

Teachers' Experiences of Collaborating in School Teaching Teams

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Abstract

Teachers in numerous countries worldwide often confront education reforms in their career, in which, collaborating is considered a feasible approach to changing teachers' traditional teaching philosophy. This study aims to examine Taiwanese teachers' experiences of collaborating in school teaching teams. We invited six teachers from different schools for an interview. Afterward, we conducted two sessions of focus-group interviews with 18 participants from various roles in teaching teams as well as various geographical areas. The findings show that information exchanges of education works, uncoordinated processes of collaboration, and discussions not involving pedagogical knowledge are the general experiences on participating in the teaching teams. Certain barriers to teacher collaborations are from inadequate focuses during team discussions and a lack of curriculum leadership. Through experience-sharing, the participants considered that a focus on student learning during discussions and examples of practices for curriculum leadership were the key aspects for successful experiences in teacher collaborations.

Keywords: teacher collaboration, teacher professional development, teaching teams, learning communities

1. Introduction

Teachers in numerous countries worldwide often confront education reforms in their career. In education reform initiatives, school teachers are often encouraged to implement innovative teaching strategies to enhance teaching quality. Collaborating is considered a feasible approach to changing teachers' traditional teaching philosophy. However, even though schools have organized a teaching team for their teachers, some teachers still preferred to work alone in their classrooms (Edmunds, 2009; Hughes & Kritsonis, 2006; Nompula, 2012). The reasons may include that the teachers found working individually faster than collaborating with others (Sikes, 2009) and they preferred self-directed learning, especially older teachers (Richter, Kunter, Klusmann, Lüdtke & Baumert, 2011). Based on the above phenomenon, teachers' experiences in, and barriers on, participating in teaching teams should be a concern.

Teaching team structures instead of professional learning community have been implemented as part of the school improvements to promote a collaborative mode of teaching and comprehensive education for students in many countries around the world. In Taiwan, organizing teams of teachers from the same subject area or for the same grade level is a regular administrative affair in a school. In the early years, the tasks of these teaching teams only focus on choosing the teaching materials, arranging learning activities, and setting an academic schedule for a semester. Less than 10 years ago, the concept of a professional learning community from Western countries advanced Taiwanese schools' teaching teams into becoming a learning community to facilitate teachers' professional development. In recent years, the concept of teacher professional development in Taiwan has also been impacted by the "Lesson Study" delivered from Japan, and approximates the tendency of teacher collaboration. The collaborative activities adapting Lesson Study is also perceived as valuable by school teachers in other countries, such as Singapore (Lim, Lee, Saito, & Haron, 2011), Thailand (Kadron & Inprasitha, 2013), Australia (Groves & Doig, 2010), and South Africa (Ono, & Ferreira, 2010).

Theoretically, teachers collaborating on a project such as a lesson can exchange teaching ideas and experiences, discuss teaching practices, provide each other with feedback, and participate in further changes to teachers' cognition and/or behavior (Meirink, Meijer, & Verloop, 2007). During collaborating, teachers collectively develop a perspective on how to enhance students' learning. Such practices that emphasize teachers'

collaboration to promote teachers jointly engaging in a sustained analysis of teaching and learning are seemingly considered a feasible process of teacher professional development. Currently, teachers are often expected to improve their teaching as well as to enhance student learning through mutual experience-sharing and collective learning in school teaching teams. However, teachers struggle with the move from isolation to collaboration and the tension between autonomy and collaboration (Puchner, & Taylor, 2006). These teachers' new collaborative experiences under changing educational circumstances warrant further investigation.

The purpose of this study is to examine Taiwanese teachers' collaborative experiences in participating in school teaching teams. The collaborative experiences of Taiwanese teachers would provide a valuable reference to those school teachers involved in educational reform activities in other countries.

