

## STUDENT TEACHERS SOCIALIZATION DEVELOPMENT BY TEACHING BLOG: REFLECTIONS AND SOCIALIZATION STRATEGIES

Chun-Mei CHOU

National Yunlin University of Science & Technology, Taiwan  
choucm@yuntech.edu.tw

### ABSTRACT

This study aims to probe into the cognitive sources and reflective content of student teachers' socialization, such as job proficiency, goals and values, school culture, and role regulation by 'teaching blog'. This paper utilizes eight student teachers of business, data processing, Chinese, English, science, and technology as subjects. Through Action Research, this study examines educational practices related to teaching practices, home teacher practices, administrative practices, and service learning from teaching blogs constructed by student teachers and online feedback. Moreover, this study collects qualitative data via in-depth interviews, tour visits, school meetings, teaching demonstrations, practice communications, and mail and analyzes the data with software by ATLAS.ti. Findings demonstrate as follows (1) student teachers' teaching demonstration can enhance the socialization strategy of 'job proficiency'; (2) teaching blog can present student teachers' dialogues and feelings regarding 'goals and values' in the virtual community; (3) student teachers' cognitive sources for socialization strategies of 'school culture' is based on peer student teachers, mentor teachers, and internet communities; and (4) socialization strategy of 'role regulation' is based on teacher certification and school expectations.

**Key Words:** student teacher, socialization development, teaching blog.

### INTRODUCTION

'Socialization' refers to the adjustment of individual acceptance of organizational rules and culture. Teacher socialization refers to the influential processes of professional rules, teacher culture, and school environment on teachers in professional groups (Deng, & Yuen, 2011; Killeavy & Moloney, 2010). For student teachers, educational practice indicates the transformational process from novice to expert teacher. Student teacher reflections on educational practice content, competitive educational goals and judgmental thinking on educational practices are approaches to develop educational socialization (Berliner, 2001; Howard, 2002; Mule, 2006).

Chou and Shen (2007) found that student teachers' perceived pressures in socialization include the new measures of teacher education and preparations for teacher re-testing. Practical experience gained during the transition from novice teacher to expert teacher and socialization activities that construct learning beliefs include the following phases: 'external support', 'transitional', and 'self-regulatory'. Socialization strategy refers to novice teachers' organizational socialization learning under mentor instruction. Learning adjustments during socialization include job proficiency, goals, values, school culture, interpersonal relationships, historic rules, and role language (Calderhead & Robson, 1991; Deng, & Yuen, 2011).

Teaching blogs are public WebPages created by individuals or groups which contents may include citation of shared topics, creation, feedback, and review. Connections and exchanges occur between blogs posted on an internet platform as online members to share their feelings, articles, pictures, etc. (Chiou & Lee, 2008; Halic, Lee, Paulus, & Spence, 2010; Xie, Ke, & Sharma, 2008). Blogs can develop into online virtual communities for the purpose of social relationships. E-media allows members to share similar values and interests, without the limitations of time or space, where they interact and construct online interpersonal relationships (Lin, Lin, & Huang, 2008; Xie, Ke, & Sharma, 2008).

Past studies have indicated the learning effect of teaching blogs for online learners (Crippen & Earl, 2007; Du, & Wagner, 2006; Ebner, Lienhardt, Rohs & Meyer, 2010; Halic, Lee, Paulus, & Spence, 2010; Hall & Davison, 2007; Killeavy & Moloney, 2010; Kim, 2008; Romm, Pliskin & Clarke, 1997; Weller, 2007; Xie, Ke & Sharma, 2008). Teaching blogs, as the platform of student teacher online learning communities, aim to probe into interactions of virtual communities and analyze teacher professional development (Chang, & Liu, 2008; Deng, & Yuen, 2011; Killeavy & Moloney, 2010). Student teacher reflections posted on blogs have positive influence on the growth of professional knowledge and capacity. The reflection content is based on 'students' and 'practice teachers'. Various researches have treated one-year practice teachers as subjects, and probed into vocational practice teacher socialization activities. In student, contact, adjustment, and integration phases, there are different socialization strategies (Chou & Shen, 2003).

Some studies suggest that student teacher interactions with mentor teachers, peer student teachers, and students in practice schools can influence the outcome of socialization (Killeavy & Moloney, 2010; Ward & McCotter,

2004). In the past, advisers could only learn of student teachers' socialization activities by tour guidance, practice journals, and student teachers meetings in schools. They could effectively control socialization in practice schools only by student teachers sharing their experiences in meetings and interviews or according to advisers' rich and sensitive experience from tour guidance and practice journals. Educational practices for the new teacher educational system are changed from one year to a half year of Teacher Education Law in Taiwan (Ministry of Education of Taiwan, 2004).. Therefore, if advisers can immediately control student teachers' socialization processes and properly guide them, it would enhance student teachers' socialization development.

Teaching blogs save educational practice data uploads, and allow communities to post feedback and have discussions (Chang, & Liu, 2008; Halic, Lee, Paulus & Spence, 2010; Joshi, & Chugh, 2009; Karatas, 2008; Lin, 2009; Maor, 2003; Ray, & Coulter, 2008; Ray & Hocutt, 2006a). Through student teaching blogs, this study aims to analyze student teachers' cognitive sources and reflective content regarding socialization in educational practices. Moreover, this study intends to probe into interpersonal relationships in socialization, as based on internet community interactions on teaching blogs. Through teaching blogs and traditional educational practices, advisers can learn about student teacher interactions with teachers, students, and peers in practice schools, as well as interpersonal relationships in virtual communities. Based on the research motives above, this study analyzes student teachers' cognitive sources and reflection content of job proficiency, goals, values, school cultures, and role regulations. Based on the findings, suggestions are proposed as criteria for teacher education institutions regarding systematic planning of educational practices.

### **PURPOSES OF THIS STUDY**

According to the research background described above, this study explored the socialization development of student teachers by teaching blog. Specifically speaking, the purposes were:

1. To explore student teachers' cognitive source and content of reflections.
2. To analyze student teachers' socialization strategies.

