

Factors Contributing To Teachers' Competency In K-12 Education In China

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Abstract – Scholars noted that teacher quality matters. It is the most important school-related factor influencing student achievement. Thus, professional characteristics are important considerations in an effective teaching and learning process. They are significant to the learners for it shall affect or determine the outcome of the job these educators were doing. Teachers' competency is important for the process of student 'well development' in ensuring quality learning especially for students in K-12 Classes. Teachers' competency will give positive effects on students' academic development and skills, and help teachers to improve their teaching techniques. This study would enhance knowledge on Teacher's competency in Chinese Context. This study will employ quantitative approach following a correlational research design. In order to ensure that the research data obtained will provide answers to research questions, according to previous study, it is important to use appropriate research methods and tools in every research. To obtain data, the quantitative process uses a scientific methodology, and it is deductive in nature. This design has been used extensively in all fields, such as, in social sciences, psychology, sociology, economics, marketing, information technology, political science, anthropology and history.

Keywords – teacher's competency, k-12 education, basic ability, language ability, language teaching ability

I. INTRODUCTION

Background of The Study

In recent years, research has made progress not only in identifying successful teachers (e.g., in value-added models; McCaffrey, Lockwood, Koretz, Louis, & Hamilton, 2004), but also in describing specific aspects of teacher competence that can be directly measured via teacher surveys or standardised tests (Gitomer & Zisk, 2015). To reach a clearer theoretical understanding of the concept, finding common ground of teacher competence beyond diverse cultures and comparing teacher competence across cultural traditions is necessary. An in-depth study of any parallels and contrasts in teacher competency across Western and Eastern cultures may be able to explain discrepancies in language learning results reported in international comparative studies, for example (Leung, 2014). Creating reliable and valid instruments based on solid theoretical frameworks should be the first step in achieving this goal.

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We contribute to this objective in this research by examining the feasibility of adapting a Western framework of teacher competency and its measuring tools to an Eastern setting.

Learning and creativity within organisations are becoming increasingly essential to maintain competitive advantage (Argyris, 1999; Ulrich, Jick, & Glihow, 1993). As a result, organisational learning appears to be a requirement for global economic survival, and organisations must continue to learn to adapt and improve efficiency. Knowledge is an essential contributor for most nations in today's world of globalisation and competitiveness. The mainstream of managing organisations in the new century is continuously enhancing skills and procedures via knowledge acquisition to obtain and sustain competitive advantage (Nezafati, Alfrazeah & Jalali 2009). Learning has become a critical fundamental strategic aspect to continuously improve organisational performance through a resource-based approach to knowledge management and new knowledge creation (Lopez, Peon, & Ordas, 2006). As a result, learning has become a critical fundamental strategic aspect of improving organisational performance continuously. Malaysian institutions could combine and exchange information among various faculties and top administrative workers. According to Sohail and Daud (2009), Organisational learning and knowledge generation is demonstrative and crucial in higher educational institutions.

For the last two decades, researchers have discovered that an organisation's success may be related to individual, group, and organisational learning to increase competence and efficiency, as well as to drive organisational performance improvement via continuous learning capabilities (Jiiminez & Valle, 2011 & Johidi & Jabar, 2012).

II. PROBLEM STATEMENT

Although East Asian students' concomitant poor emotional outcomes such as low enthusiasm and confidence in studying, worldwide large-scale comparative studies of student accomplishment have regularly documented East Asian students surpassing their Western counterparts over the last decades (Leung, 2001, 2014). Such disparities in language learning results have had a significant influence on educational policy and system improvements all around the globe (Deng & Gopinathan, 2016). Many Eastern and Western nations started curriculum revisions around the turn of the century to improve educational performance. These innovations are most visible in language education, although they are not limited to it.

The nature of the topic and the needed techniques for learning and teaching it has been radically altered in these new curricular standards (Ni, Li, Li, & Zhang, 2011). However, it is difficult to relate a reformed curriculum to students' learning since various variables impact and limit the success of curriculum implementation (Krupa & Confrey, 2017). Teachers, in particular, must play a significantly different role in the effective implementation of reform techniques in classrooms (Remillard, 2005). Professional competency of teachers, such as appropriate knowledge and abilities needed by the reformed curriculum, is unquestionably another essential aspect that will impact the practical and successful implementation of education reform projects (Lloyd, 2008; Remillard, 2005). As a result, a thorough knowledge of the theoretical construct of teachers' professional competence—and various ways to develop it is critical in teacher education across the globe (Guerriero, 2017; Schleicher, 2016; Townsend & Bates, 2007). Aside from its practical value, Seidel and Stürmer (2014) believe that modelling and comparing the structure of teacher competencies in diverse situations is crucial for theoretical advancement in this subject. To achieve this aim, researchers will need to create measuring frameworks and tools that will enable them to assess instructors' abilities in various settings.

