Pre-service teachers' beliefs about evaluation

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Abstract

Fifty-six Chinese pre-service teachers from three four-year teacher normal universities were interviewed about their evaluation beliefs through two perspectives: student-centred (PSSC) and teacher-centred (PSTC). The analysis yielded five areas of evaluation belief structure (who, when, how, why to evaluate students and what to be evaluation beliefs) with various subcomponents: content, reasoning, applications and procedures. Yet, all fifty-six pre-service teachers prone to compromise their beliefs in the future teaching practice. Implications for reformers, educators and pre-service/in-service teachers include the need to provide a firmer grounding in teacher training, to explore the reliability of evaluation belief systems, and to develop feasible instrument based the analysis of interview data to confirm pre-service teachers' evaluation beliefs on a big scale. All of these endeavours are paid for the new educational policies carried on smoothly and descending the confliction among different beliefs from reformers, researchers and pre/in-service teachers.

Keywords: teacher-centered; student-centered; teacher evaluation beliefs

1. Introduction

Research on pre-service teachers' beliefs has received a lot of attention in recent years. Research on the topic since Pajares's pioneering study in 1992 has indicated that reformers could benefit to determine curricula and program direction from the research on pre-service teachers' beliefs. In fact, impacted deeply by the many years of experience as learners, pre-service always keep their educational beliefs as what the education is, what it means to "do" the education, and what role education plays in society, when it enters into the teacher education university on the first day (Bahr & Monroe,2004).

According to the proposal of Buehl and Alexander (2001), domain-specific beliefs should be discussed to clarify the different views about knowledge depending on the academic domain under consideration. Evaluation is a special and important phrase during the whole teaching and learning process. However, compared to the educational beliefs discussed widely, teachers' evaluation beliefs are fewer to be concerned by researchers specially. Most researchers will recognize this situation. A pre-service teacher' evaluation beliefs leads his/her teaching career to come up with possible solutions from their learning and growing experiences. Apparently, pre-service teachers' beliefs on evaluation act important role during the teaching and learning process. Sometimes such a sharing of thought seems to help: what are pre-service teachers' evaluation beliefs? Duckworth (1977) addressed that understanding pre-service teachers' sense about teaching, it was an important way to have students to explain the sense they were making. Therefore, the present study reviews the relevant previous research on pre-service teacher beliefs about teaching and learning, and then investigate pre-service primary school teachers about domain-specific beliefs

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(evaluation beliefs) through group and individual interviews to explore the nature of their evaluation beliefs.

2. Theoretical Background

Many years ago, Lortie (1975) pointed that teachers learned a lot about teaching through their experience as learners, which was called their "apprenticeship of observation". Similarly, in-service teachers tend to teach the way they have been taught instead of the training in teacher education (Larsson,1986; Koballa et al., 2000). Subsequently, Kennedy (1997) attributed that in-service teachers and pre-service teachers have strong beliefs about their educational role, individual academic performance and evaluation in the classroom. Any teaching that challenge their educational beliefs would be dismissed as theoretical, unworkable or simply wrong. Obviously, there exists a need to identify pre-service teachers' beliefs on teaching and learning and to develop tools that can make all their educational beliefs explicit. This will lead to strength the relationship between practice and theory and a deeper involvement in New Curriculum Reform among researchers, reformers and pre/in-service teachers.

2.1. Descriptions of Teacher Beliefs in Educational Research

Many researchers hold that beliefs can be divided into two components: one is related to the individual's intrinsic properties; the other one depends on the individual' s context, including one's history, environment and linguistic community (e.g. Perry, 1980; Brown, 1986; Pajares,1992; Richardson, 2003). Thus, belief is defined as a proposition which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual, and is therefore imbued with emotive commitment; further it serves as a guide to thought and behavior (Borg, 2001, p186.). Meanwhile, it is a connection between thought and behavior integrated knowledge, skill and attitudes together (Korthagen, 2004). However, exploring the notion of an individual's beliefs, we should respect the questions as following: What is the individual's acceptance? Why does the individual hold the view? How does the individual characterize what he/she get? When does the individual determine to act in the context of his/her situation?

