CHAPTER 3 METHODOLOGY

Introduction

An overview of the research methodology of this study is presented in this chapter. It includes information pertaining to case selection, participant selection, seeking approval from authorities and methods of data collection required to answer the research questions. This is followed by an explanation of the data analysis techniques used to make sense of the data and provide an interpretation of the phenomenon studied in the four cases. Other aspects covered in this chapter include discussion on validity, generalizability and ethical issues.

Research Design

A good research methodology should be able to integrate the research questions, the methods of collecting data and data analysis techniques (Morse & Richards, 2002). Therefore, the research design presented here is a blueprint of how I logically connected the research questions to the data collection methods and eventually to the findings of this study (Yin, 1994). This study used a qualitative research paradigm, which allowed me, "to view the case from the inside out, to see it from the perspective of those involved" (Gillham, 2000, p.11). This research design was used because it allowed an indepth investigation into how teachers were evaluated and the meaning they attached to the social experience in school. The inquiry focused on both the formative and summative evaluation practices in school and how these practices helped to improve teacher performance. A qualitative approach enabled me to talk to the participants and observe the actual situation in the local context. It provided a genuine insight of what was happening in the primary schools. Furthermore, I was able to gauge the administrators' and teachers' understanding of the whole teacher evaluation process and its relevance to improving teacher performance in school.

Qualitative Case Study

I used a qualitative case study design because it "allows an investigation to retain the holistic and meaningful characteristics of real-life events..." (Yin, 1994, p.3). This research design, which probed deeper into issues studied, was considered more suitable for this study because it offered a thorough investigation of a process, event or phenomenon (Creswell, 1998; Punch, 2000; Yin, 1994) compared to a quantitative approach such as a survey, in which the respondent is given a limited number of options from which to select an answer. The limited options cannot explain the complexities involved in the implementation of teacher evaluation practices in a school.

Prior research on teacher evaluation in Malaysia used the survey design (Chan, 1994; Chan, 1997) and the findings indicated that only certain aspects of the teacher evaluation process could be investigated. It was recognized that a qualitative design was necessary to provide an in-depth explanation about the 'why' and 'how' of the teacher evaluation process in school. The survey design generates data required to see the relationship between variables or the cause and effect of a phenomenon. But this study was not looking at the relationship between independent and dependent variables; rather, it explored the multiple factors that shaped a single phenomenon (Creswell, 2005) within a school system. This study was not interested in hypothesis testing either; it was more concerned with "insight, discovery and interpretation" (Merriam, 1988, p.10) of the participants' perspective of a system which judged their performance and how it affected instructional practice in schools.

Merriam (1988) agrees that it is definitely better to examine the complex underlying factors in real-life interactions using a qualitative case study rather than a survey or an experimental design. Thus, by using this design, I was able to provide a detailed description of the various aspects of the school-based teacher evaluation practices in the local context and also what it meant to those who were part of it (Merriam, 1988). The naturalistic style of the research helped to examine human interaction as it is in the real world and provide evidence that can be found in the case setting (Gillham, 2000, Yin, 1994). I was able to explore the concerns of the teachers, which included their thoughts and feelings about being evaluated; their role in the school-based teacher evaluation process; the benefits of the feedback provided during evaluation and the utilization of the evaluation findings for future teacher growth and development.

At the same time, I was able to get the perspectives of the administrators who were the main implementers of the school-based teacher evaluation practices in school. They explained how they evaluated teacher performance in their respective schools and the challenges they faced in implementing a system which had to meet the developmental needs of the teachers.

The subjectivity aspect of the research, that is, the phenomenological meaning that emerged from the study (Gillham, 2000) was another important feature of this qualitative case study. It examined the different feelings people have about being evaluated in similar work environment and the underlying reasons in their diverse perceptions or experiences. There was a constant comparison of the diverse views of the participants to produce an accurate explanation of the phenomena, as well as the reactions of the individuals within the bounded system.

