

The Challenges of Promoting Teacher Collaboration: A Taiwanese Context

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Contextualisation

The significance of culture for the outcome of any reform can hardly be overemphasized. As many commentators have pointed out, earlier studies tended to neglect the cultural aspect of change in education (Fullan, 2001; Hargreaves, 1994; Stoll and Fink, 1996). This paper is intended to redress the balance; it introduces part of my research, which aims to answer how teacher cultures have affected, and have been affected by, a radical reform in the Taiwanese national curriculum - the Grade 1-9 Curriculum. Although the definition of 'culture' varies from discipline to discipline, and author to author, the concept used here is similar to that of 'organisational culture'. Its essence is '...that set of basic assumptions which has worked well enough to be consider valid' (Schein, 1989), or '...the way we do things around here...' (Deal and Kennedy, 1983, p 14). This paper specifically focuses on one important aspect of teacher culture, ie, collaboration.

Abstract: *This paper examines the extent to which apparently collaborative activity, resulting from a new policy initiative in the Taiwanese education system – the introduction of the Grade 1-9 Curriculum, has increased teachers' collaboration. An ethnographical approach was used to examine a variety of apparently collaborative practices in two schools, one an elementary school, the other, a junior high school, over the first three years of the new policies' implementation. Categories of collaborative activity are identified as a result of a range of data gathering activities. It is argued that although there was some evidence that a collaborative culture was occurring, this was superficial or 'shallow' in nature. The reasons for this interpretation are discussed and prospects for future developments explored.*

Introduction

Traditionally, teaching in a Taiwanese school was an individualistic practice. After the introduction of the Grade 1-9 Curriculum, this kind of working pattern was no longer seen as appropriate. First, being designed as an integrated curriculum, the new curriculum merged traditional subjects into 7 wider Learning Areas; for example, History, Geography and Citizenship were merged as Social Studies. Moreover, team-teaching was encouraged. As a result, teachers of 'related' subjects were expected to work together in the relevant Learning Area Panels. Secondly, being a policy of decentralization, which promoted school-based curriculum development, the new curriculum provided only general guidelines for schools and teachers to follow. One requirement of the new approach was the Committee of School Curriculum Development in each school, should create a School Curriculum Plan. This Committee comprised curriculum panels for each of the Learning Areas. Because this was the first time in Taiwan's educational history that such curriculum development measures had been set up in schools, a need for greater teacher collaboration was anticipated, as schools became directly responsible for their curriculum.

There is little doubt that a collaborative teacher culture can help a school to take up changes (Biott, 1992; Nias, 1989; Nias, 1992). Research in English primary schools, for example, found that a collaborative working environment was a central aspect of successful whole-school curriculum development (Nias, Southworth and Yeomans, 1989). Since the Grade 1-9

Curriculum reform was intended to enhance teacher collaboration, the question, which I choose to focus on in this paper, is:

“To what extent is the reform succeeding in changing teachers’ working patterns, which previously showed few signs of collaboration?”

When school leaders take up teacher collaboration as an initiative, it is at risk of creating *contrived collegiality* rather than a genuine *culture of collaboration*. Hargreaves makes the following distinctions (Table 1) between these two forms of teacher cultures (Hargreaves, 1994).

Table 1. Distinctions between two forms of teacher culture.

Collaborative culture	Contrived collegiality
Spontaneous	Administratively regulated
Voluntary	Compulsory
Development-oriented	Implementation-oriented
Pervasive across time and space	Fixed in time and space
Unpredictable	Predictable

Note: Based on Hargreaves (1994)

These two constructs are illuminating, but two major, and problematic issues are worth noting. First, Hargreaves constructs these two types of work pattern from a particular perspective, ie, one of a leader or outsider. Because contrived collegiality is externally regulated, the descriptions of it seem to make sense. However, problems occur when we closely examine the characteristics of collaborative culture. For instance, from the outsiders’ point of view, interactions between members of a collaborative culture may seem pervasive across time and space or unpredictable; while from the insiders’ point of view their collaboration still has certain boundaries, and norms, and therefore may be much less unpredictable. Because collaborative culture relies heavily on members’ intrinsic motivation, whether, or not, the outsider’s viewpoint is appropriate, is questionable.

