

How do business teachers trainees conceive professional competence and teach?

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Abstract

This study identifies business teacher trainees' conceptions of teaching business subjects and how these teaching conceptions draw impact on the ways they teach during their teaching practice by using phenomenographic and grounded theory research methods. All the 26 students who are studying the Business Studies Major of 4-Year Full-time B Ed (S) program were the research participants. To collect data from these participants, the researcher (1) asked participants to describe a good teaching of business subjects, (2) observed how the participants conduct their business lesson(s) in the practicing school, and (3) studied the teaching portfolios of the participants. The researcher were then look for the patterns of participants' teaching conceptions and ways of teaching.

The findings show five conceptions of teaching competence: (1) possessing accurate subject knowledge, (2) having effective teaching skills, (3) cultivating business ethics, (4) linking teaching with authentic business world and (5) increasing students' employability. Two dimensions, performance and integrated, of this phenomenon could be explored. Business teacher trainees hold multiple and dissonant conceptions of teaching. The teaching approaches the trainees would use include: (1) instructional, (2) interactive and (3) situational. The competence conceptions and ways of teaching business subjects were found to be multi-faceted.

Background

According to Hong Kong's new workforce demand and new secondary business curriculum, business students need to acquire generic and higher level competencies. Business teacher trainees should be able to possess adequate business subject content and pedagogical knowledge, and use the ways of teaching that can advance students' in-depth learning. However, research findings show that teachers' conceptions of teaching can affect their classroom pedagogy (Ball, 1988) and in turn teachers' teaching is regulated by the conceptions of teaching they held (Gow & Kember, 1993; Ho, 1998; Kember, 1997; Tang, 1993 & 2001; Trigwell, Prosser & Waterhouse, 1999). Conceptions of teaching are "qualitatively different categories of teachers' descriptions about their experience of teaching" (Watkins & Biggs, 2001, p. 10). The conception of teaching that a teacher holds and interprets in teaching is important in developing students' competence. This has led to the recognition that a teacher's genuine professional development has to begin with a change in his/her conceptions of teaching and learning (Gibbs 1995; Gow & Kember, 1993; Ho, Watkins & Kelly 2001). Using a conceptual change approach by increasing teachers' comprehensive understanding of teaching and their awareness of the existence of other conceptions in teacher training programs has emerged as a promising means before specific ways of teaching could be finally implemented (Ho, Watkins & Kelly 2001). Moreover, recent research has indicated that teachers hold different conceptions of teaching depending upon their classroom experience (Ho,

Watkins & Kelly, 2001, p. 144). Gaining more practical experience is one of the most precious elements in teacher professional development.

Currently, there are 26 teacher trainees who are studying the third year of the Business Studies (BS) Major in the 4-Year Full-time Bachelor of Education Program in the Hong Kong Institute of Education. These 26 Year 3 BS trainees have just completed their first 8-week teaching practice in local secondary schools from March to April this year. They independently taught around 9-12 business lessons per week during the teaching practice. Before the teaching practice, these Year 3 BS students have already completed the two Major methodology modules, Teaching and Learning of Secondary Business Curriculum I & II which provide them with an understanding of (a) the secondary business curricular, and (b) pedagogical knowledge and skills in instructional planning, teaching strategies, teaching resources and assessment for the teaching and learning of business subjects. In addition, they have completed nearly 80% of their Major academic studies in which cover all the business subject matter at the secondary level. These Year 3 BS trainees would have sufficient curricular, subject content, and pedagogical knowledge and skills to allow meaningful and realistic formation of conceptions and ways of teaching during their first block teaching practice.

