller, 2008; Ermeling, 2010).

Despite the strong promotion of the formation of communities within universities, not much has been reported in the literature on how university teachers learn within such communities and how their participation impacts their instructional practice. There is, in

other words, a big gap that needs to be bridged to understand the learning process within these communities and how participation in such communities would impact university teachers' instructional practice. For example, little research has been conducted to examine the specific "interactions and dynamics by which professional community constitutes a resource for teacher learning and innovations in teaching practice" (Little, 2003, p. 915). Many questions revolving around activities taking place within a teacher learning community remains unclear.

### **Purpose of the Study**

The purpose of the study was to explore the activities taking place within a Teacher Inquiry Community to understand how learning occurs within the community. To understand the learning process within the community, emphasis is placed on analyzing the content of the discussion of each weekly session and the perceptions and meanings teachers attached to the experiences learning within the community. The study was also conducted to understand the impact of participation on teacher's instructional practice.

This study was shaped by the conception that learning is a socially-constructed process and is situated within a setting that is governed by interactions, tools and context of learning (Brown, Collins & Duguid, 1989). It was also shaped by the conception that learning occurs when one problematizes, inquires and reflects on his or her teaching practice and questions his or her beliefs and assumptions about teaching and learning (Cochran-smith and Lytle, 2001). This study was framed by the following research questions:

1. How did teachers learn within the teacher inquiry community?
2. How did new knowledge, skills or values impact teachers' instructional practice?

### **Method**

#### **Participants**

The recruitment of members for the teacher inquiry community was done through informal briefings about the project to potential participants and personal communications with heads of departments. As a result, for the first cycle, eight language teachers from various university language programmes volunteered to join the community. The number of participants however fluctuated to ten in the second cycle and nine in the third cycle due to personal circumstances.

All teachers who were members of the teacher inquiry community were females, teaching English language, literature or communication courses to students of various levels (Pre-University (Enrichment, Intensive English and Foundation), Diploma, and Degree). The level of expertise of the participants varied from novice to experts and teaching experience varied from 2 to 34 years. Five of the participants did not have a teaching degree but held qualifications in various areas like Computer Science, English Language Studies, Mass Communication, English and History, and Performing Arts. In the past, most participants had

taken part in various university professional programmes, in the form of workshops, trainings and peer observation exercise but none had took part in a community-based professional development. Despite this, however, the group appeared to be interested and motivated to form the community to improve their instructional practice.

The Teacher Inquiry Community Project took place within 3 cycles and was completed within a year. Each cycle comprised of a ten weekly one to two hour meetings. Thirty sessions were held to discuss dilemmas and problems in instructional practice.

To make learning within the teacher inquiry community systematic, a protocol was designed based on the proposed inquiry cycle by Bay Area School Reform Collaborative (BASRC) and the consultancy protocol produced by National School Reform Faculty (NSRF). Teachers in the teacher inquiry community would be involved in the following activities. The meeting would start with a teacher sharing a problem or a dilemma that she faced in her instructional practice (Problematizing practice). At this stage, a teacher could also be sharing an evidence of practice (for example, students' written work, teachers' reflective notes, assignment prompts) (Tool-dependent). This would then be followed by a session where other members would ask her clarifying and probing questions to refine the problem or dilemma that surfaced. In the next activity the group would discuss the teacher's problem or dilemma (Deprivatizing practice). The teacher with the dilemma would 'keep quiet' and take notes of any important points raised or suggested to 'solve' or understand the problem or the dilemma. At this stage, the teacher with the dilemma was required to reflect on her practice and link it to the discussion carried out by other teachers within the community on her dilemma (Reflecting on practice). This activity was then followed by a session where the teacher shares her reflection and her future plans to remedy her situation. In the next step, the teacher and the group would discuss measurable goals and concrete action planning to be implemented in the teacher's classroom. The teacher would be required to keep evidence of her implementation of the action planning as it would be analyzed by the group in the next meeting. The teacher would then implement her action plans and collect data or evidence (Tool-dependent) to share with the group. In the next teacher inquiry community meeting, the teacher would report the result of her implementation of the action plans and this would restart the cycle as it would be another platform of inquiry to further resolve the problem or to analyze the problem more thoroughly. The cycle would only be completed if the teacher felt that she had understood or 'resolved' the problem or dilemma that she faced in her instructional practice.