Case Selection

A qualitative case study begins with the selection of the case, which is the unit of analysis that is going to be examined (Merriam, 1988). An institution, a process, a program, an event, a group, a community, or even an activity can be considered the 'case', which will provide the necessary information required to examine a specific phenomenon (Berg, 2004; Creswell, 2005; Gillham, 2000; Merriam, 1988; Punch, 2000). In this study, the national primary school was identified as the case, the bounded system (Merriam, 1988) which was studied. In a case study involving an institution like a school it is possible to focus on a specific program or system within the institution (Berg, 2004; Merriam, 1988; Stake, 2000). The focus of this study was the school-based teacher evaluation system in the national primary schools. The decision to select the school-based teacher evaluation system as the focus of the study was based on the need to address the issues of improving quality of teaching and learning in these schools. Teachers and their instructional practice must be evaluated to ensure that students receive quality education in schools.

In order to present an in-depth understanding of each case, Creswell (2005) recommends that only a few cases should be studied. He explains that if too many cases are studied, less time will be devoted to investigate fully any one particular case and it will take a longer time to collect and analyze the data. This study examined multiplecases to present alternative approaches (Creswell, 2005) to teacher evaluation practices in four national primary schools. I chose four cases in order to carry out a thorough investigation to obtain rich data on teacher evaluation practices in Malaysian national primary schools. A qualitative inquiry demands a great deal of time to collect data at each site and due to time constraint I could not select more than four cases for my study. Furthermore, I wanted to study both the formative and summative teacher evaluation practices in each case and at the same time obtain both the administrators' and teachers' perspectives on the implementation of the teacher evaluation process. The scope of the inquiry in case was wide and therefore I had to restrict my investigation to four cases so that it could be manageable. The four cases selected for this study provided sufficient data to answer the research questions.

A list of all national primary schools in the Federal Territory of Kuala Lumpur and the state of Selangor were obtained from the Educational Planning and Research Division of the Ministry of Education and initially ten schools which were identified as effective schools by the Federal Inspectorate of Schools were selected. These schools also ranked high in the self-assessment process carried out by administrators based on the School Education Quality Standard, 2004 (*Kementerian Pelajaran Malaysia*, 2004) created by the Federal Inspectorate of Schools. I visited all the ten schools to talk to the head teachers and to carry out initial investigation to determine if the school-based teacher evaluation practices were implemented in the respective schools. During my visits I could also gauge the receptiveness of the participants towards an inquiry into the school-based teacher evaluation practices in their schools. Some schools had unique features which made them an interesting site to carry out the inquiry.

Based on further discussions with officials from the Federal Inspectorate of Schools, I finally chose two schools in the Federal Territory of Kuala Lumpur and two schools in the state of Selangor. The schools were selected based on the criteria given in Table 3.1. The main criterion for selection was the implementation of school-based teacher evaluation practices in the selected cases. The administrators had to show evidence that they carried out teacher evaluation practices in their schools.

The selected schools in this study comprised high performing schools in the Federal Territory of Kuala Lumpur and the state of Selangor. In Malaysia, the primary schools are ranked as high or low performing schools based on their performance in the Primary School Assessment Examination (*Ujian Penilaian Sekolah Rendah*), which is

held at the end of Year Six. The teachers in these schools played a crucial role in helping students achieve better results in the national examination. Therefore, I selected high performing schools for this study based on the assumption that I could identify good teacher evaluation practices which had helped improve instructional practice and ultimately resulted in better student achievement in the national examination.

Another criterion for case selection was the schools had teachers from diverse teaching backgrounds. Some of them were senior teachers in school, whilst others were beginners and they were all teaching different subjects in school. This would allow me to talk to different categories of teachers to obtain multiple perspectives on the teacher evaluation process. The final criterion was the school administrators were willing to grant access to the site and provide pertinent information regarding the implementation of school-based teacher evaluation practices in their schools. Table 3.1 indicates the case selection criteria.

School	Implementation of Teacher Evaluation	Student Achievement	Participant Background	Unique Features of School
School A	teache	Mostly young teachers who	Top performing school in the state.	
			had been in the school for less than 10 years.	Functions like a private school.
			ului 10 yeus.	Students have won many awards at the international level.
School B	Yes	High	Some teachers had worked in the private sector - they could provide	Administrators had special knowledge on performance evaluation.
			comparison of evaluation practices.	Active parent involvement in school activities.

