國立交通大學 英語教學研究所 碩士論文

A Master Thesis

Presented to

Institute of TESOL,

National Chiao Tung University

In Partial Fulfillment of the Requirements

for the Degree of

Master of Arts

部落格為中介行為之教師發展

Blogging as Mediated Actions in Teacher Development

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中華民國 九十九 年 八 月

August, 2010

論文名稱:部落格為中介行為之教師發展 校所組別:交通大學英語教學研究所 畢業時間:九十八學年度第二學期 指導教授:張靜芬博士 研究生:劉官汶

中文摘要

教師發展之研究已由強調教師對課程內容的知識轉為注重教師個人經驗和實際教學中之社會因素(如師生關係,學校社群)。近年來,隨著社交網絡的廣泛使用,最受歡迎的社交網絡工具之一 -- 部落格,廣被第二語言教師使用於教學紀錄與意見交流(Ferdig, 2007)。雖然探索教師部落格的研究逐漸增加,鮮少研究嘗試由社會文化角度檢視此項議題。

本研究針對兩位英文老師,吳與林,探討他們的部落格行為和教師發展間的關係。研究問題有三個,包括:(1)什麼因素影響這兩位教師部落格過程中的行為,(2)部落格如何促進兩名教師的教師發展,以及(3)這兩位老師如何看待他們的部落格經驗。研究資料由參與者的部落格文章,訪談與線上觀察中取得,其部落格文章依據六項具實證基礎的教師學習實踐方式編碼(一:自傳、二:批判探索、三:社群互動、四:教學實踐學習、五:專家之聲、六:長期參與專業工作)。這六個方式為 Darling-Hammond 和 Hammerness (2005) 所提出,並於其後由 Luehmann(2008)架構,以探索教師透過部落格學習並發展的有效方式。而根據分析人類行為複雜性的框架,活動理論(Engestrom, 1987, 1999),訪談和線上觀察資料將藉由歸類出個人活動系統下的因素進行分析,即「個體」、「欲達成之目標」、「達成目標之媒介」、「個體存在之社群」、「社群內之規則」、「以及個體與他人間的權力關係」。

研究結果指出,即使有著不同的個人背景和經驗,吳與林在個人與人際方面都受益於部落格行為。一方面,紀錄之餘,書寫過程亦提供兩位教師表露情感的

機會,增強了個人的反思。另一方面,撰寫部落格過程中,吳與林都張貼大量社群互動相關文章,兩名教師也表示網路社群特別在提供支持和建議部分扮演重要角色。此外,吳與林都認為部落格是個有助於他們教師發展的工具,並對該經驗持正面的態度。

本研究顯示,部落格為一對觀察教師複雜省思行為具有高度潛力的工具。此外,溝通以及與其他人在網絡社區的連結有助教師更新思路,同時協助他們不斷提升自我。因此,對教師教育而言,應用部落格優勢於教師發展是一個很可能的新方向。對於教育應用的建議,本研究建議教師培訓機構與學校應嘗試邀請教師創立自己的部落格,同時支持教師間的連結以建立教師網路社群。

關鍵字:社會文化理論、活動理論、教師發展、部落格

ABSTRACT

Research on teacher development has undergone a shift from an emphasis on teachers' content knowledge to attention to teachers' personal experience and social factors situated in their teaching practice (e.g. student-teacher relationship, school communities). In recent years, with the widespread use of social networking, blogs, one of the most popular social networking applications has been popular for L2 teachers to record their teaching and exchange ideas with other teachers (Ferdig, 2007). While an increasing amount of research has explored teacher blogs, little has been done to examine this issue from sociocultural aspects.

This study targets two English teachers, Wu and Lin, and investigates the relationship between their blogging and teacher development. Three research questions are addressed, including (1) what factors affect the two teachers' operations in the blogging process, (2) how blogging may mediate the two teachers' development, and (3) how the two teachers perceive the blogging experiences. Data are collected from the participants' blog entries, interviews, and online observations. The blog entries are coded according to the six empirically grounded learning practices, Auto-Biography (P1), Critical Inquiry (P2), Community Interaction (P3), Study of Practice (P4), Expert Voice (P5), Long-Term Engagement in Professional Work (P6). The six practices were recognized by Darling-Hammond and Hammerness (2005) and later framed by Luehmann (2008) to explore the practices which are effective for teacher learning and development through blogging. Drawing on Activity theory (Engestrom, 1987, 1999), which is an analytical framework to map out the complexity of human behaviors, interviews and online observation data are analyzed by sorting out the factors underlying individuals' activity systems, namely individuals' agency, goals to be achieved, mediated artifacts to achieve the goals, the communities where

individuals are situated, rules embedded in communities, and the relationship between individuals and others.

Findings of this study reveal that, while with different personal background and experiences, Wu and Lin both benefited from blogging not only intrapersonally but also interpersonally. On the one hand, in addition to recording, the process of writing offered the two teachers an opportunity to express feelings and enhanced their personal reflection. On the other hand, during the blogging process, Wu and Lin posted a large amount of entries related to community interaction. The two teachers reported that the online community especially played a significant role in providing support and suggestions. Moreover, Wu and Lin both perceive blogs functioning as a beneficial tool for their development and hold a positive attitude toward the experiences.

The present study indicates that a blog is a high potential tool to observe the complicated reflecting process of teachers. Additionally, communication as well as connection with others in the online community are helpful to refresh teachers' thoughts and assist them to continuously improve themselves. Thus, taking the advantages of blogs in teacher development is possibly to be a new direction for teacher education. For pedagogical implications, it is suggested that teacher training programs and school should not only try to invite teachers to launch their own blogs but also support links among teachers to build online teacher communities.

Keywords: sociocultural theory, activity theory, teacher development, blogs

ACKNOWLEDGEMENTS

I would like to thank those who have helped me during the process of completing this master thesis. First and foremost, I would like to express my heartfelt gratitude to my advisor, Dr. Chin-Fen Chang, who is a considerate and respectful mentor for me. I most appreciate her continuous encouragement and advice. She was extremely patient to read the drafts my thesis and offer insightful comments. Without her stimulation and inspiration, my thesis could not be completed.

My sincere gratitude also goes to my committee members, Dr. Chi-Hua Kuo and Dr, Shiou-Wen Yeh. Their tremendous help and priceless suggestions contributed to improving the final product of the thesis.

My special thanks are sent to my participants. Their generous participation and sharing provided valuable data for this research. Both of them are excellent English teachers. I am glad to have them in my study.

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Finally, I would like to thank my family and all of my friends for their endless encouragement and care. No matter what happened, they always stood by my side. I was so blessed with many kind people supporting me through the journey of my graduate study. For me, they are the most valued people in the world.

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CHAPTER ONE INTRODUCTION

Background and Rationale

"Development is a strategy of influence and indirect intervention that works on complex, integrated aspects of teaching; these aspects are idiosyncratic and individual" (Freeman, 1989, p. 276).

Teacher development is a continuing process involving change and maturity in multiple dimensions including intellectual, experiential and attitudinal (Freeman 1989). Through increasing or shifting awareness, it assists teachers to generate changes of beliefs or behaviors during their teaching process, providing a longer-term goal and facilitating their growth. Development is essential for teachers because it not only helps them gain knowledge and skills of the subject matter but also enhances their ability to cope with difficulties during the teaching process (Richard, 2005).

In the field of second language teaching and learning, research focus of teacher development has undergone a shift from an emphasis on teachers' content knowledge to teachers' personal experience and social factors situated in their teaching practice (e.g. student-teacher relationship, school communities). As Johnson (2006) indicates:

Although the overall mission of second language (L2) teacher education has remained relatively constant, that is, to prepare L2 teachers to do the work of this profession, the field's understanding of that work—of who teaches English, who learns English and why, of the sociopolitical and socioeconomic contexts in which English is taught, and of the varieties of English that are being taught and used around the world—has changed dramatically over the past 40 years. (p. 237)

In other words, while the ultimate goal of teacher education is still to make teachers able to do the job, the understanding of how L2 teachers learn to teach has been shifted toward a more sociocultural perspective. Johnson (2006) proposes the term "sociocultural turn" to describe the application of sociocultural theory to study

teacher development. The term infers human learning as "a dynamic social activity which is situated in physical and social contexts, and is distributed across persons, tools, and activities" (p.237). More specifically, the notion of "sociolcultural turn" suggests that human beings develop as participants in cultural communities and only an understanding of the cultural practice and circumstances in their communities can reach an exhaustive interpretation of their developmental process (Rogoff, 2003). With the introduction of sociocultural theory to teacher development, teachers are no longer regarded as flat characters but as individuals with different experiences, beliefs and expectations (Chen, 1997). Moreover, in addition to skill training, the influence of socio-historical factors on the individuals' mental functions and decision making during the teaching process has become a core of research and practice in this field.

Sociocultural theory is a concept consisting of manifold aspects and one of the basic notions is "mediation." Mediation refers to a process involving sociocultural and historical tools to shape human action. In sociocultural perspectives, human learning is mediated and human beings only interact with the world indirectly through mediating tools including language, words, or other visible/invisible materials (Lantolf, 2000; Lei, 2008; Vygotsky, 1978, 1987). The idea of mediation is later developed into Activity Theory, a theory which seeks to explore human behaviors by analyzing the relationship between individuals and the social-historical contexts, explaining the process of human development in a more comprehensive and systematic way (Leont'ev, 1978). In Activity Theory, a person's framework for thinking is closely related to historical, culturally-grounded actions and human behaviors are considered as activities intertwined with many contextual factors which work together, constantly leading to different outcomes (Engeström, 1987, 1999; Vygotsky, 1986). Activity Theory has been applied to studying teacher behaviors in recent years (Jonassen & Rohrer-Murph, 1999). After providing an explicit and

thorough description and analysis of Activity Theory, Jonassen and Rohrer-Murph (1999) claimed that Activity Theory, which functions as social-cultrual lens, has the potential to assist designers to analyze human activity systems and suggest different perspectives for analyzing learning process and outcomes for the purpose of designing instruction for teacher learning.

Sociocultural Theory not only brings a shift in research focus but also leads to increasing attention to more personal approaches for teacher development which emphasize on observing individuals' inner feelings and thoughts. Reflective teaching, for instance, has been suggested as a useful approach to help teachers reflect their in-class behaviors among the research of teacher development. As Bartlett (1990) notes, improvement of teaching must be achieved through reflection, which is both a process focusing on the daily classroom teaching and an action oriented as well as historically-imbedded social frame relating the individuals with a situation. Reflection appears as a response including teachers' conscious recall as well as examination of previous experiences and then serves as a basis for evaluation, decision making, planning and action.

Previous research has proposed that journal/diary writing is one of the effective ways of doing reflection (Richards, 1991). Through diaries, the operating process of human inner mental functions can be clearly observed. Recently the use of dairy writing has been extended to the field of teacher development. Involving observations, feelings, reactions, interpretations, reflections, hunches, hypotheses and explanations together which form a mean with high potential to interpret the teaching process, diary writing is suggested as a valuable routine leading into a number of areas of professional development and meta exploration, ending up with fresh perspectives (McDonough, 1994).

Blogs, one of the most popular forms of electronic diaries, have gradually

become a popular way for people to record daily life and exchange messages.

Different from traditional ways of reflective practice, teachers may record electronic blog entries and do asynchronous sharing through the Internet. Being a collection of multi-media narratives and web links, blogs function as a creative outlet for people to interact with one another as well as exchange ideas (Lin & Yuan, 2006).

The growing number of teacher blogs has also drawn much attention in teacher development. However, first, many of the studies examining teacher blogs center on short-term teacher training programs; not until very recently, studies concerning with more longitudinal blogging process have been conducted (Chan & Ridway, 2005; Jarvis, 1992; Luehmann, 2007; Numrich, 1996). Second, former research on teacher diaries or teacher blogs usually depends on concordance analysis to examine the frequency of words and trace the variance of frequency over time instead of specifically examining the contents of the entries (e.g. Jeffrey, 2004, 2007; Jeffrey & Hadley, 2002). Third, although a few recent efforts have started to study teacher blogs in Taiwan, these studies neither aimed at language teachers nor intended to explore teacher blogs in a qualitative way. In addition, among the studies trying to address the relationship between blogging and teacher development, few of them attempt to examine the issue through sociocultural perspectives. Reviewing literature concerned with present computer mediated communication(CMC) tools, Ferdig (2007) summarized the advantages of using these tools including encouraging active participation, providing a constructive learning environment which promotes feedback and reflection, making learning occur through central participation of the community and building an environment supporting scaffolding. These advantages all correspond to the key concept of sociocultural theory which suggests that learning is a process of participation. Thus, applying sociocultural perspectives to examining blogging and teacher development may contribute to a more extensive and complete

understanding of the interaction between teachers and the contextual factors during the blogging process.

Research Questions

The current study adopts sociocultural theory as a theoretical basis, in particular taking the teachers' experiences and social-historical contexts into consideration to investigate how blogging process may mediate second language teachers' development. Three research questions are addressed:

- 1. How are the targeted English teachers' blogging influenced by the contextual factors situated in their blogging process?
- 2. How may blogs mediate the targeted English teachers' teacher development?
- 3. How do the targeted English teachers perceive the blogging experiences in their development?

Significance of the Study

Through the lens of sociocultural theory, the present study intends to investigate the potential of blogging as a tool for enhancing teacher development. It is hoped that addressing these questions will contribute to a more comprehensive understanding of teacher development through blogging and seek for the possibilities of using blogging to teacher education.

After a concise introduction of the background and rationale of the present research, in the next chapter, related literature will be reviewed.

CHAPTER TWO LITERATURE REVIEW

This chapter first provides a brief review of sociocultural theory and related concepts including mediation and Activity Theory. Then, I will discuss literature concerned with teacher development as well as the integration of technology into teacher development.

Theoretical Framework: Sociocultural Theory

A General Description

Developed by the Russian psychologist Vygotsky (1987) and his colleagues, sociocultural theory is initially applied to explain the process of human development, aiming to understand how people organize and use their minds for carrying out the business of living. The fundamental tenet of the theory holds that sociocultural and mental activities are bound together in a dependent and symbolically mediated relationship (Lantolf & Pavlenko, 1995). Drawing on the tenet, the individual and the social are necessarily relational and social origins take on special importance in sociocultural theory (Lantolf, 2000).

According to Vygotsky, the notion of sociocultural theory can be examined particularly in the developmental process of children. To have a complete understanding of a child's developmental process, the social environment which the child lives in must be explored since learning is embedded in the activities as the child interact with objects, events, and people in the social environment (Vygotsky, 1986). Such a social process is the precursor and gives rise to the individual process. While both are essentially mediated by artifacts, sociocultural theory proposes that the interpersonal (inter-mental) processes are the necessary condition for the emergence

of individual (intra-mental) processes (Cole & Wertsch, 2002).

Generally speaking, Vygotsky's sociocultual theory can be capsuled in terms of three major principles. First, only a thorough analysis of human mental process can achieve a complete and accurate interpretation of human mental functioning. Second, all higher mental functions have social origins. In other words, those mental functions all originate in social activities. Third, sign systems play a significant role in distinguishing cultural forms from communicative forms of human behaviors and the decontextualization of meanings of words constitutes a prerequisite for the transition from the interpersonal to intrapersonal level (Johnson, 2004). Simply stated, Vygotskian sociocultural theory describes the dialectic interactions between the external (social) and internal (mental) process. In the theory, there is a connection between language and thoughts. The connection originates from interpersonal level, and then is mediated by semiotic sign systems and internalized within individuals.

Sociocultural theory is closely related to human mental development. To examine human mental functions, Vygotsky (1978, 1986) suggests higher forms of mental activities including voluntary attention, logical memory, rational thoughts, and the planning, execution, and monitoring of mental process as the proper unit of study. Each of the activities can be fully understood only when observed either in its formation over time or when it is disturbed. By specifically discriminating and analyzing those metal activities, sociocultural theory is appropriate lens for analyzing human learning as a developmental process. Recently, the theory has been applied to language education and literature has indicated that it provides different understandings and recommendations for improving language teaching and learning (Zuengler & Elizabeth, 2006). It should be noted that sociocultural theory is not a single theory. Thus, the following parts will contribute to a review of two concepts within the theory which are related to the present research including mediation and

Activity Theory.

Mediation

Mediation is one of the most distinguishing concepts of sociocultural theory.

Vygotskyan sociocultural theory argues that human mental functioning is basically a process intertwined by cultural artifacts, activities, and concepts. During the process, the function of mediation is essential. In other words, human behaviors are activities consisting of and affected by sociocultural factors and mediating artifacts serve to connect the individuals (subject) and the goals (object) they would like to achieve.

Mediation is an active process involving the potential of cultural tools and the unique use of such tools to shape human action. According to Vygotsky, human mind is comprised of a lower-level neurobiological base with the distinctive dimension of human consciousness to control over biology either through the use of higher-level mediating technique tools (e.g. a saw) or through psychological tools/signs (e.g. language). Human beings can, possibly, control their behavior from the outside by means of tools and regulate their minds from the inside by means of signs. Mediation exactly refers to indirect connections linking the individual and the social-material world with the assistance of mediating tools or signs (Lantolf, 2000; Lei, 2008; Vygotsky, 1978, 1987).

An underlying assumption of mediation is that all higher forms of human mental activity are mediated. That is, human beings access to the world only indirectly (mediately), through the mediation of artifacts, rather than directly (immediately). Those activities arise while individuals interact with other members, with the culture, with specific experiences or with other artifacts. Moreover, the interaction is a dialectic relationship between human, society and culture. Namely, not only individuals' mental activities determine the nature of our social world but also the

world of human relationships and artifacts determine how we regulate our mental process (Lantolf, 1995, 2000, 2005).

Activity Theory

Leont'ev (1978) later develops Vygotsky's ideas of social and cultural mediation by developing a hierarchical model of human activity, Activity Theory.

Sociocultural theory suggests that human learning is basically a situated and mediated process intertwined by the individual mind and social milieu (Lantolf, 2000). Among the multitudinous concepts in sociocultural theory, Activity Theory is a key theory seeking to explain social and cultural practices by relating them to the cultural and historical contexts. It is not a methodology but "a philosophical framework for studying human beings with the developmental processes in which both individual and social levels interlinked at the same time" (Jonassen, 1999). In other words, Activity Theory tries to illustrate and interpret human behaviors by examining the dialectic relationship between individuals and the social contexts.

Activity Theory is originally used to explain individual activities and thus the basic unit of analysis held by the theory is an "activity." According to Activity Theory, human activities are driven by needs in order to achieve certain purposes. Leontiev (1978) proposed that an activity comprises three levels, the activity level, the action level and the operation level. Activities consist of series of actions, which consist of operations. Actions are basic components of activities guided by goals; operations are executing actions which correspond to goal achievement (Lantolf, 2000; Leontiev, 1978). However, the line between an action and an activity is difficult to define as goals and motives often overlap each other and are used interchangeably. As a result, all the three levels can possibly move both up and down as the needs arise (Marra, 2005).

Engeström (1987, 1999) extends the basic assumptions of Activity Theory and developed a systematic model named "activity systems" as shown in Figure 2.1.