### **REVIEW OF LITERATURE**

#### **Theories Teacher Socialization**

The professional socialization of teachers is a continuous process of development in which student teachers become professionals in their field. In Taiwan, the process can be divided into three stages: the student stage, the initiation stage, and the teaching stage (Wang, 1991; Yang, Ou, Wang, Tang, & Liu, 1992). Professional socialization of teachers represents the process through which an individual internalizes professional abilities, professional attitudes and a sense of professionalism. There are several theories that can be used to interpret the processes and content of professional socialization. The most frequently adopted are Functionalism, Conflict Theory and the Theory of Symbolic Interaction (Cherubini, 2009; Wang, 1994; Zeichner, & Gore, 2010).

Advocates of Functionalism think society exists prior to the individual because people and their activities are regulated under the social systems. Individual behavior is gradually shaped by the expectations and approbation of others. The theory of Functionalism assumes that hierarchical mechanisms can form every type of role and personality demanded by the process of socialization. In other words, each member of society has consistent beliefs and values under hierarchical structures. Functionalism identifies three factors which shape individual socialization: (1) Social regulations and values are equipped with the characteristics of equality, harmony and integration; there are rarely changes or conflicts. (2) Human nature is passive; people in social hierarchical structures cannot actively construct their roles; instead, they merely accept social regulations and values and play roles to meet social expectations. (3) In an interactive process, personal roles are influenced not only by the immediate social system but also by the larger system in which it is embedded (Deng, & Yuen, 2011; Ponte, Ax, Beijaard, & Wubbles, 2004; Wang, 1994; Zeichner, & Gore, 2010).

Advocates of Conflict Theory emphasize analyzing unstable states of social orders, i.e., conflicts in a society. The focus is different from that of Functionalism, which enhances the balance and harmony of social orders. Supporters of Conflict Theory maintain that each society is undergoing a process of change. This is not exactly an unhealthy scenario. Sometimes the process of integration can cause the reorganization and reordering of an organization to establish more efficient value systems or regulations. Nether important point of Conflict Theory is that a person does not need to abide by the roles assigned by social organizations or even accept social regulations. People can take the initiative to shape their roles through activities in a democratic society, and this may further alter the social system and regulations (Berliner, 2001; Calderhead, & Robson, 1991; Holadley, & Ensor, 2009; Killeavy, & Moloney, 2010).

Advocates of the Theory of Symbolic Interaction assume a society is composed of a group of interactive people.

Interpersonal interactions conclude classify symbolic icons in the interactive process of societies and interpret of practice (Johnston, & Witherill, 2002; Mule, 2006). In other words, in the interactive process, symbol systems deliver interactive messages. The agents who send the symbols define the meanings of the symbols, which are decoded by a receiver and given meaning by an individual's subjective understanding. This kind of subjective decoding system is embedded in a unique personal, subjective, and contextual interpretation. Nevertheless, every individual has the ability to understand and play other roles, including that of the sender, which gives everyone the ability to understand the messages the sender delivers. In the interactive process, people develop a decoding system to understand each other's meanings, i.e., contextual definitions. Thus, people can eventually develop themselves and manifest behaviors that are consistent with social values. This is the process of socialization.

### **Student Teachers' Socialization**

Research on the socialization of student teachers mostly concentrates on the initiation stage. Student teachers in elementary schools or secondary schools are the subjects. Kocoglu (2008) found that teachers' professional development was continuous. The most important factors affecting teachers' sense of professionalism were the schools they taught in and society in general (Bayram, Deniz, & Erdongan, 2008; Teo, 2009). The research noted 'teaching', 'classroom management', 'teaching materials, insufficient conditions and overload' trouble student teachers most. There was a significant relationship between student teacher distress, personal traits and school they served. In particular, what caused student teachers the most distress was their unwilling enrollment in teachers colleges, their grades during their course of study, and the environment of the schools or communities to which they were sent (Gulbahar, 2008; Kocoglu, 2008; Lee, 2005; Mule, 2006; Taiwo, 2009; Teo, 2009).

Scholars indicate that the problems student teachers encounter include the teaching process, classroom management, teaching facilities, insufficient resources, excessive workloads, teaching unfamiliar subjects, doing research on teaching, the application of teaching methods, curriculum design, the establishment of teaching concepts, unfamiliarity with teaching materials, the application of teaching media, the ability to do research, and test design skills. These problems can be solved if student teachers develop self-regulated learning abilities, which have close links with the individual's observation of his or her own leaning process (Cherubini, 2009; Flores, 2001; Hansen, 1995; Kocoglu, 2008; Taiwo, 2009; Ward & McCotter, 2004). Therefore, developing student teacher perception of the efficacy of the teaching process is an important factor to consider when setting up a comprehensive counseling system for the internship. It is also crucial to improve the faculty's quality that the quality of faculty student teachers interact with mentors faculty members and lead teachers. Enhancing student teachers' perception of teaching is urgent.

Holadley and Ensor (2009) explored the socialization of student teachers through the perspectives of 'theory and practice', 'operation of school', 'classroom life and teaching classrooms', and 'informal regulations of teachers groups'. They found that pressure from schools and parents influenced portions of student teacher teaching beliefs and styles. As for classroom management, student teachers still maintained a 'humanism orientation' and 'liberal attitudes'. Informal regulations from teacher groups affected student teacher values and attitudes. Johnston and Witherill (2002), reviewing studies regarding student teachers in the past ten years, pointed out that the issues that most distressed student teachers were 'classroom management' and 'teaching'. Student teachers frequently consulted senior teachers when encountering difficulties.

To sum up, in order to understand and become accustomed to school environments, student teachers were often unable to prepare subject contents properly and often could not focus on the most important curricular contents. As a result, they could not easily match theory with practice. Due to such multidimensional problems as insufficient teaching experience, unfamiliarity with teaching subjects, lack of knowledge of classroom management and adaptation to new environments, student teachers had flaws and difficulties in their teaching. Consequently, student teachers searched for information in an attempt to understand learning contents, and they used adaptation strategies to make adjustments via collected information and reflective behaviors.