Kember and Kwan (1999) recognized a strong relationship between teachers' conceptions of and approaches to teaching. Teachers who view teaching as a transmission of knowledge would use teacher-centred teaching approach and teachers who view teaching as a facilitation of knowledge would use student-centred teaching approach correspondingly (Kember & Kwan, 1999). Biggs (1999) also pinpoints that teachers tend to perceive teaching as a transmission of knowledge when they first commence teaching. If this is the case, the business teacher trainees of the said program may insufficiently develop students' in-depth learning which are urgently needed in the recent business curriculum changes. In order to understand the business teacher trainees' conceptions of teaching business subjects and the impacts of their holding conceptions on their teaching practice, it is important to identify and describe the conceptions and ways of teaching these business teacher trainees have. Gillian (2003, p.108) points out that the value of studying conceptions of teaching allows "a few conceptions to be underlined and explain many different behaviors". In this study, the findings can delimit the teaching conceptions the business teacher trainees have and explain the limitations of their teaching ways as a starting point to making changes. A direction for increasing their comprehensive understanding and awareness of others' conceptions in the teaching of business subjects can be drawn further.

To allow an in-depth understanding of their conceptions and ways of teaching, the related research aims of this study are to (a) identify business teacher trainees' different conceptions of teaching business subjects, (b) explore how they teach business subjects in their teaching practice, and (c) examine the relationship between business teacher trainees' teaching conceptions and ways of teaching business subjects. There is relatively little information about conceptions and ways of teaching of pre-service teacher trainees with a particular emphasis on the business study area in the Hong Kong context. The results are able to: (a) inform the teaching conceptions the business teacher trainees have and their implications on the ways of their teaching of business subjects, (b) create an awareness of business teacher trainees' qualitative variation in understanding of teaching business subjects, (c) provide a starting point and direction to bring about change in business teacher trainees'

ways of thinking about teaching, and (d) inform the direction for improving the teaching and learning of B Ed BS Major at the program level.

Some recommendations which might come out of the study are to suggest the categories of conceptions the teacher trainees need to be possessed, appropriate pedagogical strategies and relevant changes in engaging in teaching practice at the program level. Thus, the crucial role of the said program, developing business teacher trainees' teaching competence, can be achieved more effectively.

The conception of competence and teaching approaches

There are different approaches to understanding competence. From a traditional perspective based upon rationalistic research, competence is perceived as attributes for accomplishing the work. The three underpinning approaches, behaviourist, generic and integrated, range from a narrow to a broad view (Gonczi, 1994; Hager, 1995; Thompson, 1998). From a holistic perspective with regard to interpretative findings (Sandberg, 1994), competence is constituted by a worker's understanding of work. The interpretative and interpretative-relational approaches are the two complementary approaches of this perspective (Sandberg, 1994; Velde, 1999). These two rival perspectives propose not only a major shift in the basic understanding of competence, but also in the development of competence. As competence moves from being externally related to workers' work to internally related to workers' understanding, competence development shifts from an emphasis on knowledge transfer to knowledge construction (Sandberg, 2001).

Competence development can be simply described as a teaching and learning process for effective work (Barnett, 1994; Bowden & Marton, 1998). It can be distinctively achieved in two main ways, via a transmission of knowledge and an individual's construction of knowledge (Sandberg, 2001). Teachers who view teaching as a transmission of knowledge would use teacher-centred teaching approach and teachers who view teaching as a facilitation of knowledge would use student-centred teaching approach (Kember & Kwan, 1999).

Teacher-centred approach and its teaching strategies

Brown (1998, p. 9) stated that a teacher-centred teaching approach aims for knowledge transmission, which underpins current career and technical education thinking. Learning involves the changing or conditioning of observable behaviour and thus focuses on procedural knowledge, that is, knowing how instead of knowing why (Brown, 1998, p. 5). Lecturing, modelling, instructing, illustrating, demonstrating and coaching are the main teaching strategies of a teacher-centred approach (Brown, 1998; Castling, 1996). These teaching strategies mainly involve a formal exposition of a desired teaching content by the teacher. Teachers in this delivery mode take an active role in the selection, organisation and presentation of teaching materials. They are also responsible for adjusting the pace, the level and the style of presentations in a way to elicit the most effective learning outcomes. Teachers directly instruct students and provide little chance for questioning, independent thought and interaction among learners. Therefore such a direct instruction is the best way to teach rules,

procedures, and basic skills to younger or low academic achievers (Muijs & Reynolds, 2001, p. 15). They are more relevant to developing observable behaviours (Brown, 1998), which is a low level of competence.