Engeström's model intends to explain collective activities and cooperative work in term of the interaction between an individual and his/her environment through mapping out essential elements in an activity, namely, the objects set by individual agency, the mediated artifacts, the community and its rules, and finally the division of labor. In the model, an activity is undertaken by a human agent (subject) who is motivated toward the targeted point (object), and mediated by different artifacts, tangible and intangible alike (artifacts), in collaboration with others and ultimately reach the desired outcome. In addition, the structure of the activity is shaped and constrained by other sociocultural factors including conventions or regulations (rules), interaction with others who share the same object (community) and social divisions, which refers to power status divided among members of that community (division of labor) within the context (Engeström, 1987, 1999).

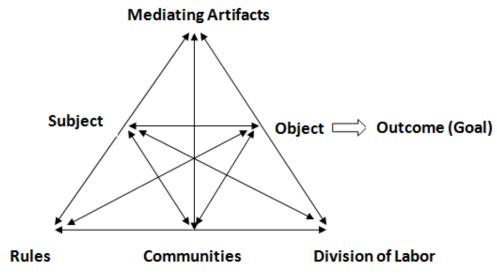


Figure 2.1 The Expanded Activity System (Engeström, 1987, 1999)

The model of activity systems depicts the interaction between individuals and activities specifically. In activity systems, it is crucial to realize that what helps to

analyze human mental function is not the individual elements of the system but the relationships between these elements which are operations and actions occurring in and across time periods, forming the unit of analysis and support transformation (Lantolf & Thorne, 2006). The interplay between the various elements continuously leads to various new outcomes. Consequently, all elements of this system are not fixed but are constantly changing. More importantly, the model emphasizes on the activities in which people are engaged, the nature of the tools applied, and the social as well as contextual relationship.

Activity Theory and Second Language Teaching and Learning

Over the last few decades the research focus of the Activity Theory has moved from psychology to social contexts and to education as well. From a sociocultural perspective, learning is participation and is a relational as well as interactive process. In the field of language teaching and learning, the influence of context on teaching and learning has gradually gained attention and Activity Theory in recent years is adopted as an explanatory tool to address the complexity of the operating process of students and teachers as well (Chang, Lin, Lee & Liu, 2009; Coughlan & Duff,1994; Lantolf, 2002). It is, apart from being a tool to examine students' learning process; Activity Theory is also useful lens to investigate teacher learning and development (e.g. Chen, 1997; Jonassen & Rohrer-Murph, 1999).

From the perspective of Activity Theory, individual thoughts are closely related to historical, culturally-grounded actions as well as the social contexts and thus the theory is effective for understanding the process of learning to teach. After examining the nature and elements of Activity Theory, Jonassen and Rohrer-Murph (1999) consider the theory as social-cultural and social-historical lens with the potential to analyze human activity systems and provide different prospects for analyzing learning

process and outcomes for the purpose of designing instruction. A later study elaborated key concepts of Activity Theory and also claimed that the theory is useful for studying the conceptual change and professional development of teachers (National Research Center on English Learning and Achievement, 1999).

In addition, previous research on teacher learning has reported the close connection between the writing process of reflective writing, which is a beneficial tool to enhance teacher learning, and activity systems (Wells, 2002). It is suggested that the process of writing is compatible with the activity systems especially when the writer has to accommodate as well as communicate with external constrains or materials that may provide assistance and motivate the writer with a larger contextual purpose. In addition, there are usually a wide variety of meditational means including model texts, source of ideas and the dialogue which was usually with the self during the writing process. In this way, activity systems seem to be an appropriate framework to study teachers' developmental process through reflective writing.

Teacher Development

Current Conceptualization of Teacher Development

Within the scope of teacher education, two broad kinds of goals are often identified, training and development. Different from training, which usually directly focuses on a teacher's present responsibilities, aiming at short-term and immediate goals, development usually serves a longer-term goal, seeking to facilitate growth of teachers' teaching and self identification. Teacher development is a continuing process involving change and growth in dimensions of intellectual, experiential and attitudinal of teachers (Lange, 1990).

Bailey, Curtis and David (2001) provided various reasons for teachers to pursue

professional development ranging from increasing income as well as gaining prestige to acquiring new knowledge and skills which may help teachers to cope with problem and make their teaching more interesting. Bailey further suggested that professional development could fulfill the goals of empowerment and enlightenment, avoiding deskilling of teaching and fighting against the negative effect of teaching. Therefore, pursuing continuous development seems essential and significant for teachers throughout their career.

Hargreaves and Fullan (1992) have observed that there are three approaches to teacher development. The first one is concerned with knowledge and skill development which aims to assist teachers to develop knowledge about the subject matter and teaching strategies. The second one regards teacher development as ecological change and put emphasis on the influence of teachers' working environment. Finally, the third approach takes teacher development as a process of enhancing self understanding of personal and practical knowledge of teaching. Responding to Hargreaves and Fullan's ideas, Tsui, Wu and Sengupta (1996) reviewed previous literature and proposed three important basic facets of teacher development, namely the development of knowledge and skills, and the development of the teacher as a person and the development of a collaborative culture. Teacher development is a complicated concept so that traditionally there is no consensus on what teacher development encompass. Simply stated, teacher development is a concept including complex aspects which are idiosyncratic as well as individual, and the goal of development is to assist teachers generate change through the teaching process (Chen, 1997; Freeman, 1989).

During the past decade a, considerable body of literature has emerged on the continuous development of teachers. Nevertheless, compared with other aspects within teacher education, it is an aspect has not yet been much explored. (Garet,

Porter, Desimone, Birman, & Yoon, 2001) In recent years, the essential themes in the field of teacher development have undergone a significantly shift due to the influence of teacher education and general educational theory. The following will be devoted to a discussion on the shift.

A Conceptual Shift from Content Knowledge to Mental Functions

To study teacher development, it is essential to explore the relationship among the three terms, teacher development, teacher education, and teacher learning. Simply stated, approaches to teacher development are connected with the concepts of teacher education and the rationale of teacher education derives from assumptions in the field of teacher learning. According to Richard (2005), teacher learning is considered as skill learning, as a cognitive process, as personal construction and as reflective practice; each of the conceptualizations can lead to different approaches to teacher development.

Johnson (2006) reports that the notion of teacher education has changed over the past decades and it significantly affects the research and practice of teacher development. In the mid-1970s, research on teacher education focused on teaching behaviors, ensuring that teachers mastered the content they were expected to teach and were able to deliver it through efficient methods. In the mid-1980s, due to cognitive learning theories and information-processing models, the research focus of teacher learning has shifted from content knowledge and teaching skills to the process and the impact of teachers' decision making. From then on, the complexities of teachers' mental lives become a major concern of teacher educators. The teachers' prior experiences as well as their interpretations of the activities they engage in combine and both interact with the contexts, shaping the teachers' decision making and development. In simple terms, it seems the study of teacher education has turned

toward more sociocultural perspectives.

A Theoretical Shift from Product-Oriented to Process-Oriented

In addition to the shift of the field's understanding of teacher education, previous literature indicates that traditional language teacher education housed in departments of applied linguistics, education, or languages and literature was fragmented and overlooked teaching itself (Freeman, 1989). During the last decade general educational theory and practice have exerted a more powerful influence on the direction of teacher education. Derived from the theory and practice of general education, there are shifts of focuses in language teacher education including a move from product-oriented theories to process-oriented theories of teacher learning, an emphasis on situated teacher practice and the development of concrete linkages between theory and practice, a growing recognition of the powerful role teachers' prior learning experiences played in shaping teachers' views of teaching and a growing concern that teacher development should be handled through sustained research and in-service programs rather than the typical short-term or one-shot training programs (Crandall, 2000).

To summarize, in addition to the facet mentioned in previous literature such as teaching skills and working environment, recent studies tend to emphasize more on situated and socialcultural views of teacher behaviors. Teachers' personal development has become another essential dimension worth examining (Tsui, Wu & Sengupta, 1996). Knight (2002) further insists that teaching ability and enjoyment of teaching is as much about how teachers feel about themselves as it is about how many slick teaching techniques they can string together. Thus, it is important for oneself to develop a sense as a good teacher. In other words, nowadays research on teacher development has regarded teachers as individuals, studying teachers' individual

development as a whole instead of dividing it into fragment areas and examining each single fragment. As the new reconceptualization claimed by Freeman (1998), learning to teach is a sociocultural process and the experiences in teacher education would frame how the individuals respond to the basic sociocultural processes. Moreover, the core must focus on "the activity of teaching itself, centering on the teacher who does it, the contexts in which it is done, and the pedagogy by which it is done" (Freeman, 1998).

Studies on Teacher Development

The change of focus in teacher development leads to a switch of trends in related in related research and practice. Traditionally, Bailey (2003) suggested that teacher development may be briefly divided into four aspects: individual level (e.g. self-monitoring), paired work (one to one, working with another colleague, e.g. peer coaching), group based (e.g. teacher support groups), and institutional directed (e.g. workshops). Generally speaking, these aspects include documenting different kinds of teaching practice or examining the teachers' beliefs, values and communication or collaborating with peers. Johnson (2006) later claimed that a more self-directed, collaborative, inquiry-based learning that is closely connected to the daily activities of teachers and students is needed. For instance, teacher inquiry seminars, teacher study groups, narrative inquiry, and critical friends groups, for instance, are all designed as alternative means to foster and sustain teachers development.

In addition to the approaches mentioned above, recently a more personal-directed and process-oriented approach, reflective teaching, which assists teachers to record the process and enhance reflections, has gained increasing attention (e.g. Boud, 2001; Jarvis, 1992; Jeffrey, 2002). Concerned with reflective teaching, diaries/journal writing has been suggested as an effective way to help teachers do

reflective practice. Therefore, in the next section, we will first concisely introduce basic concepts of reflective teaching; then, literature as well as empirical research on diaries/journal keeping and teacher development will be discussed.

Reflective Teaching

According to Bailey (2003), reflective teaching is a main concept, a core of recent teacher development approaches. Most teachers gain a repertoire of teaching strategies and form their own teaching styles with experiences. However, there can be a danger hindering a teacher's professional growth while a teacher's teaching style serves as a mean of coping with routine demands of teaching. One effective way to help teachers move beyond the level of routine responses to classroom practice is reflection. Richards (1991) claimed that reflection is an activity or process in which an experience is recalled, considered as well as evaluated and the process is usually in relation to a broader purpose. It involves taking the unprocessed, raw material of experience, exploring the messy events and focusing on the thoughts and emotions that accompany them to make sense of what has occurred.

Originally, reflective teaching was regarded as individual and independent, emphasizing a process reviewing a teacher's behaviors and thoughts of classes which could be done on the teacher's own. In the last decade, social factors have been brought into the idea of reflection and in this way the meaning of reflection turns to be twofold. In addition to personal thoughts and behaviors, reflective teaching also includes reflection of the relationship between a teacher and other members within the community the teacher belongs to. For teachers, doing reflective practice is the base of making changes and changes are necessary when people intend to improve themselves. To transfer from an unsatisfying behavior to a more satisfying behavior, holding a critical attitude is essential. Reflection has transcended the level of learning

teaching skills, forcing language teachers to appraise themselves and challenge their teaching beliefs (Bartlett, 1990).

To be a reflective teacher, many different approaches can be employed ranging from observation of oneself and others, team teaching, self-report, autobiographies to exploring one's view of teaching through journal writing. Among those approaches, journal writing has becoming widely acknowledged as a valuable tool for developing critical reflection (Richards, 1991). In more recent years, a growing number of studies are now available to shed some lights on the relation among teacher journals, reflective writing and teacher development (Boud, 2001; Hull, 2007; Jarvis, 1992; Richards, 1991; Richards, 2005; Suzuki, 2004).

Teacher Diaries/Journals

Boud (2001) suggested that there are three types of reflection according to the occasions (reflection in anticipation of events, reflection in the midst of action, and reflection after events) and indicated that although the goals and procedures may vary with the variance of occasions, journal writing plays a significant role for all the three types of reflection. Being one of the introspective methods, journal writing is considered a more thorough approach for professional development of language teachers compared with other approaches such as video or audio taping (Jeffrey, 2002).

To explore teacher journals, it is essential to review previous literature concerned with the definition and the nature of diaries and journals. Hull (2007) claimed diaries and journals are distinctive, arguing that journals tend to be written in the knowledge that the contents are in the public domain and that there are readers such as teacher trainers or colleagues whereas diaries are often written in the understanding that their contents will only be made public with the writer's permission. However, despite the

difference, Hull also acknowledged the similarity of diaries and journals: they both refer to introspective writing. Indeed, previously Richards, Platt and Platt (1992) had already defined a "diary study" for research in first language and second language acquisition as a "regularly kept journal." Consequently, the two terms obviously overlap each other and literature often uses them in free variation. Considering the similarity, in the present research, which mainly focuses on reflective writing instead of the distinction between journals and diaries, journals and diaries are regarded interchangeable and literature related to both will be examined.

Applying Teacher Journals/Dairies to Teacher Development

According to Richard (2005), a teaching journal is an ongoing writing account of observations, reflections and other thoughts about teaching. It could be in forms of notebook or electronic mode and serves as a record of incidents, problems or insights occurring during lessons. Journal writing can fulfill different purposes depending on the audience. For teachers themselves, it can be a way of exploring their own beliefs and practice and clarifying their thoughts; for peers or supervisors, reading a teacher's journal writing and providing feedback can be a way to encourage reflective inquiry, facilitating the teacher's problem resolving.

Both in language teaching and in teacher training, diary writing, or journal keeping, has been widely applied. Nevertheless, in the research field, not until the last two decades was the use of diary in teacher training and development studied and there were few diary studies available, especially studies concerned with diaries kept by experienced language teachers (Jeffery, 2002, 2008; McDough, 1994). Jarvis (1992) regarded teacher as learners and studied the diaries of in-service teachers in special training programs. The results mainly showed two findings. First, teachers did perceive the record as valuable and helpful in making sense of their course. Second, in

teacher diaries, teachers may record themes related to solving problems, seeking new teaching ideas and legitimizing own practice, which is a sense that one is on the right lines through understanding more fully why something works. A later research analyzing 26 diaries written by novice ESL (English as a Second Langue) teachers who enrolled in TESOL (Teaching English as Second Language for Foreign Learners) programs revealed the novice teachers' early preoccupation with their own teaching behaviors, transfer and rejection of teaching skills, and the continued frustrations, suggesting teacher diaries actually could offer insight into the pressing needs of novice teachers (Numrich, 1996).

Noticing how the rich reflective quality of the trainees' journal writing raised the trainees' awareness of teaching, allowing issues unnoticed to rise to the conscious level, Hull (2007) further conducted a research on an experienced teacher's reflections on his teaching of two classes, one undergraduate and the other graduate. The results demonstrated that the patterns of the teacher in the graduate class diverged from those in the undergraduate class and the teacher neither aware nor especially paid attention to the difference. The findings not only corresponded to Hull's argument that reflective writing could enhance teachers' awareness but also suggested that while revealing the probably fast-changing patterns of an inexperienced teacher, reflection would be more likely to reveal the ingrained patterns of an experienced one. In other words, as for trainees, reflective writing is similarly developmental for experienced teachers.

A series of three more recent studies on teacher diary experiences were conducted by Jeffrey (Jeffrey, 2002, 2004, 2008). Jeffrey (2002) conducted his first diary study when teaching in Japan. With diary analysis, Jeffrey found his focus gradually shifted away from initial nervousness, class atmosphere and concerned for activity sequencing to his personal feelings and reflections. Moreover, he noticed that

his approaches to teaching also changed as well. Jeffrey considered the process beneficial and did two other diary studies (Jeffery 2004, 2008). While reviewing and examining the three diary studies, Jeffery not only discovered how his syllabus had shifted over the years from predominately teacher centered to student centered but also noticed other factors including students' proficiency and motivation. To conclude, the series of studies provide Jeffery deeper understanding of the realities of teaching, make him more realistic and let him realize his own abilities and limitations (Jeffery, 2008).

To sum up, for teachers, there are four advantages of keeping teaching journals. Through journals, teachers can clearly describe problems they face, reveal the depressed emotion, clarify as well as further understand the teaching experience, and finally, continue to develop their professional skills (Bailey, 2001). Therefore, diary study has been categorized as the least structured, least controlled means of conducting research in teacher education, yet it is a real insider instrument providing insights (McDonough, 1994; Numrich, 1996).

Integration of Technology into Teacher Development

Technology as Mediating Artifacts for Learning

Previous literature has indicated three general categories of mediation, social mediation, self mediation and artifact mediation (Lantolf, 2000). Social mediation refers to mediation by others through social interaction, self-mediation is considered as the mediation by oneself through private speech, and finally, artifact mediation is the mediation by cultural artifacts, either linguistic or non-linguistic. In each kind of the mediation, language plays a significant role to mediate the process. While language is a powerful cultural artifact available to human beings, it can also

comprise artifacts with non-linguistic features (Donato & McCormick, 1994). Take computer technology for example, the evolution of technology leads to the widespread use of computer mediated communication (CMC), which both enhances connection among human beings and provides new instruments for teaching and learning (e.g. Cameron, 2006; Lee, 2000; Richards, 2005; Riding, 2001; Rui Kang & Herbert, 2007)

With the popularization of computer mediated communication, the term "social software" is created and has attracted much attention over the last few years. Social software is defined as software offering opportunities to give and receive feedback, supporting conversational interaction and individuals' desire to be pulled into groups to achieve their personal goals. Tools including email, photo sharing, wikis, facebook and blogs are all considered as social software (Ferdig, 2007).

Social software has been usually applied as a mediating artifact to encourage students' collaboration in the virtual space (Cameron, 2006; Lee, 2000; Salaberry, 1996). In addition to student learning, social software also introduces innovative tools for teachers to interact with one another as well as exchange ideas, bringing in more possibilities and opportunities for teacher development (Loving, Schroeder; Riding, 2001; Richards, 2005; Rui Kang & Herbert, 2007). For instance, different from traditional ways of reflective practice, nowadays teachers may record electronic entries and do synchronic as well as asychronic sharing through the internet. In sociocultural perspectives, every kind of learning is mediated. Therefore, it is significant to investigate how the artifacts mentioned above function as mediators and help teachers to pursue development.

Blogs: One of the Most Widely Used Tools for Teacher Development

It has been noted that descriptive and introspective research tools such as logs,

diaries and journals are particularly suited for investigating behavior in context while there are relatively few studies on teacher diaries compared with other studies of second language teaching and learning. However, with the development of technology, Suzuki (2004) suggested that the trend may change with the advent of the online diary, "blog." "Blog" is the shortened form of "weblog" coined by Jorn Barger in 1997.

Weblog originally referred to a web page with hyper links to websites which a websurfer found interesting. Nowadays, blogs, or weblogs are used to refer to online journals. Blogs are websites frequently updated with new post and thus one of the distinctive features of blogs is the order of the post. A blog is considered as a hierarchy of text, images, media objects and data arranged chronologically. Other four characteristics of a blog include personal editorship, hyperlinked post structure, archival features and free, public access to the content (Chan & Ridway, 2005; Ridgway, 2005).