### **Teaching Blog and Teacher Socialization**

The positive effects of blogging on critical reflection have been reported in several studies that have explored the application of blogs in student education and noted that the depth and breadth of student reflectivity were enhanced via blogs (Chai & Kim, 2010; Chang, & Liu, 2008; Churchill, 2009; Crippen & Earl, 2007; Deng & Yuen, 2009; Du & Wagner, 2006; Ebner, Lienhardt, Rohs & Meyer, 2010; Killeavy & Moloney, 2010; Kim, 2008; Kocoglu, 2008; Lee, 2005; Marks, 2007; Ray & Hocutt, 2006b; Ray & Coulter, 2008; Yang, 2009; Zeichner, & Gore, 2010). Lin (2009) conducted an empirical case study through questionnaires to understand the degree of teacher self-disclosure and self-disclosure support; he conducts quantitative analysis based on two-way analysis of variance to evaluate the affect of teachers' subjective well-being emotion and teaching effectiveness. The results found that it has obvious interaction effects between 'degree of self-disclosure' and 'self-disclosure

support' on subjective well-being emotion and teaching effectiveness.

Yang (2009) indicated that through blogs as a teaching platform for teachers to promote positive and critical reflection effectively. Chan's & Ridgway's (2005) use of blogs demonstrated that blogs could support the communication between tutor and students. Blogs were introduced as a tool for students to develop their communicative, reflective and technological skills and to serve as a channel for teachers to communicate with students in addition to face-to-face meetings. Ray and Hocutt (2006a) used a sampling tool that sought to code the 'depth' of reflection accruing on each blog sampled by scoring each entry on a numeric scale. Their results found that the level of reflection-on-practice varied both within individual blogs as well as from blog to blog. Goh, Quek and Lee (2010) explained students' perceptions of the learning benefits of blogging these are four factors, namely, efficiency, deliberation, de-personalization, and collaboration that.

Lai & Chen (2011) research blogs of the eight factors adopted by secondary school teachers in Taiwan, are perceived enjoyment, codification effort, compatibility, perceived ease of use, personal innovativeness, enjoyment in helping others, school support and perceived usefulness. "Blogs can support self-expression, self-reflection, social interaction, and reflective dialogue on the part of student teachers and the interactive functionality of blogs was used mostly for exchanging social support rather than reflective dialogue" (Deng & Yuen, 2009:p.877). Weblogs' can support collaborative nature towards the development of these personal networks and forming a community of practice (Ebner, Lienhardt, Rohs & Meyer, 2010; Kim, Song, & Jones, 2011). Chai, & Kim (2010) found that trust was a key element of bloggers' sharing knowledge.

To sum up, to see that other researchers had considered the use of weblogs as a reflective tool in student teacher socialization development context. It positioned this research plan as not unique, but contributing toward a better understanding of a topic currently under-researched. The educational affordances of blogs validated through this investigation can contribute to our understanding concerning the potential, strength and limitations of these student teachers in the arena of educational media. Insights gleaned can guide educators and researchers, especially those in the field of teacher education, to better capitalize on the expressive and communicative capabilities of blogs in support of teaching and learning.

## **METHODOLOGY**

### **Participants**

The subjects of this study were eight student teachers in the new teacher educational system, with various backgrounds including business management, data processing, Chinese, English, science, and technology. Two factors were used to select the subjects:

First, regarding student teachers' prior experiences within the new educational system, during student education 'teaching practice' courses were offered by the researcher; and during the practice, student teachers were assigned to a practice school for three weeks (12 hours). Thus, they would have prior understanding of practice school activities. In order to avoid the influence of teachers' different control variables, such as their teaching devotion, teaching experience, personality traits, and educational background on the implementation outcome, the researcher served as the mentor teacher for eight student teachers during 'educational practice'.

Secondly, regarding the selection of practice schools, the researcher selected schools that signed the contract with the teacher education center. In Action Research, the researcher followed the program of teacher education institutions, and then conducted design and implementation of the action research, as well as contact with teachers in practice schools. The teacher education center has been cooperating with practice schools for years. It could provide immediate suggestions regarding student teachers' socialization processes, and could function as criteria for adjusting educational practices.

### **Research Method**

This study probes into student teachers' socialization by teaching blogs of action research. Action Research is applied in order to substantially assist with the participants. By teaching blogs constructed by student teachers in the action, advisers could immediately realize student teachers' possible practice obstacles and interpersonal interactions. Thus, advisers could actively provide suggestions and solutions, and successfully guide student teachers to develop professional socialization. Action research is conducted based on four constructs of the teaching model of the Cognitive Apprenticeship Theory and educational practices during student teachers' educational practice (six months), the procedure of action research in Fig. 1, and includes four phases, as follows.

First, based on the Cognitive Apprenticeship Theory, Action of Cognitive Apprenticeship is designed. According

to content, approach, sequence, and social of Cognitive Apprenticeship of Collins, Brown, and Newman (1989), this study designs educational practice activities through “blending” concept of courses.

Secondly, student teachers participate in action research of educational practices and the construction of teaching blogs. Units of action educational practices include the following, teacher-to-be study group, mentor-apprentice meeting, communication guidance, return-to-school interview, teacher-to-be teaching demo, and simulated oral test of teacher selection. Student teachers first construct teaching blogs and upload practice journals and assignments regarding the actions of educational practices on teaching blogs.

Thirdly, regarding eight units of educational practice guidance, advisers observed student teachers’ cognitive sources, reflection content of job proficiency, goals, values, school cultures, and role regulations by action research.

Finally, student teachers’ cognitive content of socialization strategies and the researcher’s reflections are included. By teaching blogs, advisers could analyze student teachers’ socialization developments, their views, objectives, and solutions regarding the new teacher educational system, as well as the researcher’s reflections. Upon the instructor’ role, the researcher analyzed ‘reflection in action’, from perspective of Schön (1983). The researcher’s reflections are restricted by the context at the time. After action research, the researcher reflected on the members’ thoughts and actions, as well as group operations, in order to solve practical problems (Churchill, 2009; Rodgers, 2002; Schellens, & Valcke, 2006; Schweiker-Marra, Holmes & Pula, 2003 ).

Therefore, based on teaching blogs constructed by student teachers, on-site observations, interviews, and educational practices, qualitative data is collected. Teaching blogs include the files of educational practices and feedback. Educational practice includes learning a teaching demo, learning back-to-school guidance, tour guidance record, tour guidance network and mail guidance record, educational practice file, etc. Feedback includes community feedback and hosts’ feedback. The researcher analyzed student teachers’ socialization development by live video of teaching demo, pictures, recording scripts of in-depth interviews, journals of teaching practices, home teacher practice, administration practice, and advanced studies.