Table 3.1Case Selection Criteria

Table 3.1 (continued)Case Selection Criteria

School	Implementation of Teacher Evaluation	Student Achievement	Participant Background	Unique features of the School
School C	Yes	High	Many experienced teachers who were very vocal. They taught varied subjects.	Existence of a unique teacher monitoring system created by the headmistress. Efficient school management system.
School D	Yes	High	A good mixture of experienced and beginning teachers. Some teachers had worked in the private sector.	Exemplary school in the state. Attracted many visitors who came to study the overall management of school activities. The school has won many awards for excellence at the state level

Selection of Participants

The selection of participants within the schools in this study was based on purposeful sampling. Purposive sampling is necessary when the researcher intends to gain an in-depth insight of a phenomenon and there is a need to choose "a sample from which one can learn the most" (Merriam, 1988, p.48). The main criterion in choosing the participants for this study was their involvement in the teacher evaluation practices and their ability to provide information which was relevant to understand the schoolbased teacher evaluation system in their school. The criteria for participant selection is provided in Table 3.2 Altogether there were twenty-four participants in this study and they comprised four head teachers, four senior assistants and sixteen teachers.

Table 3.2Participant Selection Criteria

Participants	Selection Criteria
Administrators	 i. They made administrative decisions pertaining to teacher evaluation in school. ii. They were the main evaluators in the formative and summative teacher evaluation process. iii. They were knowledgeable of the teacher evaluation process in school.
Teachers	 i. Teaching for more than three years in the school. ii. Teachers who have been evaluated previously. iii. Teaching experience between 3 to 20 years. iv. Teachers who had knowledge of the teacher evaluation process in school. v. Teachers from diverse academic background (teaching certificate, diploma, or degree).

Selection of Administrators

The school administrators in this study included headmasters/headmistress and senior assistants who were involved in making administrative decisions in the school. The criterion for selecting the administrators was based on their involvement in the teacher evaluation process in the school. They were the main evaluators in the school and therefore they made all the decisions pertaining to the teacher evaluation process in their schools. They were knowledgeable and could provide the administrators' perspective of how school-based teacher evaluation practices were implemented in the school.

There were three headmistresses and one headmaster from the four schools. As for the senior assistants, there were three females and one male. They were the key informants who provided access to teachers and documents necessary for the study. The head teachers in all four schools were experienced teachers who had served in both primary and secondary schools. They were confident of how they managed their schools and evaluated their teachers. The headmistress in Aman Ria Primary School was the only graduate among all the administrators. She had taken up distance education to obtain a degree in Mathematics. As for the senior assistant, he had taught in a secondary school before becoming an administrator. In Impiana Primary School the headmaster had been a teacher in a secondary school and later worked as an administrator in the State Education Department before taking up the post as an administrator in a primary school. His senior assistant had been a science teacher in a secondary school before she was promoted to become an administrator in this school. She had attended self development courses and was well-versed in training and performance evaluation.

The head teacher in Sri Damai Primary School had served as a teacher and administrator in a secondary school before taking up the post as a head teacher in a primary school. She had very strong leadership qualities and had created an efficient monitoring system in school. Her senior assistant had many years experience as a language teacher before she became an administrator in this school. The headmistress and senior assistant in Kiarra Primary School were teachers in various primary schools before being promoted as school administrators. They had vast experience in managing the school and were willing to share their experiences on the implementation of the school-based teacher evaluation practices.

Selection of Teachers

In each school I selected four teachers to be participants because a small sample size will ensure an in-depth description of the phenomena being studied, compared to a bigger group, which may lead to superficial presentation of the data (Creswell, 2005). The teachers who were selected had been teaching for more than three years in their respective schools. A list of all the teachers in the school was obtained from the school administrator. Then four teachers were selected based on the criteria stated in Table 3.2.

I met the teachers to explain about the research and discuss their role in the study. The purpose of the study was explained clearly to the teachers to enable them to make a decision whether to be a willing participant in this study. Subsequently, I answered their queries and obtained their permission to include them as participants. When a selected teacher was reluctant to become a participant, he or she was replaced by another teacher. Once the teachers had been selected I held several informal meetings to get to know them better and to make appointments to conduct one-to one interviews.