Regarded as electronic entries, there are three advantages of blogs. First, blogs offer access to an unlimited number of readers; second, blogs are not only personal but also interactive and collaborative since people can provide feedback to each other; finally, blogs offer instant publishing and is editing possible (Suzuki, 2004). Pervious literature has indicated various ways of applying blogs in education. The most common ones are posting work and reflecting by individual learners, discussing and publishing assignments by the whole class, posting suggestions or references for students by teachers and finally, serving as a further development and research tool for the professional community (Educational Technology Division, Ministry of Education, 2005). The current study focuses on the last one and intends to investigate how blogging contributes to teacher development.

As for blogging and teacher development, Darling-Hammond and Bransford (2005) suggested five complementary types of teacher learning domains for new

teachers including vision, understanding, dispositions, practices, and tools. As Darling-Hammond and Bransford mentioned,

New teachers learning to teach in a community that enables them to develop a *visio*n for their practice; a set of *understanding* about teaching, learning, and children; *dispositions* about how to use this knowledge; *practices* that allowed them to act on their intentions and beliefs; and *tools* that support their efforts. (p. 385)

Based on the five dimensions, Luehmann(2008) framed six practices to investigate teacher learning through blogging as the follows:

- Awareness and consideration of personal educational autobiography (P1): The
 effects of the teacher's previous knowledge and emotional reactions on their
 teaching practices.
- 2. Engagement in critical inquiry-based reflection (P2): The teacher's personal reflection on teaching.
- 3. Engagement in community-based interactions (P3): The interaction with other members within the same community. 1896
- 4. Studying practice in a way that is connected to, yet removed from, content-specific daily practice (P4): Describing goals or plans for teaching when the teacher is removed from daily classroom practices.
- 5. Consideration and integration of an expert voice (P5): Link with other professional resources;
- 6. Engagement in thoughtful, intentional professional practice over a long term and in sustained ways (P6): Both regular and longitudinal engagement in professional work.

After conducting a study on a science teacher's blogging process, Luehmann found the science teacher invested significant time and energy into her blogging. In addition, the teacher made use of several blog features including using her blog to tell

stories, reflect on her practice, work through dilemmas, and solicit feedback. Results of the study indicated the potential of blogging for teacher development.

Consistent with Luehmann's study, aside from efficient information retrieval, rich content type and ideas exchange, it is suggested that blogs also provide multiple purposes both for personal and for group (Educational Technology Division, Ministry of Education, 2005). On one hand, blogs help the writer to do personal reflection, journaling and online repository; on the other hand, blogs assist community building and collaborative task. Based on these assumptions, blogs enhance both the personal reflective practice and group community building, which are two important aspects of teacher development and will be further explored in the next two sections.

Blogs for Personal Reflective Practice

Concerned with reflective practice, previous literature has suggested a positive correlation between students' learning performance and attitude of learning reflection. The correlation proved that blog service is an effective tool for recording learning attitude as well as performances and referring to others' learning portfolios (Lin & Yuan, 2006). What is more, Tsui et al. (1996) indicated that while little attention was given to the process of teacher learning, not only students but also teachers could benefit from blogging. The research also inferred that although there is no obvious demonstration of teachers' inner personal reactions, teacher's awareness of the complexity of teaching and learning may be enhanced by journaling.

Previous studies also research on the relationship between learners' enthusiasm and blogging. Regarding online journaling offered a unique format which might stimulate learners' enthusiasm and increase both the quality and quantity of learners' output, Gary (2003) conducted a study on the blogging process of preservice teachers and reported both learners and instructors considered blogging as a unique mechanism

to enhance the development of reflectivity. Contrary to Gary's findings, another study conducted by Chan and Ridway (2005) on preservice teacher learners' in Macau concluded that blogging did not help much in the learners' reflective practice.

However, Chan and Ridway acknowledged that the participants were required to keep blog entries. Being unclear about what should be included, most of the participants had reported problems in writing journal weekly. Unfamiliarity with the concept of assessment for learning has been a phenomenon in Macau and may be part of the reasons influencing the learners' use of blogs. Thus, while the study suggested cultural factors should be considered when applying blogs to teacher education, blog service was proved helpful for communication between teacher learners and their tutors.

In addition to preservice teachers, Eekelen, Boshuizen and Vermunt (2005) studied experienced higher education teachers' self regulating process adopting digital diary analysis accompanied with two semi-structured interviews and concluded that teachers' learning process was in a non-linear way. Although the study did not find a fixed pattern of teacher learning, the result suggested that reading electronic diary scould be an effective way to examine teachers' learning process. Therefore, blogging seems to enhance development for both preservice teachers and inservice teachers.

Blogs for Online Communities Building

Except reflectivity, blogging is also considered as a tool for enhancing links among its users. As for teacher development, collaboration with other teachers is as important as individual work and thus gradually teacher support groups are built as a way for teachers to seek for accompany and sharing. Instead of a staff meeting, a teacher support group is a voluntary activity which involves a group of teachers meeting to discuss goals, concerns, problems and experiences. With the evolution of

technology, teacher support groups are not only conducted face to face but also conducted through the internet (Richards, 2005). In other words, online teacher communities have been being gradually built in more recent years.

Tsui, et al. (1996) researched on the effect of a network named "TeleNex" for English teacher development and found the network could raise teachers' awareness of issues related to teaching, initiate cross-school collaboration, build confidence and share reflections with others. Moreover, an analysis of teacher support and development through email discussion communities also suggested features such as wide-range membership and facilitated communication are essential reasons contributing to successful continuing development for their members (Riding, 2001). Furthermore, based on the constructivist theory of learning, which emphasizes on social or situated process of learning as well as personal construction of knowledge, blogging is considered as an effective tool for building online community in which a group of learners can establish relationship and share thoughts.

Loving et al. (2007) reported the importance of blogs for enhancing links among teachers because blogging could fulfill both conceptual and affective purposes. The former helped teachers to share resources and ideas; the later made teacher reflect their own teaching practice. These helped teachers to build rapport with others and each of the two is indispensible in creating online professional communities. With a qualitative case study examining an urban teacher's professional identity development through blogging, Luehmann (2008) proposed the potential of using blogs to encourage identity and develop the professional sense of self as a teacher. With the help of blogs, the participant could construct stories of multifaceted aspects of teaching, support and be supported simultaneously by a professional community that spanned geographical and institutional boundaries, position herself centrally within a larger professional discourse.

As discussed above, previous literature has demonstrated the significance of applying blogs to teacher education. It is known that teachers need ongoing support as they face challenges or difficulties and continue to improve themselves throughout their careers. To conclude, basically, blogs mainly contribute to three aspects of teacher development. First, blogs encourage a teacher's self reflective practice through blogging; second, blogs assist conceptual development through material as well ideas sharing; finally, blogs enhance links among teachers, building online communities which affectively support their members. While the use of blogs for teacher learning seems promising, the potential of blogging to support teacher development is only beginning to be explored and most of the previous research mainly concerns with preservice or novice teachers (Luehmann, 2007). The development of technology has provided new aspects for second language education. However, most of the former research demonstrates how teachers may make use of technology to make teaching more effective and stimulate students' participation instead of the teachers' professional and self development (Hawkins, 2004; Lin & Yuan, 2006; McDonough & McDonough, 1997; Suzuki, 2004). Therefore, more qualitative studies focusing on in-service and experienced teachers are needed to gain deeper insights of incorporating blogging into teacher development.

So far I have reviewed literature related to sociocultural theory, teacher development, and technology. In the next chapter, I will explain the research methodology of the current study.

CHAPTER THREE METHODOLOGY

The present study aimed to investigate how blogs mediated EFL teachers to enhance their professional development. A case study approach was adopted to gain a comprehensive understanding of the participants' blogging process. This chapter begins with an introduction of the study settings and the process of selecting participants for the current research. Then, a description of data collecting process is presented. Finally, I will discuss the methodology for data analysis.

Study Setting

In the past two decades, an increasing number of blogging websites (e.g. *Wretch*, *Yam*, *PIXNET*)¹ has appeared in Taiwan and has gained much attention. Except for some slight differences in the interface, these blogging websites all provide basic functions: providing a virtual space for users to keep electronic blog entries accompanied with photographs, pictures, and videos. Among these blogging websites, "*Wretch*" is one of the most commonly used websites in Taiwan. *Wretch* offers bloggers various functions including electronic albums, online diaries, and message board, etc. After registering an account, everyone can easily be a blogger for free in *Wretch*. However, to gain the full service such as an enlarged space for virtual diaries/albums/message board, bloggers have to be charged for advanced membership (refer to the website for detailed information).

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¹ The URL link of *Wretch*, *Yam*, and PIXNET: *Wretch* http://www.wretch.cc/; *Yam* http://blog.yam.com/; *PIXNET* http://www.pixnet.net/

Up to the data collection, the website has attracted millions of users. A lot of English teachers have launched blogs and recorded their teaching in the websites.

Thus, the current study targeted at the website to recruit potential participants. Figures 3.1 provides an example of the interface of blogs in Wretch.



Figure 3.1 The Interface of Blogs in Wretch

The Recruitment of Participants

To recruit appropriate participants for examining how blogs mediated English teachers development, three main criteria were applied to select the potential participants. First, the host of the blog should be an English teacher regardless the level he/she teaches (e.g. kindergartens, elementary school, high schools, universities, or cram schools). Second, in each of the selected blogs, there should be over fifty entries related to English teaching. According to Chang (2007), "fifty entries" was set as the preliminary selecting criterion of recruitment to ensure that there were enough

entries for analysis and that the bloggers really devoted some time to keeping entries. Following Chang's criterion, I looked for blogs which meet the requirement. Finally, the bloggers must keep blog entries regularly and continuously. Here, "regularly" is defined as regularly posting certain amount of entries each month (e.g. 4 entries a month) and "continuously" refers to continuously posting blogging for a period of time (at least a year). As Baily (1990) noted, regular and candid entries documented in a personal journal are the best way to record teaching experiences. A regular and continuum record of blog entries may help to extensively and completely examine the development of our target bloggers through observing his/her blogging.

According to the three criteria, I searched for qualified blogs in the targeted blogging website, *Wretch*. However, while there were a lot of English teacher blogs, only few met all of our criteria. I contacted with hosts of the blogs, inviting them to participate in the current research. As a result, two English teachers, Wu and Lin were recruited. Both Wu and Lin signed a consent form, being the study participants.

Wu and Lin were both female Taiwanese English teachers. At the time of dada collection, they had been bloggers for four years and were continuing posting blog entries. Table 3.1 shows a brief introduction of the participants' demographic information.

Table 3.1
The Participants' Demographic Information

_	Wu	Lin	
Gender	Female	Female	
Age	Late 20s	Early 30s	
Nationality	Taiwanese	Taiwanese	
Education	A bachelor degree of	A master degree of	
_	Foreign Language	TESOL from Taiwan	
Type of School Taught	Elementary school	Vocational high school	
Teaching Experiences	4 years	9 years	
Years of Blogging	4 years in Wretch	1.5 years in Yam	
		2.5 years in Wretch	

Note: Lin worked for 8 years in formal schools, 1 year in cram schools

Wu: A Descriptive Portfolio

Wu was an elementary English teacher at her late 20s. She held a bachelor degree in foreign language and received training from the Center of Teacher Education when studying in college. As she graduated, Wu started her career as an elementary school teacher and had been teaching for four years.

Originally, Wu did not intend to be a teacher. However, she met an influential teacher who aroused her enthusiasm of teaching. In her freshman year of the college, Wu took a course offered by a professor who made a professional specialty in second language teaching and learning. According to Wu, the professor noticed that Wu had some unique personal characteristics which might make her a good teacher and provided her opportunities to try. During summer and winter vacations the professor invited Wu to take part in English camps held for children in rural and remote areas. Therefore, in addition to simply learning theories from text books, Wu also accumulated a lot of practical experiences.

After graduation, Wu began to teach in an elementary school in northern Taiwan. For Wu, the first year of teaching was really challenging. Wu was assigned to be both

a homeroom teacher in a first-grade class and an English teacher in an affiliated kindergarten of the school. Being a novice teacher, Wu did not exactly know how to handle those kids. She spent a lot of time exploring learning materials to attract her students' attention and make them concentrate in classes. At the same time, Wu began to take advantages of blogs to record teaching resources she found. Wu reported that, in this way, her blog could be a rich and useful reference for her teaching. As time goes by, Wu gradually got more and more familiar with her job. After two years in the school, Wu asked for transferring to another school due to a health problem. For Wu, transferring to another school meant she had to face a new working environment and new challenges. In her blog entries, Wu first expressed her anxiety of teaching in a new school. Nevertheless, Wu later reported she met many kind colleagues who were always willing to help her. Soon, Wu got used to her life at the new school. While sometimes there were still difficulties, with Wu's previous teaching experiences and the help of her colleagues, she continued to enjoy her teaching and serve as a devoted teacher.

Wu's Blog

Before data collection, Wu had kept blogging for four years. She launched a blog in the website, *Wretch*, simply because *Wretch* was the most popular blogging website at the time. Figure 3.2 and 3.3 presents an overview of Wu's blog.



Figure 3.2 Wu's Blog: The Homepage

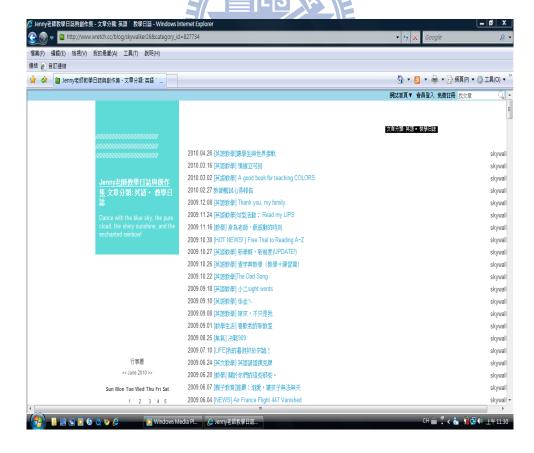


Figure 3.3 Wu's Blog: Entries Related to Teaching

In her previous blogging experiences, Wu took blogs as a tool for recording her daily life and personal feelings. As Figure 3.4 indicates, compared with teachers who simply used blogs for English teaching and learning, Wu's blog included a wider range of topics from teaching, traveling, personal reflection on daily life to music and food. At the time of data collection, there were over 1,400 entries in Wu's blog and Wu continued regularly posting four or five entries related to teaching and learning every month. Among Wu's classifications of her blog entries, three of them especially related to teaching and learning (teaching diaries, pre-service teaching diaries, and lesson plan examples).



Figure 3.4 Wu's Blog: Wu's Classification of Entries

Lin: A Descriptive Portfolio

Lin was a non-native vocational high school English teacher. She held a mater degree in TESOL. Before teaching at the vocational high school, Lin had worked in a cram school and a junior high school. At the time of data collection, Lin has been an English teacher for nine years. After being a teacher, Lin realized that it was important for teachers to constantly enhance their abilities. Thus, she applied for an in-service master program in a college in northern Taiwan and received her master's degree of TESOL in 2008.

Lin majored in foreign language and started her career as a junior high English teacher. Gradually Lin found that she did not enjoy her teaching in junior high school because it always took her a lot of time to manage students' behaviors in class.

Therefore, she decided to prepare for High School Teacher Admission and then was provided an opportunity to work in a vocational high school.

Being a vocational high school teacher was totally different from being a junior high school. At first Lin kept applying many learning activities and games to stimulate students' participation. Soon she realized it did not do much help for senior high students who might need extensive reading and a larger amount of grammar knowledge. Moreover, teaching in a vocational high school was not as easy as Lin thought. The school administrators especially put emphasis on Applied Foreign Language Department and required students of the department to have an annual English performance. Thus, in addition to preparing for classes, English teachers had to invest a lot of time and efforts on assisting students to do the performance. While suffering from pressure, Lin felt that teaching was more enjoyable now than before since she could finally put what she had learned before into practice. She thought she was really delivering knowledge to students instead of doing class management.

Being a teacher, Lin had always wanted to create an English learning website

which involved many interesting learning materials for learners and useful resources for teachers. However, she soon found that it was not an easy job to set and manage a website since she was not quite familiar with the related computer skills. As she learned to use blogs, Lin considered the interface of blogs was convenient as well as friendly for users even if they did not know much about designing a website. As a result, Lin decided to launch a blog to share information concerned with teaching and learning with others.

Lin's Blog

At the time of data collection, Lin has been keeping writing blog entries for over four years. Originally, Lin had a blog in the blogging website, *Yam*. When she studied in the in-service master program, Lin thought blogs might be a fresh and interesting topic for her thesis and decided to conduct research on blogging and English learning. Lin found most of her students preferred the interface of *Wretch* and thus Lin herself also set up an account in *Wretch* and started to keep entries in the website. Lin's blog entries in *Yam* were not accessible. Thus, the current study only includes Lin's entries in *Wretch*. Figure 3.5 and 3.6 present an overview of Lin's blog in *Wretch*.

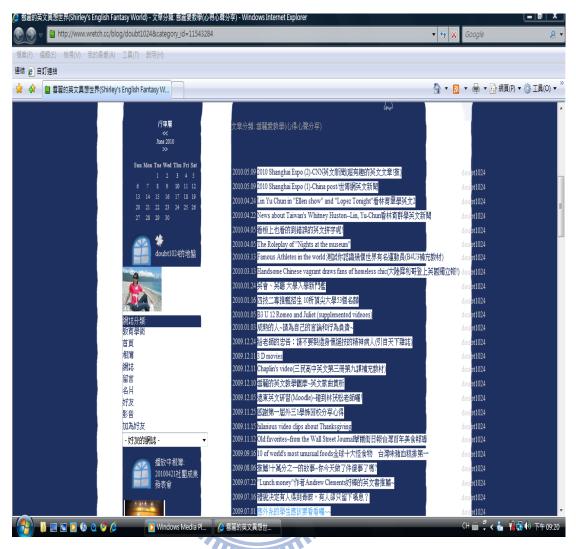


Figure 3.5 Lin's blog: The Home Page and Entries Related to Teaching



Figure 3.6 Lin's Blog: Lin's Classification of Entries

As shown in Figure 3.6, Lin classified her entries into several themes and most of them were related to English teaching and learning. In addition to keeping teaching diaries, Lin provided learning materials, including English writing as well as thesis writing and shared her experiences of participating English speech contests as well as High School Teacher Admission tests. Lin regularly wrote five or six entries related to teaching and learning every month. Totally there were 252 entries in Lin's blog at the time of data collection with 197 of them concerned with teaching and learning.

Data Collection

Data Sources

Borg (2006) indicates that reflective writing, observation, and verbal commentaries are effective ways to study teacher cognition and beliefs. According to Borg, first, reflective writing aims to elicit teachers' perceptions of their experiences and beliefs concerned with language teaching through writing tasks. Second, the goal of observation is to collect real or simulate planning and teaching, and then compared them to stated cognitions. Third, verbal commentary is to elicit verbal commentaries about teachers' beliefs, attitudes, practical theories and related mental constructs through interviews, stimulated recall or think-aloud protocols. To examine the target teachers' development through blogging, the present study adopted Borg's suggestions, collecting data from blog entries, regular online observations and two interviews. In the following, detailed descriptions for each of the data sources in the present study are provided.