The second point arising from Hargreave’s conceptualization, given above, arises perhaps because he restricts his focus to the *form* of culture; his constructs have a hint of behaviourism about them. In other words, his theory is constructed upon the production, regularity and predictability of teachers’ interactions. The strength of behaviourism, as a theoretical approach, is that it creates observable indicators for empirical research. The question is whether these indicators are significant for all research interests. For instance, I suppose that, in many cases, what the members of staff have in mind, when they work with other members of staff, is more important than whether their collaboration is predictable or not.

To add further nuances to teachers’ collaborative culture, I try to examine teachers’ collective work from the perspective of what the substance, or matters of collaboration involved, are. The underlying assumption here is that different collaborative tasks involve different degrees of collaboration. For instance, sharing materials with colleagues involves a lower degree of collaboration than teaching a lesson together. In this paper, I firstly illustrate how the teacher cultures of the schools that I have studied are moving from isolation to collaboration. Secondly, I construct a repertoire of the teachers’ collaborative activities. On the basis of this construction, I will further argue that their newborn cultures are, so far, merely forms of “shallow collaboration”.

The study

The research upon which this paper is based was conducted at one elementary school and one junior high school. Its main task was to gain insight into the implementation process of the Grade 1-9 Curriculum from a teachers' perspective. An ethnographical approach was taken because of its strength in "...understanding and describing a social and cultural scene from the *emic*, or insider's, perspective..." (Fetterman, 1989). Geertz believes ethnographers should aim at providing "...the interpretation of culture...". The analysis of culture is not "...'an experimental science in search of law but an interpretive one in search of meaning..." (Geertz, 1973). Therefore, for this study, I am not content with only describing, or documenting, the changes in teachers' work cultures. What I try to achieve in the end, is to find out the significance, or import, behind their behaviours, or interactions, and to provide explanations for the phenomena observed.

The two schools studied were located in the same town, and had overlapping catchment areas. In 2002, KJ Elementary School had 104 teachers and 2103 pupils, excluding the nursery department, while GH Junior High School had 1807 pupils and 90 teachers. The proximity of the two schools allowed me to move easily between them.

The research methods used included in-depth interview, observation and document analysis. The interviews with the teachers, administrators and principals of the two schools were mostly tape-recorded. Opportunistic observations covered classroom lessons, staff meetings and in-service sessions. Observation of staff in their offices became a daily routine. Observations were assisted by taking field notes and sometimes audio-recording. Documentary data, including government publications, media coverage, and documentation relating to the two schools were also collected.

In order to trace the process of the reform, the study took a longitudinal approach, which contained three phases of fieldwork, and cut across three academic years. The first of these phases (Phase 1) ran between March 2002 and April 2002. This was followed by the second phase (Phase 2) between September 2002 and December 2002, and the final phase (Phase 3) between October 2003 and January 2004.

The data extracts in this paper, arising from the various phases of the study, have been given an identification code in parentheses. It can be decoded in the following way:
eg '(6, junior high, history, 2 -10I)' translates as '(6) years of teaching experience; (junior high) school; (history) teacher; data collected from phase (2) of the research and recorded in tape no. (10), (I) interview data'.

From isolation to collaboration

Teaching is conventionally an isolated practice. In Taiwan, schools do not employ support assistants for ordinary classes. In a classroom, the teacher is the single adult who takes charge of the classroom organisation and activities. The teacher is the 'king or queen' of the class. Ke describes this phenomenon of isolation and refers to the 'classroom kingdom':

"Especially under the long history of 'classroom culture' or 'classroom kingdom' the situation of isolation is more severe. Both teachers and students stay always in their classroom with little communication with other people. When occasionally they enter other people's classroom, they do not have the courage to stay long. No matter what they do in there they feel odd and uneasy. This state of mind is the spiritual portraiture of the 'classroom kingdom' (Ke, 2000).