The use of maximum variation sampling depicted the heterogeneity of the participants chosen for this study. The participants consisted of male and female teachers from different racial groups; beginners with less than five years of teaching experience and senior teachers with more than twenty years of teaching experience; and teachers who taught various subjects such as Mathematic, Science, English language, Music, Physical Education, Malay language and Living Skills. The selection of the participants was based on the assumption that they would provide accurate, honest views about the implementation of the teacher evaluation practices, as well as express their perceptions and underlying feelings about being evaluated by the school administrators.

Data Collection Procedures

The data collection procedures included the process of acquiring permission from the relevant authorities, seeking access to the sites and gathering data using multiple methods such as interview, observation and document review. This section will also provide a detailed description of how data were recorded during data collection.

Firstly, I obtained permission from the Ministry of Education to carry out this study in the selected schools. The research proposal, as well as, the interview protocols, and observational checklist were submitted to the Educational Planning and Research Division of the Ministry of Education for their perusal and comment. Then I obtained permission from the Federal Territory (Kuala Lumpur) and Selangor State Education Departments to visit the selected schools to carry out the case studies.

Subsequently I carried out discussions with the school administrators who were the 'gatekeepers' to negotiate access to the research site and to obtain cooperation from the key players in the school-based teacher evaluation system. I explained the purpose of the study and the data collection procedures to the school administrators before I started gathering data from the school. I scheduled appropriate times to visit the school to meet the participants and carry out interviews, observations and collect documents for review. The data collection process in all the four schools lasted for ten months. The final visit to the schools was to conduct exit interviews and thank the participants for their cooperation in providing vital data for this study.

Methods of Collecting Data

I used multiple qualitative research methods such as interviews, observations and document review to have an in-depth understanding of the four cases in my study (Creswell, 2005; Merriam, 2001). I interviewed the administrators and teachers, observed the evaluators and reviewed school documents to obtain information about school management and teacher evaluation practices by administrators. The use of multiple methods to collect data allowed me to triangulate the evidence gathered about the teacher evaluation practices in the selected schools and increase the validity of this study. Table 3.3 indicates the multiple methods used to collect pertinent data for the study.

Instruments	Data collected
i. Teacher Interview	Audio tapings
Protocol	Interview transcripts
	Analytic memos
ii. Administrator Interview Protocol	
i. Observation Protocol	Field notes Analytic memos
	ž
i. Document Checklist	Classroom observation instruments
	Schedule for classroom visit
	Appraisal forms
	School management books
	Evaluation reports
	School activity list
	Duty lists
	Official school documents on evaluation
	i. Teacher Interview Protocol ii. Administrator Interview Protocol i. Observation Protocol

Table 3.3Summary of Data Collection Process

Interview

In case studies, one of the main methods of obtaining data is through interviews (Yin, 1994). This method allowed me to explore the participants' mind and extract information to see how they interpreted their world based on their own perception (Cohen, Manion & Morrison, 2000). The interview was considered suitable for this study because the issue being investigated was highly personal to the participants and only indepth conversation and probing could elicit their true feelings and reactions about being evaluated by the school administrators. The bulk of the data for this study was collected

through multiple interviews with administrators and teachers in the selected cases. I conducted 49 interviews with 24 participants in the four selected schools. Each participant was interviewed twice and one participant was interviewed three times to get further information. The individual interview sessions lasted approximately from sixty to ninety minutes.

During the interviews the teachers were given an opportunity to express their innermost feelings about having their performance evaluated by administrators; their opinions on how they would want to be evaluated; the value of the feedback given to them during evaluation and what changes they perceived in their instructional practice as a result of the evaluation process. The school administrators revealed their perspectives on evaluating teacher performance and the challenges they faced in implementing the school-based teacher evaluation practices in their respective schools. They provided detailed information on how teachers reacted towards evaluation practices and measures taken to ensure that teacher evaluation practices were carried out justly.

I used semi-structured interviews to obtain some common information from participants in different cases. During my initial visit to the school I fixed appointments with each participant and chose an appropriate time and place to conduct the interview. The interviews were carried out individually with each participant in a natural setting which facilitated discussion and encouraged participants to be articulate and express their feelings without reservations. At the beginning of the interview session I clearly stated the purpose of my study and got their consent to do the interview. I assured the participants that the information they revealed would be kept confidential and only used to answer the research questions of the study.