2. Literature Review

Studies have shown the successful experiences of teacher collaborations such as teachers' strong commitment to consistency in professional development (Erickson, Brandes, Mitchell, & Mitchell, 2005; Puchner & Taylor, 2006), guidance in enhancing teachers' instructional design (Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Lau, 2013), support from colleagues and administrators (Lau, 2013; Schnellert, Butler, & Higginson, 2008), and interactions among teachers in an atmosphere of trust and mutual understanding (Erickson, Brandes, Mitchell, & Mitchell, 2005; Lau, 2013). The above studies revealed that commitment, guidance, support, and trust lead to the successful implementation of teacher collaboration. Studies have also shown the benefits of teacher collaborations on professional knowledge development (Burke, 2013; Egodawatte, McDougall, & Stoilescu, 2011; Nelson, 2009). Specific types of activities can emerge when teachers succeed in collaborating (Pawan & Orloff, 2011; Stanley, 2012). For example, effective collaboration on professional tasks enables teachers to receive feedback from their colleagues, reflect on their instructional strategies, and develop innovative teaching techniques (Goddard, Goddard & Tschannen-Moran, 2007). Importantly, teachers' learning experiences attaining from collaborative efforts could make them more competent in terms of improving student learning than from isolated work (Cajkler, Wood, Norton, & Pedder, 2014; Printy, 2008).

However, numerous challenges make it difficult for teachers to engage in collaborations, such as the absence of a supportive environment, unwillingness to share, and lack of time to collaborate with colleagues (Harfitt & Tavares, 2004). The processes of teacher collaborations are complex because of involvement in an organizational context (Doppenberg, Bakx, & den Brok, 2012; Little, 2002), collegiality (Ning, Lee, & Lee, 2015), mutual trust between teachers in engaging in dialogue and experience-sharing (Sztajn, Hackenberg, White, & Allexshat-Snider, 2007), teacher autonomy (Roux, & Valladares, 2014) and a critical focus on collaboration (Doppenberg, den Brok, & Bakx, 2012).

Studies have revealed certain barriers that reduce teachers' willingness to collaborate with each other. A lack of a regular common schedule is a frequently mentioned problem, although the significance is controversial (Sawyer & Rimm-Kaufman, 2007). Teachers need to find a common time to plan, meet, coordinate, and implement a new, shared curriculum (Muscelli, 2012; Suzanne, 2012). Developing long-lasting relationships built on trust requires a considerable amount of time, as does maintaining a good program (Bullough & Birrell, 1999). However, only arranging a regular common time to meet cannot resolve all the problems related to teacher collaborations.

In addition, a clear difference in the subject area of teachers is viewed as a main obstacle to collaboration, because teachers' suggestions from another subject area would not be accepted because of a lack of involvement in common professional knowledge (Pawan & Orloff, 2011). Moreover, even with teachers in the same subject area, the lack of adequate processes and procedures (e.g., time allocation, coordination, and effective leadership) may lead to insufficient collaboration (Pawan & Orloff, 2011; San Martín-Rodríguez, Beaulieu, D'Amou, & Ferrada-Videla, 2005), resulting in collaborative activities focusing only on information exchange, instead of teaching observation, in-depth discussions, and collective reflection (Pawan & Orloff, 2011). Vangrieken, Dochy, Elisabeth and Kyndt (2015) found possible negative consequences of teacher collaboration, illustrating that teachers may experience competitiveness, an increased workload, a loss of autonomy and tensions that can escalate into conflicts during teacher collaboration because of involving groupthink.

A long-lasting commitment with a vision and relationships based on trust (e.g., with colleagues and school administrators) can enhance the quality of teacher collaborations by building a stronger sense of community, emotional attachment, and empathic concerns regarding others' needs, which are identified by teachers as high-level professional competence in teacher collaborations (Tseng & Kuo, 2010). Vangrieken, et al. (2015) reviewed literature related to teacher collaboration and indicated the actions facilitating collaborations (e.g., realizing task interdependence, developing clear roles for the team members, a defined focus for collaboration). In addition, group level interventions (e.g., mainly focused on group members' composition) and structural

supports (e.g., scheduling adequate time for collaboration, structuring collaboration meetings formally) seem to be the important points of action in order to facilitate teacher collaboration.

Thus, the experiences of success and various barriers in teacher collaboration in teaching teams should be noted. Furthermore, if teachers could develop specific strategies by interactions in teaching teams and self-reflections when confronting the challenges, they not only achieve collaborative professional development, but also enhance student learning.