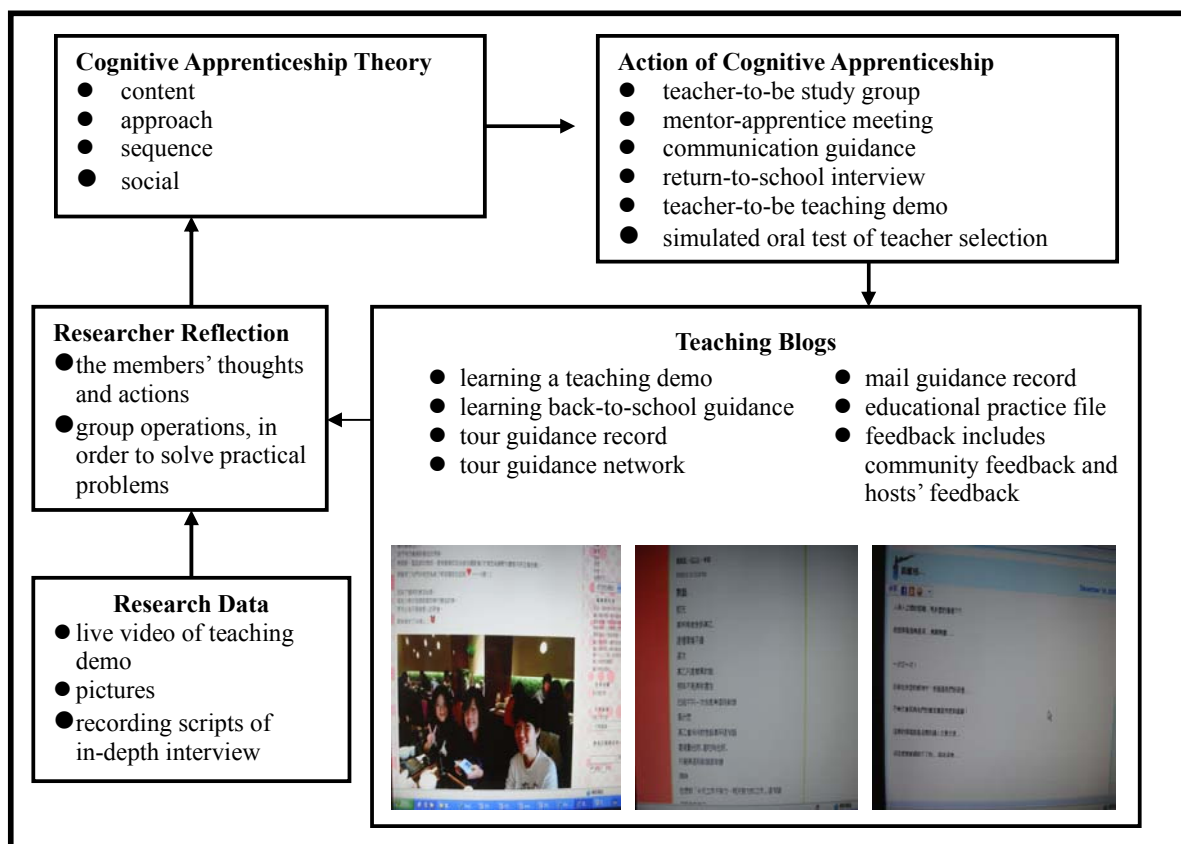


Fig. 1 The procedure of action research

### Statistical Analysis

Upon the data collected, ATLAS.ti was used to effectively connect and explain the data. According to previous literature, this study constructed a coding table and registered coding for each key event. Student teachers' teaching blogs and educational practices are encoded. Key event content was recorded for analysis of the teachers' thought processes and learning styles. Common or unique phenomena among cases were generalized and analyzed, and further compared and analyzed with previous literature. Data were encoded for student teachers' departments, namely, A. business; B. data processing; C. Chinese; D. English; E. science & technology data sources (1. teaching blogs; 2. interview; 3. on-site observation records; 4. practice related documents). Three coders test reliability by the "intercoder reliability" approach (Wimmer & Dominick, 2000). Reliability is .87. The formula is as shown below:

$$A. \text{ inter-rater agreement} = \frac{2M}{N1+N2} \quad B. \text{ reliability} = \frac{N * (\text{average inter-rater agreement})}{1 + ((n-1) * \text{average inter-rater agreement})}$$

### RESULTS

Student teachers' cognitive sources and reflection content of 'job proficiency', 'goals and values', 'school culture' and 'role regulations' are shown in Table 1, and described as follows.

#### Job Proficiency

Student teachers' cognitive sources of 'job proficiency' are based on study class, teaching demonstration, use of teaching equipments, and student teachers' self-reflections. Reflection content of socialization strategy refers to mentor teachers' corrections, peer student teachers' feedback, students' reactions, and grades. Student teachers' review and improvement on students' reactions are adjustments of job proficiency. The findings are similar to the results of Hall and Davison (2007), Joshi and Chugh (2009). Student teachers' reflection contents in blogs are mainly related to students and themselves, and will enhance their growth of professional knowledge and abilities. Summary of the qualitative data is as shown below:

"The professor at the teacher education center will watch my teaching today. A teaching demo is important for student teachers. I can demonstrate what I have learned during practice, and treat it as the evaluation criterion." (C3)

"I failed the demo. The examples were few and it seemed that students did not understand what I have taught. The exam ended in disaster!" (A2)

"Preparation for teaching demo is complicated, and in addition to the text, teachers should set the time of professor's visit, borrow the equipment, make instructional tools, write the teaching plans, etc." (B1)

"School teachers and student teachers participated in a teaching demo and offered suggestions. The teaching demo could be the first work of my "teachers' career"! (C3)

"In Chinese typing unit, I expected that students should at least know how to type their names. Therefore, I asked some students to take apart their names. Most of them did a good job. However, all of them told me it was difficult and they failed the exam". (E1)