Student-centred approach and its teaching strategies

A student-centred teaching approach focuses on the empowerment of the learners by providing them with practical experience, metacognition and self-evaluation through small group interaction (Brown, 1998, p. 6). Its teaching strategies may include group discussions, debates, simulation games, role playing, case studies, projects, field visits, co-operative learning and problem-based learning, which are “process oriented, problem based, contextual, interdisciplinary and metacognitive in nature” (Brown, 1998, p. 49). Teachers place students and their social environment at the departure point of teaching and learning, and allow students to construct knowledge by themselves and through social interactions (Doolittle & Camp, 1999). An open-ended question or situation is usually presented for inquiry through group discussions and interaction (Brown, 1998, p. 55; So & Yu, p. 32). The teacher’s role is to engage learners in the discovery of knowledge and provide them with the opportunities to reflect upon and test theories through real-world applications. The student-centred teaching approach can achieve deeper learning that is required to develop a higher level of competence.

Kember (1997) proposed five conceptions (imparting information, transmitting structured knowledge, student teacher interaction/apprenticeship, facilitating understanding, and conceptual change/intellectual development) and two higher-level orientations (teacher-centred/content-oriented and student-centred/learning-oriented) for understanding teachers’ conceptions by reviewing 13 studies of Western university teachers. A similar multiple-level conceptual structure is identified by interviewing university lecturers in Hong Kong (Kember & Kwan, 1999) and school Physics teachers in Guangdong, China (Gao & Watkins, 2001). Moreover, an individual teacher does hold multiple or even conflicting conceptions of teaching in both Chinese and Western cultures (Gao & Watkins, 2001). Teachers might hold multiple conceptions of teaching when they viewed teaching as a “complex” system, but teachers might support two conflicting conceptions when they put “ideal” and “practical” into considerations (Gao & Watkins, 2001, p. 42). It may cause inconsistency between conceptions and strategies of teaching. A study of conceptions and ways of learning for Indigenous Australian University students also found an inconsistency between conceptions and strategies of learning, which is considered as “dissonance” between conceptions and strategies (Boulton-Lewis, Lewis & Wilss, 2002).

Research Methods – Phenomenography and grounded theory

There are two major purposes of the study: (a) to identify business teacher trainees’ conceptions of teaching business subjects and (b) the implications these conceptions have in their teaching of business subjects during their teaching practice. Both of these purposes seek to find meaning in human experience. Marton, Dall'alba and Beaty (1993) indicated that qualitative research is a means of answering questions about the nature of human phenomena as it focuses on meaning and understanding. Qualitative methods can be used to present and understand what lies behind any phenomenon that is difficult to convey with a quantitative approaches (Strauss & Corbin, 1990, p. 19). It is therefore reasonable to use qualitative methodology – phenomenography and

grounded theory - in this study. Phenomenography would be used to identify business teacher trainees' conceptions of teaching business subjects and grounded theory would be used to identify their ways of teaching in business lessons.

Phenomenography is adopted for identifying trainees' conceptions because it focuses on "description, analysis and understanding of people's experiences in the phenomenon" (Marton, 1981; Marton & Booth, 1997). It is a description of how people conceive a phenomenon (Hasselgren & Beach, 1997). By using phenomenography, the categories of description will be presented with sufficient extracts to delimit the meaning of the category and their contextual relationships (Entwistle, 1997, p. 132) that allows the researcher not only to list people's conceptions in the form of categories of description but also the researcher's interpretation of the relationship in the form of a diagram which is called outcome space.

The second purpose of this study is to identify the ways of teaching in a qualitative way that is not specifically concerned with teachers' conceptions but their processes and actions. The phenomenon is more narrowly focused on how and why the teacher trainees use the ways to teach business subjects, which is grounded in reality. The ways and the relationship between the ways of teaching are conceptually undeveloped. Grounded theory is "discovered, developed, and provisionally verified through systematic data collection and analyses of data pertaining to that phenomenon" (Strauss & Corbin, 1990, p. 23). It allows flexibility and freedom on one hand, and provides a scientific method on the other hand, to explore the ways of teaching in depth.