The above reviews emerge a theoretical framework of teacher collaboration that teachers collaboratively improve instructional practice under a positive and supported atmosphere within a teaching team to enhance students' learning. Lack of a regular common schedule, common professional knowledge and adequate procedures, could be easily overcome because Taiwanese schools have adequately organized the teaching teams as a regular administrative affair. However, it is still unclear what teacher's collaborative activities involved. Thus, this study addresses two research questions.

1. What do teacher's collaborative activities in teaching team involve?
2. What are the teacher's concerns for implementing successful collaboration?

3. Methodology

This study focuses on what Taiwanese teachers have experienced during teacher collaborations when they participated in school teaching teams. The data of this study depend on a self-reported understanding of the processes of teachers' participation in teaching team; thus, a qualitative approach was employed.

3.1 Methods

The focus on teacher collaborations in numerous countries differs because of cultural differences (So, Sin, & Son, 2010). There is currently little information about Taiwanese teacher teams in the literature. To understand what teacher collaborative activities involved according to the first research question, we first conducted an individual interview method to collect data on various teachers' experiences in teaching teams. Moreover, based on the second research question, common issues of concern and successful experiences are also critical to an understanding of implementing teaching teams. We used the focus-group interview (FGI) to obtain participants' common perspectives regarding teacher collaboration experiences.

The above two methods for collecting primary research data can also achieve study dependability, which is demonstrated by the use of overlapping methods, and it can validate the analytical results. We also categorized each interviewee's viewpoints on teaching teams during individual interviews, and edited them further to devise the critical questions regarding our FGIs.

3.2 Participants

Junior high school teachers in Taiwan are confronting the significant challenge of shifting in the secondary education system (e.g., no longer emphasizing the outcomes of students' entrance exams for senior high schools). Thus, we considered junior high school teachers as study subjects. To obtain transferability, we purposively invited participants based on several conditions, such as the school location, teaching subject, and teaching grade.

For the individual interviews, we invited six teachers from different junior high schools located in different geographical regions of Taiwan. Considering that Taiwanese schools organize teams of teachers from the same subject area or for the same grade level, the interviewees, participating in teaching teams on Chinese literature (1), Mathematics (1), Science (1), Physical Education (1), and Social Study (2), were invited. They were also in teaching teams for the seventh grade (2), eighth grade (3) and ninth grade (1). The individual interviews were conducted during November and December 2013.

In addition to school location, teaching subject, and teaching grade, the FGI participants were purposely invited based on a consideration to lead the teaching teams because effective curriculum leadership is a factor resulting in successful teacher collaboration (Pawan & Ortlof, 2011; San Martín-Rodríguez, et al., 2005). We believe that curriculum leadership might mediate the impact of collaborative teams on teachers' works. The perspectives on collaborative activities between team leader and other participants might differ. Thus, we intentionally chose some curriculum leaders (e.g., the principal and team chairperson) as FGI's participants. One FGI session, consisting of eight participants (one school principal, two team chairpersons and five participating teachers), was held in western Taiwan, with another involving ten participants from eastern Taiwan (one school principal, two team chairpersons and seven participating teachers). Years of teaching experiences of all participants range from 12 to 32 years. The average years of teaching experience is 20.6. Of all 18 participants, nine males and nine

females are involved. The two sessions of FGI were conducted in March and April 2014.

All participants volunteered to sign an agreement, participating in this project after being fully informed about the research process, potential harm, and important rights, such as the right to cease participation or withdraw from the research at any time without suffering discrimination or harm.

3.3 Data Collection

The objective of an individual interview was to collect data on the collaborative activities of teachers during their participation in school teaching teams as well as their viewpoints. The interview questions focused on “what you did in,” “what you perceived regarding,” and “what you think about” during teaching teams.

The original FGI questions were developed based on the analytical results of the individual interviews and the perspectives of the literature reviewed for this study, and were revised by three professors with expertise in teacher professional development. The formal questions were as follows: (a) What did you share during teaching teams? Were you involved in the discussion on teaching observation? Why or Why not? (b) Have you obtained any help from school leaders or others? Did you have any difficulties? (c) According to your experiences, what is the successful collaboration in teaching teams, especially on teaching practice?