Blog Writing

Within each blog, there were electronic entries kept by the bloggers. In the current research, all of the entries in the selected blogs were first collected. After reviewing all of the entries, the parts related to the participants' feelings and reflections of teaching were particularly noted and taken as sources of the teachers' reflective writing.

Online observation

I read the participants' recently posted blog entries on a weekly basis and kept research logs. In my research logs, I recorded every notable phenomena as well as my reflection. Here are some examples shown in my research logs.

When reading entries related to Wu's anxiety of being a teacher, I recorded,

I know there must be a lot of struggles for a beginning teacher and I would like to know what the most challenging thing was for Wu at that time and how she tried to overcome it. Moreover, I am also interested in that during the struggling process, whether keeping blog entries provided her any help or not. If not, why was Wu willing to continuously keep entries? (2009/06/17)

Also, observing Wu's interaction with others on the internet, I wrote in my researcher's log:

Aside from continuing to record her teaching process, Wu also constantly played games with her readers and offered her worksheets as prizes. What inspired Wu to interact with others in this way? (2009/07/14)

In another log, I noted,

Recently, Wu usually expressed her negative feelings. However, at the end of each entry, she always cheered herself up. I am wondering if Wu would consider about others' feelings when reading the entries and thus she purposely presented a positive image. (2009/08/02)

What I recorded in research logs were complied and became the base of interview questions.

Interviews

Two face-to-face interviews with semi-structured questions were conducted for each participant to elicit their commentaries on their blogging experiences. The first interview was mainly with the three goals:

- Gain an in-depth understanding of the participants' subject agency, including their personal background and teaching/learning experiences
- 2. Understand the participants' attitude toward teaching and blogging including the motives encouraged them to keep blog entries as well as their expectations on their blogs and their goals of teaching, etc.
- 3. Clarify specific phenomena uncovered by me during the analysis of the participants' blog writing and recorded in research logs, comparing the

participants' stated cognition of teaching with what I had noted during online observing process (see Appendix B for interview guides).

The second interview was conducted several months later as a follow-up interview to trace if there were any changes of the participants' blogging behaviors and perceptions of blogging. All the interviews were audio taped and later transcribed.

The next section gives an introduction of the exact time arrangement and data collecting procedure.

Data Collecting Procedure

For data collection, I first collected the participants' blog entries and carefully examined their blog writing to gain an initial understanding of the participants. While examining the participants' blog entries, I did weekly online observation and kept a research log. After collecting data from blog writing and online observing, face-to-face interviews were conducted for each participant individually to elicit their verbal commentaries for later analysis. Table 3.2 presents the timeline of data collecting procedure.

As shown in Table 3.2, in both cases, I spent three months to collect and review the participants' blog entries while doing online observation. Then, I conducted the first interview. Originally, I expected to conduct the second interview for each of the two participants two or three months later after the first interview. However, Wu was extremely busy and unavailable in the second half 2009 and thus the second interview for Wu was postponed to March, 2010.

Table 3.2 Data collecting procedure

& I		
Participant/ Data Collection	Wu	Lin
Collection and review of	2009/5-2009/7	2009/12-2010/2
blog entries		
Online observation	2009/5-2009/7	2009/12-2010/2
The 1st Interview	2009/08/19	2010/02/27
The 2ed Interview	2010/03/18	2010/04/19

Data Analysis

Analysis of Blog Entries

The current study took a case study approach and reported two cases of English teachers' blogging experiences to explore how blogs may mediate English teachers' development. To investigate how blogs may mediate English teachers' development, it is essential to examine what the participants wrote about in their blogs.

At first, I examined the participants' blog entries, taking the participants' own classification of entries as a reference and briefly divided the entries into two categories, namely, teaching and learning related as well as daily life related. The step aimed to separate entries concerned with teaching and learning from other entries for later analysis. Specific descriptions of the two categories are provided as the follows.

1. Teaching and Learning Related: The category included all of the entries related to teaching and learning. Teaching diaries, learning resources, skills, and ideas sharing, and demonstration of students' work were all included in the category. For example, while fourteen of Lin's entries were categorized by Lin as "Daily Journal," in the current study, they were regarded as "Teaching and Learning Related" since they are all concerned with events that happened between Lin and

her students.

2. Daily Life Related: The category included special events in the participants' daily life, the participants' life experiences, and their feelings. For instance, an entry concerned with taking pictures with a new camera or an entry describing the experience enjoying delicious food was categorized in the category. In addition, entries in which the participants revealed their thoughts of friendship and love were also included in this category.

Next, to identify which practice the participants engaged in during the blogging process, entries related to teaching and learning were coded according to the six "empirically grounded practices framed by Luehmann (2008), namely, awareness and consideration of personal educational autobiography(P1), engagement in critical inquiry-based reflection(P2), engagement in community-based interactions(P3), studying practice in a way that is connected to, yet removed from, content-specific daily practice(P4), consideration and integration of an expert voice(P5), and engagement in thoughtful, intentional professional practice over a long term and in sustained ways(P6). However, among the six practices, engagement in thoughtful, intentional professional practices over a long term and in sustained ways (P6), which refers to engage in long-term professional and thoughtful work for substantial periods of time and in sustained ways, was suggested to be related to each of the other five practices in blogging. After analyzing an urban teacher's blog, Luehmann (2008) reported that activities in blogging all represented strong examples of long-term engagement in varied types of professional work. In the current study, blogging itself was a long-term and substantial activity for the participants and thus there was no need to set an independent code for P6. Thus, only the other five practices were applied for data analysis for this study.

As Luehmann (2008) suggested, while it was difficult to find direct evidence of the participants' change in blogging, identifying learning practices teachers engaged in offered the evidences of the opportunity for development through blogging. Based on Luehmann's definition, the five practices were operationally defined as the follows (See Appendix C for examples).

- P1. Autobiography: Teachers' own awareness, understanding, and emotions which assist teachers to deal with the discrepancies between their prior beliefs and the professional identity they are seeking to development.
- P2. Inquiry-Based Reflection: Critical examination of the varied tensions of teachers' professional practice. It enhances teachers' understanding of the complexities of teaching.
- P3. Community-Based Interaction: Engage in interactions among the blogger and groups of like-minded people who share certain norms and practice. It can offer the support teachers needed when seeing for development.
- P4. Studying of Practices: Using classroom-based materials such as lesson plans or students' work as the focus of reflection. Luehmann (2008) proposed that it helps to address the tensions of integrating authenticity while maintaining distance.
- *P5. Expert Voice:* Connect and integrate professional work or research-based implications.

Analysis of the Interview Data

In addition to blog entries, the model of activity system developed by Engeström (1987, 1999) was used in this study as an analytical framework to examine the contextual factors underlying the participants' blogging process. As mentioned in Chapter Two, the model consists of six contextual factors, namely, subject, object, mediating artifacts, rules, community and division of labors. All these factors interact

with one another and work together to achieve the final outcome.

One of the main reasons for the present research to apply the expanded model was that the model incorporates various mediational means within the subject and object including cultural artifacts (tools and signs), community, divisions of labor, and rules, adding a stronger focus on the influence of the contexts on the relationship between the subject and the object (see p.11). The model not only examines the individual part of the activity but also consider the communities formed by the collection of people who are working together in the activity and individual actors have their own objects, interacting with the mediating means in their own way. With the widespread Internet and the increasing number of blog users. It seems that bloggers have formed an online community which had its own rules, specific way of interaction and distribution of power relationship. Accordingly, the model is appropriate for the present study to investigate the subjects' relationship with others in the online community.

With elements and assumptions mentioned above, the new model of activity systems helps to present an overall and specific analysis for the interaction of the subjects and contextual factors and thus assist to explore how the interaction influences teacher development through blogging. The following are operational definitions of the six elements and Figure 3.7 demonstrates a summary for the application of activity systems to the current research.

- 1. Subject: In the present study, subjects were the two targeted EFL teachers and their past experiences as well as personal background.
- 2. Object: Object referred to the participants' goals toward their blogs. In other words, objects were the bloggers' expectation on their blogs and what the bloggers would like to provide for their readers as well as what they would like to gain through blogging. For example, some bloggers took their blogs as

- a platform for information sharing and some regarded blogging as a way to reveal personal feelings.
- 3. Mediating artifacts: Mediating artifacts here were the blogs and the language the participants used in blogs. The present study took blogs as a mediating tool to assist teacher development. Thus, issues as what the targeted EFL teachers kept in blog entries and how they presented their blogs were considered when examining their bogs. In addition, in sociocultural theory, language is an important mediating artifact assisting the subject to achieve the goals of revealing feelings or expressing thoughts and different language use has different functions. In the current study, the language used by the participants (e.g. the first language or the second language) was also taken into consideration when analyzing the two teachers' blogging process.
- 4. Rules: Rules were the routines and rules of blogging or of the blogging websites. For example, some websites were mainly designed for video sharing and thus few of their users would write long entries concerned with personal events; others particularly served as a place for bloggers to keep electronic diaries and thus users would record much about daily life and feelings. In addition, certain blogging websites might set limitations for those who own free membership and require their users to pay for full service.
- 5. Communities: Communities meant not only the online communities formed through blogging by those who kept the entries as well as those who read the entries but also the interaction among all the members in the communities.

 Moreover, the interaction could be multi-dimensional. For example, in addition to the writers/ readers relationship in the virtual world, in reality, the readers might be the bloggers' friend, colleagues or even supervisors at the same time. The multi-dimensional relationship might affect the bloggers'

- writing style and content.
- 6. Division of labor: Compared with communities, in addition to interaction, division of labor put more emphasis on the power relationship between the bloggers and other members. For instance, while originally the bloggers absolutely had the power of deciding the topic and contents of their entries, gradually, feedback from members in the community might affect the bloggers choice. In this way, the power had shifted from the bloggers to their readers.

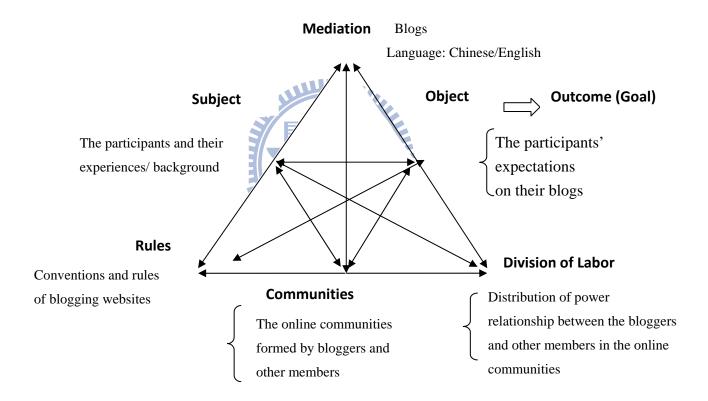


Figure 3.7 The Expanded Activity System

Data Analysis Procedure

The data analysis procedure of the current study includes analysis of the blog entries and analysis of the interview data. The former aims to observe the participants' blogging behaviors and the later intends to explore factors influencing the

participants' blogging process as well as the participants' perceptions of the blogging experiences.

To analyze the participants' blog entries, I first divided the two teachers' blogging process into three stages. The first stage referred to the teachers' first half year of blogging, the last stage was the last year of their blogging, and the second stage referred the periods between the two stages. In this way, I could compare the similarities and differences of Wu's and Lin's blogging behaviors during both the time they started to engaged in blogging and their last year of blogging before data collection. For example, in Lin's case, I arranged entries in her two and half year of blogging into three stages according to the time they were posted:

2007/08-2008/02(the first stage), 2008/03-2009/02(the second stage),

2009/03-2010/02 (the last stage). Since the two teachers had been blogging in *Wretch* for different amount of years at the time of data collection, there is a difference in the number of months at the two teacher's second stage. Table 3.3 demonstrates a summary of how I arranged the participants' entries.

Table 3.3

The Arrangement of the Participants' Blog Entries for Analysis

	Wu	Lin
The First Stage	2005/07-2005/12	2007/08-2008/02
The Second Stage	2006/01-2008/07	2008/03-2009/02
The Last Stage	2008/08-2009/07	2009/03-2010/02

Next, I reviewed all of Wu's and Lin's entries related to teaching and learning, taking a single entry as a unit for analysis and coding it according to the six empirically grounded practices suggested by Luehmann (2008). Then, after the entries had been coded, the frequency of each teacher learning practice was counted. In this way, both the type of the learning practice Wu and Lin engaged in during their

blogging process and their transition of blogging behaviors from the first stage to the last stage were examined. It must be mentioned that keeping a blog entry was a complicated process consisting of various behaviors at the same time. For example, in one of the entries, Lin wrote,

雖然當老師已經不算菜了~但是常常都在反問自己,如何才能當個好老師?……如何才能成功的進行班級經營……如何快樂又充實的上課教學讓學生期待這堂課的到來……這迄今都是我在心中捫心自問的問題……我要分享我在三位學校名師身上學到的最寶貴經驗談……

名師1:王老師

- 1. 態度想法很重要:把學生當自己的小孩,扮演多重角色,老師父母朋友……
- 2. 和學生一同成長……(blog entry, 2007/09/12)

While I am not a novice teacher now, I still constantly ask myself, "How to be a good teacher?"...How to achieve successful classroom management?....How to make my teaching both enjoyable and substantial so that the students will look forward to my class every week...Until now, what mentioned above are all unsolved questions in my mind...I would like to share the valuable experiences I have learned from three admirable teachers...

Teacher 1: Teacher Wang

- 1. Attitude and thoughts are extremely important: Take your students as your own sons/daughters, playing multiple roles while you are teaching(a teacher/parent/friend)...
- 2. Learn with your students...(blog entry, 2007/09/12)

The above entry includes both Lin's reflection as well as idea sharing with others. Thus, in the current study, it would be coded as P2, Inquiry-Based Reflection and P3, Community-Based Interaction (P2x1; P3x1). Since a single entry might be related to more than one practice, as a result, the sum of frequency of the practices at each stage was unlikely to appear as 100%.

It should be noted that, while Lin's 197 entries were all coded, I did not code all of Wu's entries due to the large amount of data. I also coded all of the entries in both Wu's first stage and last stage of blogging. However, for Wu's second stage, I coded entries in the odd-numbered months.

In addition, to analyze the interview data, I first compiled the data and transcribed the interviews. Next, I read through the transcription and to review for general impressions of the participants' thoughts of the blogging experiences. Then, I read the data again and marked phrases connected to the ideas of the six factors in activity systems. For segments which were hard to classify, I highlighted the segments and wrote comments. Finally, I made an effort to code the data according to the six elements in the expanded activity systems.

Trustworthiness of Research

To ensure the trustworthiness, the current study adopted strategies including triangulation and member checking. First, to gain multiple views of the targeted EFL teachers' blogging experiences, multiple data sources (e.g. online observation, dairy analysis, interviews) were employed to present multiple viewpoints and establish triangulation. Second, for member checking, the researcher sent the interview transcripts to the participants, inviting them to read the transcripts and make sure the transcripts were recorded accurately.

So far I have explained the methodology I applied and how I analyzed data in the current study. In Chapter 4, the results of my data analysis are presented. In addition to exploring the learning practices the targeted English teachers engaged in, an activity system framework created for each of the two teachers is provided to illustrate the interaction among different elements of the system within the participants' blogging process.

CHAPTER FOUR RESULTS

The chapter provides an inclusive picture of the two Taiwanese teachers' blogging experiences. At first I report personal background as well as experiences of the two teachers and provide a brief introduction of their blogs. Then, how the contextual factors intertwined with one another in the two teachers' blogging process and how the two teachers perceived the blogging experiences are presented.

Case One: Wu

Motivation for Wu to Start Blogging

Having been an elementary English teacher for four years in northern Taiwan, Wu's ultimate goal of teaching was to make each of her students enjoy learning and enhance language ability from her classes. Wu found that while many elementary students in Taiwan were sent to learn English in cram schools, still some were not. Teaching a class consisting of 30-40 students with various proficiency levels could be a tough task for elementary English teachers. Wu did not expect the students to pick up everything she taught in class, but she hoped that they could all gain some new knowledge after a class session.

In her class, Wu integrated creative ideas including games, sketchbooks and role plays into teaching. During her first two years of teaching, Wu was always working hard to search for appropriate teaching skills and learning materials. Gradually, Wu realized that being a teacher was a tough job which required investment of time and effort to search resources and plan lessons. She considered that if she could make a record of the teaching resources, it would save her a large amount of time. Therefore, Wu started to write blog entries concerned with English teaching and learning as

references for future teaching.

Wu's Blogging Process

Wu started to keep blog entries since her first year of teaching. At the time of data collection, Wu had been blogging for four years. Wu's blog entries were written in Chinese. In addition to texts, Wu also added pictures and uploaded videos to help her both clearly present her ideas and share students' work with others. In her blog, Wu noted the ideas she used during her teaching process and materials she found from others' blogs. Wu not only recorded those resources but also constantly tried to revise them to make more effective teaching.

Up to the end of the data collection time, Wu's blog included over 1,400 entries with various topics. I divided all of Wu's entries into two main categories, Teaching and Learning Related as well as Daily Life Related. Table 4.1 shows the categories and the frequency of entries in Wu's blog.

Table 4.1

Categories and Frequency of Entries in Wu's Blog

Categories	Wu's Classifications of Entries	Number of	Subtotal
		Entries	
Teaching and Learning	Teaching Diaries	354	
Related	Pre-Service Teaching Diaries	62	422
	Lesson Plan Examples	6	
Daily Life Related	Daily Journals	304	
	Feelings	274	
	Friendship/Love	285	992
	Food &Traveling	118	
	Music &Drama	11	
Total			1,414

As shown in Table 4.1, there are 422 entries related to teaching and learning in Wu's blog. However, among the 422 entries, except for Pre-Service Teaching Diaries and Lesson Plan Examples which were not opened to the public, only 354 entries in Teaching Diaries are accessible. Teaching Diaries was the one Wu especially put emphasis on and regularly added four to five entries to the category every month. In Teacher Diaries, in addition to recording teaching skills/materials and special events that happened in teaching process, Wu also posted entries related to her feelings as well as attitude toward both teaching and her students. For instance, in her blog, Wu confessed that the first two years as an elementary teacher were extremely hard and tiring. It was her first full time job and she had to learn to adapt to the conventions of the working environments. Nevertheless, as Wu recollected memories of those days, she felt thankful and considered the experience fruitful and valuable. She wrote in the entry titled "The Hardest Two Years; the Most Fruitful Harvests "(最辛苦的兩年,最 甜美的收穫),

我常覺得,開始教書的頭兩年,真的是非常辛苦的……現在回首,真不知道自己是怎麼熬過來的……謝謝之前的學校,謝謝我的孩子們給我這個機會與他們一起學習,謝謝可愛的家長們全力的支持……我想因為這樣,我會更肯定自己……我想我要加把勁,在新的學校努力……(blog entry, 2007/09/12) I always feel that my first two years of teaching were really exhausting…every time when I tried to turn back to review those days, I did not know how I overcame all of the suffering and struggling events…I appreciate the school. I appreciate my students who provided me the opportunity to learn with them. I appreciated the support from my students' parents……Thanks to the experience, I am more confident in myself… I think I have to continue to work hard in the current school…(blog entry, 2007/09/12)

Also, once Wu described her frustration of teaching the first graders,

沒有想到,一年級的英文課的challenge這樣大,當我發現,我有滿肚子的理想,想給孩子很多不同、好玩的課程,卻發現怎麼塞也塞不進去課程。因為我上課得不斷得提醒恍神的孩子,得管秩序……我真正能上到課的時間也或許只有25分鐘不到……一陣陣無力感無奈感襲上心頭……我是該花些時間調整自己的心態了,告訴自己slow down……"(blog entry, 2008/09/23)

I have never thought that teaching the first-graders English is such a challenging thing. I was ambitious and had many expectations on my classes. I would like to provide my students a lot of interesting materials and made them learn happily. However, I have to spend so much time managing students' behavior...there is little time, about only 25 minutes, left for the class...I feel disappointed and frustrated...maybe I should remind myself to change my attitude and slow down my step...(blog entry, 2008/09/23)

In the entry, Wu not only revealed her feelings of being frustrated but also tried to comfort herself as well as adjust her attitude.