#### Goal and Value

Student teachers' cognitive sources of 'goals and values' refer to teacher certification, teacher recruitment, and service. Their reflection content of "goals and values" includes student teachers' busy practice life, reflections on practice goals and life values, control of review study groups, as related to teacher certification and care of practice unit supervisors. Findings of this study are the same as Xie, Ke, and Sharma (2008). Student teachers of the new system are significantly influenced by teacher certification, which demonstrates that through mentor teachers, student teachers learn expert knowledge and skills. They are devoted, capable of communication, have definite attitudes, values, and morality, with attitudes and belief in care and functions of professional development. They are also able to re-examine and adjust influences on others by reflection (Chai & Kim, 2010; Capasso & Daresh, 2000; Ebner, Lienhardt, Rohs & Meyer, 2010; Lin, Lin & Huang, 2008; Weller, 2007). Summary of qualitative data is shown below:

"We assisted with teacher recruitment at the registration Office of Academic Affairs. I was energized by so many student teachers participation in the exam. I should not only pass teacher certification, but also pass the exam to become a formal teacher next year." (A2)

"I have been always busy. However, I have the most workload, as they said that I was competent. It was not true. We were all graduated from graduate schools; however, a full-time assistant could

not handle my work? Please don't train me like this. I have had enough". (A1)

"The study group will be at six o'clock on Wednesday evenings. From this week, we will be busy on Mondays. Please don't change the schedule on Mondays. We will be busy in practice and please manage your time. The weather is changeable lately, please take care of yourself. There are only three months left for teaching examination. Good luck!" (B1)

"With the guidance of the principal, the director, and the mentor teachers, as well as my efforts and preparation, I will perform better next year". (D1)

### School Culture

Student teachers' cognitive sources of 'school culture' mainly refer to student teachers peer and mentor teachers. Student teachers' support the teaching demo, assist with school services, and engage in exchanges through internet communities, as teaching blog are cognitive sources of a socialization strategy. Student teachers' reflection content of 'school culture' mainly indicates that students' care about mentor teacher feedback. Student teachers significantly recognize school teachers' support and care. Findings of this study are the same as Crow and Matthews (1988). By a mentor's guidance and reflection, student teachers realize their new roles, and their responsibilities within the school culture, which indicates different challenges and reflections. Care of students, mentor teachers, and school teachers' support and concern will enhance student teachers' identification with school culture (Marks, 2007; Ray & Coulter, 2008; Teo, 2009; Xie & Sharma, 2008). Summary of qualitative data is shown as follows:

"The students kept cheering me up this morning. I felt so warm. Other student teachers helped me improve my looks. Thank you! (By the way, they all looked nervous today) Without you, I would not have succeeded in the demo!" (B1)

"It was finally finished. Thanks for the practice teachers' participation. Your opinions will enhance my progress. Moreover, I appreciate Teacher Lin's help. The poster is great! ". (B1)

"Yes! The key part of the practice is finished! You have contributed a lot. You were the one who maintained contact with mentor teachers. Thank you! (Jing Hsuan's response at 10:39 AM, November 15, 2008)" (C1)

"I was exhausted when I returned to the office. Mei chu (staff in Office of Academic Affairs) said that you should have been exhausted! It was great that you accomplished the tasks of this stage. You should keep studying" (Host's response at 11:12 AM, November 15, 2008)". (C1)

"The internet is strange, people are interactive, information is shared, sharing happiness is necessary..., I'm glad to meet you on internet. Your layout is great. We can exchange with each other and don't forget to leave messages!" (A1)

"Some teacher told me my students have good manners. I was happy. I had dinner with a teacher who asked me if I was filled with happiness" (B1)

"It is a full of surprises day. The students have planned a birthday party for me. They and the mentor teacher surprised me!" "Students took the cake and walked toward me. When I blew out the candle, I was really moved! ". (C1)

"When I returned to the office, other practice teachers congratulated me. They all envied me for the gifts you gave! I was lucky to have you as a novice teacher! I am energized for the future. Thank you~~~ my babies of business A class! ". (C1)

Table 1 Teaching blogs on student teachers' cognitive sources and reflection contents of socialization strategies

Socialization strategies	Cognitive sources	Content of reflections
Job proficiency	<ol style="list-style-type: none"> <li>1. Study class and teaching demo</li> <li>2. Teaching activities and use of teaching equipment</li> <li>3. Student teachers' self-cognition and reflection</li> </ol>	<ol style="list-style-type: none"> <li>1. Mentor teachers' corrections</li> <li>2. Peer student teachers' feedback</li> <li>3. Students' reactions and grades in exams</li> <li>4. Students' reactions to teaching sites, reviews, and future improvements</li> </ol>
Goals and values	<ol style="list-style-type: none"> <li>1. Teacher certification, teacher recruitment, and services</li> <li>2. Control of review for study group related teacher certification</li> <li>3. Practice unit supervisors' care</li> </ol>	<ol style="list-style-type: none"> <li>1. Student teachers are busy with teaching</li> <li>2. Recognizes the importance of educational practice by assisting with teaching test.</li> </ol>
School culture	<ol style="list-style-type: none"> <li>1. Peer student teachers and mentor teachers</li> <li>2. Support for teaching demo and assistance</li> </ol>	<ol style="list-style-type: none"> <li>1. Care of students and mentor teachers</li> <li>2. Student teachers significantly recognize school teachers' support and care</li> </ol>

	with school services	
	3. Feedback and interactions of internet community	
Role regulation	1. It is based on teacher-student interactions and peer interpersonal relationships	1. It is based on teacher certification
	2. Mentor teachers' corrections and suggestions	

### Role Regulation

Student teachers' cognitive sources of 'role regulations' are mainly based on mentor teachers' corrections and suggestions, as well as teacher-student interactions and peer interpersonal relationships. Student teachers' reflection contents of 'role regulation' are based on teacher certification. Findings of this study are similar to Xie, Ke, and Sharma (2008). The reason could be in that 'teaching blogs' enhance interpersonal communications. Moreover, in order to prepare for re-testing in the new teacher educational system, student teachers can try hard to socialize. Regarding role regulations, they will try to meet the expectations of the practice school (Killeavy & Moloney, 2010; Hall & Davison, 2007; Lee, 2005). Summary of qualitative data is shown below:

"The practice will finish and I feel sorry". (B1)

"There are only two more months left in the practice. Besides learning teaching affairs, I should start preparing for teacher certification. I will only continue on this road by acquiring a teachers' certificate!"(B1)

"It seems that your demo is getting better. I also made progress with the mentor teachers' critique. I was nervous on stage. Thanks for your suggestion and the funny picture. I did not put it on my blog, so I will show you next time!" (E1)

"I sincerely appreciate mentor teachers. From the beginning of the semester, they have guided my teaching, my interpersonal relationship, and many details. Thus, I succeeded in my teaching demo today. I really appreciate them!" (E2)

### DISCUSSION

Student teachers' teaching demonstration will enhance 'job proficiency'. Demo in practice, use of teaching equipment, peer teachers' feedback, and students' reaction will demonstrate the outcome of the teaching demo. Teachers' self cognition and reflection will enhance job proficiency. However, in this study, student teachers' sources of "job proficiency" mainly refers to study classes and teaching demonstrations, including peer teachers' feedback, students' reactions, and student teachers' self-cognition and reflection. Reflection content of socialization includes instructional activities, which is related to the use of instructional equipments and adjustment of perceptions of socialization strategies (Joshi, & Chugh, 2009; Lin, Lin & Huang, 2008; Mule, 2006; Zanting, Verloop & Vermunt, 2001). The reason is that prior to completing the practice, there is a teaching demo, which is related to the use of instructional equipment and labor-force arrangements. In order to accomplish "job proficiency", student teachers will seek support and assistance, which will enhance job proficiency and reflection.

Teaching blogs will reveal student teachers' dialogues and feelings on 'goals and values' in virtual communities. This study finds that the cognitive sources of student teachers' 'goals and values' are as follows (1) teacher certification, teacher recruitment, and services; (2) control of review of study group related teacher certification; and (3) practice unit supervisors' care; recognition of importance of educational practices by teaching test. Regarding student teachers' feelings of their practice term, the researcher collects chat and values content in online communities of 'teaching blogs'. Moreover, chatting in online communities by student teachers on teaching blogs demonstrate the learning patterns of peer learning communities of virtual study groups and student teachers' actual psychological state (Chai & Kim, 2010; Deng, & Yuen, 2011; Du & Wagner, 2006; Schellens, & Valcke, 2006; Xie, Ke & Sharma, 2008).

Student teachers' cognitive sources regarding 'school culture' socialization strategy mainly refers to student teachers peer, mentor teachers, and internet communities. Practice school students' and mentor teachers' care, school teachers' support and concern, and internet community feedback and exchange on teaching blogs are one of the sources of school cultures, as perceived by student teachers. It demonstrates the importance of internet community feedback and exchange. Student teachers should continually examine the gap between teaching and goals. This study demonstrates that teachers' personal reflections and inner motivations help to maintain their devotion to teaching and persistence to improve through peer student teachers and mentor teachers, and demonstrates the importance of feedback and exchange in internet communities. Student teachers should



continually examine the gap between their teaching and goals, and be sensitive to transitional information and problems (Chiou, & Lee, 2008; Romm, Pliskin & Clarke, 1997; Ward & McCotter, 2004; Ponte, Ax, Beijaard & Wubbles, 2004).

‘Role regulation’ is based on teacher certification and school expectations. This study finds that, in order to prepare for re-testing of the new teacher educational system, student teachers should strive to meet the requirements of the socialization strategy. Their cognitive sources in ‘role regulations’ are mainly sourced upon teacher-student interactions, peer interpersonal relationships, and mentor teachers’ corrections and suggestions in order to meet the expectations of the practice school. Foreign studies demonstrate the importance of mentors’ belief in the construction of student teachers’ socialization strategies. During interactions, in addition to interpersonal relationships and job proficiency, teachers should gradually develop the self, and their performance behaviors to meet school cultures and social values (Churchill, 2009; Holadley & Ensor, 2009; Killeavy, & Moloney, 2010; Lin, 2009; Maor, 2003).

### IMPLICATIONS

This study proposed five suggestions as criteria for educational practice guidance in teacher education institutions.

1. Enhance student teachers’ teaching demo and their instructional reflections. This study found that for teaching demonstrations, student teachers should show their positive cognition and reflection content by daily demonstrations, teacher-student interactions, peer student teachers’ support, and mentor teachers’ suggestions. In order to meet new system of teacher education, teacher education institutions should help student teachers to apply diverse instructional strategies and practices in life experience. Diverse instructional strategies can function as feedback of teaching activities by reading, discussions, observations, field studies, autobiographies, journals, case studies, debates, appreciation, and inquiry, as well as action research. Student teachers should construct self reflection and professional dialogues with peers and become active learners.
2. Guide student teachers to construct teaching blogs and prepare for re-testing. Through teaching blogs, advisers could effectively control student teachers’ socialization developments. Teacher educational units should not only instruct student teachers to collect information related to practice schools, but also guide them to construct teaching blogs and prepare for re-testing, and develop time management skills. By arranging discussions of educational practices and simulation of re-testing, teacher educational institutions recognize role position and the construction of the educational profession during student teachers’ practice, thus, helping them to become mature educational workers.
3. Encourage student teachers to construct study groups in virtual communities. Study groups of virtual communities on teaching blogs, regarding ‘goals and values’ would enhance student teachers’ instructional reflections, and adjustments of the teaching test schedule. Teacher educational institutions should encourage student teachers to construct study group of peers in virtual communities in order to meet the new system of teacher education. Student teachers prepare for re-test and teaching examination by study groups on teaching blogs. Through teaching blogs, teachers have forums of professional experiences, theoretical dialogues with peer coaches of virtual communities, student teachers, peer teachers, expert teachers, and advisers. Through observing teaching blogs constructed by teacher education units, action observations of expert teachers and peer teachers, as well as peer coaches, such as collaborative actions of self reflection, this study learns student teachers’ practical reflections and intentions.
4. Help student teachers construct school culture-oriented internet communities for professional development. Student teachers’ participation in school services could enhance identification with ‘school culture’. Regarding ‘role regulation’, student teachers will consider teacher-student interactions and peer interpersonal relationships. Teacher education institutions should enhance student teachers’ professional knowledge through skill-based instructions, conceptual thinking instructions, collective study instructions, ladder practice-oriented instructions, and various instructional strategies. They should help student teachers to construct school culture-oriented internet communities for professional development, and assist student teachers to effectively master professional knowledge and abilities, which will turn into professional literacy and allow teachers to gain sufficient transitional and self-regulatory measures.