The individual interview and FGIs were semi-structured and video-recorded.

3.4 Data Analysis

Data analysis involved using a process of constant comparisons for recurring words and emerging patterns (Lincoln & Guba, 1985). To obtain confirmability, three trained researchers independently reviewed the descriptive words when reading the interview transcripts, and met to reach a consensus on interviewees’ descriptions. The patterns that emerged from the data were based on the study purpose regarding the teachers’ collaborative experiences. While constantly reading the individual-interview data, collecting the emerging findings regarding teachers’ experiences, the themes of teacher collaborations in school teaching teams were identified.

After each FGI, data were constantly analyzed. Analysis of the FGIs involved transcript reviews to determine the detailed common perspectives (i.e., what participants said on teacher collaborations in school teaching teams), and to draw conclusions. As recommended by Bloor, Frankland, Thomas, and Robson (2001), indexing was used for the FGIs. Indexing increases data manageability for analysis. When a response for any FGI question (e.g., a lack of common time) was raised during each FGI, the key terms of the response instantly were marked as a possible index. Then the next response for the FGI question was compared with the initial index. Based on the above method, the initial index was maintained or a new index was developed. When a pattern emerged reflecting a correlation with a couple of indexes, it was reviewed again to identify relationships and trends among the various viewpoints and detailed data.

We triangulated the data from the two sessions of FGIs as well as individual interviews to increase the credibility of the study findings, and further identified the participants’ common perspectives, especially on common obstacles and successful experiences in teacher collaboration, as mentioned in the literature.

4. Results

While analyzing the individual interviews, three patterns that were observed that explain the participants’ viewpoints on participating in school teaching teams. In addition, two patterns emerged in the FGIs that helped identify participants’ common perspectives, and they were used to indicate barriers and successful experiences in teacher collaborations.

4.1 Teacher collaborations Did Not Involve Pedagogical Discussion But Information Exchanges

Based on the analytical results of individual interviews, we identified three specific phenomena: 1). the tasks of teaching teams were experience-sharing only in information exchanges of educational works, 2). the processes in teacher collaborations were uncoordinated, and 3). the perceptions for teaching teams did not involve deep discussions and reflections on pedagogical knowledge.

As mentioned in literature, all of the interviewees stated that the school administrative departments have arranged a regular common meeting time for teachers according to the subject they teach. In addition to traditional tasks (e.g., evaluating and choosing textbooks for students and assigning exam schedules), experience-sharing was a common task mentioned by most interviewees. Experience-sharing, however, involved only information exchanges of educational works.

After a teacher attends a workshop outside school, sharing with other teachers what he or she has

learned during team meetings is required by the schools' administrative departments. Each teacher has the opportunity to attend such workshops by taking turns, and is required to share. (Science Teacher)

Teaching teams often discuss a few educational topics (e.g., how do we consult a high-risk student?), especially when an education event happened, and was reported by the news media. (Physical Education Teacher)

According to the common viewpoints of three interviewees, the discussion topics on educational events are often provided by the school's administrative department rather than teachers themselves.

Except for the discussed topics, the processes of teacher collaborations were uncoordinated. Although a chairperson of a teaching team was elected at the start of an academic year, a careful framework for practicing teaching teams was not built because of a lack in coordination. Theoretically, teacher collaborations should minimally involve classroom observations of each other's classes. Only two interviewees expressed having done so because of an official regulation by the local government. After observing teaching activities, the instructor and observer did not engage in in-depth discussions on the teaching processes and effectiveness, but offered simple and superficial praise. No coordination for teaching teams resulted in the poor teacher collaboration.