Wu's blog has attracted over 400,000 blog hits. According to Wu, many of her readers were also bloggers working as English teachers. Wu and these teachers linked their blogs with others' so that it was convenient for them to visit each other's blogs and share thoughts. As a result, there seemed to be a network of teacher bloggers (see Figure 4.1). Wu reported that whenever she mentioned some problems or difficulties in the entries, others on the Internet would provide her a lot of suggestions and exchange ideas with her. Wu mentioned that once she was extremely discouraged because of misunderstanding between her and her students' parents. Many people left messages in her blog to cheer her up and shared their own experiences with her. After reading the feedbacks, Wu reported that she felt inspired and refreshed.



Figure 4.1 The Network of Teacher Bloggers

Being thankful to those who supported her on the Internet, Wu attempted to find ways to build a closer relationship between her and others in the online community. On certain special dates such as Wu's birthday, she would play games with her readers. That is, the first ten replying to the assigned entry would get Wu's worksheets as presents. Every time the worksheet Wu provided was concerned with different topics ranging from phonics to short English stories. The worksheets were all designed by Wu and had been applied in her classes. Wu reported that not only herself but also her readers enjoyed the games very much. Thus, the assigned entries always received much more responses than usual.

Types of Learning Practices in Wu's Blogging Process

The 354 entries in Teacher Diaries were coded according to empirically grounded practices recognized by Darling-Hammond and Hammerness (2005).

Table 4.2 presents the type of learning practices Wu engaged in during her four-year blogging. As mentioned in Chapter Three, I coded all of the entries of both Wu' first and last stage of blogging. For the second stage, I coded entries of the odd month. In addition, the second stage was divided into two periods so that I could get a more specific understanding of Wu's transition of blogging behaviors during the process.

Table 4.2

Types of Learning Practices in Wu's Blogging Process

71 0	The First Stage	The Second Stage	The Third Stage
	3/ 3		
Time	2005/07-	2006/01-	2008/08-
(Year/Month)	2005/12	2008/07	2009/07
P1	33	1896 38	11
Auto-Biography	(62%)	(34%)	(17%)
P2	21	15	9
Critical Inquiry	(40%)	(14%)	(14%)
P3	13	81	49
Community Interaction	(25%)	(77%)	(77%)
P4	27	15	14
Study of Practice	(51%)	(14%)	(22%)
P5	4	15	8
Expert Voice	(8%)	(14%)	(13%)
Total Number of	53	107	64
Entries			
(Total:224 entries)			

Note: (n%) refers to the percentage of entries concerning with the learning practice at each stage, the frequency of each category is divided with the sum of the entries in the specific stage.

As shown in Table 4.2, P1, autobiography, occurres most at Wu's first stage of

blogging. Compared with P3 (0.25) and P5 (0.08), P1 (0.62), P2 (0.40), and P4 (0.51) seemed to play more significant roles at that time. Wu's first stage of blogging was exactly the time she started to work as a teacher. She shared much about her emotions and attitude toward teaching (P1) accompanied with descriptions of her goals as well as actions for future teaching (P4). In addition, she also explored her behaviors in class and identified the strengths and weaknesses (P2).

However, at the second stage, P3 (0.73) ranked first among the five practices. The frequency of posts of P1 (0.34), P2 (0.14) and P4 (0.17) drop and continued to decrease in the following two stages. Examining the contents of Wu's entries at the second stage, it is clear that, compared with the first stage, Wu kept much more entries related to teaching skills and materials. She also timely asked for suggestions or posted information on workshops and invited others to join the workshops with her. In other words, the type of teacher learning practices Wu engaged in has turned from expressing feelings and beliefs of a novice teacher to sharing teaching resources and interacting with others in the online community.

Factors Influencing Wu's Blogging

The following is a discussion on factors influencing Wu's blogging. I first examine the relationship among subject, mediation and object as well as the way online communities shape Wu's blogging process. Then, how rules and division of labors affect Wu's blogging process is presented.

Subject and Object

To understand the motives and expectations encouraging individuals to engage in the activity, it is important to examine the subject's individual historical and educational background. Being an English teacher, Wu reported that she always hoped that she could assist every student to gain new knowledge after a class session and make them enjoy the learning process. However, Wu's past teaching experiences in the summer/winter camps while she was a college student and later a teacher in elementary schools made her realize that it was crucial but challenging for English teachers to constantly design various learning activities to encourage students' participation, especially when her students were with different proficiency levels. As she stated in an interview.

Either during the summer/winter camps or at school, a teacher has to face a lot of students at the same time. Some of them may have learned English for a long time and some have totally no ideas of the language...it is really a tough job. I have to constantly find appropriate learning materials for different students...(the 1st interview, 2009/08/19).

Thus, initially what motivating Wu to start keeping entries related to English teaching was the intention to record her ideas of teaching. Wu considered that noting down the used teaching ideas and materials could help her build a personal teaching portfolio. It might not only save her a lot of time to search for teaching resources but also stimulate her ideas for better teaching in the future. Wu's blogs, thus, was built with a hope to serve as a tool to record her professional sources.

In addition to her past experiences, Wu's personal characteristics had a significant impact on how she presented her blog and the contents of her entries. As she described herself, Wu was a bright, sensitive and broad-minded person who wanted to enjoy everything in her life. Due to the personalities, in addition to English teaching, she included various topics in her blog such as food, traveling and any other interesting events in her daily life. As a blogger, Wu reported that she would like to demonstrate a funny and fascinating style. In addition to sharing a lot of admiring pictures and interesting videos, she also tried to write things in a humorous way. For

instance, after the winter vacation on the very first day of school, one of the fluorescent lights was broken. It suddenly blew up and made a noisy sound. While being shocked, in the blog, Wu described the accident as a "bombing start" for the new semester which would take away the bad luck from her and her students. Moreover, noticing that many parents were too busy to care about their children's schoolwork, as Wu mentioned her wishes of the new semester in blogs, she wrote, "希望接下來的一個學期能很順利,學生乖乖,家長記得簽名(笑)。(I hope that everything will go smoothly in the new semester. Not only my students will behave themselves but also their parents will remember to sign on their workbooks ⑤)"(blog entry, 2010/02/22).

Furthermore, being a teacher is not easy and once in a while it may be frustrating. In Wu's blog, there were many entries describing disappointing events that happened in her teaching. While Wu expressed depressed feelings in these entries, at the end of each entry she always ended with a positive attitude and cheered herself up. In an interview, Wu mentioned that,

Although my job is sometimes exhausting, it did not come easy. It is my choice to be a teacher and I have worked hard to achieve the goal. I will never easily give up. While the thing could be extremely disappointed, trying to take it in an easy attitude is the first but important step to solve the problem... (the 1st interview, 2009/08/19).

Wu knew clearly that, no matter how discouraging the thing was and no matter to what extent she wanted to give up, she would never really dropped from her job. Due to the personalities, instead of trapping herself in setbacks, Wu would rather think positively.

Mediation

In the present study, mediation refers to blogs and languages the two teachers chose to use in their blogs. In Wu's case, mediation has a close relationship with both the participants' objects and the subject agency.

For the object, initially, Wu's goal of blogging was to make a record for her teaching. To achieve the goal, Wu recorded teaching ideas and her teaching process in blogs. Thus, at Wu's first stage of blogging, there were many entries concerning with her emotional sharing (P1) and reflections on classroom based materials she had used (P4). For the connection of blogging and the subject agency, in addition to writing about her reflections of applying certain teaching skills in class, Wu also express her feelings of teaching when feeling either frustrated or delighted. She reported that expressing feeling in her blog was helpful for her to reorganize her thought. Not only did rewriting frustrating things provide her opportunities to express her negative emotion but also noting down something delighting made her feel encouraged. Both the processes contributed to refreshing her ideas. Wu mentioned that when she was a novice teacher, she was usually restless and anxious. At that time, writing blog entries offered her an opportunity to release her pressure, examine her teaching and plan her future actions of teaching. This explained why many of the entries in Wu's first-year blogging process were concerned with emotion sharing (P1), reflection (P2) and self-directing (P4).

During Wu's blogging experience, aside from the topics Wu selected for her entries to fulfill her expectations on her blog, language also played a critical role which mediated the process of revealing thoughts through writing. While being an English teacher, Wu chose to use Chinese, which was her first language, to write blog entries. In the interview, she reported that using her mother tongue made her feel more comfortable when expressing ideas. It is hard to exactly describe the complicated

human emotions and Wu regarded her blog as personal, not for academic purpose. As she remarked in the interview.

Originally I simply intended to make use of a blog to collect my ideas of teaching. Chinese is more effective for me to do the recording...Chinese makes it easier to express my feelings and I think it also enhances the readers' reading. (the 1st interview, 2009/08/19).

Thus, she considered the first language would be more convenient than the second language to help her formulate and express ideas. Also, most users of the blogging website were Taiwanese who were used to reading and writing in Chinese. Therefore, Wu regarded Chinese as the most effective language facilitating her interaction with others.

The Interaction of the Online Community with Other Factors

Originally, Wu kept blog entries due to the intention of collecting useful resources for future teaching as well as recording her teaching practice. According to Wu, after years of blogging, the interaction with members of the online community gradually became one of the main motives encouraging her to continuously write blog entries. In her blogs, Wu confessed that the impact of members in the online blogging community was significant on her blogging and the online community provided her a lot of support. On the one hand, an increasing number of readers gradually influenced her blogging in terms of topic choice and writing style. On the other hand, support and suggestions from the community not only assisted her to face challenges and difficulties in teaching but also encouraged her to continue working as a productive blogger. Therefore, during Wu's four-year blogging experiences, P3, community interaction, had occurred most among the six learning practices suggested by Darling-Hammond and Hammerness (2005) for the last three years. In the following, I

will discuss about the interaction of the online community with mediation, object, and subject separately.

Community and Mediation

Interaction with members of the online blogging community gradually influenced Wu's choice of topics and writing styles of her blog entries. Originally, for personal recording, Wu freely wrote everything related to teaching. She simply noted several key words when concerned with certain teaching skills or materials. However, Wu found that there were more and more people reading her entries and most of them were English teachers who tried to search for handy and helpful resources for teaching. Thus, she began to post entries related to useful teaching resources much more frequently than before. As Wu reported,

Since I start to write entries related to materials and skills of English teaching, I find the blog hits of my blog began to increase. There are English teachers responding to my entries. They tell me they like my sharing and would like to try them out in their classes...(the 1st interview, 2009/08/19).

Furthermore, to have her readers clearly understand how she made use of the ideas she presented, Wu did her best to describe every material or idea as in detail as possible. Instead of only noting the keywords, Wu exactly and carefully showed each step to her readers. For example, in one of the entries in Wu's first year blogging, she mentioned several games for learning English and described the games in a very simple way,

- 1. 發給學生卡片。
- 2. 請他們去尋找爸媽 -- capital letters 或小孩--little letters。
- 3. 引導他們使用 Do you have a/b/c/...的句型。(blog entry, 2006/03/13)

- 1. Give students the cards
- 2. Ask them to find the parents --capital letters or the children--little letters.
- 3. Guide them to use the sentence pattern: Do you have a/b/c/...? (blog entry, 2006/03/13)

Two years later, in another entry, Wu also suggested a learning activity for English speaking. However, this time Wu provided much detail of the game including specific steps of its procedure as well as what teachers had to do during the game. Moreover, Wu clearly told the goals of the game and how the game could enhance students' ability. Thus, it seemed that Wu had turned from simply recording key points for her own reference to trying to introduce the games to her readers. As shown in the following example,

第四課是 could you please...,單字有 open, pick up......。

- 1. 首先,把單字寫在黑板上,但不解釋意思。(要學生自己去發掘)
- 2. 再來,請學生說出(並拼出)他們知道的動詞, ex: jump, cook
- 3. 接下來,老師使用孩子列舉的一些動詞,放進句子裡,帶孩子熟悉 could 的發音,鼓勵孩子任選一個動詞詢問老師.....
- 4. 老師可根據狀況,回答 sure/sorry,若回答 sure,則必須真的做出那個動作(老師動作越誇張越好,孩子會很樂),若無法做,就回答 sorry......
- 5. 接著,老師秀出新字字卡,換老師詢問同學 Could you please...(新經驗連結舊經驗)
- 6. 經過這樣的練習,學生印象都很深刻了。(可以的話,老師可再把該如何 回答的句子寫在黑板上,加深學生印象)

這樣的方式也許比較花時間,但孩子是主動去發掘單字及句子的意思,同時為了達成要「讓老師為他們做某件事的目的」而去使用英文。(等於在不知不覺中,孩子已經被你引導去思考,去開口說英文了)(blog entry, 2008/11/21)

The sentence pattern of Lesson 4 is "could you please..."

Vocabularies include "open", "pick up"...

1. First, write the vocabularies on the board without explaining the meanings. (Make students to explore the meanings by themselves.)

- 2. Then, invite students to tell (and spell) any verbs they have learned, e.g. jump, cook.
- 3. Next, use some of the verbs named by students to make sentences and lead students to get familiar with the pronunciation of "could." Encourage students to choose any of the verbs, making a sentence and ask the teacher to act out the verb.
- 4. Depending on the real situation, the teacher may respond with "sure" or "sorry." When saying "sure," the teacher has to act out the verb. (Act as dramatically as possible so that students would be attracted and enjoy the process.)
- 5. After that, show students cards of the new vocabularies. It is the teacher's turn to ask students "Could you please...?" (Connect the past learning experience to a new learning experience.)
- 6. The students may have been familiar with the sentence pattern after practicing through this activity. (If possible, write sentence patterns of how to respond to the requirement on the board to enhance students' impression).

While it takes much more time, students are actively exploring meanings of the vocabularies and sentences. At the same time, students use English to achieve the goal of "asking the teacher to do something for them." (In this way, unconsciously, students are guided to think and talk in English.) (blog entry, 2008/11/21)

Community and Object

The blogging community not only influenced the contents and writing styles in Wu's blog but also made Wu shifted her expectation of her blog from simply recording to both recording and sharing. Wu explained that, as soon as she learned about blogging, she noted that there were a lot of generous bloggers who shared with others rich information on teaching and learning. She usually explored these blogs and learned much from them. Wu admired those generous teachers and decided to pass the favor. She thought that the widespread application of the Internet had built a network in which people should help each other.

The idea was also the reason inspiring Wu to share worksheets with her readers.

She realized that worksheets were especially necessary for English teachers but it was not easy to find an effective worksheet. After downloading worksheets from the Internet, teachers always had to compile and do a lot of revision to make them fit into their teaching needs. What was worse, some websites even required a membership and payment in advance for downloading any teaching resources. Therefore, Wu considered it helpful if she provided her worksheets to others as free resources. Additionally, Wu would like to make the sharing interesting. Thus, she played games with her readers and gave them the worksheets as prizes. In this way, Wu could both share information and enhance her interaction with others.

Community and Subject

Aside from the impact on contents and writing styles, support and suggestions from members in the online community also played critical roles in Wu's blogging process. Being a teacher, she faced different challenges unavoidably and constantly. Wu reported the feeling of consulting with colleagues was different from receiving feedback from others on the Internet. After realizing the problem which Wu was trying to deal with, her colleagues could not come up with appropriate solutions immediately. However, with the asynchronous computer-mediated communicating tool, blog, others had more time to think about the issue before they decided to provide suggestions. Thus, while feedback both from her colleagues and from others on the Internet were important support for Wu, she confessed that sometimes the later were more helpful. In addition, Wu described the feeling was extremely cheerful and encouraging when realizing someone on the Internet tried so hard to comfort her or help her overcome the difficulties even though she/he was not familiar with her. As Wu reported in an interview,

While I have many nice colleagues, I still need support from those who are not related with my working environments. Thus, I think it is good to have a blog. In blogs I may often happy to find someone leaving me messages and encouraging me even if they did not know me before. Their suggestions are usually helpful and inspiring. After reading their words, I would try to reconsider about my teaching (the 1st interview, 2009/08/19).

However, it should be noted that Wu confessed that she would never tell her colleagues and students about her blog because she thought it might hinder her from expressing true and inner feelings. She said,

Many of my entries are concerned with my personal feelings. For me, my blog seems to be a place to release pressure and negative emotions of teaching. I do not want my entries to be read by anyone related to my working place or I will feel uncomfortable and cannot express my ideas freely...I am willing to share teaching materials with my colleagues. For my colleagues, my students, and my students' parents, I have launched another blog which only includes teaching skills and resources... (the 1st interview, 2009/08/19).

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For Wu, the process of blogging in the virtual world was similar to the process of completing any tasks in real life which needed patience and encouragement. From the very beginning, she was ambitious and expected herself to keep an entry every day. As a result, she found she did not have so much time to do the recording and decided to just keep several entries a month. During the four-year blogging process, once in a while Wu might feel lazy and want to take a rest from keeping blog entries for a while. However, thinking of the support she received from the community, Wu always decided to continue keeping blog entries. Every time when Wu returned to the blogging community and found others providing inspiring feedback for her lately post, she would be refreshed and would like to be more engaged in both blogging and teaching. In an interview, Wu stated,

It is hard to describe the feelings of blogging. Sometimes it is tiring. I have to type the words. I have to upload the pictures as well as videos. However, after stopping posting entries for a period of time, I would think that I cannot go on with that and must back to the blogging community. There are people who help me a lot in the on line community. I have to keep my connection with them and I also would like to do whatever I can do to help others through blogging.... (the 2^{nd} interview, 2010/03/18)

Rules and Division of Labors

In the present study, rules refer to the conventions and regulations of the blogging websites. Basically, *Wretch*, did not especially set any regulations set for bloggers except for requiring its users to show respect to one another in the online community. In *Wretch*, bloggers could launch a blog and start blogging for free. However, *Wretch* provided limited services for those who owned free membership. For example, there were limited space for the blogger to upload photos and limited space for the message board. To gain the full service, the users had to pay for an advanced membership. According to Wu, due to the increasing number of readers, many of Wu's readers told her that there was not enough space for them to leave a message in Wu's blog. While Wu reported that it was really inconvenient, to keep the interaction with others in the community, she still decided to make the payment.

