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Exploring EFL Teachers' Perspectives of Professional Knowledge and Teaching Efficacy in Vocational High Schools

Abstract

The presented study was conducted to investigate vocational high school EFL teachers' professional knowledge and teaching efficacy from teachers' perspectives. Data were collected through a questionnaire and analyzed by frequency distribution, t-test, ANOVA, Pearson correlation and stepwise regression. The results indicated that teachers have higher performance on professionalism and attitude to professional knowledge; teaching and class management in teaching efficacy. A significantly positive correlation was found between EFL teachers' professional knowledge and teacher efficacy. Teachers reported that professional skills, professionalism, and attitude in professional knowledge were significant predictors of teaching efficacy. Professional knowledge helps to shape effective teaching.

Keywords: *vocational high school; EFL teachers; professional knowledge; teaching efficacy; Taiwan*

Introduction

Even though learning English dominates most Western and Eastern countries and prevails in the EFL and ESL language teaching contexts (Hütter, Smit & Barbara, 2009), the English teacher's education has always been given importance in schools. Yet, the English teacher's education has always been connected with the certification and recognition of qualified teachers (Brumfit, 2006). Qualified

teachers play a significant role in the functioning of vocational education. They contribute to the development of the vocational education system by ensuring teaching quality and self-efficacy as well as students' learning and achievements (Güven, 2010). In today's modern society, teachers holding different characteristics and perspectives about teaching, teacher professional knowledge and teaching efficacy play a significant role in classrooms. Especially, in Taiwan's vocational education context, there are more than 100 vocational high schools of various types, such as High Schools of Industry, High Schools of Commerce, High Schools of Agriculture, etc. (Huang & Fu, 2010).

Research Problem

Teacher professional knowledge has been bound to specific contexts and curricula, and has influenced cognitive processes in learners that can promote learning (Wette, 2010). Elbaz (1983) described the components of professional knowledge as self, the milieu of teaching, the subject matter, curriculum development, and instruction. Grossmann (1990) further categorized teacher professional knowledge into general pedagogical knowledge, subject matter knowledge, pedagogical content knowledge, and knowledge of context. The professional knowledge of EFL teachers is an important aspect of EFL teaching and teacher expertise, one that is often not acknowledged. Day and Conklin (1992) classified the professional knowledge of English teacher education into four major types: content knowledge, pedagogical knowledge, pedagogical content knowledge, and support knowledge. Huang (2004) indicated that English teachers' education must include professional knowledge, which means English ability training and TESOL courses including syllabus design, lesson planning, teaching methods, and multi-assessment ability. Lu (2005) analyzed the professional knowledge of the English teacher as general knowledge, professional knowledge, educational professional knowledge, and educational professionalism. Qing (2009) wrote that English teachers have to reflect, analyze, and adjust or change their practice whenever it is necessary in the English classroom. The purpose of this paper is to report the influences of vocational high school EFL teachers' professional knowledge on teaching efficacy in terms of teachers' perceptions. To sum up, the English teacher's professional knowledge in this paper involves basic English ability, which refers to four skills of English ability; professional knowledge, which refers to EFL teachers' being equipped with related knowledge and conception in English teaching; professional skills which refer to EFL teachers' familiarity with teaching ability, lesson planning, syllabus design,

and teaching methods or strategies; professionalism and attitude (the conception of counseling, teaching attitude, teaching beliefs, and teaching professionalism).

In addition to English teachers' professional knowledge, teaching efficacy is also a crucial factor for achieving success in EFL instruction. Bandura (1997) defined teaching efficacy as judgment of the teacher's capabilities so as to bring about the desired outcomes of student engagement and learning, even in those students who may be difficult or unmotivated. Pekkanliegelt (2009) also stated that teacher efficacy was related to teachers' beliefs about their ability to affect students' learning outcomes. Eslami and Fatahi (2008) reported that there were two types of teachers' perceived efficacy, Personal Teaching Efficacy (PTE) and General Teaching Efficacy (GTE). According to the above literature, the teaching efficacy of English teachers has generally been divided into three types: teaching design and method, teaching and class management, and teaching assessment. The inclusion of teaching design and method implies that teachers need to have strong concepts of teaching objectives, content, and strategies. Teaching and class management refers to teachers' necessity to know how to control their lesson plans and successfully manage classes as well as maintain good interactions between the teacher and students. Teaching assessment refers to students' being tested for their learning outcomes and teachers' helping students who may have difficulties learning and be unmotivated. Research on teaching efficacy has produced similar findings. For instance, Ashton and Webb in 1986 found that teachers with high teaching efficacy had a positive influence on teaching activity, effort, and productivity. Khairani and Razak's (2010) research showed that student teachers with high teaching efficacy beliefs were more productive, competent, confident, and successful.