The Teacher Inquiry community project received support from participants' respective departments. Participants were promised some points in their year-end performance appraisal provided their attendance was more than 80% for each cycle. Another form of support from the administration side was the blocking of the participants' class time-table from 12.00 to 2 pm every Friday for three consecutive semesters during the time the inquiry community was in session. Other than that, participants received free stationery and lunches.

Prior to the project, a briefing was held with the participants to inform participants of the process of teacher learning in the teacher inquiry community; the protocol that was utilized during the meetings; the data collection methods employed and administrative matters concerning logistics, food and attendance. During this briefing, participants were also given the ‘training’ of being in the teacher inquiry community through the use of the protocol employed.

### **Data Collection and Analysis**

The study employed four different methods to gather data and they were a) participant observation, b) qualitative questionnaires c) in-depth and focused interview and, d) audio-visual materials. Data for the study was collected through participant observation of inquiry community meeting sessions; content analysis of audio-taped sessions of meetings of the inquiry community; in-depth and focused interviews of members of the inquiry community pre and post cycle; and qualitative questionnaires which recorded individual teacher’s learning accounts during the inquiry community meeting. To make sense of the data collected, a qualitative (directed) content analysis was employed on the data retrieved from all sources. Data analysis was ongoing which means that it was done before, during and after the project.

After each meeting, the audio-recorded interactions were transcribed verbatim. During this process, focus on the meaning and the perception constructed by the participants through speech (Oliver et al., 2005, p. 1274). In the earlier stage of data analysis, contact summary sheets were prepared to give focus or to summarize questions about a particular contact (Miles and Huberman, 1994) in which, researchers’ reflection was also included. Contact summary sheets were produced for every observation of the teacher inquiry community meeting, the qualitative questionnaires gathered after each meeting, and the evidence of practice (tools) that surfaced during each meeting.

In the next stage data was abstracted from three data sources, observation, the transcribed interactions and the qualitative questionnaires. Abstracting data involved the process of creating “codes, categories and themes at varying level” (Graneheim & Lundman, 2003, p. 106). The meaning units were identified in the written data and these meaning units were then condensed, coded and categorized. To guide this process, an initially generated a list of categories from the literature was referred to (Zhang and Wildemuth, 2009) and new categories were also identified. After this stage, themes were created to link the underlying meaning in categories together (Graneheim & Lundman, 2003). Another language teacher from a different institution assessed the coding.

According to Merriam (2009), during the more intensive phase of data analysis for a case study, all the information about the case that are derived from multiple data sources should be brought together in order to convey an understanding of the case. To accomplish this, a

case report was produced where the findings of the analyses of data and researcher's reflections were merged. In the case report, conclusions and verifications were drawn from the analyses of the different data retrieved from the case and also the reflective remarks that were recorded in the contact summary sheets.

Once a cycle was completed or after ten teacher inquiry community meetings, the participants were then interviewed. The data retrieved from each interview would then go through the process of abstraction where meaning units would be coded, categories would be produced and placed under themes. These findings were then triangulated with the findings retrieved from the analyses of data retrieved from the teacher inquiry community meetings. Data displays in the form of tables and diagrams were then produced to draw conclusions and make verifications on the following; the process of group learning within the community and individual teacher's learning; impact of participation on instructional practice and contextual elements that influence learning within the community and the transfer of knowledge to practice.

### **Research findings**

This section will focus on answering the research questions listed above pertaining to the process of learning that took place within the teacher inquiry community and the impact of participation to individual teachers' instructional practice.

Analyses of data synthesized from various sources show that the process of teacher learning in the teacher inquiry community was a complex system. It was not only influenced by the protocol, but it was also influenced by various contextual elements that made the learning process subjective to the individual teacher. Generally, each teacher's learning context was different from one another thus each had her own path of learning within the community. Due to their contextual differences, teachers gained knowledge, skills and values that varied from one another and this brought about different impact to their instructional practice. To understand the process of group learning within the community, analyses were carried out on the transcribed interactions of the teacher inquiry community meetings and this was supported and triangulated by various other data sources, namely observations, the qualitative questionnaires and the in-depth interviews.