Draw out from the philosophy states, we continue review the educational literature on beliefs. Pajares (1992) states that teacher beliefs is a theoretical framework for investigating how/why teachers behave the way they do. The concepts of teacher beliefs are not only important concepts in understanding teachers' thinking processes, instructional practices, but also important considerations in conducting teacher education designed to help pre-service and in-service teachers develop their thinking and practices (Clark and Peterson, 1986; Munby, 1982). Considering the importance of teacher beliefs, researchers have been focusing on a consensus definition of teacher beliefs. As a result, two nests of definitions of teacher beliefs can be recognized. One embraces a various array of empirical research that "teacher beliefs" generally used to be defined as a provocative form of personal knowledge that is pre- or in-service teachers' implicit assumptions about students, learning, classrooms, and the subject matter to be taught (e.g. Bryan, 2003; Foss & Kleinsasser, 1996; Nespor,1987; Richardson, 2003; etc.).

From a theoretical perspective, the other nest attempts to explore the nature of teachers beliefs and describe them as teachers beliefs systems, which is a "core" that depends only on the individual's intrinsic properties, and a periphery that depends on the individual's context, including his or her growing experience, cultural environment, and educational community (Brown, 1986; Harvey, 1986; Sigel, 1985). From the descriptions about teacher beliefs, we can get some enlightenment about teacher beliefs as following: As a teacher, he or she always sets out the education career based on his/her own beliefs, which are formed during his/her life by individual cultural background and educational experiences, and then he/she improves and filters the education beliefs on the basis of the growing of the teaching experiences which

forms a highly personalized philosophy of pedagogy--a belief system that constrains the teacher's perception, judgment, and behavior in the classroom (Kagan, 1992). Belief systems that appear to be formed based on logical, rational data often rely on mental constructs. They module teachers' educational philosophy during the teaching and learning processes regarding who is the authority in educational activities; what is valid and valuable knowledge to be taught; how to adopt the effective and appropriate strategies and forms to promote his/her professional development and student learning achievement, and when to carry on the instruction or evaluation (Beattie, 1995; Grossman, Wilson, & Shulman, 1989; Kagan, 1992; Shulman, 1986).

2.2. Capture Teacher Evaluation Beliefs

Evaluation is an on-going, co-dependent, and intermittent process. It is one of the basic competencies for a skilled teacher to be owned. Various kinds of policies and documents internationally issued by state educational departments point out that teacher should evaluate student development and achievement by the approaches of teacher-evaluation, self-evaluation and peer evaluation in suitable time to improve the teaching & learning processes and share the results with students, parents, administrators and other teachers as well (e.g., American Federation of Teachers National Council, 1990; Chinese Ministry of Education, 2004; the Education Commission of Hong Kong, 2000; Australian Ministerial Council on Education, Employment, Training and Youth Affairs, 2003; Association for the Professional Quality of Teachers in Netherland, 2004; European Commission, 2005; The General Teaching Council For Scotland, 2006; the Flemish Government, 2007) .   Match to the ways to exploring the nature of evaluation (Tufo & Gaster, 2002), most of the national educational policies above include five domains of evaluation: when to evaluate, why to evaluate, how to evaluate, who to evaluate and what to be evaluation goal.

In the realm of practical knowledge, teacher beliefs on evaluation influence their teaching activities, then influence student learning approach and ultimately student learning achievement. And the inherent in the idea of evaluation is "value". When we evaluate, what we are doing is engaging in some process that is designed to provide information that will help us make a judgment about a given situation, taking into account such ideas as objectives, goals, standards, procedures, and so on. In particular, in a classroom, teacher's evaluations are usually done in the context of comparing worthiness, appropriateness, goodness, validity, effect, etc. All of these value judgments are related to teacher beliefs. Furthermore, teacher evaluation beliefs are the key to effect kinds of educational policies working smoothly or not in practice.

However, impacted by progressivism and traditionalism in educational beliefs (Dewey, 1902), teacher beliefs, which have a profound effect on teacher's practices, are broadly classified under the knowledge transmission as teacher-centered or construction category as student-centered (Bunting, 1988; Entwistle, Skinner, Entwistle & Orr, 2000; Ravindran, Greene & DeBacker, 2005). The former emphasizes on passive reception of knowledge by students while the later encourages students to actively make sense of their experiences situated within the social cultural contexts. That's to say, teacher with student-centered beliefs is inclined to create active learning environment to support students involving themselves into learning processes to discuss, generalize and evaluate their true feelings and experiences about teaching and learning. While teacher with teacher-centered beliefs tends to emphasize the importance of a teacher-controlled curricula and classroom through strict discipline, order and procedure (Hermans, Tondeur, Braak & Valcke, 2008).