Samples – Business teacher trainees

Around 25-30 respondents are considered a suitable number for capturing the possible variation of conceptions in a rich and comprehensive way (Sandberg, 1994, p. 72). So, all the 26 Year-3 students who are studying the Business Studies Major in the 4-Year Full-time Bachelor of Education (Secondary) Program in the Hong Kong Institute of Education were the potential participants in the study. They were invited to participant into the study with a consent form and a clear verbal explanation given directly by the researcher in the class.

Instruments – Interview, class observation and teaching portfolio

Interview is the main research instrument in this study because it is not only the traditional means for conducting qualitative research but also an opportunity for allowing participants to describe and give rich accounts of their ways of lived experience. To focus on participants' ways of experiencing, semi-structured one-to-one interviews were conducted in pre- and post-teaching practice period. Participants were asked to describe their understanding of a competent business teacher and how they would teach in the interviews. An individual class observation were conducted in teaching practice in order to gain thorough understanding of how the participants make their ways of teaching in business lessons in the practicing school. The teaching practice supervision form covers a number of items: the teacher's attitude, content of teaching, planning and evaluation, management and instruction, communication and individual needs of students, which could clearly inform the ways of participants' teaching. Therefore, the items listed in the teaching practice supervision form

would be the key observation checklist. Apart from interview and class observation, participant's teaching portfolio that records participant's teaching and learning process within the teaching practice were used as another instrument for further investigation of their ways of teaching business subject.

Data collection procedures

An invitation letter were sent to the potential participants to ascertain their interest and availability for participating in the study. All the 26 business teacher trainees were consented to be the participants of this study. Data were collected through interviewing, class observation and studying teaching journals in the phases of pre-, during and post- teaching practice correspondingly.

I Interviews: Pre-TP (completed) and Post-TP (in-the-progress)

In the pre-TP interview, participants were asked to describe what is a good teaching of business subjects to them and how would they teach their business lessons. According to Gao and Watkins (2001b) suggestion, the questions focus on two different aspects: (1) 'key questions' – about teachers' opinions and values to teaching and (2) 'practical questions' – about teachers' teaching experiences and behaviours would be asked in the post-TP interview.

II Class observation during TP (completed)

Each participant were observed how he/she conduct a business lesson by the researcher. The teaching assessment from were a basic observation checklist. Post-observation discussion was held to gain a better understanding of how participants conceive and act on the teaching of business subjects.

III Post-TP submission of teaching portfolio (in-the-progress)

Each participant were required to submit their teaching portfolio that incorporates their educational belief, lesson planning and reflection made in the teaching practice. The teaching portfolio is actually a standard practice at the program level and there is no extra work for participants. Any relevant information and or description that inform participant's ways of teaching would be extracted for data analysis.

Throughout the data collection particularly for the interview, the researcher would (a) identify what elements of the phenomenon are the focus of the participant's attention by encouraging reflection on the experience, (b) obtain descriptions of the phenomenon, examples and comparisons by asking for information about how the phenomenon appeared to the participant, (c) confront and pursue areas of confusion by asking participants to reconcile contradictory statements or raising controversial issues related to the phenomenon, (d) probe for analogies by saying, 'You said it was like', and (e) encouraging reflection on experience by asking for elaboration through questions such as 'Please explain', 'Tell me more about ...', 'Can you explain that in a different way?', 'Give me an example', 'Describe that a little more please' and 'Anything you want to add' (Bruce, 1994, pp. 50-53). Most important, the researcher put aside her own experience of the phenomenon and focus on the experience of the participant, and treat all possible descriptions supplied by the participant as being of equal value (Bruce, 1994, p. 54).