In my daily observations during the fieldwork period, I also found that teachers did most of their work on their own. This was especially true for the teachers of KJ Elementary who,

indeed, spent most of the time in their classrooms and, therefore, had very few chances to communicate with their colleagues on typical school days. Transferring from another school to KJ Elementary for one year, a teacher told me that she felt lonely in this school because everyone stayed in their classrooms most of the time. She surmised that this was because this school was too big. Another teacher observed that '*I am also curious about how other teachers teach their classes, but I don't have the chance to find out.*' The junior high teachers had more chances to meet their colleagues in the staff offices because they had more non-contact time than the elementary teachers, but their collaboration existed only at the level of exchanging information, ideas, teaching aids or lecture handouts. Collaboration in classroom practice rarely occurred.

As indicated, the Grade 1-9 Curriculum was intended to change teachers' culture of working on their own and to enhance teachers' collaboration. Even if the school leaders did not have 'teachers' collaboration' in their minds, they made great efforts to get the new curriculum organizations, ie, the Learning Area Panels and the Committees for School Curriculum Development, up and running, as the policy required. During the 3-year period of the study, I observed the following phenomena with regard to teachers' collaboration.

Intensification at earlier stage

Some earlier studies have shown that schools' intentional promotion of teachers' collaboration can result in an intensification of teachers' work (Johnson, 2003; Woods, Jeffrey, Troman and Boyle, 1997). In this study, I observed a similar outcome. To prepare for the Grade 1-9 Curriculum, the administration of GH Junior High had arranged common meeting times for each of the Learning Area Panels, starting in the academic year 2001-2002. The school had originally mandated weekly panel meetings. However, many teachers found that this was unnecessarily frequent, and some panels started reducing the number of their meetings. As one panel convener said:

"We had a meeting each week. But later we found that there were not that many things that needed to be discussed. Therefore later we decided to have one meeting per month if there is no special matter. But if there are special matters, we will hold extra meetings." (10, junior high, biology, 1- 4I)

In the academic year 2002-2003, other Learning Area Panels dropped some of their weekly meetings. This trend continued in the following academic year. In the year 2003-2004, two panels still tried to have a meeting every week, two held fortnightly meetings on average, and another two preferred monthly meetings. One panel had meetings only when they felt it was necessary.

The panel of the KJ Elementary schools' meeting policy was even more structured and demanding at the beginning. In the first semester of 2001-2002, the school required every panel to have a 20-minute meeting every Wednesday morning, before the first class started. The panels were given a task: to design a teaching programme for a theme. However, the teachers felt the meetings were pointless, because none of these programmes were adopted as actual practice afterwards. Unsurprisingly, no meetings were convened in the second semester. As one panel convener said:

"Last semester we had a meeting every Wednesday morning. We were asked to design learning activities. It was like a practice, because we didn't use those learning activities in reality. This semester we hold no meetings. Human beings are passive. The school has too many other things to deal with, so they cannot care so much." (2, elementary, grade 6, 1-1I)

The grade group was another type of teachers' group, one with a longer history, which comprised teachers of the same grade. It was more significant than the Learning Area Panel in the respect of elementary teachers' daily practice. Being the first group to implement the new curriculum, the grade 1 teachers' group had meetings every Thursday afternoon in the academic year 2001-2002. Although the grade head persisted with the weekly meetings, she slightly reduced the frequency of formal meetings a little bit, in the second semester, because of her group members' complaints. A grade 1 teacher observed that they were "...having meetings for meetings' sake".

The school's central control over teachers' meetings put both the panel conveners, and the grade heads, in a very difficult position. A typical convener's grievance was the following, which illustrated how contrived the nature of those meetings was.