### **The Learning Process within the Teacher Inquiry Community**

Analysis of data collected through qualitative questionnaires, observation and interviews reveals that teachers would go through cycles of inquiries during the discussion and individual and group reflection during and after each inquiry community meeting. Learning took place within these cycles and resulted in the acquisition of new knowledge, changes in teachers' beliefs or perspective about teaching and learning and formation of new teaching habits or communication behaviour.

## **The Emergence of New Knowledge**

Learning of new knowledge of practice began with the sharing within the community. The protocol used within the community encouraged sharing and the generation of localized knowledge of practice among the community members. When a teacher disclosed her instructional dilemma, she would reflect on her practice and disclose classroom events, beliefs about teaching and learning, approaches or strategies that she adopted within her classroom, past teaching and learning experiences, personal experiences, materials used in her classroom, information about her students, the program that she was conducting and the constraints that she faced in her teaching environment. From such deprivatization of practice, new knowledge emerged. For example, when describing the problem she faced in teaching sentence construction to her lower proficiency students, Nancy accompanied her oral narratives with her written reflections on the activities in her classroom. She described the activities that she had conducted, students' oral and written response to the tasks and her reflections on what she had done. She also provided explanations on how she planned to improve the activities that she had conducted in her classroom. She shared her beliefs in teaching (for example, grammar cannot be taught in isolation) and her teaching approaches (she believed in an empathetic one-to-one approach). From such disclosures, teachers gained an insight into her practice and they learnt the approaches and strategies that Nancy employed in her teaching of sentence construction to lower-proficiency students within the constraints of her language program.

Responding to disclosures on an instructional dilemma, teachers within the community asked various questions to understand it. As a result, the teacher with the dilemma would continue sharing her knowledge of practice. Other teachers within the community responded to the disclosure by reflecting on their own teaching experiences and disclosing their own classroom practice, personal experiences and strategies that they employed to deal with similar problems faced by the teacher with the dilemma.

Furthermore, as most of the discussion on an instructional dilemma was inquisitive and exploratory, teachers collectively explored factors that of the instructional problem and its impact to the learning process, classroom teaching, students and the teacher. During such exploration, teachers continued to inquire and reflect on their practice and share knowledge of practice. The discussion on H, Meera's problematic student, for example, explored the possible causes of H's problematic behaviour. As there was limited information on H, teachers discussed various factors to understand his problematic behaviour. Teachers reflected on their teaching and personal experiences and shared knowledge on medical conditions that could lead to problematic behaviour; occasions when they dealt with people with such conditions; H's background (he came from a warring state, could this affect his learning behaviour?), personality and motivation and its influence on learning; and the reasons why students from countries in which English was not their native language was facing problems in writing in English. From such exploration, new knowledge of practice emerged. New knowledge was also reported to emerge during the discussion when

strategies were shared and refined. Some teachers reported learning new strategies in teaching through the sharing within the communities, for example strategies that they could apply within their own classrooms when dealing with disruptive and problematic students, teaching spelling to lower-proficiency students and promoting critical thinking among students.

After the implementation of the suggested strategies, teachers with the dilemma would then share the outcome of the implementation with other community members by providing oral narratives on the events that took place within their classroom and sharing evidence of practice. Such sharing increased teachers' knowledge on the dilemma and the process of teaching and learning in general. A specific example was during Leslie's reporting on the outcome of the spelling test that she conducted to improve her students' spelling of English words. Leslie reported to the community that she went back to basic, she gave her students a simple spelling test, explained how she conducted the spelling test, and reported the outcome of the spelling test: "... he is from the Middle East... he's got like out of 25, he got only 4 correct" (Week 5, C 1, line 23- 25); "I got Malaysians... they got like 22 out of 25 and then 17 over 25 and so and so right.. and then one or two Mongolians are also having problems with the spelling" (Week 5, C1, line 26- 28). She also disclosed the problems her students faced during the test, one made errors when he was writing the correction and another marked his friend's wrong spelling as correct: "I just couldn't believe my eyes and when ... when they were marking... the friends were marking each other's work...this particular guy marked the incorrect spelling correct" (Week 5, C 1, line 124- 125). She also shared the follow-up activity that she conducted: "...writing it 5 times for every phrase that they got wrong... so I told them it would happen AGAIN but it would not be every week...maybe maybe two weeks or three weeks one time.... (Week 5, C 1, line 34- 42).