Division of labors refers to the distribution of power relationship between the bloggers and other members in the online community. Originally Wu simply recorded for her own reference and thus she freely wrote down what she regarded important in her blog. However, when more and more people visited her blog, Wu began to care about her readers' need when choosing the topics. Thus, while Wu still held the power of deciding the topics of her entries, her readers began to share part of the power with her and were able to affect Wu's writing.

A Summary of Wu's case

In case one, Wu's blogging was examined by the framework of activity systems. The results show that, while all of the six factors intertwined during Wu's blogging process, four of them, namely, subject, object, mediation, and community were especially influential.

For the relationship between the subject and the object, due to Wu's personal background and past experiences of teaching, she launched a blog for recording her teaching process as a reference for her future teaching. In her blog, the mediated artifact of this study, Wu not only wrote entries related to teaching resources but also revealed her feelings and reflections of teaching. Also, she chose to write in Chinese. Compared with English, Chinese assisted her to express her thoughts more freely and comfortably.

Gradually, with the increasing number of readers, community intertwined with other factors and significantly impacted Wu's blogging. First, Wu's object of blogging shifted from recording to both recording and sharing and interacting with others. In addition, in her blog, Wu's choice of topics of entries and writing style were affected by her readers' needs. Moreover, at the same time, support and suggestions from others in the community encouraged Wu to keep working hard as a blogger and as a teacher. Figure 4.2 presents a summary of the relationship between Wu's blogging process and the six factors.

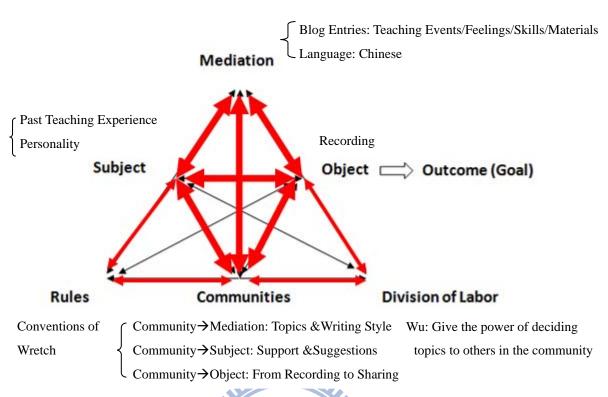


Figure 4.2 Factors Influencing Wu's Operation of Blogging

Wu's Perceptions of Blogging

Wu perceived a blog as an effective tool functioning to facilitate the process of reflecting, expressing thoughts, and reorganizing ideas. First, for reflection, Wu mentioned that when she was recording her teaching process, the scene seemed reappeared and it helped her examine the problem of her teaching. Next, the characteristics of blogs provided Wu a chance to express her opinions. Wu reported that she had participated in many workshops held for English teachers in Taiwan. For Wu, some workshops were admiring while some were disappointing. Thus, blogging became a way for her to present her thoughts. According to Wu, in this way, she could express her thoughts to others without being harsh and challenging the speaker face to face no matter how she felt unsatisfied. As she said,

In workshops, some speakers are excellent, but some really disappointing. I am

not the kind of aggressive person who would raise his/her hand and challenge the speaker face to face. Thus, my blog turns to be a place for me to show others my opinions. This is good. Before writing down my ideas, I have to compile the information I received in the workshops along with my reflections. It seems to be an opportunity for me to reconsider about the issue... (the 1st interview, 2009/08/19).

Finally, Wu considered blogging as a helpful way to reorganize ideas. Once, one of Wu's students was terribly sick. Wu was extremely worried about the student, but she did not know what she could do. Wu recorded the whole thing in her blog entries. According to Wu, she was at first restless and anxious, but when writing the event down, she felt calm and peaceful. Her thoughts turned to be clearer and she tried to figure out possible ways to help the student and his parents.

Moreover, in addition to the three main functions of blogs mentioned above, Wu regarded blogging was flexible as well as interesting and she enjoyed the process very much. When Wu served as a pre-service teacher, she was required to keep teaching diaries every month. Compared with the traditional paper and pen teaching diaries, Wu could select the topics and the way she would like to present her entries more freely. Also, Wu regarded blogging an appealing process since she could be creative and add pictures as well as videos in her entries.

To conclude, while at first Wu did not especially regarded blogs as a tool for teacher development. As mentioned above, during the blogging process, Wu found many advantages of blogs which facilitated her teaching and helped her work toward a better teacher. She held an extremely positive attitude toward the blogging experiences and even suggested all teachers to start to join the community of bloggers.

Case Two: Lin

Motivation for Lin to Start Blogging

Recalling her learning experiences, Lin mentioned that she met various excellent teachers who had great impacts on her attitude toward teaching. In her senior high school years, Lin had an informative English teacher who always introduced interesting and useful knowledge of the language to students. The teacher not only inspired Lin to take English teaching as a lifelong career but also influenced her teaching beliefs. Moreover, while studying in her in-serve master program, Lin found the professors were extremely good at leading students to do critical thinking. Due to these experiences, Lin would like to follow the example of her teachers, helping her students not only learn useful information of the target language but also be creative and enjoy learning. Being a vocational high school English teacher, Lin was willing to try different ways of teaching in class.

Additionally, while she was preparing for High School Teacher Admission Tests, Lin realized that it was essential for teachers to constantly improve themselves. Lin reported that, in her view, exchanging and sharing was especially important for teachers to enhance their teaching skills. Having applying various ways of teaching and been experienced in High School Teacher Admission Tests, Lin considered it would be beneficial for both herself and other teachers to find a place for her to compile her teaching materials, share experiences and exchange ideas with others. Thus, Lin decided to launch a blog which included rich resources and information for both teachers and learners.

Lin's Blogging Process

Lin has been keeping writing blog entries for over four years at the time of data

collection. As mentioned in Chapter Three, Lin at first had a blog in the blogging website, *Yam*. She spent one and half year blogging in *Yam*. Then she moved to *Wretch* and continued blogging for two and half years. However, Lin's blog entries in *Yam* were not accessible and thus only her entries in *Wretch* were analyzed in the present research.

Lin mainly wrote her blog entries in Chinese but sometimes in English. While she reported that she did not especially pay attention to the number of entries and just post an entry whenever she felt like doing it, on average, Lin regularly posted five to six entries per month. As shown in Table 4.3, at the time of data collection there were 197 entries related to teaching and learning in Lin's blog. It should be noted that fourteen entries in "Daily Journals" were concerned with teaching and thus I categorized them as "Teaching and Learning Related."

Table 4.3

Categories and Frequency of Entries in Lin's Blog

Categories	Lin's Classifications of Entries	Number of	Subtotal
		Entries	
Teaching and	Feeling of teaching	72	197
Learning			
Related	Class Diaries	31	
	Translation	24	
	English/Thesis Writing	27	
	Experiences Sharing (English Speaking	24	
	contests, Teacher Admission Tests)		
	Students' Feedback	5	
	Daily Journals	14	
Daily Life	Daily Journals	46	55
Related	Traveling	4	
	Cosmetology	5	
Total	1896		252

In her blog, in addition to sharing her experiences of participating English speech contests as well as High School Teacher Admission tests, Lin provided a lot of resources for learning including English writing, thesis writing, and translation.

Moreover, in "Class Diaries," Lin made records of special events for her students. Lin reported that students would be excited when seeing their photos in her entries and provided feedbacks to her. She considered it was a good way to connect her with students. Lin also wrote about her reflections of teaching, expressed her opinions on educational issues and even expressing her feelings to her students. She classified the related entries as "Feelings of Teaching." For example, once, Lin noticed that many students posted blog entries which aimed to criticize their teachers. She felt frustrated

and wrote in her blog,

blog 的興起讓大家暢所欲言,可是不像自己的日記,網路是開放的空間,每個人都可能看到,罵的情緒也許是一時的,可是對當事人的傷害卻是永久或要很久時間才能弭平的......我知道我沒有很完美~可是我至少每天教英文備課出考卷都很努力盡力......老師本來就不是來讓學生愛的.....發洩情緒無妨~可是不要傷害到別人......如果真的要寫在網路上,至少上鎖加密,不要傷了你身邊的人的心......(blog entry, 2010/02/03).

The development of blogs provides us a way to express ideas freely. However, unlike personal diaries, Internet is public accessible and everyone can read entries in your blog. Your negative emotions may simply last for a short time, but for those who are offended by your mean words, it took them quite a long time to recover from the frustrated feeling...I know I am not perfect. However, I tried hard to prepare for classes...teachers are not born to be loved by students. It is okay to find a way out when you feel bad. But never try to hurt others...if you really want to write those offensive words on the Internet, set passwords and lock the entry. Don't break other people's hearts, especially those who care about you... (blog entry, 2010/02/03).

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Before data collection, Lin's blog had attracted over 4,500 blog hits. Lin confessed that being busy preparing teaching materials left her little time for blogging and she considered herself not a responsible blogger who spent a lot of time blogging. Thus, Lin was surprised to know that there were still some people constantly reading her blog and providing her feedback. As a result, others' feedback and support gradually became one of the main motives for her to continue posting blog entries. As she reported in the interview,

Some people may provide me feedback in my blog. I don't know who they are. We did not know each other. Nevertheless, they still visit my blog and give me suggestions. I think they are also English teachers...This is a good thing. I can communicate and exchange ideas with others through my blog. Support from others turned to be a power inspiring me to keeping writing blog entries (the 1st interview, 2010/02/27).

Types of Learning Practices in Lin's Blogging Process

Table 4.4 indicates the type of teacher learning practices Lin engaged in during her blogging process. As Table 4.4 presents, it is clear that during Lin's blogging process, P3, Community Interaction, ranked first in frequency of post, followed by P1, Autobiography. In line with what Lin reported in the interview, her blogs was originally built for information sharing and ideas exchanging. Thus, Lin had especially put emphasis on interaction with others in the online community (P3). Compared with other four practices, it played a much more significant role in Lin's blogging process.

Table 4.4

Types of Learning Practices in Lin's Blogging Process

	The First Stage	The Second Stage	The Third Stage
Time	2007/08-	2008/03-	2009/03-
(Year/Month)	2008/02	2009/02	2010/02
P1	7	1896 42	26
Auto-Biography	(35%)	(48%)	(29%)
P2	1	20	19
Critical Inquiry	(5%)	(23%)	(21%)
P3	17	57	82
Community Interaction	(85%)	(65%)	(92%)
P4	2	19	7
Study of Practice	(2%)	(22%)	(8%)
P5	2	33	19
Expert Voice	(2%)	(38%)	(21%)
Number of Entries	20	88	89
(Total: 197 entries)			

Note: (n%) refers to the percentage of entries concerning with the learning practice at each stage, the frequency of each category is divided with the sum of the entries in the specific stage.

While sharing her experiences and ideas of teaching resources, Lin also shared much about her feelings of the experiences and teaching process. Moreover, Lin

usually posted education issues and state her comments or positions on the issues.

Revealing emotions and stating positions were all related to autobiography and thus

P1 had been ranking second in the frequency of post through Lin's blogging process.

Additionally, according to Lin, originally she launched a blog for sharing her own ideas and experiences to others. After starting to keep blog entries, she gradually found that there were many teacher bloggers who were informative and provided a lot of professional knowledge and resources to others. Lin reported that she would like to learn from those teachers. Thus, she not only offered her own ideas but also introduced materials she found in others' blogs accompanying with access information (P5). When sharing education issues, instead of simply revealing feeling, Lin also expressed her reflections and explored multiple sides of the issues (P2). As a result, compared with the first half year, P5 (Expert Voice) and P2 (Critical Inquiry) both sharply increased at the later two stages of Lin's blogging.

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Factors Influencing Lin's Blogging

In the following, I aimed to provide a specific examination of Lin's blogging experience through the factors of activity system. First, I explored how subject-object relationship, mediation and community shaped Lin's operation during the blogging process. Then, a discussion of the two other factors, rules and division of labors is presented.

Subject and Object

For Lin, a blog was a virtual place to record her teaching process and share English learning/teaching materials with others. According to Lin, there were four reasons motivating her to engage in blogging. First, Lin believed that information exchanging was extremely important in modern society. Lin had found many useful

resources on the Internet and she hoped herself could also help other teachers in the same way. Lin reported in the interview,

When preparing for classes, I always search on the Internet for inspirations. It is very convenient and efficient for me to find the resources I want...exchanging ideas and sharing resources were especially important for teachers. I have learned much from others' blogs and I also would like to share what I have with others.... (the 1st interview, 2010/02/27)

Second, Lin described herself as a person with a high sense of crisis. She always felt restless about the future and considered keeping polishing one's own ability was crucial. Her experiences in High School Teacher Admission Tests made her realize that learning was a continuing process not only for students but also for teachers. Therefore, Lin tried to compile resources for both teachers and learners. Third, Lin considered it beneficial to have a record of teaching which she could later refer to in her future teaching process, or she might easily ignore some effective skills she had used. Finally, Lin's interest in blogs inspired her to conduct a related research for her thesis and thus she would like to explore blogs as much as possible. This motive made her more enthusiastic in the blogging process.

Therefore, in addition to recording her teaching process, Lin put more emphasis on sharing and exchanging with others on the Internet through blogs. This explained why the teacher learning practice concerned with community interaction (P3) appeared as the one Lin especially invested a lot of time and efforts in.

Mediation

Mediation connected subject with his/her objects. In Lin's case, the goals she set for her blog influenced the contents of her blog entries and her personal experiences and expectations affected the language she used.

Holding the expectations mentioned above, namely, recording, sharing, and exchanging, Lin shared things related to her teaching process and personal experiences, as well as her thoughts of teaching in her blog. She also included many learning materials for English learners. Lin reported that her recording in the blog was informal and flexible since she did not intend to make both English teaching and English learning appear interesting. Lin would like to be creative and free in the virtual space. She posted what she considered fresh, funny, and useful. In addition, during the blogging process, Lin found that people tended to pay more attention on blogs with full of both pictures and literacy compositions. Since one of the main goals of Lin was to communicate and exchange information with others, she always added videos and photographs to entries to make her blogs attractive



Figure 4.3 An Example of Videos in Lin's Blog

Moreover, as for the language use, at the beginning Lin always felt hard to choose between Chinese and English when posting entries. Lin assumed that English

teachers' blogs should be presented in English and she at first intended to build an English only blog. However, on one hand, since most of the readers in the blogging website were more used to read and write in Chinese, Lin considered that Chinese facilitated her both to express ideas and interact with others. On the other hand, being a non-native English speaker, Lin was not confident enough in her English writing especially after some of her expressions were criticized as Chinglish by others on the Internet. Therefore, Lin mainly kept the entries in Chinese and occasionally in English when she wanted to record something professional or academic. In an interview, Wu stated,

Being an English teacher, I consider that I have to write my entries in English. However, being a non-native speaker, I am not confident enough in my writing, especially after my writing was criticized as Chinglish. Thus, I decide to use both Chinese and English to write entries. I mainly use Chinese, but when I try to post an entry which is more academic or professional, I would use English... (the 1st interview, 2010/02/27).

The Interaction of the Online Community with Other Factors

For Lin, the experience of interacting with others through blogging was interesting and valuable. Lin's blog provided her a way to communicate not only with her students and colleagues but also with others on the Internet.

Community and Mediation

Since Lin liked her students very much and cherished every moment with them, in her blog, she especially offered a category recording events about her students.

Whenever her students participated in contests, she would post the pictures in her blog. Lin reported that, while she did not enforce her students to browse her entries, when some of them found their pictures in Lin's blogs, they felt happy and actively

provided Lin a lot of feedback. In this way, Lin's blog turned to be a platform for her to communicate with her students after classes. When reading sweet words from her students, Lin decided to spend more time in her blogs. As a result, in her blog Lin posted a great number of entries concerned with interaction with her students.

Community and Subject/Object

As for community and subject, interaction with others on the internet assisted Lin to express true feeling and made her feel being supported. First, Lin regarded blogging as a good way to keep in touch with her colleagues. Most teachers in Lin's school seemed extremely busy and did not have much interaction with others. Since many of her colleagues also had their own blogs, those teachers could visit others blogs, exchanging ideas and cheering up one another on the Internet. Lin reported that some feelings were not easy to be expressed when talking face-to-face so that through blogs she might have more understanding and share deeper thoughts with her colleagues. Second, in addition to colleagues, there were still others who constantly visited Lin's blog and provided her feedback. Among the visitors of Lin's blogs, some were her old friends Lin had lost in touch for a long time; others were acquaintances working in the field of English teaching; still others were stranger who accidently found her blogs and like her style and words. Lin confessed that she was not a hard-working blogger and thus when she found her blog had attracted some readers, Lin was encouraged. Also, the suggestions she received from her readers were really helpful.

As for community and object, in an interview, Lin reported that the interaction with others in the online community made her more encouraged in engage in post entries concerned with sharing. Through sharing, Lin and other members always exchanged ideas. The process made Lin feel more close to others and thus her

blogging became more enjoyable.

Rules and Division of Labors

As it concerned with rules, as Wu, Lin still had to follow the regulations of *Wretch*. However, the amount of feedback she received did not exceed the limitation *Wretch* set. Thus, Lin did not have to face the problem of whether to pay for advanced membership or not.

As for division of labor, Lin reported that she did not want to think over carefully about the topics. While regarding interacting and sharing with others as an important part of her blogging, in Lin's opinion, she was not writing blog entries for others. Lin believed that as long as she posted the resources on the Internet, those who needed the information she provided would finally find it. As she stated,

For me, blogging is self-centered. I recorded what I regarded as important such as my experiences in High School Teacher Admission Tests. I am not posting entries for a certain group of audience. Therefore, I do not spend a lot of time thinking about the topics or the contents. It is tiring if I have to always consider that if my topics are attractive enough or not...(the 1st interview, 2010/02/27).

It should be noted that the only thing Lin cared about was her students. For her students, Lin tried to provide useful learning materials and record significant events for her students. Therefore, throughout Lin's blogging process, it seemed that she always held the power to decide the topics of her entries while her students might share part of the power with her.

A Summary of Lin's Case

In Lin's case, her blogging process was mainly intertwined by four factors in the activity system, subject, object, mediation, and community. Figure 4.4 indicates the

factors influencing Lin's blogging. In the upper triangle, Lin's past experiences shaped her attitude toward teaching as well as learning and influenced how she presented her blog. Lin aimed to achieve the goal of both recording and sharing when starting to keep blog entries. Therefore, in her entries, in addition to her teaching process, she also wrote about many learning and teaching resources. Gradually, the online community turned to be an important factor encouraging Lin to keep blog entries. For Lin, her blog gave her opportunities to communicate with students and colleagues after school. Meanwhile, she also made many new friends who also working as English teachers. Interaction with others in the online community not only provided her suggestions but also support Lin during both the process of blogging and teaching.