Research Focus

In Taiwan, college students who want to be EFL teachers in vocational high schools are required to complete education courses at colleges or universities. They have to complete rigorous training classes in order to promote higher professional and teaching quality according to the policy of Taiwan's Teacher Education. Based on Articles 7 and 9 in the Teacher Act of Law and Regulations Database of The Republic of China, college students who want to be EFL teachers in secondary education also have to pass examinations in the teacher education centers of universities. After completing these requirements, they have to work as intern teachers at a high school for six months before applying for an official teacher certification examination. However, the professional knowledge of vocational high school EFL

teachers and its relationship to teaching efficacy in Taiwan are often neglected. Therefore, the following research questions were posed to guide the study.

1. What type of professional knowledge do EFL teachers perceive as necessary for teaching vocational high school English?
2. What type of teaching efficacy do EFL teachers perceive as necessary for teaching vocational high school English?
3. Does the professional knowledge of EFL teachers have a significant impact on teaching efficacy in EFL classes in vocational high school?
4. What are the professional knowledge factors that predict variations in EFL teachers' teaching efficacy in vocational high school?

Research Methodology

Research Sample

There are 111 public and private vocational high schools with approximately 1,110 EFL teachers in Taiwan. Therefore, the cluster sampling technique was used in this study. Firstly, according to their location, vocational high schools were divided into northern, central, and southern ones. Secondly, vocational high school EFL teachers were phoned and asked to participate in this study. Then, questionnaires were sent to those teachers who had agreed to participate. All the participants were provided with written information about the nature and purpose of the research project. As a result, 484 questionnaires were sent and 353 teachers provided anonymous responses. The return rate was 72.93%. However, there were 28 invalid questionnaires. The final data set contained responses of 325 EFL teachers from 56 public and private vocational high schools spread throughout the island of Taiwan.

Instrument and Data Analysis

This study used two scales consisting of 80 items on EFL Teacher Professional Knowledge Scale (ETPK) and EFL Teacher Teaching Efficacy Scale (ETTE). ETPK was revised from the Elementary School English Teacher Professional Knowledge Questionnaire developed by Huang (2004) and the Educational Professionalism in Teacher Professional Knowledge and Cognition Questionnaire developed by Yang (2005). ETTE was adapted from English Teacher Teaching Efficacy Scale developed by Lu (2005) and Class Climate in Teacher Teaching Efficacy Questionnaire developed by Hsieh (2004). The scales of ETPK and ETTE were examined by three experts to find inadequate items. Revised scales were then conducted in the pilot study.

The pilot study comprised 91 EFL teachers from 10 public and private vocational high schools. There were four factors in the scale of ETPK, including basic knowledge, covered by 8 items; professional knowledge, 18 items; professional skills, 10 items; and professionalism and attitude, 10 items. The results showed that the instrument content was valid for measuring EFL teachers' professional knowledge and teaching efficacy. After the pilot study, 2 items in the professional knowledge were deleted due to disturbingly low values in the item analysis of SPSS. The reliability of ETPK was 0.980 and 0.961, 0.962, 0.959, and 0.936 for each type, respectively.

There were three factors in the scale of ETTE, including teaching design and teaching method, covered by 15 items; teaching and class management, 11 items; and teaching assessment, 11 items. After the pilot study, 1 item from the teaching design and method was deleted due to disturbingly low values in the item analysis of SPSS. The reliability of the ETTE was 0.981 and 0.959, 0.959, and 0.958 for each category, respectively. In the formal study, these two scales were based on a 5-point Likert-type scale, ranging from 5 points for "strongly agree" to 1 point for "strongly disagree," which measured the participants' perceptions of their own professional knowledge and teaching efficacy. Data were collected through a questionnaire and analyzed by frequency distribution, t-test, ANOVA, Pearson correlation and stepwise regression.

Research Results

Vocational High School EFL Teachers' Professional Knowledge

As shown in Table 1, the vocational high school EFL teachers have a high perception on professionalism and attitude ($M=3.87$) and low on professional knowledge ($M=2.73$). It indicates that the teachers place a high value on the teaching attitude, teaching beliefs, and teaching professionalism and teacher professional knowledge was neglected, such as the theory and knowledge of English teaching, linguistic, and literature.

Table 1. Descriptive Analysis on English Teacher's Professional Knowledge

EFL Teacher's Professional Knowledge (ETPK)	Mean	SD
basic knowledge	3.28	0.72
professional knowledge	2.73	0.74
professional skills	3.02	0.80
professionalism and attitude	3.87	0.66

Vocational High School EFL Teachers' Teaching Efficacy

As shown in Table 2, teaching and class management was the most regarded. The teachers have a high perception on teaching and class management ($M=3.72$) and low on teaching design and method ($M=3.55$) in teaching efficacy. The results showed that the teachers perform better on items in the category of class management and interaction between the teacher and students than a well-designed lesson plan before class.