At times, a teacher shared an evidence of practice to support the description of her dilemma. An evidence of practice brought into the inquiry community provided concrete examples that substantiate the explanation of a dilemma. When Leslie shared the outcome of her implementation, she shared a sample of her Arab students' written work with the community, providing the community with the samples of spelling problems faced by her Middle Eastern students. From the sample, teachers within the community analysed, queried and highlighted the following spelling problems:

- 1) 'different' was spelled 'diffrent'
- 2) 'describe' was spelled 'discribe'
- 3) 'employees' was spelled 'employes'
- 4) 'factories was spelt 'factores'
- 5) 'developing was spelled 'develobing'
- 6) 'afraid' was spelled 'afried'
- 7) 'create' was spelled 'creat'
- 8) 'view' was spelled 'veiw'
- 9) 'interview' was spelled 'interveiw'
- 10) 'because' was spelled 'beacause'

11) 'cannot was spelled 'can not'

(Taken from the sample of student's work shared in Week 5, Cycle 1)

During the discussion on the student's work, teachers identified patterns of mistakes made by the student, discussed the possible causes and highlighted similarities in terms of the spelling problems their own Middle Eastern students made. This was considered as new knowledge to other teachers within the community who had limited experience in teaching English to students of lower proficiency. Meera for example reported that "*I have had several Middle Eastern students and I notice that they have problems in their spelling but I never know that there is a pattern to that until another lecturer from IEP brought that problem up*" (Interview, C1, line 90- 94).

Knowledge shared on an instructional dilemma was accumulative since a discussion on it was progressive towards finding a solution to the dilemma. There were instances where a discussion on an instructional dilemma went on for several sessions with continuous reporting (at times by different teachers who tried the strategy suggested to the teacher with the dilemma in their own classroom) and probing. Bringing in literature on the dilemma shared and strategies that were suggested and tested provided teachers with more new knowledge of practice that could benefit their teaching.

By participating within the discussion in the teacher inquiry community, teachers learnt a lot of new knowledge of practice. Through a process of reflection on practice, teachers selected information that was relevant to their practice and conformed to their beliefs in teaching. Meera's sharing, illustrated the process of selection that most teachers underwent:

*Ya... not everything discussed in the IC I can reflect to my situation but I can relate especially to the Middle Eastern students ( oh ya..) yes I do have foreign students in my class and I do face the same kind of problem, same kind of mistakes that they made, spelling, punctuation, paragraphing, that kind of things so ya.*

(Interview, C 2)

Knowledge selected was then processed in four different ways: some was stored for future application to practice; some when through a series of reflection and; some was directly applied to practice.

### **Storing Selected Knowledge**

Not all the knowledge of practice that teachers learnt from the community was utilized immediately. This occurred due to various contextual factors relating to teaching and organizational constraints. Casey, for example, found the new knowledge shared on how to teach students to paraphrase beneficial but she did not apply it to her practice because she



did not have students to experiment on. Helen, faced similar situation when it came to new knowledge that she gained about 'copywriting':

*I learned that it can be used in certain situation depending on the students' need and the students' level but I cannot really try it on because I don't have sort of like a class to teach yet at the moment. Like I said I just came back right...So I don't have class, I don't have sample, I can't test it out.*

(Interview, C 3, line 84- 87)

One other main constraint was time. Leslie, for example, reported that her failure to apply some of the strategies that she considered beneficial to her dilemma was due to time constraint: "The course runs for 10 weeks only so for us to actually conduct the strategies and then find out whether it works or not... it's already end of the term" (Leslie, In-depth, C 1).

Some did not apply selected knowledge to their practice because it was irrelevant to their present teaching context. Knowledge shared on ways to deal with problematic students, for example was not transferred to practice because some teachers did not have such problems within their classroom. When the time is right, the knowledge selected would be applied to practice as reported by Helen:

*It could be.. it could be.. because like I say you can either accept or reject or another way would be you just store it away, you don't use it but maybe later on, it may be necessary for you to use it because like I said education is like evolving, you have different kind of students coming in every semester.*

(Interview, C 2, line...)

Selected knowledge that was not stored would be further processed. Most teachers reported going through a series of reflection on the knowledge that was shared by making connections to their practice and questioned the assumptions and beliefs that they had formed about teaching and students. When this occurred, teachers reported gaining a better understanding and also an increase in awareness on certain aspects of teaching and learning.