### LIMITATIONS

Some limitations of this study should be mentioned. Firstly, this study used action research method. This sample of bloggers of student teacher has limited the generalizability of the research results. This may result in biases and lacks the cross-school population. Future research should conduct other collecting and sampling methods to correct the biases. Secondly, this study used cross-school student teachers, ignoring the possible effects of school and mentor teachers. Student teachers’ cognitive sources and reflective content on job proficiency, goals and values, school culture, and role regulation may need these supporting of mentor teachers. Future study could

conduct longitudinal studies to overcome this limitation. Thirdly, few researchers investigated student teachers' trust and involvement in the teaching blogs of education practice. This study is an exploratory researcher. Future research could explore other effective e-tool of related to student teachers' socialization. Lastly, some study point these influencing factors of student teacher' teaching blog , involved in teacher training type, time of student teachers participating in the blog, but this study did not explore. Future study could investigate these influencing factors.

#### ACKNOWLEDGEMENTS

This study was financially sponsored by the National Science Council, Republic of China, under Grant No. NSC95-2516-S-224-001-MY3 & NSC98-2511-S-224-002-MY2.

#### REFERENCES

- Bayram, S., Deniz, L., & Erdongan, Y. (2008). The role of personality traits in web based education. *The Turkish Online Journal of Educational Technology*, 7(2), 41-50.
- Berliner, D.C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35, 463-482.
- Calderhead, J., & Robson, M. (1991). Images of teaching: Student teachers' early conceptions of classroom practice. *Teaching and Teacher Education*, 7, 1-8.
- Capasso, R.L. & Daresh, J.C. (2000). *The school administrator intership handbook*. Thousand Oaks, CA: Crowin.
- Chai, S., & Kim, M. (2010). What makes bloggers share knowledge? An investigation on the role of trust. *International Journal of Information Management*, 30(5), 408-415.
- Chan, K. K., & Ridgway, J. (2005). *Blog: A tool for reflective practice in teacher education?* Paper presented at the 3rd International Conference on Education and Information Systems: Technologies and Applications, Orlando, 333-337.
- Chang, Y. F., & Liu, Z. F. (2008). Genre analysis of teachers' blogs. *Tainan University of Technology*, 42(1), 119-138.
- Cherubini, L. (2009). Reconciling the tensions of new teachers' socialization into school culture: A review of the research. *Issues in Educational Research*, 19(2), 83-99.
- Chiou, J.S., & Lee, J. (2008). What do they say about "friends"? A cross-cultural study on internet discussion forums. *Computers in Human Behavior*, 24, 1179-1195.
- Chou, C.M., Shen, C. H. (2003). Study on vocational practice teachers' socialization from perspective of cognitive process. *Educational Review*, 20, 57-78.
- Chou, C.M., Shen, C. H. (2007). Study on cognitive apprenticeship on student teachers' socialization. *Kaohsiung Normal University Journal*, 22, 93-110.
- Churchill, D. (2009). Educational applications of Web 2.0: using blogs to support teaching and learning. *British Journal of Educational Technology*, 40(1), 179-183.
- Collins, A., Brown, J., & Newman, S. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honor of Robert Glaser* (pp. 453-493). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Crippen, K. J., & Earl, B. L. (2007). The impact of web-based worked examples and self-explanation on performance, problem solving, and self-efficacy. *Computers & Education*, 49(3), 809-821.
- Crow, G. M., & Matthews, L. J. (1988). *Finding one's way: How mentoring can lead to dynamic leadership*. Thousand Oaks, CA: Corwin Press. Robert Glaser (pp.453-494). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Deng, L., & Yuen, H. K. (2009). *Value of blogs in student teacher education*. Proceedings of the 17th International Conference on Computers in Education. Hong Kong: Asia-Pacific Society for Computers in Education.
- Deng, L., & Yuen, H. K. (2011). Towards a framework for educational affordances of blogs. *Computers & Education*, 56(2), 441-451.
- Du, H. S., & Wagner, C. (2006). Weblog success: exploring the role of technology. *International Journal of Human-Computer Studies*, 64(9), 789-798.
- Ebner, M., Lienhardt, C. Rohs, M., & Meyer, I. (2010). Micoblogs in higher education: A chance to facilitate informal and process-oriented learning? *Computers & Education*, 55, 92-100.
- Goh, J.W.P., Quek, C. J., & Lee, O. K. (2010). An Investigation of Students' Perceptions of Learning Benefits of Weblogs in an East Asian Context: A Rasch Analysis. *Educational Technology & Society*, 13 (2), 90-101.
- Gulbahar, Y. (2008). ICT usage in higher education: A case study on student teachers and instructors. *The Turkish Online Journal of Educational Technology*, 7(1), 32-37.
- Halic, O., Lee, D., Paulus, T., & Spence, M. (2010). To blog or not to blog: Student perceptions of blog effectiveness for learning in a college-level course. *The Internet and Higher Education*, 13(4), 206-213.