At the start of this academic year, the Taichung city government announced that every teacher must openly present his or her teaching practice to other teachers. ...I reluctantly practiced this once. After teaching, every observing teacher always offers humble words, such as comments on interesting teaching activities or wonderful words on the classroom blackboard. (Social Study Teacher A)

(Researcher: Would you offer suggestions to other teachers?) Well, I just talked about similar situations in my classroom. Giving suggestions? You know, each teacher always has a few teaching characteristics. It is difficult to say what is adequate or inadequate... (Researcher: Has any person ever told you how to comment on the teaching project?) Hah, no ... (Mathematics Teacher)

All interviews agreed with the benefits of participating in teaching teams. Support from the administrative departments was also recognized. An interviewee stated the following:

I recognized that teaching teams are useful to teachers for professional development. We talk about a few of teaching experiences, and listen to and learn from each other's descriptions. (Social Study Teacher A)

We have a positive relationship with our administrative department. They assist us enough, and regard us as professionals when we want to do something for the students. I think an administrative support is a keypoint for successfully practicing teaching teams. (Social Study Teacher B)

In summary, time allocation and administrative support allow teachers to have a regular, common schedule to meet as a group, while teachers' collaborations only involve information exchange such as sharing experiences and viewpoints on educational events. Theoretically, a coordinated process should be built to promote teachers' collaborations for professional development. Through this study, a verifiable fact is that due to uncoordinated processes of teacher collaboration, observing teaching practice in a small group of teachers did not lead to, nor facilitate, teachers' conversations on professional knowledge. Positive recognition of teacher collaborations, but not specific implementation, is the current phenomenon regarding Taiwanese teachers' collaboration.

4.2 A Focus on Student Learning and Examples of Practices for Curriculum Leadership Contribute to Successful Collaborations

This above phenomenon involves several factors. Two patterns emerged in the FGIs, and we further identified two key themes regarding teacher collaborations (i.e., barriers and successful experiences). In addition to the mentioned analytical results, the barriers and successful experiences provide an explanation to why Taiwanese teachers' collaborations implement superficial collaborations such as for information exchange, as well as further strategies for successful teacher collaboration.

During the FGIs, certain teachers stated that teacher collaborations can benefit teacher professional development by facilitating the sharing of thoughts and reflections with each other, whereas other teachers stated that experience-sharing would expose a teacher's shortcomings, such as insufficient professional knowledge and inadequate behaviors (e.g., reproaching students in the classroom).

I've heard "Lesson Study" of Japan. I also recognize that teachers working together can provide them with good examples and with some considerations to improving their teaching when a couple of teachers discuss an effective teaching project. (First FGI, Department Head A)

I am afraid of discussing about my teaching problems with colleagues. It is inevitable that I would

blame students during my teaching..., experience-sharing of my teaching in teaching teams would expose my shortcomings. (First FGI, Teacher C)

These two contrastive expressions revealed the previous analytical result of the individual interviews (i.e., positive recognition, but not for specific implementation). The description provided by Teacher C shows an anxiety regarding collaborations. After discussing these two standpoints during the FGIs, the majority of participants collectively produced an emergent consideration, stating that, because teacher collaborations would be able to promote professional development, teachers need time to engage in educational practices that are meaningful for students via successful teacher collaborations. A description from Chairperson B, indicating that *the model of teachers working alone for a long time in Taiwan*, also partly explains why teachers did not devote themselves to developing collaborative tasks when participating in school teaching teams.

Except for the factor of time, when teacher collaboration focuses on students' learning performances, teachers are more willing to work together. This perspective seems to be considered a key factor affecting teacher collaborations by all participants.

We frequently focus on student learning, rather than teachers' teaching behaviors when discussing classroom teaching. If teachers' conversations tend to focus on students' effectiveness and failures, we are more willing to share our experiences than ever. In this manner, teachers would not feel as if they are the subject of discussion. (Second FGI, Teacher D)

The teachers' collaborations worsen teachers' friendships, because most teachers are used to focusing on negative teaching behavior. Although observing teachers often results in praises face to face, their observation reports often show conflicting shortcomings. Some experienced teachers have been teaching for two or three decades. They cannot accept criticism from others. (Second FGI, Teacher B)

Observing teachers praising instructors in face but writing down their shortcomings is a significant contradiction. According to the school principal in the second FGI, one reason for giving praise is that teachers consider the team's harmonious atmosphere, and worry about hurting a colleague's feelings. In addition, Chairperson B in the second FGI stated that writing down the shortcomings may fulfill the aim of intentionally reflecting on the observer's attention to the classroom observation. This phenomenon seems to be psychological, implying an insufficient trust with other teachers, and affecting teachers' dialogue and collaboration. Basically, dialogue with each other is a core base of teacher collaborations to improve teaching techniques. The focuses of the dialogues would induce teachers to successfully or unsuccessfully develop meaningful collaborations. Notably, based on a successful experience from Teacher D, focusing the dialogue on students' learning performances rather than teachers' teaching behaviors might be able to resolve the above contradiction and further initiate the collaborative activities.