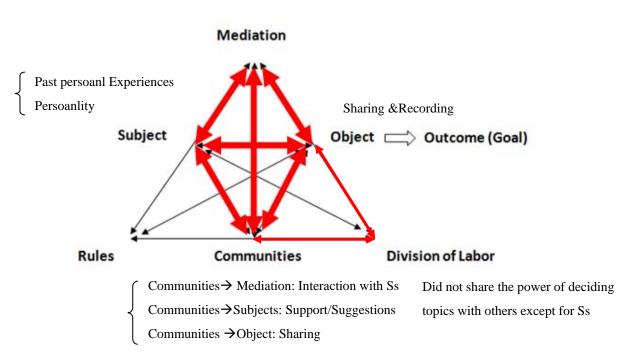


Figure 4.4 Factors influencing Lin's operation of blogging

Lin's Perceptions of Blogging

For Lin, the blogging experience was inspiring, interesting and advantageous for

teacher development. In addition to recording and sharing, Lin perceived blogs as a beneficial tool for reflection, expressing feelings and providing support.

First, Lin mentioned that one of advantages of blogging was the enhancement of reflection. Lin was an innovative teacher who was willing to try different ways of teaching, but the students' reaction and learning outcome were not always as satisfying as she expected. For example, in one of Lin's class, she brought a coffee machine to the classroom, intended to enjoy coffee with students and introduce related English terms. However, the students did not show much interest in it. At this moment, recording the teaching process stimulated Lin to think about the event again and find ways to solve the problem. Lin reported,

Originally I thought it would be interesting if we could have a cup of coffee together while learning several related English terms. But, soon I found that those high school students preferred milk tea to coffee...As I was recording this event in my blog, many ideas flashed into my mind...Now I realize that I have to have more understanding of students before I design an activity...(the 1st interview, 2010/02/27).

Next, blogging also contributed to offering Lin a space to voice her opinions and find a way out when she was discouraged. In Lin's blogs, she wrote much about her feelings of teaching. Sometimes she would note popular issues related with education and shared her view on them. Writing down her thoughts and attitude helped her reorganize her ideas of the issues. Moreover, when Lin felt tired, blogging was effective for her to express her negative feeling and release her pressure. Sometimes when Lin was in a bad mood because of some naughty students, instead of blaming the students face to face, she wrote about her feelings and what she wanted to tell them in her blog. After reading the entries, some students would apologize to Lin. Lin revealed that even if the students did not visit her blog and read the entries, the

process of writing had already assisted her to adjust her attitude and feelings. Lin said in an interview,

I am not a patient person. Sometimes I am so eager to correct my students' behaviors that I turn to be a straight-talker...For teenagers, who do not like to be regulated, my words may annoy them. They even criticize me in their blogs. I think those students would also visit my blog. Thus, I write what I want to let them know in my entries...To be honest, even they do not read the entries, I always feel much better after revealing my feelings in my blog (the 1st interview, 2010/02/27).

Finally, the online community supported Lin not only in continuing blogging but also in keeping working toward the goal of a better teacher. Communication and idea exchanging with others on the Internet have turned to be an important part for Lin in her daily life. She reported that reading feedback to her entries from other members was cheerful and encouraging. Especially when she encountered problems or was frustrated, comforts and suggestions from readers of her blog made her feel that she was not alone. As a result, she would cheer herself up, refreshing herself and moving forward.

To conclude, Lin considered that she would not stop blogging since the process really benefited her in many ways. Blogs offered Lin an opportunity to do intrapersonal reflection and served as effective platforms for interpersonal communication as well as information exchanging. However, Lin considered that blogging really took time and passion and thus whether to own a blog or not depended on every teacher's need. Nevertheless, Lin regarded the process extremely advantageous and beneficial. She was willing to continue blogging and would be more engaged to share more useful resources in the future.

In this chapter, I have presented the two teachers' blogging process as well as

their perceptions of the blogging experiences. In the next chapter, a comparison of the two teachers' blogging experiences and a discussion on the three research questions will be provided.



CHAPTER FIVE DISCUSSION AND CONCLUSION

The study intended to investigate how blogs may mediate EFL teachers' teacher development. The chapter contains three sections. In the first one, I discuss the research questions. The second one is a conclusion of the current study. Finally, limitations of the study and suggestions for future research will be presented.

Discussion of the Research Questions

The following discussion of the research questions integrates data collected from the researchers' online observation, the targeted English teachers' blog entries and face to face interviews. By comparing the two cases, the blogging processes of Wu and Lin are examined and a cross-analysis will be presented. Moreover, Wu and Lin's perceptions of the blogging experiences are also discussed.

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How Are the Targeted English Teachers' Blogging Influenced by the Factors Situated in Their Blogging Process?

A Comparison of the Type of Learning Practices between Wu's and Lin's Blogging

Process

To explore the factors influencing the target English teachers' blogging, it is essential to examine their blogging behaviors during the blogging process. Table 5.1 presents the percentage of each teacher learning practice Wu and Lin engaged in through blogging.

Table 5.1

Type of Learning Practices in Wu's and Lin's Blogging Process

	The First Stage		The Second Stage		The Last Stage	
	Wu	Lin	Wu	Lin	Wu	Lin
P1	62%	35%	34%	48%	17%	29%
Auto-						
Biography						
P2	40%	5%	14%	23%	14%	21%
Critical	- 3 , 3		•			, •
Inquiry						
P3	25%	85%	77%	65%	77%	92%
Community						
Interaction						
P4	51%	2%	14%	22%	22%	8%
Study of	2 3	_,,	14%		,	2.3
Practice						
P5	8%	2%	F14%	38%	13%	21%
Expert	3,0			8 E	10,0	
Voice		3	1000			
			1896			

As shown in Table 5.1, at the first stage, Wu and Lin engaged in different aspects of the learning practices. In Lin's case, P3 (85%), ranks first, followed by P1 (34%). In Wu's case, P1 (62%) ranks first in frequency of post, followed by P4 (51%) and P2 (40%). P3 only accounts for 25% and ranks the fourth place. That is, at the beginning of their blogging process, Lin focused on interaction with the online community while Wu put more emphasis on awareness of personal educational autobiography such as emotional sharing. The findings correspond to the two teachers' original expectations on their blogs, that is, Lin expected her blog to serve as a platform for exchanging ideas while Wu initially took her blog as a tool for recording her teaching process.

However, in the following two stages of Wu's blogging, there is a sharp increase of P3 in frequency of post and the frequency of P1 drop. At the last stage of Wu's

blogging, P1 only accounts for 17% and ranks at the third place. Nevertheless, for Lin, P3 keeps ranking first and even accounts for 92% in the last stage of her blogging. The results indicate that the influence of online community was significant in the two teachers' blogging process. Within the process, not only did Lin always post entries concerning with interaction but also Wu's focus of her blogging had been shifted from a personal practice to a more interactive practice. As what Wu and Lin reported in the interviews, after they started to post entries, they found that interacting with members of the online community played an essential and critical role during their blogging process.

Factors Influencing Wu's and Lin's Blogging Process

While all of the six factors in activity systems had the potential to affect Lin's and Wu's blogging experiences, due to different social contexts situated and their personal history, while still sharing common grounds, factors within the activity system interacted with one another differently in the two cases. In the following section, I will first present the similarities of Wu's and Lin's operations in the experience. Then, the differences between the two teachers' blogging process will be discussed.

The Similarities of Wu's and Lin's Blogging Process

In Wu and Lin's cases, there were several similarities during their blogging processes in terms of object, mediation, and community (see Figure 5.1).

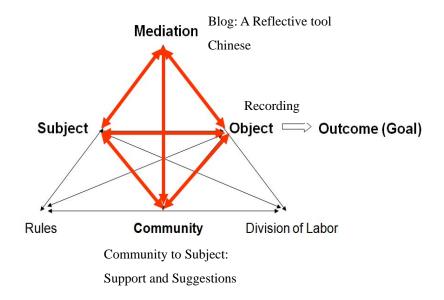


Figure 5.1 The Similarities of Wu's and Lin's Blogging Process

First, Wu and Lin basically regarded blogs as a space to record. With the advantages of blogs, Wu and Lin both liked to make a record for themselves, including their teaching process and their feelings. In this way, what they wrote in blog entries helped them build a personal portfolio and would later turn into valuable resources.

Next, as a mediated artifact, blogs mediated the two targeted teachers' reflection through blogging. Both Wu and Lin reported that blogging provided them an opportunity to examine their teaching process. When facing difficulties or frustrations, recording the events and revealing feelings in blogs not only assisted them to release negative emotion but also made them have a more comprehensive understanding of the problems. In other words, the process of writing deepened their thoughts, enhanced reflections, and encouraged them to be better teachers.

In addition to the blog itself, language was also a mediated artifact assisting the targeted teachers to present their feelings and interact with others. Wu kept all of her

entries in Chinese. Lin originally intended to keep her blog entries in English but later turned to use Chinese in most of her entries. For the two teachers, compared to English, Chinese was easier for them to express feelings. They both reported that the first language, Chinese, was usually more helpful to exactly describe their feelings and thoughts. Moreover, "Wretch" is a popular blogging website in Taiwan and most of its users are used to communicating with one another with Chinese. In the two teachers' points of view, keeping entries in Chinese rather than in English facilitated the bloggers' interaction with others in the online blogging community.

Finally, community played a significant role in both Wu's and Lin's blogging process. As shown in Table 5.1, at the data collection time, the practice concerned with interaction with others (P3) ranked first in both the targeted teachers' blogging. Previous study has indicated that wide-range membership and facilitated communication are essential reasons contributing to successful continuing development for members in communities (Riding, 2001). With the development of technology, as Richards (2005) suggested, teacher support groups are not only conducted face to face but also conducted through the internet. In the two teachers' cases, in addition to personal reflection, feedback from the online community was another advantage of blogging which encouraged Wu and Lin keep writing their blog entries and helped them to deal with problems in teaching. Through the interaction with others in the community, Wu and Lin considered that they received many useful suggestions. The support they gained from the community also accompanied the two teachers whenever they felt delighted or disappointed. Therefore, community seemed as a crucial and necessary factor influencing both Wu's and Lin's blogging and teaching.

The Differences between Wu's and Lin's Blogging Process

Figure 5.2 demonstrates the distinction in Wu and Lin's blogging processes. As showed, the differences of Wu's and Lin's blogging processes are concerned with subject, mediation, object, community, and division of labors.

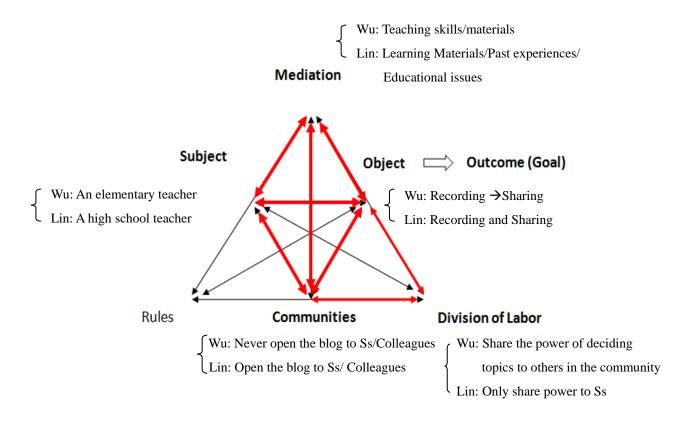


Figure 5.2 The differences between Wu's and Lin's blogging process

As for the relationship among subject, mediation and object, with different personal background and experiences, Wu and Lin held different expectations toward their blogs and thus the ways they presented their blogs varied from each other.

Originally Wu simply took blogs as a tool for recording instead of a platform for delivering knowledge or sharing information. Thus, she shared a lot of her anxious emotions of being a novice teacher (P1) and wrote about her teaching process accompanied with reflections (P2) as well as plans for future teaching (P4). In Lin's

case, since she would like to compile useful learning materials and information in her blog for every teachers and learners, compared with Wu, aside from recording, Lin put more emphasize on uploading learning materials and information sharing.

Therefore, P3 always ranked first through Lin's blogging.

Moreover, the subject's personality or past experiences also influenced the topics and contents in the two teachers' blogs. For example, being an energetic person who was humorous and with high curiosity of the world, Wu not only recorded her teaching experiences but also wrote every interesting and fresh things happened in her daily life. As a result, in Wu's blog, in addition to categories related to teaching and learning, there were other categories such as food and traveling in her blogs which included numerous entries. In Lin's case, unlike elementary school teachers, senior high school teachers had to provide students extensive knowledge of the target language and assist them to gradually get familiar with the language. Also, Lin's experiences made her realize that teachers must constantly pay attention to the trends of education in the world. Therefore, in Lin's blogs, almost every category was concerned with either English teaching and learning or educational issues.

As for the contextual factors, namely, rules, community, and division of labors, while the influences of conventions and rules in the online communities were not obvious in both the two targeted teachers' cases, Wu and Lin exhibited very different attitude in terms of community and division of labors. Wu and Lin both considered blogs as a convenient platform for communicating with others, but they tried to include different members in the community. As Wu reported, to void hindering her from expressing her true feelings, she would never let her colleagues, students, and students' parents know about her blogs. Thus, most of Wu's readers were her friends or teachers of other schools who accidently found her blog when searching materials for teaching online. On the contrary, Lin opened her blogs to both her colleagues and

students. In this way, her blog turned out to be a way for Lin to exchange ideas with colleagues and students after school. It provided a plateform of interaction which was different from the interaction at school.

Finally, when it comes to division of labors, the increasing number of readers also influenced the power distribution in Wu's case. At first Wu recorded for herself. However, as she noticed that there were a lot of other teachers visiting her blogs for teaching ideas and resources, Wu became more devoted to keeping entries related with materials and skills sharing. Wu was glad that what she wrote in blogs could help others and thus she started to care about her readers' needs when keeping entries. However, in Lin's case, in spite that her initial intention was sharing teaching materials, Lin did not especially consider her readers and simply recorded what she regarded as important and interesting. Lin considered that the Internet itself was a virtual place including a large amount of information and people would always find a way to get the resources they want. She wanted to enjoy the process and did not what to set limitations of the topics for her entries. Simply stated, in the two cases, although both teachers still held the power of deciding the contents of their blog entries, Wu gradually released parts of the power to her readers and increased entries related with sharing. As a result, the frequency of post of P3 increased and took the place of P1 to rank first among the learning practices.

How May Blogs Mediate the Target English Teachers' Teacher Development?

Previous studies (Eekelen, Boshuizen, & Vermunt, 2005; Tsui, Wu & Sengupta, 1996) have revealed two main advantages of blogging in teacher development; facilitating personal reflection and building online communities. In line with former research, results of the present research indicate that blogs assisted the two teachers' reflection and interaction with others. After compiling findings of this

study, I extend the two aspects and regard blogs both as an intrapersonal tool and as an interpersonal tool to enhance teacher development. More specific description of the two aspects of blogs is provided as follows.

Blogs as an Intrapersonal Tool

In this study, I defined the intrapersonal functions of blogs as functions related with the individuals such as personal recording and personal reflection instead of interaction with others such as ideas exchanging. As for intrapersonal level, results of the present study suggested that Wu and Lin both benefited from blogging in three aspects, recording the teaching process, expressing feelings as well as opinions, and doing reflection.

First, for recording the teaching process, blogs provided a virtual space for Wu and Lin to keep everything related to teaching and learning ranging from their thoughts, experiences to materials. In blogs, they could not only easily edit, manage and categorize entries but also upload videos or pictures to present ideas effectively. Therefore, compared with traditional paper and pen diaries/journals, blogs seem to be a more systematic and efficient electronic portfolio which is beneficial for future reference.

Next, during the process of recording, Wu and Lin also revealed their feelings through the presentation of their entries. As one of the most popular form of electronic diaries, blogs turned to be a way for them to express their thoughts. During the teaching process, teachers have to face different challenges every moment and sometimes they may suffer from stress. Thus, finding an effective way to reveal both positive and negative feelings is especially important for teachers. As both Wu and Lin reported in the interview, recording cheerful events was encouraging and restating frustrating things helped to release the tension. In addition to expressing feelings, for

Wu and Lin, blogs were also a mean for voicing opinions. For instance, after participating in a workshop, Wu always noted down the points of the work shop accompanied with her comments and attitudes toward the workshop. When Wu's ideas were different from the speaker, her blogs gave her an opportunity to present her thoughts without challenging the speaker face to face. In Lin's blog, she also timely expressed her thoughts and stated her opinions on issues concerned with teaching and learning. For both Lin and Wu, blogs served as a platform for them to present ideas publicly.

Finally, more than recording and revealing feelings, blogging was also beneficial for the reflective process of Wu and Lin. Bartlett (1990) has suggested that reflection is the base of improvement. It opened up possibilities of transforming everyday classroom life for teachers. Previous studies have found that electronic journaling process such as blogging not only stimulates teacher's awareness of the complexity of teaching but also enhances the development of reflectivity (Gary, 2003; Tsui et al, 1996). It is proposed that reading electronic diary is not only an effective way for researchers to examine teachers' learning process (Eekelen, Boshuizen and Vermunt, 2005) but also a non-invasive as well as non-threatening observation instrument offering teachers the possibility of studying their classroom processes (Suzuki, 2004). In line with results of previous studies, Wu and Lin reported that the process of writing was introspective. In class, both the two teachers were distracted from teaching by various things including the time limitation, students' reaction and class management. Through keeping teaching diaries in blogs, they could observe their own teaching process, examining the advantages and disadvantages of their teaching. When facing difficulties or frustrations, restating the event in blogs usually made the two teachers reevaluate the way they dealt with the problem. Thus, in the two teachers' cases, blogs appeared as a tool refreshing their ideas, deepening their

thoughts, and then assisted them to be a better teacher.

Blogs as an Interpersonal Tool

Beverly and Martha (2006) and Suzuki (2004) have indicated that blogs also enhance social interaction. Being a computer mediated communication tool (CMC), in addition to intrapersonal level, blogs also contributed to the participants' teacher development in the community. Within the online community, due to its asynchronous characteristics, Wu and Lin both reported that blogs were especially helpful in terms of enhancing interaction as well as providing support and suggestions.

On one hand, for both Wu and Lin, blogs served as a convenient platform for interaction. In a modern society, people usually lead a life filled with hustle and bustle. As a result, there is little time left for them to communicate or share feelings with others. Without the limitation of time and place, blogs form a virtual network which connects people together. After researching on the effect of a network for English teacher development, Tsui, et al. (1996) concluded that a network of teachers could build confidence, share reflections, and initiate cross-school collaboration. In the present study, with the help of blogs, Wu not only contacted with old friends but made many new friends who were also English teachers. Moreover, Wu took the advantages of blogs to share her daily life with members in the online community. In addition to texts, she added video and pictures to vividly present her life experiences. Like Wu, Lin also considered blogs helpful for her to build a closer relationship with others including colleagues, students, and acquaintances. For Lin and Wu, blogs not only brought them many new friends but also provided them a way to share feelings and emotions with people around them.