- Hall, H. & Davison, B. (2007). Social software as support in hybrid learning environments: The value of the blog as a tool for reflective learning and peer support. *Library & Information Science Research*, 29, 163-187.
- Holadley, U., & Ensor, P. (2009). Teachers' social class, professional dispositions and pedagogic practice. *Teaching and Teacher Education*, 25(6), 876-886.
- Howard, B., McGee, S., Schwartz, N., & Purcell, S. (2000). The experience of constructivism: Transforming teacher epistemology. *Journal of Research on Computing in Education*, 32(4), 455-464.
- Johnston, B. & Witherill, K. (2002). Teacher socialization: Opportunities for university-school partnerships to improve professional cultures. *The High School Journal*, 85(4), 23-39.
- Joshi, M., & Chugh, R. (2009). New paradigms in the teaching and learning of accounting: use of educational blogs for reflective thinking. *International Journal of Education and Development using Information and Communication Technology*, 5(3), 6-18.
- Karatas, S. (2008). Interaction in the internet-based distance learning researcher: Results of a trend analysis. *The Turkish Online Journal of Educational Technology*, 7(2), 11-19.
- Killeavy, M., & Moloney, A. (2010). Reflection in a social space: Can blogging support reflective practice for beginning teachers?. *Teaching and Teacher Education*, 26(4), 1070-1076.
- Kim, H. N. (2008). The phenomenon of blogs and theoretical model of blog use in educational contexts. *Computers & Education*, 51(3), 1342-1352.
- Kim, J., Song, J., & Jones, D. R. (2011). The cognitive selection framework for knowledge acquisition strategies in virtual communities. *International Journal of Information Management*, 31, 111-120.
- Kocoglu, Z. (2008). Turkish EFL student teachers' perceptions on the role of electronic portfolios in their professional development. *The Turkish Online Journal of Educational Technology*, 7(3), 71-79.
- Lai, H. M., & Chen, C. P. (2011). Factors influencing secondary school teachers' adoption of teaching blogs. *Computer and Educational*, 56, 948-960
- Lee, H. J. (2005). Understanding and assessing preservice teachers' reflective thinking. *Teaching and Teacher Education*, 21, 699-715.
- Lin, F. R., Lin, S. C., & Huang, T. P. (2008). Knowledge sharing and creation in a teachers' professional virtual community. *Computers & Education*, 50, 742-756.
- Lin, C. Y. (2009). *The effects of teachers' self-disclosure on subjective well-being and teaching Effectiveness by Internet Blogging: A Case of Teachers in High School of Home Economics & Commerce*. Yuan Ze University Department of Information Communication Master Thesis.
- Maor, D. (2003). The teachers' role in developing interaction and reflection in an online learning community. *Education Media International*, 40(1/2), 127-137.
- Marks, M. J. (2007). Influences on preservice teacher socialization: A qualitative study. Retrieved September 28, 2010 from the World Wide Web: <http://www.eric.ed.gov/PDFS/ED496098.pdf>.
- Ministry of Education of Taiwan (2004). Important Teacher Cultivation. Retrieved February 17, 2011 from the World Wide Web: Policy <http://english.moe.gov.tw/ct.asp?xItem=7119&ctNode=818&mp=11>.
- Mule, L. (2006). Preservice teachers' inquiry in a professional development school context: Implications for the practicum. *Teaching and Teacher Education*, 22, 205-218.
- Ponte, P., Ax, J., Beijaard, D. & Wubbles, T. (2004). Teachers' development of professional knowledge through action research and the facilitation of this by teacher educators. *Teaching and Teacher Education*, 20, 571-588.
- Ray, B. B., & Hocutt, M. M. (2006a). Teacher-created, teacher-centered weblogs: Perceptions and practices. *Journal of Computing in Teacher Education*, 23(1), 11-18.
- Ray, B. B., & Hocutt, M. M. (2006b). Reflection and the middle school blogger: Do blogs support reflective practices? *Meridian*, 9(1). Retrieved from [http://www.ncsu.edu/meridian/win2006/MS\\_blogs/03.htm](http://www.ncsu.edu/meridian/win2006/MS_blogs/03.htm)
- Ray, B. B., & Coulter, G. A. (2008). Reflective practices among language arts teachers: The use of weblogs. *Contemporary Issues in Technology and Teacher Education*, 8(1), 6-26.
- Rodgers, C. (2002). Defining reflections: Another look at John Dewey and reflective thinking. *Teachers College Record*, 104(4), 842-866.
- Romm, C., Pliskin, N. & Clarke, R. (1997). Virtual communities and society: Toward an integrative three phase model. *International Journal of Information Management*, 17(4), 261-270.
- Schellens, T., & Valcke, M. (2006). Fostering knowledge construction in university students through asynchronous discussion groups. *Computers & Education*, 46, 347-370
- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic.
- Schweiker-Marra, K., Holmes, J.H., & Pula, J.J. (2003). Training promotes reflective thinking in student teachers. *Delta Kappa Gamma Bulletin*, 70, 55-61
- Taiwo, DR. S. (2009). Teachers' perception of the role of media in classroom teaching secondary schools. *The Turkish Online Journal of Educational Technology*, 8(1), 75-83.
- Teo, T. (2009). Examining the relationship between student teachers' self-efficacy beliefs and their intended uses of technology for teaching: A structural equation modeling approach. *The Turkish Online Journal of*

- Educational Technology*, 8(4), 7-15.
- Wang, C. C. (1994). *Ethnography of Socialization of Student Teachers in Junior High School*. Unpublished master's thesis, National Taiwan Normal University, Taipei, Taiwan.
- Ward, J.R. & McCotter, S.S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and teacher education*, 20, 243-257
- Weller, M. (2007). The distance of isolation, why communities are the logical conclusion in e-learning. *Computer & Education*, 49, 148-159.
- Wimmer, R. D. & Dominick, J. R. (2000). *Mass Media Research: An Introduction*. (6<sup>th</sup> ed.). Belmont, CA: Wadsworth.
- Xie, Y., Ke, F. & Sharma, P. (2008). The effect of peer feedback for blogging on college students' reflective learning processes. *Internet and Higher Education*, 11, 18-25.
- Yang, S.H. (2009). Using blogs to enhance critical reflection and community of practice. *Educational Technology & Society*, 12 (2), 11-21.
- Yang, S. K., Ou, Y. S., Wang, C. J., Tang, W. L., & Liu, W. H. (1992). Study of Educational Practicum in Taiwan. *Collective Periodicals of National Taiwan Normal University Graduate institute of Education*, 34, 143-177.
- Zanting, A., Verloop, N. & Vermunt, J.D. (2001). Student teachers eliciting mentors' practical knowledge and comparing it to their own beliefs. *Teaching and Teacher Education*, 17, 725-740.
- Zeichner, K., & Gore, J. (2010). *Teacher socialization*. Retrieved September 28, 2010 from the World Wide Web: <http://ncrtl.msu.edu/http/ipapers/html/pdf/ip897.pdf>