Building on the guidelines of previous research, educational policies and social cognitive theories on beliefs, teacher beliefs and evaluation, this study extends research on teachers' beliefs about evaluation. Firstly, we premise pre-service teachers' evaluation beliefs could be divided into two dimensions: teacher-centered (TC) and student-centered (SC). And then five questions that generated data for this paper are: What are the basic educational beliefs of pre-service teachers; Who should

take the responsibility during the evaluation process; Why should the pre-teacher accept his/her evaluation beliefs; When is the right time to evaluate student learning performance; how could the pre-service teachers evaluate their future students to meet the premised educational goal.

3. Methods

3.1. Subjects

Fifty-six pre-service teachers majoring four-year's full-time elementary education were selected from three normal universities located in three different provinces in China. The selection of both research sites and pre-service teacher samples were consistent with the proposal of Patton (1990) that maximum variation sampling and typical case sampling are the two purposeful sampling strategies. Maximum variation sampling was achieved by selection of three normal universities located in three provinces: a developing area, a less developed area and a developed area in China. The Normal Universities were considered typical of Universities in the three contexts.

Likewise, pre-service teachers were selected, with a gender breakdown of 39 females and 17 males, by professors and peer recommendations according to the criteria of Patton's maximum variation sampling. All of pre-service teachers have accepted the educational training for 1-4 years. Their majors included Chinese, mathematics, science and English. The fifty-six pre-service teachers have the basic knowledge about evaluation in the classroom from educational training, but all spoke of their lack of reflection on own evaluation beliefs though their learning and training experiences.

3.2. Procedures

Data were collected through entry and exit individual writing interviews, audiotaped group interviews, face interviews with 20,18 and 18 per-service students from three universities respectively. Initially, a one-hour structured writing interview was conducted with each pre-service teacher to provide demographic data about the teacher as well as the data on his/her espoused beliefs about evaluation including the basic questions as following:

1. Who evaluation of students? Why?
2. When assessing students? Why do you think this time is more appropriate to evaluate the students do?
3. Evaluate what the purpose or function? When you evaluate a student, will first of all what? Why is this considered?
4. How to assess student knowledge, attitude and ability? You more focused on the evaluation of knowledge, or focus on the evaluation of the attitude, or on the ability to evaluate it? Why?
5. How do the students provide assessment feedback? You usually will take what form? Why? In addition, it offers the pros and cons of evaluation feedback in the wrong?

Next, on the basis of pre-service teachers' answers on the paper, instructed by the theory of progressivism and traditionalism, the researcher divided them into student- - centered (SC) and teacher-centered (TC) teams with two subdivided groups respectively. And then, an half hour group interview was conducted with four groups holding two different evaluation beliefs. During the group interview, the common views about evaluation in a group would be taken a note and integrated the other group's ideas into the SC or TC team's evaluation beliefs. The group interviews were autiotaped and transcribed.

In order to explore the evaluation beliefs further, six of the 20/18 pre-service teachers were selected from SC and TC teams respectively to carry on another half hour face interview. For that writing and group interviews were not enough, the face

interview with various learning history and cultural contexts could provid the full perspectives for understanding per-service teachers' evaluation beliefs.3.3

3.3. Data Analysis

To analyze the data, transcriptions of 56 pre-service teacher writing interviews and 6 SC & TC group interviews were entered into a word processor. Data were organized around 5 structural categories of evaluation: who, when, how, why and what. Further coding of the structural categories resulted in 73 thematic categories. A database was created containing 3,537 records coded with one or more thematic categories. All of the categories were then compared with the research questions in order to specify which ones could be the feasible answer for each question. Finally, the face interview data were compared with the writing and group interviews to determine inconsistencies between the historical learning experience and academic education training.