Accordingly, teachers should have the ability to collaborate through adequate coordination; however, a misunderstanding in collaborative tasks from administrative departments was found and further induced specific teachers to produce inadequate perception of teacher collaboration. Inadequate curriculum leadership was mentioned as a barrier to teacher collaborations in teaching teams. An experienced teacher revealed his displeasure as follows:

Because of the regulation from the local government, the school administrators asked us to fill out many tables, and write some reports before and after classroom observations. I do not really know why they made such a regulation to bother teachers. (First FGI, Teacher C)

We recognized a sufficient number of examples to overcoming the barrier to effective teacher collaborations. A principal expressed the following, and other participants also identified with this feeling:

There is a mistake. Maybe the request is from a few administrators who want more data on paper to achieve the regulation goals. School principals and department heads ought to clearly describe the benefits, to coordinate feasible processes, and to encourage teachers to practice through constant communication, rather than to demand a lot of paperwork. (First FGI, Principal)

To resolve the problem about inadequate curriculum leadership, an exemplary model is useful for successful teacher collaboration.

It is difficult to persuade teachers to collaborate with each other. Instead, an ideal role model, for example, a curriculum leader who can exemplify how to innovatively teach, share, and discuss, can show other young teachers how to act and behave accordingly. (Second FGI, Teacher B)

Since teachers have worked along for a long time, they were not used to being observed when teaching. The

teachers were also concerned for being a subject of discussion due to imperfect teaching, leading to their anxiety regarding collaborations. Inadequate curriculum leadership, demanding a lot of paperwork instead of involving discussions and reflections on pedagogical knowledge, resulted in superficial implementation for teachers collaborations. On the contrary, a focus on student learning and examples of practices for curriculum leadership contribute to successful collaborations.

5. Discussion

As mentioned, regular meetings are crucial for teacher collaborations. Taiwanese schools have arranged common meeting times for teaching teams; that is, the barrier of a necessary common schedule has been overcome. However, as mentioned by Sawyer and Rimm-Kaufman (2007), a regular, common meeting time is not a problem unique to teacher collaborations. If coordination on guiding the development of school teaching teams is nonexistent, teachers may implement superficial collaborations such as for information exchange, in contrast to high-level teacher collaborations mentioned by Tseng and Kuo (2010). The above perspective was verified by the finding of this study, a lack of coordination resulting in poor teacher collaboration.

When a local government declares regulations related to mutual classroom observation, certain schoolteachers forcibly or positively begin to initiate classroom observations, and increasingly recognize the benefits of collaborating. However, in this study, a few school teachers reported that they have not perceived the benefits of teacher collaboration because of inadequate information delivery (e.g., un-meaningful paperwork) for hasty achievements from their school's administrative departments. Additionally, the participating teachers also expressed their anxiety on being observed during teaching.

Within a situation of lack of collaboration with each other for a long time, Taiwanese teachers have the anxiety about being observed during teaching due to a misunderstanding of being a subject of discussion. As Vangrieken, et al. (2015) mentioned, a defined focus for collaboration and realizing task interdependence can facilitate collaborations of teachers. This study's findings show that appropriate focuses on student learning performances and clear task descriptions for curriculum leadership on effective teacher collaborations were recognized by participants. The student's learning performance resembles a kind of topics on teaching practices, similar to learning materials. Taiwanese teachers tend to be willing to observe and discuss the student's learning performance, like topic discussion, rather than to evaluate their teaching behaviors. The clear task descriptions for curriculum leadership are helpful for teachers to experience the benefits of teacher collaboration, in addition to avoiding a lot of useless paperwork.