During the first interview I gathered basic information about the participants' background, their duties in school, and their knowledge of teacher evaluation. The informal conversational style put the participants at ease and helped build a rapport with

them. The natural flow of interaction with the participants facilitated the process of getting to know them better and obtaining the relevant information for the study.

After collecting the initial data and getting familiar with the setting, I asked the participants general, broad questions based on the interview protocol. This study utilized two sets of self-designed interview protocols, that is, teacher interview protocol (Appendix A) and administrator interview protocol (Appendix B). I extracted the participants' perspective without imposing my preconceived notions and ideas about the phenomena being investigated (Patton, 1980). As the study progressed and once I had been in the setting for some time, more structured questions were asked to obtain information that could facilitate the analysis of the data (Neuman, 2006). The follow-up interviews allowed me to probe deeper into the issues related to teacher evaluation practices. I investigated the reasons why teachers and administrators had diverse views about the teacher evaluation process in school. The interviews helped me to explore further about what was actually happening during the implementation of the teacher evaluation process in school. I continuously moved around from one school to another until all the participants were interviewed as scheduled.

Audio taping the interview allowed me to capture the entire conversation with the participants. Prior consent was obtained from the participants to audiotape the interview session. Listening to the audio tapes after the interview sessions helped to reconfirm what I had written and also provided feedback on how I could improve my interrogative skills. In the beginning stages I realized that I was speaking more than the participants and after listening to the audio recordings I changed my style of questioning. After each interview session, all audio recordings were transcribed and verbatim transcriptions were prepared for data analysis. I prepared the transcript for all the interviews. I did member checks by getting the participants to review my transcripts and confirm if the information they had provided were recorded accurately.

In addition to audio taping, I also took down notes during the interview sessions. This allowed me to write down the participants' response to my questions and also the non-verbal behaviour of the participants. Analytic memos were written to record my personal reflections of the interview and the initial inference I made from the data. After every interview session, I made extensive notes to check if the information required had been obtained and what aspects needed further clarification. This helped me to monitor the data collection process and begin initial analysis of the data.

Observation

Observation allows the gathering of information as it occurs at a site, thus it provides an opportunity to make detailed description of a visible process (Creswell, 2005). In this study, by observing the school administrators and teachers during the formative evaluation process, I was able to obtain firsthand information on how classroom observations were carried out by the administrators, as well as, understand how teachers reacted when they were observed. The observations provided me with a better understanding of the participant's behaviour (Morse & Richards, 2002) and I was able to witness and record the interaction between the evaluator and the teacher during the actual observation process. Moreover, the observations enabled me to corroborate data gathered from interviews and document review. They helped me examine the extent to which the actual practice deviated from what had been described by the teachers and administrators in a particular school setting.

During data collection I managed to carry out eight classroom observations in the schools. The observations were limited because the administrators only conducted classroom observations twice a year. During most of my visits the administrators were not carrying out the classroom observations in their school. The observations were planned based on the administrator's schedule for evaluating teachers for the whole year.

I had to wait to be invited to observe the administrators and therefore I could not carry out many observations. It was not possible to observe the summative evaluation which was a confidential process between the administrators and the teachers and it was not performed overtly in schools.

The observation encompassed (i) the school setting, (ii) instructional process in the classroom, (iii) the interaction between the evaluator and the teachers, (iv) the post observation activities, and (iv) encounters outside the classroom. I followed the administrators to the classroom and sat down at the back to observe what happened in the classroom. I played the role of a non-participant observer who was at the site to record notes on how teachers were evaluated and not to judge the teacher's performance in class.

The first observation was an unfocused observation to get an overall understanding of how teachers were evaluated in the classroom. In the subsequent observations I focused on specific interactions between the teacher and the evaluator and decided what meanings could be attached to the observed behaviours, responses made by the participants, language used and the participant's body language.

After the observation, I had discussions with the administrators to seek further clarifications of the activities observed. In cases where I had an opportunity to observe the participants of my study in their classroom, I would ask the teachers questions pertaining to what I had observed in the classroom. Other informal, inconspicuous observations were carried out whenever I was in the school to understand further the interactions between the administrators and the teachers.