### **Reflecting on Selected knowledge**

The process of inquiry helped teachers disclosed a lot of new knowledge about teaching and learning but it was through the process of reflecting on practice that assisted participants in internalizing what they have learnt from a session. Analysis of data reveals that teachers reflected collectively and individually on their practice during and/ or after a session. Leslie, for example shared that by talking about her instructional dilemma, she was able to "reflect better about the problem at hand" (QQ, C 1, Week 5) and it was during the reporting that she "thought of another activity" (QQ, C 1, Week 5).

Other teachers within the community reported reflecting on their practice when they took part in a discussion on an instructional dilemma. Casey, for example reported that *“... when you listen to different teachers’ idea, you tend to think ow...I did not think in that way probably this would work and you know you go back to your class and try to implement it if it’s practical to you”* (Casey, Interview, C 1). Sandra reported similar experiences of reflecting on practice when she related that while listening to a discussion *“... you might realize that it might relate to some of your experiences or your weaknesses maybe in handling a problem”* (Sandra, Interview, C 1, line...). Helen, shared similar opinion when she stated that taking part in a discussion on a dilemma *“...makes me think about my own practice so when other people are discussing their problems and then I hear the other member giving suggestion, feedback so I put it all together it makes me think ok...Can I use this way?, do I have this problem?, in such a case how else can I tackle this kind of problem?”* (Helen, C 1, line...). New knowledge learnt was internalized through the process of reflection on practice where teachers made connections to and evaluation of their own teaching practice, and made projections on the feasibility of applying what was learnt into their own classrooms.

Reflection on practice was also reported occurring after a session or a series of discussion on a dilemma. Nancy reported that *“the reflecting stage would be what I called when I mulled over so the mulling over can occur any time, it can be here in my office or it can be in my class, it can be at home and definitely when I put them in writing”*. It was during such reflection when the dilemma *“becomes more crystallized”* to Nancy (Interview, C 2, line 234-236).

Teachers’ individual reflection was particularly evident when they responded to the questions in the qualitative questionnaire. When answering the questions, teachers were found to be reflecting on the knowledge that they gained or events that they recalled from a discussion and make connections to their own teaching context.

Reflecting on practice enabled teachers to view their instructional practices from a more general perspective and this enabled them to form new assumptions and gain new ideas about teaching and learning. Not only that ,the sharing of multiple perspectives on a dilemma encouraged reflection on teacher’s own teaching where teachers were able to see their practice from a different angle or through different terms of reference. This led them to make new discoveries about themselves as teachers, their courses, their teaching approaches and the students within their classrooms.

A stronger impact on practice was observed when teachers were continuously exposed and reflected on similar issues or events. This process helped changed teachers’ beliefs as similar exposure and discussion on an issue provoked them to continue to question their set assumptions and beliefs that they held. This consequently changed teachers’ practice, for example the way they approach the teaching of specific skills or the ways they dealt with students within their classrooms. The process that Meera underwent illustrates this process. During the discussion on her on her problematic student, H, Meera were exposed to new

knowledge on the conditions like Asperger's and Autism that could hinder students' learning without the teacher or the students realizing it. Such sharing made her questioned the belief or assumptions that she had on the way she perceived problematic students: "every time when a student is not performing or not following orders, the first thing came to mind is stupidity or laziness." (Meera, QQ, Week7, C 1) This made her realized that "there are more possibilities than just that" (ibid.). At the end of the first cycle, she shared that she learnt that she should not "jump to conclusion" and "maybe give them (her students) the benefit of the doubt" (Meera, In-depth interview, C 1, line 39) and "look at all the possibilities and never assumed that ... they are lazy or they are stupid" because "...there are always other possibilities" (ibid., line 23- 24). Similar exposure to similar issues continuously made her reflect and question her beliefs about problematic students.