The above perspectives, extending the perspectives of previous studies that indicated certain barriers (Doppenberg et al., 2012; Harfitt & Tavares, 2004; Sawyer & Rimm-Kaufman, 2007; Sztajn et al., 2007), can explain why appropriate focuses on student learning performances and clear task descriptions for curriculum leadership enhance the effectiveness of teacher collaboration in teaching teams of Taiwan schools.

In Asia, numerous teachers are reluctant to be observed during teaching (Saito & Atencio, 2013). Few schoolteachers are able to collaborate with other teachers, resulting in a long-lasting habit of working alone. With educational reform, psychological obstacles inevitably emerge for teachers, and they find it difficult to adjust their previous habit of teaching alone within a short period. Although given sufficient time is necessary, leadership can accelerate the effectiveness of teacher collaborations (Pawan & Orloff, 2011). Because of a lack in curriculum leadership as well as in coordination in teaching teams, teachers have no procedures to follow, and a teacher's resistance is thus understandable. With the accustomed habit of working alone, Taiwanese teachers need a suitable example to imitate, especially at the start of initiatives for teachers to show willingness in collaborative teams. When teachers follow an ideal example and become effective in teacher collaborations, they would perhaps develop an adequate collaboration model.

By contrast, a few of teachers have devised a satisfactory strategy of teacher collaborations in this study. The key reason for succeeding was that they had focused on student learning, regardless of whether it was during classroom observation or in after-class discussions with each other. As mentioned, mutual trust is crucial in teacher collaborations (Sztajn et al., 2007), but it requires a long period to build (Bullough & Birrell, 1999, p. 387). A critical focus on collaboration maybe circumvents the issue of providing teachers time to change. In this study, we demonstrated that an emphasis on student learning, rather than discussing teachers' behaviors in teaching, can stimulate discussions among teachers. Although student learning effectiveness is closely associated with the instructional behaviors of teachers, this type of dialogue on student learning can facilitate teacher collaborations, and perhaps also circumvent the obstacle of teachers' potential distrust in each other, compared to discussing teachers' behaviors. Notably, the discussion focusing on student learning could make teachers competent in improving student learning, as mentioned by literature (Printy, 2008). Although certain barriers still

exist in teachers' collaborations, several notable initiatives resulting from a few acceptable successful experiences during FGI discussions are worthy of implementation to facilitate effective teacher collaborations.

Based on the analytical results on teacher collaboration in school teaching teams, this study theorized that when teachers have recognized the benefits of working together in teaching teams, an adequate coordination, consisting of leading the focus of collaborative interaction on student performances and curriculum leadership for meaningful activities, is critical to teacher collaboration. Without the coordination, the teachers may consider themselves as a subject of discussion due to imperfect teaching and further feel the anxiety of classroom observation and experience-sharing. With that anxiety, the teachers would perform superficial collaboration in teaching teams, such as information exchange.

6. Conclusions and Implications

The study expanded the work of previous researchers in the area of teacher collaboration that did not indicate what the collaborative activities involve when teachers' teaching teams have been organized. This investigation revealed that information exchanges of education works, uncoordinated processes of teacher collaboration, and discussions only focusing on superficial issues are the general experiences on participating in the teaching teams. A further investigation of experiences on teacher collaboration in this study identified that certain barriers to teacher collaborations are from inadequate focuses during team discussions and a lack of curriculum leadership. As mentioned, numerous teachers are reluctant to collaborate with others, specifically on being observed during teaching. Through experience-sharing, the participants of this study considered that, a focus on student learning during discussions and examples of practices for curriculum leadership were the key aspects for successful experiences in teacher collaborations.

By collecting teachers' experiences in school teaching teams through universal sampling, we found specific perspectives (i.e., a focus on student learning rather than teachers' teaching behaviors during discussions and examples of practices for curriculum leadership) regarding participation in teaching teams. Future studies could identify the effectiveness of the mentioned themes of the study on teacher professional development. The successful experiences found in this study regarding participating in school teaching teams can provide teachers confronting educational reform with novel approaches on teacher collaborations.

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