Data analysis and analytic procedures

The data analysis was divided into two parts. The first part was mechanical and the second conceptual. The mechanical part was the handling of the raw data in the form of text using the computer program, NUD*ist. Computer program was used in the initial stage of data analysis to increase the efficiency and accuracy of handling large amounts of qualitative data. This method frees the researcher's mind for conceptual part of data analysis (Thompson, 1998, pp. 121-122). The computer application in this study was limited to storing, sorting, cutting, pasting and presenting (Coffey, Holbrook, & Atkinson, 1996; Thompson, 1998). All the raw data would be handled in the same way.

In conceptual analysis, the analytic procedures of phenomenography for identifying participants' teaching conceptions were: (1) to listen to the tapes and read the transcripts of interviews carefully and (2) to look for patterns that describe and discern the teachers' conceptions of teaching business subjects. All aspects of the responses were treated as being of equal importance (horizontalization). Similar or different meanings were sorted, transferred and coded as a category. These categories representing all identified conceptions would further filtered to become sub-categories representing qualitatively different conceptions. The sub-categories were re-coded if necessary until all the conceptions were covered. Finally, an outcome space would be constructed to describe the relationship between the categories of description.

For the grounded theory, it was used for identifying the ways of teaching and its analytic procedures cover three major coding steps. The first step, open coding, was to develop categories by identifying and grouping the data having similar characteristics. The second step was axial coding that pooled the categories and made connections between them. So, subcategories to a category and their relationship could be developed. The third step, selective coding, was to refine the categories and develop a clear story line for them. Finally, the relationship of categories was developed in a diagrammatic form to show their conditions and consequences bearing upon the ways of teaching.

To have a closer examination of the relationship between teachers' conceptions and their teaching ways, a relational table that matches the teachers' highest conception reached in the hierarchical structure with their most common ways of teaching would then be drawn.

Preliminary findings

I Competence conceptions held by the business teacher trainees

Five categories of description were drawn from the data analysis. Business teachers' competence is seen as: (1) possessing accurate subject knowledge; (2) having effective teaching skills; (3) cultivating business ethic; (4) linking teaching with authentic business world and (5) increasing students' employability.

Category one – Competence is seen as possessing accurate subject knowledge

The first conception focuses on subject knowledge that a competent business teacher should possess and deliver in business lessons. Participants emphasize on both theoretical and practical aspects of the subject matter.

P5: His/Her teaching must be accurate.

P12: They (business teachers) are knowledgeable and practical.

P21: ... must possess good subject knowledge so that their teaching is full of confidence

Category two – Competence is seen as having effective teaching skills

The focal point of the second conception is the teaching skills that a competent teacher should possess and demonstrate in business classes. Participants show that they should be able to: (1) making a good instructional plan, (2) meeting students' needs and (3) using different methods and aids to achieve effective teaching in every lesson.

P23: ... preparing the lesson by reading different references, teaching from known to unknown, using multi media such as ICT and video, focusing on the pre-set objectives, evaluating the teaching performance and providing follow-up work where necessary.

P25: ... their explanation must be clear ... don't be rush, stop at once when students do not understand, ... use different methods ...

Category three – Competence is seen as cultivating business ethic

The central theme of the third conception is that a competent business teacher is one who cares students' all round education particularly for their moral education. They believe that they should educate their students the essence of business ethics through daily teaching.

P2: Business teachers should add in business ethic in their teaching.

P3: ... teaching students the moral concepts such as fairness ...

P5: ... must emphasize on business ethic including fair trade and social responsibility

P8: ... encourage students to care the society and make contribution to it
P25: should let students know that business does not mean money, it is a tool but not an ultimate goal.

Category four – Competence is seen as linking teaching with authentic business world

In the forth conceptions, participants view teachers' competence from a practical point of view, looking at how the teachers relating theory to practice.

P1: ... can link up teaching and real world
P2: ... (teaching) close to daily life so that they (students) can apply
P3: ... allow students to touch the outside world.
P19: ... students is able to apply textbook knowledge such as organising fund raising activities

Category five – Business teachers' competence is seen as increasing students' employability

Finally, participants describe that competent business teacher should be able to cater for their students' future needs particularly for the vocational aspects so that their students can adapt to and meet the demands of ever-changing business environment.