"The teachers' motivation to participate in the group was low. Dance teachers had heavy pressure from dance training. They couldn't come to the meetings. Music teachers were under the pressure of training the string band. [Therefore] the music teachers also couldn't come. The rest were all incompetent members. They just attended but couldn't contribute any opinion. Meetings became functionless. I, one person, provided information and led everybody to move. The others made no comments. A one-person group. It became valueless. Only five or six people came to the meetings." (26, elementary, arts and craft, 1-2I)

In the academic year 2002-2003, the elementary school asked the panels to resume their meetings, but now to meet only monthly. A whole Wednesday afternoon in each month was assigned, and an agenda was suggested if the panels could not come up with their own. This kind of work pattern continued in 2003-2004. Most teachers thought this frequency, and length, more sensible, although, still, there were some teachers who did not like to attend. On a Wednesday afternoon in 2003 before the meeting time, I even observed a panel, which, after a short discussion among three of its members, decided to have one of them make up the minutes instead of having an actual meeting! Although contrived collegiality, or 'structural collaboration' (Williams, Prestage and Bedward, 2001), is less perfect than the true culture of collaboration, its contribution to fostering collaboration should not be overlooked, as Williams *et al.* observed. My study supports their point of view. As one teacher said:

"Our work relation doesn't change much. Just that now the school has scheduled a time for discussion. We can discuss the problems in our teaching. In the past teachers basically worked alone. There were few interactions. Now teachers are more actively involved in the discussion of the problems concerning some issues or teaching materials." (24, junior high, maths, 3 -1I)

Increase of informal meetings

In contrast to the decreasing trend in the number of formal meetings in reaction to having started off by scheduling too many, many teachers observed that the frequency of informal meetings, and interactions, was increasing. For instance, in academic year 2003-04, the grade two teachers of KJ Elementary had many spontaneous meetings, which took the form of 'a discussion in the corridor' during the breaks. In both schools, several teachers mentioned that they were happy to see this increase in teacher interactions.

"Because I'm teaching science and technology, I also study other fields. If I don't understand something, I'll ask other people. I'm teaching, and at the same time learning and improving. From this angle, there are more interactions [than before]." (13, junior high, physics and chemistry, 3 - 5I)

"There are more interactions. Not bad. Our grade group often has meetings, both formal and informal; There are quite a lot. Most of the grade group meetings are for discussing routine matters such as the running of school activity. The private discussions are more on teaching and materials." (8, elementary, grade 5, 3 - 21)

Not only had the frequency of informal meetings increased; the originally, formal, meetings have been transformed into a less formal format. For instance, in the second and third year of the reform, some panels started to have their meetings in teahouses, restaurants or members' houses. Sometimes they decided not to have a 'meeting' but a visit to local museums in order to broaden their curriculum in the future. Even for a meeting at the school, some panels prepared tea and refreshments to make the meeting more socially agreeable. In a meeting of KJ Elementary' Committee of School Curriculum Development, a Learning Area Panel convener expressed how great she thought the less formal panel meetings were, in the hope of replacing some in-service sessions, or formal meetings, with informal panel discussions:

"I found, most important of all, we still feel the lack of time. For panel meetings, I think time should be wasted on beautiful things, such as to drink and appreciate a cup of coffee. I felt great after we did so in the last two meetings. Therefore I think the kind of in-service in which people are rigidly seated and uselessly absorbing what the lecturer says is not necessary. It should be that kind of ... that kind of openhearted and engaging types. I think the combination of these two is more practical, in terms of our development, or friendship and experience sharing among teachers. That's my hope. Really, in-service really put us off. Panel discussion perhaps is better. But if the panel discussion involves our superintendents, to be frank, no body would like to talk." (13, elementary, convener, 2 - 10)

In their research into five English primary schools, Nias and her associates discovered that the schools in their study with a culture of collaboration shared some common beliefs or values. As qualities which supported collaboration, these schools valued openness and security (Nias, Southworth and Yeomans, 1989). Informal meetings, or gatherings, are effective ways of fostering openness and security. Woods *et al.* point out that constrained collaboration may institutionalize informal discourse; such institutionalizing is counterproductive in terms of communication and teachers' practice (Woods *et al.*, 1997). In the formal meetings, there are institutionalized ways and contents of talking, and then of writing up the minutes. It is a constraining situation, where most people find it difficult to be open about what they feel, whereas, in an informal situation, things tend to flow more naturally and easily. As a teacher observed:

"Formal meetings are not always necessary. In chatting, we often touch on the problems of our Learning Area. Its effect is contrarily better. It is better to have private communication on particular issues for discussion. The Arts and Physical Education departments are lucky to have their own office. Because, if we have a departmental office and we encounter a problem, as we sometimes do, we can discuss it right away. In meetings, sometimes we don't feel like talking. It's hard to really solve problems." (21, junior high, chemistry and physics, 2 - 23)

Informal meetings can enhance openness because they give people a sense of security. Several teachers mentioned that they hoped to work with *like-minded* people. Although this wish was not always fulfilled in real situations, informal contacts can increase mutual understanding and enhance like-mindedness. People are more likely to open up to some one with whom they are socially at ease. Eraut and Fielding found 'trust' to be important factor in teachers' collaboration (Eraut and Fielding, 2004). Nias and colleagues point out that a sense of security means that people are able to share their difficulties, and show their vulnerable

sides, which is a characteristic of a genuine collaborative culture (Nias, Southworth and Yeomans, 1989). Although I found little sign of this kind of trust in both of the schools in my study, hopefully in the long run it can be realized when the spirit of collaborative culture takes deeper root.

Shallow collaboration

The above findings point to the conclusion that a collaborative teacher culture was growing in both schools. However, whether this culture had become firmly rooted was questionable. The number of teachers' interactions should not be the sole indicator of collaboration. The substance of teachers' collaboration is perhaps a more meaningful indicator. Many activities of teachers could be counted as 'collaborative'. Drawing on the interview and observation data, I try to construct a repertoire of teachers' collaborative activities in the following paragraphs: these are presented with the most frequent form of activity first, through to that which occurred with least frequency. I will then use this repertoire to illustrate the arguably shallow nature of the schools' collaborative culture.

Meetings

There were many kinds of staff meetings in the schools. Since the implementation of the new curriculum, the most frequent, and those with the closest connection to teachers' daily practice, was the Learning Area Panel meetings and the Grade Group meetings. Day-to-day maintenance matters comprised most of the agendas for these meetings. They were slightly different, as between the elementary and the junior high schools. KJ Elementary's agendas might include the co-ordination of school events, grade events, curriculum progress, periodical examinations and theme-learning activities. Whereas in GH Junior High's meetings, teachers were more likely to discuss teaching materials, curriculum progress, periodical examinations and other forms of assessment, and school events. Teachers also shared their resources and experiences with one another in the meetings. Moreover, the scheduled meeting time might also be used for in-service training and lesson demonstrations.

Sharing resources and experiences

To a lesser or greater degree, most teachers exchanged resources and experiences with their colleagues. This kind of exchange might take place in formal meetings or it might be done privately. The resources shared included worksheets, handouts, teaching aids, useful information. Teachers also exchanged their experiences of teaching a particular topic, handling the pupils' problems, classroom management and problems with parents and colleagues etc. What should be noted is that not all of the teachers were willing to share. I heard a teacher complain that she gave out every worksheet, which she wrote to colleagues of her grade, but received very few, in return.

Exchanging lessons / classes

At KJ Elementary School, some teachers voluntarily formed class-groups within their grade group. They usually teamed up with one or two other teachers and then exchanged their lessons. For instance, in 2003-2004, three grade 5 class teachers formed a class-group. Their division of labor was arranged as follows: one teacher taught mathematics to all three classes, one taught Mandarin, and one, social studies. The main benefit was that the teacher could concentrate on preparing the Learning Area of her expertise or interest, such as mathematics, without bothering about the other two areas, ie, Mandarin and social studies. Some teachers thought that there were more advantages than disadvantages to this approach:

"In the past we worked single-handedly. Now we work in class-groups. We look for teachers that share common beliefs and good friendship to form the class-group. Our interaction is great. In our grade (grade 1) there are three class-groups. In the past we were the kings in our classrooms. We could do whatever we liked. The others couldn't know what we were doing. Now it is different. For instance, on the winter solstice, we made rice balls together. We had the chance to see how the other two teachers handled things. Our friendship was warmed up as a result. The boundaries between classes became less distinct" (13, elementary, grade 1, 3-11I)

Demonstration Lessons

Watching demonstration lessons, taught by other teachers, is a good way for teachers to learn something by looking at how other teachers go about their lessons. On the other hand, the presenter can also learn something from the observers' feedback. During my first two fieldwork visits, there were no demonstration lessons at KJ Elementary. The Dean of Instruction Affairs explained that he was too busy to organize them. On my third visit, several student teachers demonstrated their lessons. As for GH Junior High, the Dean and the Curriculum Co-ordinator were very keen to encourage the teachers to do demonstrations. During my first two visits, several teachers, both experienced and new, performed them. However, there was no demonstration lesson during my third visit.

Team-teaching

Because of its integrated nature, the Grade 1-9 Curriculum encourages teachers to apply team-teaching to their practice. Team-teaching may take different forms: teachers in Taiwan generally conceptualized it as meaning that more than one teacher teaches one lesson at the same time. Reviewing existing research, Zhang and Jian summarize five obstacles to the employment of team teaching in Taiwanese schools: teachers' insufficient ability, teachers' isolated culture and character of a self-repression characteristic, insufficient team-teaching experience, problems of school administration and a lack of auxiliary policies (Zhang and Jian, 2002). In my study, although the teachers knew that team-teaching was a possibility, it did not happen in either school. They believed that many practical problems made it impossible in their situations.

Peer-coaching

During the second phase of the fieldwork, the teachers of KJ Elementary had an in-service session on peer-coaching. To my knowledge, no teacher put this into practice in either school, except that, in my third visit, one teacher said that she had discussed doing it with her colleagues in the next semester.

Study group

During my fieldwork I did not find any evidence of study groups in either school. However, in my interview with him, the Dean of Instruction Affairs of GH Junior High, mentioned that it was his dream to see some study groups running in the school.

Although the activities reviewed above seem to represent a rich repertoire of collaborative activities, only the first two, ie, meetings and sharing resources/experiences, I think, deserve the adjective 'common'. I consider the two schools' culture of collaboration 'shallow', for the following reasons.

First, only passive and low-value exchanges were involved. In his famous study, *The Gift*, Levi-Strauss claimed that in primitive, as well as modern, societies, gift-giving is based on the principle of reciprocity (Levi-Strauss, 1969). Collaboration among teachers seems to follow a similar principle. In a sense, collaboration is constituted by a series of 'gift-exchanging' interactions. When a teacher offers information, knowledge or handouts to his/her colleagues, he/she is giving them 'gifts'. They are 'gifts' because the giver does not explicitly ask for something in return. However, as if there is an unspoken norm, most givers expect reciprocal gifts, when they are needed, from the receivers. The following two teachers' interviews reveal this expectation:

"There was a time I really felt anger. We already agreed that each one would prepare one lesson, but in the end they did nothing. They just said, 'It's not a serious matter. Forget about it. Let's just forget about it.' ...At that time I was really angry. But later I told myself that it's something I want to do, but I have no right to ask people to change. So I'll do it by myself. In the end I gave them what I had, but gained nothing from them. "(14, elementary, grade 2, 2 - 23I).

"Now there is only me who writes the handouts [for all the biology teachers]. I hope that if one day I feel tired or have no time to do it, somebody else will continue this job." (11, junior high, biology, 2 - 14I).

Worksheets and handouts were the most substantial gifts. Only a few teachers actively gave these gifts to others. The most common situation was that the receivers asked for the 'gifts' when they saw the giver using the worksheets or handouts, which they considered good. Several teachers said that if they asked, most of the time they could get what they asked for.