4. Findings

4.1. Who should conduct the evaluation

Data show a general consistency on evaluation environment but half and half different evaluation beliefs existed between student-centered and teacher-centered. However, when paper interview data were compared with group and face interview data, inconsistencies were found in three significant areas. The data show that (1) all per-service teachers believe that a comfortable evaluation environment promotes members to express their views and accept others evaluation well; (2) half of pre-service teachers holding TC (PSTC) believe that teacher should take responsibility for "*students need teacher's objective evaluation to know the learning progress"(Tang Shoubin from SICNU)* while the other half of per-service teachers holding SC (PSSC) persist that teacher evaluation is only part of student evaluation system for " *students don`t need teacher's evaluation always" (Ye Shenchao from SICNU)*; (3) about the reasons of their choice, PSTC explain that teacher can reflect students' both advantages and disadvantages clearly to promote student progress actively while PSSC emphasize that pupils can manage their learning well by collaborating each other and making suitable evaluation in a free, friendly and relax learning environment.

4.2. When students should be evaluated

Not surprisingly, the fifty-six teachers believed that in order to promote students learn better, it is necessary to evaluate them frequently. Closely related was the suitable time for evaluation both to the interest of teacher and students. Other criteria for time selection included after the teaching process, before teaching process, during the whole teaching process. Data show that the PSSC tend to evaluate students at any suitable time as well as before teaching process, for example, Qin Chao from SICNU stated, " *Mostly pupils realize their learning achievements and limitations. But they are a growing group, they need suitable feedback from outside to analysis and solve their puzzles when the problem happened* ". Correspondingly, the PSTC prefer to evaluate students after a teaching and learning stage, for example, Ma Yin from SICNU agreed, "*Evaluating students should be carried on after a teaching phase normally on the base of teacher's teaching plans. The key of the evaluation is to summary the advantages and disadvantages of students' achievement*".

When asked to explain why he/she held his/her beliefs on evaluating time, the PSSC aimed to promote the interaction and confidence among teachers and students. Liu Yufeng from QHNU said, "*Suitable evaluation can play an important role during the students' development. Especially, if teacher can praise a timid pupil's occasional good activity during the learning process, it would be easy to build his/her learning confidence and promote good interaction among class*". Her schoolmate Song

Xiaojuan agreed with her, "*Besides of evaluating students well, teacher can know students' learning needs, habits, attitudes and methods better. Meanwhile, students can realize their learning needs and then adjust their learning habits, methods and attitudes easily with the help of teacher*". At the same time, the voice from PSTC pointed to the importance of teacher's feedback after a learning phrase. Wu Xia from QHNU said, "*After a learning phrase, on the basis of test result, teacher can promote students' potential power to encourage them to access full development by positive evaluation*". And her classmate Xue Gang supported her further, "*Teacher can help students to confirm their pros and cons to solve the learning problems in time. As such, teacher can improve his/her teaching process to instruct students learning effectively*".

4.3. What should be evaluated

A third unanimous finding was the goals of evaluation during the teaching and learning process. Although all of pre-service teachers admitted that it is more important to pay more attention on students' attitudes, passions, life learning etc. than to concern the learning result absolutely, they consistently expressed apparent different evaluation aims between student-centered and teacher-centered beliefs. The PSSC focused on students' learning responsibility and claimed that the aim of evaluation was to help students know their own progress and make better learning plans while the PSTC stressed on teacher's duties and shared the beliefs that the aim of evaluation was to finish the teaching assignments, reach the social expectation, cultivate students' learning habit as well as improve teaching quality and learning achievement.

On behalf of the PSSC, Song Xiaojuan from QHNU explained, "*Besides of testing students' achievements, evaluation can reflect their learning process and the learning plan. Furthermore, it is an important way to promote students to take their own learning responsibilities*". Her schoolmate Zhao Shibao agreed, "*Students need evaluation to confirm their learning process and then guide them to make feasible decision for the coming learning*". Contrastingly, the belief on evaluation beliefs on the PSTC were clarified by Luo Yanyu from QHNU, "*Society needs kinds of elites with high quality of moral, knowledge, physics and creation. Evaluation can help teacher to clear his/her teaching effect, make better teaching plans and strategies, cultivate students' learning habit, and then meet the elite requirement of society*".

4.4. How students can be evaluated

On the whole, in the areas explored, data showed few inconsistencies between pre-service teachers' evaluation beliefs and their actual practice in the classroom for that they haven`t any experience to check their evaluation beliefs in the practice at the moment. Nevertheless, all fifty-six pre-service teachers have showed their certain evaluation beliefs in their mind and planned to carry them out in the future. According to the interview data, the most significant influence that led the pre-service teachers to show their evaluation beliefs in structural decisions was the day-to-day necessity of evaluating activities for students who could perform according to the teachers' expectations. For example, Huang Xiaomei (SCINU, PSTC) said, "*On the base of students' learning level, teacher should pay attention to adopt various evaluating methods including peer/parent/society evaluation to promote students' development*". And her schoolmate Ye Shengchao (PSSC) agreed, "*Giving students the feedback from different perspectives is very important to help them to pinpoint at their own learning problems, and then promote them to get more progress*".