Table 2. Descriptive Analysis on English Teacher's Teaching Efficacy

EFL Teacher's Teaching Efficacy (ETTE)	Mean	SD
teaching design and method	3.55	0.67
teaching and class management	3.72	0.68
teaching assessment	3.65	0.70

Correlation Analysis of Vocational High School EFL Teachers' Professional Knowledge and Teaching Efficacy

The third research question of this study aimed to explore if vocational high school EFL teachers' professional knowledge and teaching efficacy had significant correlations. Therefore, the Pearson product-moment correlation coefficient was computed on ETPK and ETTE. The correlation matrix is presented in Table 3. The results indicate that the teachers' professional knowledge has a moderate correlation with the teachers' teaching efficacy. Obviously, EFL teachers need to be equipped with basic English ability, professional knowledge related to the theory of English teaching, teaching skills, and enthusiastic teaching attitude, teaching belief and professionalism.

Table 3. Correlations on ETPK and ETTE

ETTE	teaching design and method	teaching and class management	teaching assessment	Overall ETTE
ETPK				
basic knowledge	0.58**	0.51**	0.49**	0.57**
professional knowledge	0.63**	0.49**	0.52**	0.59**
professional skills	0.72**	0.57**	0.58**	0.68**
professionalism and attitude	0.71**	0.74**	0.68**	0.77**
Overall ETPK	0.76**	0.65**	0.65**	0.74**

$p < 0.1$ **

Regression Analysis of ETPK on ETTE

The fourth research question aimed to explore if vocational high school EFL teachers’ professional knowledge has a significant impact on teaching efficacy in EFL classes in vocational high school. A stepwise multiple regression analysis was conducted to investigate which types of teacher professional knowledge significantly contributed to the prediction of English teachers’ teaching efficacy. Table 4 summarizes the results of the stepwise regression analysis.

Table 4. Stepwise Regression of ETPK for Overall ETTE and each ETTE type

Type 1: teaching design and method				
Predictor Variable	R	R Square	R2 change	F change
professional skills	0.730	0.533	0.113	77.916***
professionalism and attitude	0.807	0.652	0.119	109.545***
Type 2: teaching and class management				
professional skills	0.589	0.347	0.057	27.876**
professionalism and attitude	0.761	0.580	0.233	177.624***
Type 3: teaching assessment				
professional skills	0.594	0.353	0.062	30.705***
professionalism and attitude	0.721	0.520	0.167	111.008***
Overall ETTE				
professional skills	0.694	0.482	0.091	56.434***
professionalism and attitude	0.821	0.675	0.193	189.599***

N=325 **p<0.01 ***p<0.001

Table 4 shows that only two factors, namely professional skills and professionalism and attitude, from the vocational high school EFL teachers’ professional knowledge contributed significantly to the prediction of the English teachers’ teaching efficacy. After the regression analysis, however, basic English ability and professional knowledge in the teachers’ professional knowledge did not show significant differences due to disturbingly low values. This result indicates that these two factors do not contribute significantly to the prediction of English teachers’ teaching efficacy.

Discussion and Conclusions

The presented study was undertaken to address issues concerning (1) the professional knowledge and teaching efficacy of vocational high school EFL teachers, (2) the relationship between professional knowledge and teaching efficacy, and (3) the

professional knowledge factors that predict the variation in teaching efficacy. Concerning professional knowledge, as the results indicated, the participating teachers perform better on the professionalism and attitude. It implies that the vocational high school EFL teachers believe that they have a good level of knowledge on the self-teaching attitude, teaching belief, and professionalism to enhance teaching efficacy in the EFL class. This corresponds to the results of Wette's (2010) research, which confirmed the importance of the teacher's teaching ability in order to monitor and respond to feedback from learners about their developing understanding, and about any difficulties they have experienced with course content. Teachers must also have strong concepts of teaching ability and take responsibility for their own teaching career so as to promote their teaching efficacy to motivate students' learning.

In addition, we found a positive relationship between the vocational high school EFL teachers' professional knowledge and teaching efficacy. The two factors, teachers' professional skills and professionalism and attitude in EFL teachers' professional knowledge can be used as predictors of teachers' teaching efficacy. This implies that teachers with higher professional skills, professionalism and attitudes tend to have a higher level of teaching efficacy. This corresponds to Stansbury & Zimmerman (2002) and Halford's (1999) study, which confirmed the significance of establishing a strong belief in teaching efficacy when teachers enter the teaching profession, because they have to acquire theoretical knowledge to promote their professional teaching skills and create their own professionalism and attitude in order to have professional teaching ability to motivate students' learning. It can also be said that EFL teachers' professional knowledge is relatively effective in improving and developing EFL teaching efficacy.

This study has several recommendations for further research. First of all, it is to be noted that this is the first attempt at exploring the relationship between EFL teachers' knowledge and their self-efficacy in a national context. Thus, this study should be replicated to find out whether similar results can be obtained elsewhere. In addition, since this study was conducted only with vocational high school EFL teachers, further research needs to be carried out with EFL teachers at other levels in order to compare the results. Moreover, professional knowledge and teaching efficacy are multifaceted constructs, which vary across contexts and cultures. It would be of interest to compare the differences between native and nonnative EFL teachers for insight into research on EFL teachers' knowledge and their self-efficacy.

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