A reciprocal relationship is begun when a gift is given; if at a later time the giver needs something which the receiver can offer, morally the receiver has no excuse for refusing. Sometimes, teachers found their exchange relationship asymmetric, eg the case described by the first teacher (14, elementary, grade 2, 2 - 23I).. The constant givers might withdraw from this relationship. Moreover, some teachers preferred to opt out of any such relationship. They refused to be the giver, and therefore had no reason for being the receiver, or vice versa. As one teacher commented, "Some teachers don't use other's handouts because they think theirs are better".

The value of 'gifts' is not measured by money, but by the time and energy, which the giver has invested in them. For instance, teachers are less likely to give out multimedia materials which they spend a long time designing. This also explains why team-teaching and peer coaching have never taken place in the two schools. The scarcity of the knowledge, which it contains, also adds value to the gift. The findings show that although teachers meet more frequently than before, they seldom share their professional approaches in these meetings. To be more precise, 'competition value' is perhaps what matters most. Teachers were reluctant to give gifts, which might enable their colleagues to outshine them. Some teachers were more generous than others in giving; however, they would not give so much as to risk their continuing superiority.

Second, collaboration in the two schools was 'shallow' in that teachers' professional boundaries remained insulated. Boundary crossing is a good indication of collaboration. As shown before, teachers' social boundaries were weakened when they started to have more informal meetings and interactions. Teachers' gatherings also crossed the boundaries of the schools because they sometimes took place in restaurants or members' houses. However, teachers' classroom boundaries seemed to be hardly broken. From the repertoire, we can see that activities like demonstration lessons; team-teaching and peer coaching, that would involve teachers in other teachers' classrooms were not likely to happen. It seemed that teachers were more willing to invite colleagues to their house than to their classroom.

Third, the form of collaboration taking place among teachers in both schools concentrated on short-term tasks, rather than long-term development. The repertoire outlined in earlier paragraphs indicates that the kinds of collaboration, which teachers engaged in most, were basically implementation-oriented, whether implementing the new curriculum or other school activities. Activities, which would enhance teachers' professional development, were generally given the second priority. Biott (1992) reminds us that in working and learning for change, what should be striven for is not more smooth-running procedures, but more ambitious, discretionary, experimental goals or activities which can assist teachers' learning and the development of both teachers and the school. Although my study found that this kind of activity did not gain popularity in either school, since the time for collaboration had been structured, activities of a developmental nature did start to have a place in teachers' repertoires. For instance, the ideas of peer coaching and study groups were only mentioned in Phase 3's data but were absent from those of Phases 1 and 2.

Conclusion

Because of its principles of integration and school-based curriculum development, the Grade 1-9 Curriculum reform has been facing the challenge of promoting teacher collaboration in the elementary and junior high schools in Taiwan. By tracing the development over a period of three years in this paper, I have illustrated how teachers, in both of the schools studied, have been moving from an isolated, to a more collaborative, working culture, evidenced by signs of de-intensification, and an increase in informal interactions, in the later stages of the study.

Echoing Williams, Prestage, and Bedward's (2001) research, the study shows that the schools' administratively regulated meetings had in fact paved the way for a collaborative culture. In other words, to enhance teachers' collaboration, a structured collegiality seemed to be a necessity, at least as a facilitator, especially at the early stage when the original cultures of teachers are still very individualistic. What has been learnt from this study is that schools' loosening of control was crucial, later on, when spontaneous meetings and informal interactions among teachers had replaced administratively regulated meetings as the main bases of teacher collaboration.

Although it looks encouraging that a collaborative culture has started to grow in both schools, its current state is still far less than flourishing. By further examining teachers' repertoire of collaborative activity, I have argued that this collaborative culture is a shallow one, with low-value exchanges, insulated professional boundaries, and short-term objectives. The definition of these features of shallow collaboration can not only be used as a framework for examining teachers' collaborative culture, but can also be of use to identify key areas where more work can be done to improve their collaboration. The study was conducted in the first three years of the reform. Therefore the findings of this paper should not be taken as conclusive in regard to the new policies' effectiveness. The implication for practice is that cultural change is usually a slow process. Sometimes patience is needed to make a deeply rooted change.

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