P2: To prepare students to work smoothly in the future.
P6: let them (students) know their future working prospects
P21: ... their students can find a job eventually ...
P26: ... enable students to meet the ever-changing world.

II Teaching approaches used by the business teacher trainees

The approaches they use are: (1) an instructional approach in which the trainees transmit knowledge using direct strategies including modeling and questioning. (2) An interactive approach in which teachers are concerned with group dynamics in the process of teaching by using group discussions, presentations, games, competitions, and debates. (3) A situational approach in which teachers focus on maintaining a high level of students' interest in the business world by situating their teaching in a real-life context with the use of case studies, simulations and role plays. Trainees seem to favour one or two of these approaches.

Discussion

In this study, five conceptions of business teacher competence were identified and reported as categories of description. The five categories are: (1) possessing accurate subject knowledge, (2) having effective teaching skills, (3) cultivating business ethics, (4) linking teaching with authentic business world and (5) increasing students' employability. These five conceptions lie in the performance and integrated dimensions. The first three conceptions locate in the performance dimension because trainees narrowly itemised their competence as

performance of a number of tasks described as observable action. The fourth and fifth conceptions lie on the integrated dimension since the trainees view their teaching competence from a holistic point of view, looking at how they link their teaching in the context of practice to increase students' employability. The location of the five conceptions actually ranges from a narrow perspective, that is concentrating on task and personal attributes, to a broader perspective which incorporates tasks and personal attributes in the context of practice.

These five conceptions held by business teacher trainees do not only give rise to a variation in their teaching competence, but to a hierarchy of their professional competence which is from academic to operational competence. According to the two rival conceptions of competence, traditional and holistic approaches are correspondingly attribute-based and practical-based. Competence can be constituted by attributes including skill, knowledge and general attributes as well as the combination of all these attributes in the context of practice. It covers two levels of competence, academic and operational. Academic competence focuses on attributes built around an individual's mastery and operational competence is based on a combination of attributes towards a wider societal interest in practice. Operational competence is built up from the academic competence and is seen as a higher level. Therefore, the competence conception can be broadly constituted by the two levels and hierarchically developed from an academic to an operational level, which is similar to some researchers who perceive conceptions as hierarchical (Biggs, 1999; Dall'Alba, 1990; Martin & Balla, 1990).

As Hong Kong moves towards a knowledge-based economy, education systems must be responsive to such changing needs (Hong Kong Special Administrative Region Government, 1997, 1998 & 1999). Educationalists have come to realise that preparation for life and working in the business world is a vital educational objective (Cheung & Lewis, 1998; So & Yu, 1996). Therefore, business education serves societal interest as it prepares students to engage in business activity with confidence and competence (Ministry of Education and Training, 1999). Williams, Herrin and Taylor (2001) stated the two missions of business education in high schools are:

to teach students about business so that they could understand the economic world in which they functioned as producers and consumers, and to teach them for business so that they would have the skills and knowledge needed to be productive employees, to manage their own businesses, and to meet employers' expectations. (p.40)

According to the Policy Statement on the delivery of business education in US (National Business Education Association, 2004), competent business teachers (business educators) are expected to be:

the primary facilitators of learning for and about business. Business educators carefully analyze the needs of the learner, choose the appropriate teaching strategies, provide feedback to the learner and enlist the support of others in the learning process. To assist in delivering instruction, business educators can use partnerships within the community, cross-disciplinary projects within schools, collaborative student work groups, and interactive technology. They are changing their modes of instruction as well as finding and using the latest delivery strategies. (Policy Statement 61, US)

However, another scenario comes up by a closer examination of the relationship between business teachers' conceptions and teaching strategies in Table 1. Table 1 matches the teacher trainees' highest conception reached in the hierarchical structure with their most common teaching strategies used for further analysis.