On the other hand, support and suggestions from members in the online community were especially important factors motivating Wu and Lin to keep

blogging and play significant roles in their career as English teachers. Loving et al. (2007) reported the importance of blogs for enhancing links among teachers because blogging could fulfill both conceptual and affective purposes which helped teachers to build rapport with others. Luehmann (2008) also proposed that, with the help of blogs, teachers could support and be supported simultaneously by a professional community, positioning themselves centrally within a larger professional discourse. In Wu's and Lin's case, when facing frustration and challenges, they usually expressed their feelings in their blog writing. In addition to the intrapersonal reflective process of writing, the interpersonal interaction between them and their readers also accompanied them and assisted them to overcome the difficulties. As a result, blogs had formed a community in the virtual space which connected the two English teachers and others. For Wu and Lin, the encouragement they received from other members in the online blogging community was a great power which inspired their enthusiasm and forced them to continuously working toward a more productive blogger as well as a better teacher.

However, it should be noted that, while it seemed that blogs were beneficial for building a social network on the internet which was similar with that in real life, the present study found that communicating with others on the internet was different from in reality for the two teachers. After conducting a research on the use of blogs by student teachers, Yang (2009) suggested people may feel more comfortable to post comments and share ideas on the blog than discussing the issues in a face-to-face. In the present study, Lin regarded the interaction through blogs as more profound. Compared with face-to-face conversation, online interaction encouraged her to express her true feelings more freely and thus she could exchange deeper thoughts with other members in the online community.

How Do the Targeted English Teachers Perceive the Blogging Experiences in Their Development?

At the beginning of the two target teachers' blogging processes, they did not especially take it as a tool for teacher development. However, after years of blogging, both Wu and Lin considered the blogging experiences did contributed to their development as teachers. While the two targeted English teachers had different personal backgrounds and teaching experiences, they both held positive attitudes toward the blogging experiences in many ways.

First, although there were many other tools for teacher development, the two targeted teacher suggested blogs functioned different from them. For instance, the blogging experience was rooted from Wu's and Lin's genuine interests. For Wu and Lin, it was flexible and they could be creative throughout the process. In addition, the blogging experience was interactive. The process of blogging was not only intrapersonal but also interpersonal. Both Wu and Lin regarded constantly exchanging and sharing was important for language teachers. In Wu's view, subject teachers in most schools tended to work individually. While some teachers wanted to exchange ideas with others, some might consider it was not necessary and would take a large amount of time. The interaction in blogs was asynchronous and without the limitation of time and place. Additionally, when interacting with others, Wu and Lin usually received support and suggestions from the online community and they confessed that it was a strong motive for them to continuously posted blog entries and working as devoted teachers. Moreover, results of the present study also indicate that the two teachers benefited a lot from the writing process. When they wrote about the teaching process, the two targeted teachers always considered the problems of teaching and found more practical ways to improve students' learning.

For the whole blogging experiences, Wu considered it extremely useful and

helpful. She even suggested every teacher to start build her/his own blogs immediately. While Lin did not especially suggest that all teachers should have their own blogs because she realized it would really take a lot of time and patience, she still regarded blogs as useful tool for teacher development. If there was enough time and the teacher was interested in blogs, Lin considered blogging would be a helpful way for teachers to constantly stimulate ideas and improve teaching.

To sum up, both of the two teachers perceived blogs were beneficial for recording, reflection, and interaction. Additionally, they could also learn from others through reading others' entries or through communicating with others. Moreover, support from the online community encouraged them to keep blogging and assisted them to face the challenges. As a result, when concerned with teacher development, the blogging experiences not only enhanced the two teachers' ability in the content knowledge but also made them more mature and confident in working as teachers.

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Conclusion

In recent years, teacher development has been a critical and essential issue in teacher education. This study targets on two Taiwanese female teachers, Wu and Lin and investigates how blogs may mediate English teacher's teacher development. After collecting data from Wu and Lin's blog entries, face-to-face interviews and online observations, two frameworks were applied to explore the two teachers' blogging experiences. First, the six empirically grounded practices suggested by Darling-Hammond and Hammerness (2005) were used to examine the type of practices Wu and Lin engaged in when blogging. The six practices include Auto-Biography (P1), Critical Inquiry (P2), Community Interaction (P3), Study of Practice (P4), Expert Voice (P5), and Long-Term Engagement in Professional Work (P6). Second, Activity Theory (Engestrom, 1987, 1999), is used to analyze the factors

situated in the two teachers' blogging process.

Results of this study indicated that interacting with others in the online community seems to be especially important among Wu and Lin's blogging behaviors. At the time of data collection, Wu and Lin both posted a great number of entries related to P3 (Community Interaction). In addition, during the two teachers' blogging process, various factors within Activity Systems intertwined and led to similarities as well as differences of the two teachers' blogging process.

First, in spite that Wu and Lin used blogs as a mediated tool to record their feelings and teaching process, with different personal backgrounds and experiences, Wu and Lin had different expectations on their blogs and thus their blogs appeared very different. Realizing how difficult it was for elementary teachers to design interesting learning activities, Wu decided to note down every activity she had used in her blog so that she could refer to as references for her future teaching. Therefore, at Wu's first stage of blogging, the teacher learning practice she engaged in most frequently was P1, Autobiography. As for Lin, considering constantly enhancing English ability and acquiring new knowledge were important in modern society, she would like to compile useful learning materials and information in her blog for all teachers and learners. Thus, she posted a large amount of entries related to P3, Community Interaction.

Second, the two teachers' blogging experiences were influenced most by "community." Both the two teachers reported that feedback from members of the blogging community encouraged them to continue posting blog entries. Accordingly, among the teacher learning practices listed, practices concerned with interaction with the community not only ranked first throughout Lin's blogging process but also turned from the fourth place to the first place during Wu's three stages of blogging.

Third, when writing the entries, Wu and Lin found that blogging helped them do

personal reflections and refresh their ideas. The process of writing deepened their thoughts and inspired them to be better teachers. Thus, for Lin, who intended to especially focus on information sharing, the frequency of post of Critical Inquiry also gradually increased within her blogging process. In Wu's case, although the rising number of readers had a significant impact on Wu's choices of topics as well as contents for her blog entries, the percentage of entries related to Critical Inquiry had remained accounting for a fixed share in Wu's blogging.

The three main findings above suggested that the two main advantages of blogging in teacher development are facilitating doing personal reflection and building online communities. The writing process was stimulating and inspiring for the two teachers. It provided them opportunities to reflect their behaviors and attitude during their teaching processes. Moreover, feedback and suggestions from the community assisted Wu and Lin to face frustrations and deal with problems in teaching. They were all important factors motivating them to persist in blogging and played as significant roles in supporting Wu and Lin to improve themselves and

Moreover, as for the teachers' perceptions of blogging, both the two teachers considered that the blogging experiences enhanced their ability not only in the content knowledge as well as teaching skills but also make them more mature and confident in working as teachers.

Findings of the present research suggest that blogs is a tool with high potential to enhance teacher development. Through blogging, the teachers could engage in activities concerned with teacher learning practices and they perceived the blogging experiences beneficial. More importantly, both of them were willing to continue posting blog entries in the future. It supports that blogs might be an effective tool to be applied for a longitudinal developmental process.

Pedagogical Implications

While reflection has been indicated as an essential and critical procedure to achieve development for teachers, it is not easy to have a concrete idea about how and when reflection happens within individuals. Results of the present study indicate that a blog is a high potential tool to observe the critical reflecting process of teachers. In this way, not only teachers themselves may be more aware of their teaching but also teacher educators could gain more in-depth understanding of teachers' needs during the developmental process. Additionally, with the interactive feature of blogs, teachers are provided with more opportunities to express opinions and share ideas with others. The communication and connection with others in the online community are helpful to refresh teachers' thoughts and assist them to continuously improve themselves.

Therefore, according to findings of this study, teacher training programs as well as schools should take advantages of blogs, inviting both pre-service and in-service teacher to launch their own blogs. It must be noted that teachers have to be "encouraged" to start blogging instead of being "enforced" to post blog entries, or the blogging process would turn to be another required school routine for teachers.

Moreover, schools must support to create links among teachers and build online teacher communities. As reported by the two targeted teachers of the current research, collaboration is extremely important for teachers, but most of them are left with little time to exchange ideas with others. Thus, blogs provide teachers with opportunities to work together on line without the limitation of time and space. To sum up, since blogs function as both an intrapersonal and interpersonal tool, this study suggests that making good use of blogs in teacher development is beneficial and blogging is possibly to be a new direction for teacher education.

Limitations of the Study

Results of the present research support that blogs are beneficial for teacher development. However, several aspects of the research design may limit the implications of the study. First, the coding process was conducted by the author independently. While I reviewed each of the entries in detail and examined the data carefully, interrator reliability was missing. Second, due to the limitation of time, I only conducted twice face to face interviews with each of the participants. More intensive face to face interviews during the data collecting process might help to trace the participants' performance of blogging more specifically. Third, data collection time is another issue in this study. Teacher development is a continuing as well as evolving process. The present study collected data from only several months of observation. A more longitudinal study should contribute to gain a more comprehensive view of the relationship between blogging and teacher development.

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Recommendations for Future Research

What this study presented was a preliminary exploration of how blogs worked as a tool for mediating teacher development and the benefits teachers gained from blogging. Future research may extend the study and explore more possibilities of applying blogs to teacher development. This study reported encouraging results as to the positive effects of blogging on teacher development. Potential issues to be explored in future work include the following two aspects.

First, as mentioned, studies concerned with teacher development need a large amount of time and efforts to gain an intensive understanding. In the future, more longitudinal studies or ethnographical studies could be conducted to specifically trace the participants' performances of blogging over time. Second, in addition to the

teachers' verbal comments and texts products, observation of teachers' practices in classroom may also contribute to obtain more precise and objective data for examining the connection of blogging and teaching.



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APPENDICES

Appendix A Consent Form

老師您好:

我是國立交通大學英語教學所的研究生劉宜汶,論文研究方向是英語教師們的部落格書寫,主要是藉由觀察老師們的部落格歷程,探討部落格的特質如何在老師的教學中提供協助,以及老師們對於部落格使用的態度。為此,我希望能邀請目前正在使用部落格的英語教師參與此項研究,請不要過於緊張或擔心,除了期盼老師能同意研究者對您的部落格內容進行統整與分析外,並不需要特地為此研究做些什麼,唯一比較麻煩您的是,研究過程中需要與進行一到兩次的訪談,訪談內容主要是討論您在部落格書寫過程中的感受,並將我的觀察所得與您分享,同時釐清其中模糊的部分,否則只有研究者的詮釋可能沒有辦法客觀呈現原意。訪談一次以約一個小時為原則,過程將會在您的同意下錄音,至於訪談的時間跟地點我都會盡量配合您,不會占用您太多時間。

請完全放心,所有研究中取得的資料將會完全保密,除了我以及我的指導教授張靜芬老師外,不會有他人得知內容,而您的個人資料亦將會由匿名的方式處理。參與此研究並不會有任何風險,過程中如果感到沒有意願繼續參與,您亦隨時可以退出此研究,有任何疑慮或意見都歡迎您與我(電話:0937352596;電子郵件信箱:smilingxd@msn.com)或我的指導教授張靜芬老師(電話:03-7512121;電子郵件信箱:cfchang@mail.nctu.edu.tw)聯絡。

如果您已閱讀以上說明,了解本研究目的並**願意**參與,請在下方簽上您的全 名,非常謝謝您的配合。

參與者簽名	日期
研究者簽名	日期

Appendix B Interview Guides

Interview Guides: Interview#1

I. Factors Influencing Blogging

Subject and Object

Personal Background

- 1. What is your educational background? What is your major?
- 2. How long have you been teaching?
- 3. Why did you decide to be a teacher?
- 4. What are your expectations on a teacher/ an English teacher?
- 5. Tell me about your own (English) learning experiences.
- 6. For you, what is the most challenging part of teaching?

Blogging

- 7. Tell me about your previous blogging experiences.
- 8. What motivated you to write entries related to teaching and learning?
- 9. Before you started to post blog entries, how did you perceive blogs? What did you expected to achieve through blogging?

Mediation

- 10. Why did you choose to write blog entries in Chinese/English?
- 11. Why did you launch your blog in the blogging website?
- 12. How many entries did you try to post per month?
- 13. In addition to English teaching and learning, are there entries concerned with other categories in your blog? Why did you include these categories?
- 14. Before blogging, did you have any experiences of keeping paper and pen teaching diaries? What are the similarities and differences between traditional teaching diaries and blogs?
- 15. Did the characteristics of blogs (video/picture sharing, asynchronous interaction, publicity) facilitate or cause any inconvenient during your blogging process?
- 16. Did you record every event during your teaching process in blog? If not, how did you decide whether to record the event or not? Were there any factors influencing your choice?
- 17. How did you feel when restating an event in blog entries?
- 18. For you, did expressing thoughts and feelings (either positive or negative) in blogs do you any help? In what ways?
- 19. Were there any impressive events in your blogging experience?
- 20. Did you review your entries? If yes, how did you feel when reviewing the entries?

Community, Rules, and Division of Labors

- 21. Did you have any ideas about those who read your entries? (e.g. Who were they? What were their careers?)
- 22. Did you try to interact with those who read your entries? How?
- 23. Did others provide feedback to your blog entries? If yes, please explain a little bit about the feedback you received.
- 24. Did feedback from others help you in any ways, either in terms of teaching or blogging (e.g. support, encouragement, suggestions)?
- 25. Did feedback from others affect your writing style or contents?
- 26. Tell me if the increasing number of readers affect your writing style and contents? How?
- 27. Did you find anything convenient/inconvenient for you due to the conventions or regulations of the interface of blogs or the blogging website?

II. The participants' perceptions of blogging

- 28. In your opinion, what are the differences between online interaction and face to face interaction?
- 29. What were the factors encouraging you to continue writing blog entries?
- 30. Did you learn anything from the blogging process? If yes, what were the differences between other teacher development approaches (e.g. workshop) and blogging?
- 31. Overall, how do you feel about the blogging experiences?
- 32. Concerning with the blogging experiences/teaching, are there any other things you would like to say?

Interview Guides: Interview# 2

- 1. Several months has been pasted since we conducted the first interview, did you perceive any differences of yourself when blogging? (e.g. your attitude, the time you invest in blogging)
- 2. Tell me the feelings of restating events/reveal emotions in blog? Did the writing process still benefit you in the past month? In what ways?
- 3. Did you still feel being supported by the online community?
- 4. Were there any impressive events during these months? What role did blogging play and how did it help you in the events?
- 5. Did you ever feel tired during the blogging process and would like to give up? Why did you decide to continue your blogging?
- 6. Will you continue to post blog entries in the future? Why?

- 7. In your view, do blogs enhance English teachers' development? Do you encourage other teachers to keep blog entries?
- 8. In addition to teaching, did blogging help you in any other ways?
- 9. What are your current perceptions of blogging? Do you still hold the same attitude and expectations on blogs as what you held at the beginning of your blogging process?
- 10. Is there anything else you would like to say?



Appendix C
Operational Definition of Teacher Learning Practices with Examples

Teacher Learning Practices	Definition	Example (Blog Entries)
Autobiography (P1)	Teachers' own awareness, understanding, and	總之,甚麼工作都不可以逃避,不會的地方
	emotions which assist teachers to deal with the	就多學。我相信有了三心:愛心、耐心、責任心,
	discrepancies between their prior beliefs and the	加上學校還有很多老師可以請教老佛爺說得
	professional identity they are seeking to	很對,教育是一個永遠充滿挑戰性的工作,老佛
	development. (e.g. sharing emotional reactions,	爺在 mail 裡跟我說的話,我會好好牢記,好不容
	stating a particular position on an issue)	易考上了老師,就要用心去做好,否則就辜負我
	8 8	一年來準備筆試的辛苦,和五年來帶營隊的經驗
	1896	和辛勞。
		(Wu, 2005/08/02)
Inquiry-Based Reflection (P2)	Critical examination of the varied tensions of	今天連上了四堂課,最亂的竟然是我們班的英
	teachers' professional practice. It enhances teachers'	文,失敗的原因如下:
	understanding of the complexities of teaching. (e.g.	
	exploring multiple sides of an issue, expressing a	1. 浪費太多時間在器材上…花了不少時間讓小
	passionate argument of an issue)	朋友拉窗簾、放光碟、開單槍,以至於空白了
		很多時間
		檢討:與其讓小朋友拉窗簾,不如老師先示範怎
		麼拉

		2. 課程不連貫
		3. 沒有帶 Phonemic Awareness
		(Wu, 2005/09/13)
Community-Based Interaction	Engage in interactions among the blogger and	自從三年前(95年)起很幸運的在一些熱心的老師
(P3)	groups of like-minded people who share certain	呼籲之下,終於像國中聯合教甄一樣 有了全國高
	norms and practice. It can offer the support teachers	中職聯合教師甄試當然很多學校都還是選擇自辦
	needed when seeing for development.(e.g. engaged	選擇自己喜歡的老師(我覺得尤其是一流名校 目
	readers in discussion, sharing teaching ideas)	前很少看到所謂的明星學校加入)因為有人問我
		我想我就野人獻曝 把去年的心得和大家分享。
		因為我失敗太多次了~說實話已經考到沒有信心
	S TERM	了,不像高手考別間就算失敗也是備一,我是連
	8 8	備一都沒有呀~真的很不會試教,可
	1896	是(Lin, 2009/06/24)
Studying of Practices (P4)	Using classroom-based materials such as lesson	英語社團我大概已經想到可以帶甚麼了,期
	plans or students' work as the focus of reflection.	末的成果發表就來個 RT 吧。幼稚園的話,想從
	Luehmann (2008) proposed that it helps to address	Phonics and Phonemic Awareness 進入,加上歌
	the tensions of integrating authenticity while	謠、故事、繪本等等。
	maintaining distance.(e.g. describing thoughts	(Wu, 2005/08/02)
	through curriculum planning)	
Expert Voice (P5)	Connect and integrate professional work or	常常大家在寫英文作文時,都不知道自己寫的好不
	research-based implications. (e.g. listing pros and	好,只能找高手或老師幫忙改, 卻不知盲點為何?
	cons of resources such as books or websites).	以下有許多網址可以幫助我們很客觀的分析自己



的英文用字和文法喔!! 在許多論文中都用此來檢驗作文教學的進退步情形!雪麗強力推薦!

1. the Vocabprofiler

(http://www.lextutor.ca/vp/eng/).....可以檢測輸入的 text 用字頻率為哪一類比如輸入學生的文章後,就自動分析用字 1000 字常用字佔 87% . 2000 字常用字就很少. AWL words 就是比較難的 因為學生用到了 constantly/contrary 等等 off-list words 指的是單字庫中沒有的字 當然就更有程度囉! 兩篇論文有用此研究

http://www.lextutor.ca/cv/vp_predictor.pdf http://www.lextutor.ca/cv/vp_predictor.pdf 若不清楚 可以點進去看說明喔!

2. the grammar checher program

(http://140.122.83.189:8080/wgrammar/default.asp) four variables are detected, including the content length, the sentence length, the type-token ratio,etc. 台灣師大英語學系虛擬語言中心中的一個軟體網址把自己寫的文章或任何 text 貼上後可以免費檢測下面許多東西~非常非常實用......

(Lin, 2009/01/10)