But when we explored the reasons why they chose different forms to evaluate students, different beliefs existed were documented clearly from interview data. PSSC viewed that a full perspective way to evaluate students could avoid the limitation of single evaluation form and push the fair education, "*Kinds of evaluation forms can offset the disadvantages and limitation of single one*" (Ren Haizhen, QHNU), "*Different students have different competences. Only does teacher provide different*

evaluating approaches, the educational fair can be fulfilled" (*Zhang Delin, SCNU*). PSTC shared the beliefs that a student means a world. For example, Li Pengcheng (SICNU) stated, "*Students are a flexible and growing group. They need kinds evaluation forms to reflect their various personalities with the time gone by.*" As such, in order to know students more objectively and reliably, Die Rongjun from QHNU said, "*Kinds of evaluation approaches adopted can get more objective, authentic information of students' learning. Meanwhile, they can avoid the negative effect brought by single evaluating approach*".

Without a doubt, all of pre-service teachers should pay some great concern on testing for that it was a very important way for educators to check the real educational levels among different areas, primary schools and individuals in China. A coin has two sides. However, focusing on the advantages and disadvantages of tests, PSTC and PSSC showed another divergence as following. Given that we have discussed the advantages of evaluation from both perspectives above. Here, we showed the divergent beliefs among PSTC and PSSC on the disadvantages of test. PSSC concerned on educational fair and believed that test always ignored the differences among areas, schools and individuals. "*First of all, it often ignores the different personalities and areas*", said Liang Jun from SCNU, "*For example, it is unfair to describe the sunrise of the sea in a national test for students who haven`t seen it before*". Furthermore, test always kept far away from students' real learning situation and fair education. Even though the educational departments paid for much more money, time and energy on national test, "*it takes more care on middle level students and ignores the real needs and situation of talent / at-risk students as well as high quality/ rural primary schools. Actually, it can`t cater to individual learning need*" *(Xie Wanhua, SCNU)*. Comparatively, PSTC took care of student development and worried about that test would bring extra learning pressure and score centered to students, which would limit the creativity and emphasis more on the competition among the students. "*It could quench students' zeal to learn other knowledge which not to relate to the test contents and push much more pressure on students' spirit to pursue the scores instead of the knowledge*", addressed Liu Yuying from SCNU. From her schoolmates, Yu Yibin expressed similar views, "*Test is less flexibility and easy to produce polarization among students*". And Huang Xiaoyan agreed, "*Test provides students limited space to think about more about how to use knowledge beside of seeking higher scores*".

4.5. The relationship between evaluation beliefs and past experiences

As mentioned before, different from the learning experience of university students majoring other fields, pre-service teachers accepted the educational training on the base of his/her own learning experiences that could be traced back to the primary school. Another words, their educational beliefs have been cultivated with their learning process. According to the face interview data, all eighteen pre-service teachers talked about the old learning experiences, especially the PSTC emphasized more on their teachers impacting significantly on their evaluation beliefs. For example, Can bijuan from SCNU said:

I was used to be a pupil in a countryside primary school. A woman and a man teachers managed nearly sixty pupils in the classroom together. I found that all my peers were obedient in the woman teacher's classroom but naughty in the man teacher's lessons. Such of the experience gave me strong impression that only the teacher owned enough prestige and public reliance, even though he/she seldom praised pupils, he/she could get the advocacy from pupils.

Her classmate Li Weixi agreed, "*Actually, pupils depended on the teacher's evaluation heavily. A virtuous and philosophical teacher always popular to pupils for that he/she is good at evaluating pupils at suitable time and situation*".

A little different from PSTC's views, even they agreed with the PSSC that evaluation beliefs were impacted by past learning experiences, they still contributed their evaluation beliefs more to their formal educational training at present. For example, Qin Chao from SICNU said:

I still keep a warm memory of my headmaster in primary school. She always smiled to all of pupils and we loved her very much. However, in her classroom, everything were harmony. Now I came to the Normal University, and learnt a lot of educational and psychological knowledge, I found that it was very important to explore the students nature to learn by themselves. I believe in that students could evaluate themselves with the help of teacher and promote a higher development day by day.