Highest level of students' competence business teachers' hold	The most common teaching strategies used by business teachers			Total
	Instructional	Interactive	Situational	
Possessing accurate subject knowledge	0	0	0	0
Having effective teaching skills	0	0	0	0
Cultivating business ethics	0	0	0	0
Linking teaching with authentic business world	11	8	2	21
Increasing students' employability	3	2	0	5
Total	14	10	2	26

Table 1: Cross tabulation of conceptions and teaching strategies

Table 1 indicates that all the teacher trainees held a higher level of competence conceptions but only one fifth of them used the corresponding situational approach. Around one third of them used the instructional approach. This can be explained by an argument that initial teachers tend to perceive teaching as a transmission of knowledge when they first commence teaching (Biggs, 1999). It can also be caused by some external factors. From the comments given by the trainees, their use of teaching approaches was widely driven by the regular teachers in their practicing schools, their students' learning approaches and the school expectations, instead of being solely based on teaching and learning theories and or their own ideal ways.

This result illustrates that there is a correlation between trainees' conceptions and their teaching approaches but not as strong as the relationship between teachers' conception and ways of teaching established by Kember and Kwan (1999). At the same time, this result does support the findings on "dissonance" between conceptions and strategies (Boulton-Lewis & Wilss, 2002) and the argument about the possibility of holding conflicting conceptions when teachers consider the "ideal" and "practical" sides of teaching together (Gao & Watkins, 2001). Competence development as a teaching and learning process might be viewed as a complex system (Gao & Watkins, 2001). Teachers might need to use teaching approaches in a flexible and sensible way.

However, the business teacher trainees who act as fresh teaching practitioners in their first block of teaching practice might have their intended and unintended ways of teaching subject to: (1) their understanding of knowledge base of teaching business subjects, (2) experience in real practice and (3) limitations occurred in the practicing schools.

To further understand the substance and formation of teacher's conceptions of teaching in subject specific context, Shulman (1987, p. 8) outlines seven categories of the knowledge base of teaching as a blueprint for distinguishing the complexities of teachers' understanding and teaching of content knowledge. The categories include:

1. *content knowledge - understanding what, why and how to justify the subject matter they teach;*
2. *general pedagogical knowledge - understanding the broad principles and strategies for transcending subject matter;*
3. *curriculum knowledge - arranging the subject matter and teaching materials in a specific context;*
4. *pedagogical knowledge - understanding the learning difficulties of the subject matter and how to teach them in the most effective way resting on a research-based;*
5. *knowledge of learners and their characteristics;*
6. *knowledge of education contexts; and*
7. *knowledge of educational ends, purpose and values, and their philosophical and historical grounds.*

Teachers would build up their conceptions of teaching through on-going processes of comprehension, reasoning, transformation and reflection basing on the four sources of the knowledge base for teaching: (1) scholarship in content disciplines, (2) educational materials and structures, (3) formal educational scholarship and (4) wisdom of practice (Shulman, 1987). It means that teachers' conceptions of teaching are soundly rested on their own in-depth understanding of the (1) subject matter they are teaching, (2) organizational structures such as materials and institutional mechanisms they are having, (3) effective teaching principles and (4) the reflective practice of able teachers through a scholarly study on both theoretical and practical aspects. Teachers must learn to use their knowledge base to justify their actions in teaching skillfully instead of being a follower to teach in prescribed ways.

Conclusion

This study illustrates that business teacher trainees not only demonstrated multiple, but also a higher level of competence conceptions. However, they might use inconsistent teaching approaches owing to the limitations of their own experience and other school factors. Thus, the correlation between trainees' conceptions and teaching approaches was not too strong in this study. Trainees seem to be aware of their responsibility in teaching the business subjects, but separate their chosen teaching approaches from their own conceptions of competent outcomes. There is insufficient room for trainees to act freely in their roles and to execute their own professional judgement on the methods they believe to be most effective in teaching business lessons. The training institutions and stakeholders need to provide a more open learning environment to the trainees.

To further strengthen the business teacher trainees' professional competence, they should be encouraged to (1) explore different conceptions of competence, (2) become aware of their own teaching methods, (3) investigate different approaches to teaching business lessons, and (4) deal with their obviously conflicting roles, of being a teacher trainee and a teacher, in the process of teaching practice.

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