The classroom observations were structured and based on a self-designed observation protocol (Appendix C). The protocol covered all relevant matters pertaining to classroom observations. I was able to focus on specific data necessary to make conclusions about how administrators carried out formative evaluation in their respective schools. During field work the observation protocol acted as a guide to record detailed field notes. My field notes described the setting and the teacher's actions while the administrators were in the classroom. I also noted evidence of interactions between the teachers and the administrators as well as the distractions experienced by the administrators during the classroom observation.

Throughout the study I kept a personal journal to help me record pertinent information that could facilitate the process of reflection and analysis of the data. I wrote down details of my observation, as well as comments made during and after observation. The notes constructed for this study contained important details pertaining to the methods, instrument and criteria used; teacher behavior; student reaction and the role played by the evaluator. I looked out for extraordinary incidents and particular cues to interpret participants' reactions towards classroom observation and to find out if evaluator bias affected the whole process.

Reflective field notes were written to document my personal thoughts of the interactions observed. As the observation progressed, the focus was shifted to pertinent aspects related to the research questions. At this stage more detailed notes were recorded to identify emerging characteristics of the study. The field notes were checked immediately after every observation to ensure higher accuracy and easy recall. I constantly compared the information collected during the classroom observations to the data obtained during earlier interviews with the participants. At the same time, analytic memos were written to note useful ideas, thoughts, visions, feelings, experiences and incidents that increased my understanding of the teacher evaluation practices in the selected schools. These memos helped me to focus on the research questions and stimulate critical thinking about what was happening in the four selected schools.

Document Review

Documents can provide important insights about a central phenomenon examined in qualitative studies (Creswell, 2005; Gillham, 2000). The documents are collected and reviewed to "corroborate and augment evidence from other sources" (Yin, 1994, p.81). I collected documents from the schools to obtain data that could be used to triangulate with other data sources such as interviews and observations. A systematic approach was applied in reviewing documents for this study. The relevant documents for this study consisted of policy circulars on supervision; teacher job specifications; criteria for evaluating teachers; administrative forms, school management books, evaluation schedule, classroom observation instrument, appraisal forms, students' exercise books and lesson plans. All other necessary records, such as information on how many times evaluation had been carried out, changes made to the school-based evaluation system over the years and evidence on change of teacher practice were also scrutinized to draw out relevant data for the study. Document analysis was carried out throughout the study to ensure that all latest information pertaining to the study was included to provide a holistic description of the teacher evaluation practices in the four selected schools.

The multiple methods of collecting data discussed above were carried out simultaneously for ten months until I felt that the data collected had reached a saturation point. Once I was confident that adequate data had been collected, I carried out an indepth analysis of the data.

Data Analysis Procedures

Analyzing qualitative data involves the process of "understanding how to make sense of text and images" in order to answer the research questions (Creswell, 2005, p. 230). The constant comparison and pattern matching techniques were used to analyze the data because this study involved multiple cases and the findings must be indicative of what was happening in all the cases. The data in the form of transcripts, field notes, memos and documents were studied thoroughly to understand the underlying reasons and concepts, which provided an explanation of the teacher evaluation practices in the selected cases. A constant comparison of the multiple perspectives within the case and across the four cases provided valid and reliable information about the teacher evaluation process in all the four schools.

According to Merriam (2001), it is crucial to carry out ongoing data analysis during the data collection process to prevent redundancy and collection of unfocused, repetitious data. For this study, data analysis was divided into two phases, that is, the first phase which was an on-going process during data collection and the second phase which was carried out after all the data was collected.

The first phase of data analysis started the moment I conducted my first interview and observation, as well as when I reviewed the documents in school (Merriam, 2001). The "preliminary exploratory analysis" carried out during this first phase helped me to get "a general sense of the data" obtained (Creswell, 2005, p. 237). After each interview session, I transcribed the interviews and prepared the transcripts for analysis. The transcripts were read several times to generate codes appropriate to the content. I wrote memos to record my initial thoughts and feelings about the participants' responses to my questions. This initial exploration of the data helped me reflect on the organization of the data, refine my interview questions, and examine the codes, categories and patterns existing in the data. Then, I prepared new questions to probe further about the missing link in the data.