In the second cycle, Meera participated in the discussion on Joyce's dilemma on Omani students within her classroom who had difficulties learning English. Participating in such discussion provoked her to further to questioned the assumptions and beliefs that she had about such students. At the end of the second cycle, she reported the new awareness that she had and reported possible change in her behavior when communicating with her students:

*There was a session where Jayne interviewed some of her Middle Eastern students, haah.. that were.. that really make me more.. feel more empathic towards students so you just don't assume that oh.. ok they can't do even a simple thing you know after listening to them it's not actually something that is easy, something that they have to learn... We've taken things for granted here because we have been exposed ever since we were little but over there apparently they have to learn everything when they are... in their teens probably something new to them so ya...*

(Interview, C 2, line 33- 39)

She also reported a possible change in her behavior when communicating with such students:

*... so happen that that particular student did not has Asperger's but it just open up your eyes and your mind whenever you come across any difficult students you know then you will be ok does he have ADB for example Asperger's, autism that kind of stuff*

(Interview, C 2, line 24- 27)

Because of her constant exposure to the issue and continuous reflection on it, Meera reported a change in her behaviour when addressing problematic students in her classroom. In the past, she reported that it was often "an automatic no... no MC (Medical Certificate) you can't do it" (ibid., line 50). However, after participating in the discussions on problematic students within the teacher inquiry community, when she faced a similar problem she reported that she made attempts to understand her student's predicament for not being

able to present her speech on time: *“There was one student who had difficulty in doing her presentation so before automatically saying no to her you know so I did ask her ok what’s the problem, why you didn’t come on that day or this... this...this ok you were not... sick so were you late, why were you not in class that day so ask all those questions hoping that you know...”* (ibid., line 45- 48).

At the end of cycle 3, when Meera was asked to reflect and share what she learnt from the sessions, she reported a better understanding and a changed belief of problematic students and a changed behavior when dealing with them.

### **Experimenting on Practice**

In some cases, knowledge that was selected was directly transferred to practice through experimentation. Skills that were experimented on were generally concrete skills, for example, ways to instill critical thinking, ways to teach writing or spelling, and ways to deal with problematic students. Through repeated successful attempts and continuous reflection on practice and the roles teachers played within the classrooms, some teachers formed new teaching habits.

Sandra, for example, directly applied knowledge that she gained from the sharing on her dilemma and showed a significant change to the way she instil critical thinking and the role that she played in her classroom. Application of the strategy that worked coupled with a deep reflection on her past teaching strategies and her role as a teacher within her classroom helped make changes to Sandra’s practice. In the past she recalled holding on to *“a big autocratic kind of teacher like I will tell you what to do and you will do it this way you know”* (Sandra, In-depth interview, C 1, line 17-19). After taking part in several discussions on her dilemma and the inquiry-based technique that she applied within her classroom, she reported:

*When I shared my experience of asking the students to do the presentation you know I think you will remember that initially I was the one who came up with the questions, the guiding questions and so much so I think it’s kind of help me you know to make the students more involve in their learning and then to give them some form of autonomy...*

(Sandra, Interview, C 1, Line 20-24)

Throughout the process, she reported gaining a better understanding about her role as a teacher and the approach that she had utilized in her classroom in teaching critical thinking after several discussions on her instructional dilemma. Implementation of the technique within her classroom and continuous reflection on practice made her realize that she might have utilized an approach that did not help her students to think critically. In the past, she

often structured her students' learning experience closely and provided a lot of training, exercises and sample answers to help her students respond critically to questions based on the literary text given. She later voiced her realization about her approach in teaching when she reflected on what others' said about her instructional dilemma: "...because the moment they asked me that I maybe think like emm.. ya..I am the one who chose the text... why not let them choose the text..." (Interview, C 1, line 153- 154). This made her questioned the approach she adopted in her classroom: "Ya.. I think like emm... why did I do that, why did I... why.. why isn't there more autonomy for the students to choose?" (Interview, C1, line 158-159). Based on her reflection on the session she also discovered that the assumptions that she had formed about her students might have been faulty: "Ya..maybe I undermine them in thinking that like they probably choose something simple and I will not see any learning so that is not true because you can analyse a simple statement and it's still will be an analysis" (Interview, C1, line 162- 164). In the second cycle, Sandra continued improvising the technique to suit the needs of her students and the program and she shared detailed descriptions of the improvised inquiry-based technique and the outcome of the implementations. Continuous implementations and reflection on practice and the role she played within her classrooms made changes to Sandra's practice somewhat permanent. At the end of the third cycle, Sandra reported the following:

*I come from this teaching back ground that I am very teacher oriented. So now after this alright...probably would be a little bit more you know open to being student oriented, even if the students are weak ok, I try to do that... because for me like... ok everything has to be done right, ok you know all these objectives have to be met, so ok let's do it this way and it's always very teacher.. very rigid probably... I feel.. when someone said, ' well, let the students do it, why don't you.. let the students do it', ya.. it never occurred to me..ok.. so new habit would be like more.. ya I'll be a little bit more.. not a little bit more.. a lot more open to ya.. the students being more involved, I feel and to you know bounce it off them first and then may be guidance can come in. So previously it was the other way round, so now like ok you can do this, ok let's build up on that skills, if not, then I will guide you and then we build up. So I guess that's the new habit I have acquired...*

(Interview, C 3, line 243- 345)

It is difficult to determine the permanence of the changes to the practice as a result of application of knowledge learnt from the community to teachers' teaching through experimentation. However, repeated implementations of a certain strategy, skills or techniques and continuous reflection on practice would have a long lasting effect on practice than one time implementation with limited opportunity for reflection.

## **Implication to Practice**

The study reported was conducted to explore teacher learning within a community of teachers who took inquiry as a stance. Analysis of data that was gathered from various sources shows that learning within the community was supported by the inquiry and the reflective process. The process of inquiry encouraged sharing and deprivatisation of practice which consequently led to the disclosures of new knowledge of practice on various aspects of teaching and learning. The reflective process, on the other hand, helped teachers internalized what was shared. This helped teachers to question the assumptions and beliefs they held about teaching and learning which consequently led to new understanding about the teaching and learning process and new perspectives on roles played and approaches utilized within the classrooms. Since inquiry and reflection are vital to the learning process within such communities, participants should first understand the rationale for inquiry. Without this vital understanding, teachers could only be focusing on solving the instructional dilemma without carrying out a thorough investigation to understand it first. Such occurrence will stunt the discussion thus impact on disclosures and the sharing of knowledge of practice. It would consequently impact the learning that occurred within the community.

As inquiry and reflection are vital learning tools within the teacher inquiry community, teachers should be provided with ample time and space for inquiry and reflection. Teachers need to be given ample time to carry out inquiries to understand the dilemma, the various factors that are causing and influencing it. Similarly, they should be given time to reflect. Forcing the teachers with the dilemma to reflect on the discussion on their instructional dilemma (as prompted in the original protocol) did not seem to work as teachers reflected at different times during and after the sessions. Tools, like the qualitative questionnaire should also be available, to assist teachers in their reflection after the session.

One important observation made was that learning of new knowledge did not necessarily result in changes to practice. Changes to practice only occurred after various exposure or discussion on similar issues/ dilemma and repeated experimentation on practice. Even though the inquiry cycle utilized encouraged experimentation on practice, teachers' practice was controlled by many factors. There were times when teachers wanted to experiment on practice but they were unable to do so because of lack of time and rigid course structure. It would be difficult for them to improve their instructional practice when their teaching environment did not allow them to experiment on practice.

Even though there were instances where teachers transferred learnt knowledge to practice causing a change in practice, it is doubtful that the change will be long lasting unless teachers found that their implementation has a significant impact on teaching. Most of the time, teachers put knowledge learnt into storage. Knowledge that is placed in storage could be lost if it is not put in practice. Facilitators of such communities thus need to record or document knowledge that is shared as a future reference for teachers. Even though, the impact of such practice is unknown, there are better chances that the knowledge learnt

would be transferred to practice as they are documented for easy reference. Teachers would then refer to the record if they met similar situations or faced similar problems as shared within the community.

Another important observation is that teachers would respond to knowledge that was relevant to their present teaching context. Even though the community consisted of teachers who taught English, the group was distinctively divided into two groups: teachers who taught English or Literature to lower- proficiency students and teachers who taught English to intermediate to upper immediate students. Since this is the case, there were times when discussions within the community were only appropriate to one group and not the other. Since time was limited for most the teachers, participating in a discussion that was irrelevant to the teachers could impact quality of the discussion and could impact teachers' motivation to attend future sessions. This questions the need for teachers to form a community that consists of teachers who have somewhat similar teaching context, for example, community of teachers who teach weak students or community of teachers who teach proficient students. If this occurs there are possibilities that knowledge of practice shared would be relevant to teachers teaching context thus the probability that the knowledge would be processed and transferred to practice will be higher.

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