Yang Xiu from QHNU expressed the similar view, "*When I was young, I often observed my classmates being reprimanded by teacher for trivial things. From then on, I promised to be a good teacher who could evaluate and praise pupils fairly. Especially now, I am full of the confidence to evaluate pupils with the educational knowledge and promote a harmony learning environment with the power from educator, parents and community.*"

5. Conclusion

In this study, empirical evidence was found indicating our promise that evaluation beliefs of fifty-six pre-serviced teachers could be divided into student centered and teacher centered ones with the impaction from progressivism and traditionalism. Correspondingly, on the base of different educational foundation, pre-service expressed their evaluation beliefs through different perspectives. Because of the impact from past learning experiences, the pre-service teachers would like to cite some impressive memories during the young age to support their view on evaluation beliefs now. In other words, according to Kessels & Korthagen's (1996) view, all of the pre-service teachers articulated a frustrated awareness of the big gap between what their evaluation beliefs existed in their mind and how these evaluation beliefs would be applied in practice actually. Moreover, their frustration was intensified by their lack of experience to link effective evaluating approaches and complex classroom practice. When asked how to evaluate students effectively, most per-service teachers just listed the names of evaluation methods but limited to present the feasible educational situation for these approaches.

Findings in this study have some educational implications for researchers, reformers and pre-service and in-service teachers who involve themselves into the worldwide educational reform occurring in their countries at present. Apparently, it should be of grave concern to the pre-service teachers' evaluation beliefs that these teachers indicated that they lack instruction in both developing their education beliefs and applying them into practice, despite the fact that all fifty-six pre-service teachers regularly accept the formal educational training.

To address these concerns, reformers can collaborate with researchers to provide special programs with a firmer background in educational training process and in appropriate primary practice in structure methodology. This study suggests that some pre-service teachers prefer to meet kinds of teaching situation via deriving their learning experiences from their primary or secondary teachers. As if they are blinded to the fact that evaluation is a developing process, which can be carried deriving to not only teachers' old experiences but also students' real cultural learning situation. However, they are also blinded to integrate educational training into authentic practices. In the practice, pre-service teachers can check their evaluation beliefs and change them to lead a professional development.

These recall researchers should consider the requirement of both state and local educational programs. Beside of inviting professional in-service teachers to do the presentation for the pre-service teachers, researcher should develop feasible evaluation instrument to confirm per-service teachers' evaluation beliefs. And then they should take the responsibilities to design sessions adequate to address the theoretical and practical approaches to evaluation. However, pre-service teacher and in-service teachers should realize their own lack on the understanding of evaluation. Meanwhile, they should absorb enough abstract knowledge to serve for classroom effectively.

Besides of the implication mentioned above, there are other two revolved around the need for the pre-service teachers to explore the reality of multiple evaluation belief

systems and the need for educators and pre & in-service teachers to minimize the conflict between educational policies and teachers' evaluation philosophy. Once pre-service teachers understand all aspects of their evaluation, the nature of evaluation process and the educational confliction, they would evolve themselves in the new strategies and new solutions actively to decrease their frustration with perceptions of compromising evaluation beliefs. Consequently, they could reflect more and develop their evaluation belief in the new practice.

In conclusion, findings in this study support previous findings that the environment can influence a teacher's behavior, competencies, beliefs and so on (Korthagen, 2004). A reverse influence can be observed that from inside to outside, beliefs decide competencies, behavior and then work on the environment, but there are multiple belief systems from pre/in-service teachers, educators and reformers, which make a conflict in practice. As such, according to the up to down educational system in China, in order to carry on new educational policies smoothly, the educators and reformers should see the conflict clearly and design the feasible instrument to know the pre-in-service teachers' own evaluation beliefs. Already much is known about the evaluation process and the structure of evaluation beliefs in this study, and researchers continue to explore the evaluation beliefs which existed in pre-service teachers' mind on a large scale to minimize the gap between reform decision and practical action. By far, the results of the present study made clear that developing a set of questionnaires including five items (what, why, who how when) based on interview data to understanding teachers' evaluation beliefs is a first step in the development of the deeper understanding of innovations in complex classroom realities.

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