After each classroom observation I transcribed the field notes and read them to look for initial ideas and patterns about how instructional practice was evaluated in the classroom. The field notes were analyzed to note if the actual observed practices in the cases were consistent with the data obtained during interviews with the participants. When I reviewed the documents in each school, I looked for policy statements on teacher evaluation practices; records of how teacher evaluation was implemented; instruments that were used to measure teacher performance; and evidences of remediation actions after evaluation. The document analysis helped to corroborate data obtained from interviews and observations. Generally, there was a lack of documents pertaining to teacher evaluation in all the four schools.

During the first phase of data analysis, I went back and forth between data collection and data analysis to ensure that all relevant data had been obtained to answer my research questions. I needed to make sense of the voluminous data I was collecting. I combined different aspects, aggregated the data and discerned patterns that emerged in each case (Wolcott, 2001). Whenever I had a new hunch I asked more questions and checked with the participants. As I progressed with my data collection, I looked for fine-grained evidence that could assist in coming up with categories, concepts and abstractions.

The process of managing the data collected through interviews, observations and document review was carried out using the NVivo 7 data analysis computer programme. The data was systematically categorized as interview transcripts, field notes, analytical memos, and documents for easy retrieval and analysis. Individual files were created to store the data and these files were labeled according to cases and participants. Once the data had been organized systematically using NVivo 7, I was able to code, categorize and create data matrixes for comparisons using the software. The different levels of data analysis such as coding, construction of themes or categories and conceptualizing were performed to facilitate the process of abstraction of the data (Miles & Huberman, 1994; Morse & Richards, 2002).

Coding Data

Coding involves "segmenting and labeling the text to form descriptions and broad themes in the data" (Creswell, 2005). During open coding the codes were created from the sentences and words used by the participants. I used "broad-brush coding" (Bazeley, 2007) to group the text into broad topic areas to see what was happening initially in the context. Later I recoded the text to select specific information that explained the main concepts of the study. The initial coding using NVivo 7 created 88 codes and on further analysis these codes were reduced to 42. My list of codes consisted of a priori codes, that is, codes derived from the literature and in vivo codes drawn from the data (Bazeley, 2007).

The data were dissected into various parts such as school setting, profile of participants, pre- and post- activities, classroom observation, feedback on evaluation, administrators' expectations, evaluator attitude and others. The parts were then classified further according to similar characteristics explained by participants within a case. The codes were examined to ensure that there was no overlap or redundancy, and later they were collapsed into broad categories. Then, conceptual labeling such as formative evaluation, summative evaluation, purpose of evaluation, methods used, instrument, criteria, utilization of findings, contextual factors teacher's reaction and administrator's role were given to the categories.

Forming Themes

I created themes or categories by identifying a common idea that linked the data (Morse & Richards, 2002). A few themes were identified based on the most frequently discussed codes, unique events and those that were supported by evidences (Creswell, 2005; Miles & Huberman, 1994). I used description and thematic development to form an understanding of the overall school-based teacher evaluation system in the four cases.

The description encompassed the rationale for evaluating teachers in each case; the various methods used by the evaluators and the reasons for choosing them; and the credibility of the instruments and criteria used to judge teacher performance. I related this to the problems encountered in implementing school-based teacher evaluation practices in the selected cases.

The data obtained from the administrators and teachers were compared and contrasted (Strauss & Corbin, 1990) to scrutinize the similarities and differences in teacher evaluation practices in the four cases. The detailed case analysis provided an insight into how administrators conducted formative and summative evaluation in school and how these practices influenced teacher performance. It also revealed how teachers reacted towards evaluation and what the whole process meant to them. The contrasting views presented by the administrators and teachers disclosed the existence of multiple perspectives of the school-based teacher evaluation practices in the selected cases.

The within case analysis was followed by a cross-case analysis to compare common categories and themes that emerged from the four cases. Matrices were constructed to organize the themes, patterns, differences and similarities that surfaced from the four cases (Miles & Huberman, 1994). This enabled me to look for evolving concepts and consistent patterns in the implementation of teacher evaluation practices between the four cases. I did a comparison of the themes, patterns and trends that surfaced from all the four cases and built a consolidated framework of the findings in the four cases. This paved the way for a more generalized view of how school-based teacher evaluation practices were implemented in the schools. I started arranging the data and wrote my description, analysis and interpretation (Wolcott, 1994). A final report was prepared from the findings obtained from the four cases.

Validity

The internal validity of a study depends on how similar the findings are with the real life context that is being studied (Merriam, 2001). The validity of this study was based on the accurate description of teacher evaluation practices in the selected national primary schools. The conclusions, explanations and interpretations of the data could be validated by various methods. I addressed the validity threats of this study through member check, triangulation, peer examination and long-term involvement at the selected sites (Creswell, 2005; Maxwell, 2005; Yin, 1994).

During member check I asked the participants to examine the accuracy of the content of the transcripts and field notes, as well as to determine if I had made correct interpretations of the information they had provided. In this way I was able to solicit accurate information, which prevented misinterpretation of the data. I went back and forth to ensure that the conclusions derived from the data replicated what actually happened in the four schools. Another method of establishing validity was by triangulating data. Triangulation was achieved through the use of multiple methods such as interview, observation and document review. These methods made it possible to obtain data from different perspectives of individuals involved within a case and between different cases. This enabled me to corroborate the data and establish the validity of this study. Peer examination was used to validate the methods used to collect the data and the interpretation derived from the data. I asked my peers to check the accuracy of the findings of this study. While analyzing the data I constantly held discussions with my peers who were knowledgeable about qualitative research to examine my interpretation and findings. They were also teachers who had experienced the evaluation processes in school.

Generalizability

Most empirical studies are meticulously planned to ensure that the findings can be generalized to the entire population. Researchers, however, generally agree that qualitative studies cannot be generalized. According to Gillham (2000, p.6), we cannot generalize human behaviour from "one group of people to others, or from one institution to another because there are too many elements that are specific to that group or institution". The four schools chosen for this study depicted school-based teacher evaluation practices which were specific to the respective schools and presented different points of view from the participants about how it affected their instructional practice.

I might not be able to generalize the findings of this study to all national primary schools in Malaysia. But the unique structure of the centralized education system in Malaysia makes it possible to assume that the school-based teacher evaluation practices described in this study are not very much different from practices adopted in other primary schools in Malaysia. The best practices in each of these schools could provide an opportunity for the administrators and teachers to learn from each other and discover common perceptions among various participants. I used a multiple case studies approach to indicate similar practices across four schools in this study. According to Miles and Huberman (1994), multiple cases can increase generalizability because the practices and processes across many cases can indicate common patterns and provide significant explanations of the phenomenon studied.

Yin (1994) explains that, though qualitative case study research might not be able to generalize based on sampling logic, it can be generalized through analytical generalization. Therefore the data obtained from the four cases can provide theoretical insights about teacher evaluation practices and its effects on instructional practice in national primary schools in Malaysia.

Ethical Issues

There are several ethical issues that need to be given due consideration while carrying out a qualitative research (Maxwell, 2005). Some of these include obtaining the informed consent of participants, the issue of confidentiality and following basic ethical rules during data collection and disseminating the research findings (Merriam, 2001).

First I informed the authorities about my intention to carry out my study and obtained permission to select and visit four national primary schools. Then, informed consent was obtained from the participants to conduct interviews and observations in all the selected schools. The participants were shown the interview transcripts to confirm if their explanation of an issue had been accurately described. When conducting document review I respected the participants' wish to keep some records private and confidential. Some evaluation records were not made available to me due to the nature of the content and to protect the teacher's privacy.

The anonymity of participants was protected by assigning pseudonyms to everyone. All interview details with the teachers were kept private and not discussed with other participants, especially school administrators who were also the evaluators. I did not want the teachers to face negative consequences for being forthright during the interviews. Even though a comparative analysis between schools was carried out in this study, the names of the schools were withheld and I assigned fictitious names for the four schools involved to protect their privacy.

Chapter Summary

This study used a qualitative research paradigm to investigate the implementation of the school-based teacher evaluation practices in four schools. The qualitative case study was considered the most appropriate design for this study because it provided an in-depth understanding of the phenomenon in the cases. The overall outline of the research methodology has also been presented to give a clear picture of how I conducted the study. The process of seeking permission from the authorities and the school administrators and the selection of participants and sites for the study has been explained in detail. Besides this, I have described how data were collected and triangulated using multiple-methods, such as interview, observation and document review. The data were analyzed using an inductive approach to make sense of what was happening in the four schools. Other matters pertaining to validity, generalizability and ethical considerations have been described to indicate how I addressed these issues in my study.