Teacher competence, on the other hand, is "impossible to capture" in the area of education (Johansson, Strietholt, Rosén, & Myrberg, 2014) since it is primarily situational and societally driven (Blömeke & Kaiser, 2017). Nonetheless, it is endeavoured to discover a common foundation of teacher competence "despite distinct cultural traditions" to get a better grasp of its theoretical construct (Caena, 2014, p. 311). Furthermore, teacher competency has been portrayed as a continuous and dynamic process (Blömeke, Gustafsson, & Shavelson, 2015). The task of defining and measuring teacher competency becomes more difficult due to this classification. Despite this, there has been a growing interest in theoretical considerations of teacher competency. Several theoretically derived models of teachers' professional competence have been established in recent years from various viewpoints, along with research efforts to develop tools to assess teachers' professional competence (e.g. Guerriero, 2017; Kaiser et al., 2017; Kunter et al., 2013). Most frameworks and measuring tools for teacher competency, on the other hand, have been established by Western scholars, particularly those with an intense concentration on German traditions. To our knowledge, no similar tool for assessing teacher ability has been established in China or East Asia.

Research Questions

RQ1: Does Basic Ability have significant influence on Teachers' Competence?

RQ2: Does Language Ability have significant influence on Teachers' Competence?

RQ3: Is there any relationship between Language Teaching Ability and Teachers' Competence?

RQ4: Does Other Ability have significant influence on Teachers' Competence?

Research Objectives

The specific objectives of this study are:

RQ1: Does Basic Ability have significant influence on Teachers' Competence?

RQ2: Does Language Ability have significant influence on Teachers' Competence?

RQ3: Is there any relationship between Language Teaching Ability and Teachers' Competence?

RQ4: Does Other Ability have significant influence on Teachers' Competence?

Significance

Teachers' competency is essential for student 'well development' in ensuring quality learning, especially for students in K-12 Classes. Teachers' competency will positively affect students' academic development and skills and help teachers improve their teaching techniques. This study would enhance knowledge on teachers' competency in the Chinese context.

Definition of Terms

Competence

Hager et al. (1994) stated that competency is the assessment against prescribed performance standards. Based on this definition, the competency assessment standards in this study refer to teaching, professional, communication, and personal competencies to meet the latest requirements of the K-12 teaching profession. These competencies need to be measured so that they can improve job performance.

Teaching Competencies

Teaching competencies refer to the knowledge, skills, and abilities of K-12 teachers to successfully carry out theoretical, practical, or integrated instructions in implementing their teaching duties (Diep & Hartmann, 2016). In the current study, the term 'teaching competencies' is defined as polytechnic teacher knowledge, skills and abilities in content and pedagogy, students' knowledge, setting instructional outcomes, knowledge of resources, and designing coherent instructions.

Basic Ability

Basic ability refers to the knowledge, skills, and abilities of K-12 teachers to act professionally in teaching and learning activities (Liakopoulou, 2011). In the current study, the term 'basic ability' is defined as polytechnic teacher knowledge, skills, abilities in planning, organising, implementing, and evaluating instructions.

Language Ability

Language ability is the ability to produce and comprehend spoken and written words; linguistics is language study. Language shapes our social interactions and

brings order to our lives. Complex language is one of the defining factors that make us human. Two concepts that make the language unique are grammar and lexicon (Petersen & LeBeau, 2021).

Structure of the study

This thesis is written under the following five chapters:

Chapter 1: The introduction chapter focused on the research background providing a general outline of the study, consisting of the problem statement, purpose, justification of research and other relevant information. This information helps link the two main areas of the research: teacher competencies and their language ability.

Chapter 2: This chapter is the literature review that summarises several relevant work-related elements to teacher competencies and the general attitudes of academic teachers towards the new policy. The chapter also discussed the teacher competencies concept in detail based on research outside language ability. Besides, the research framework and hypothesis have also been planned in this study.

Chapter 3: This chapter described the research methodology that provided a thorough explanation about the research strategy, design, sampling plan, data collection and analysis and interpretation techniques used in this research.

Chapter 4: This chapter discussed the data analysis and interpretation part that analyses the accumulated data utilising several statistical tools to test the proposed research objectives and hypothesis.

Chapter 5: This is the concluding chapter that has provided the summary of findings of data analysis followed by the conclusion of the research and recommendations for further research.

Summary

The chapter has provided the foundation of the study in which several critical issues in K-12 teacher competencies were discussed. The gap of knowledge and lack of specific instruments for the Chinese context are the catalysts of the research. The integrated perspective used as the foundation in developing the instrument is the main reference in forming an instrument that suits Chinese education based on personal and professional competencies.

III. LITERATURE REVIEW

Introduction

This chapter reviews existing literature that are relevant to the teacher competencies in general context. The following discussions are included in this chapter: a systematic review of the existing literature; concepts of competencies; K-12 teachers' competencies; framework of K-12 teachers' competencies; modelling and measuring competencies; competency model; competency measurement; teachers' self-assessment instrument; instrument development model; theory and models; theoretical framework; and research framework.

Teachers' Competence

According to Spencer and Spencer (1993), competence is a basic characteristic of a person consisting of knowledge, skills, and attitudes related to the work occupied. A similar understanding was also stated by Noel et al. (2017), Wibowo (2007), and Kolibacova (2014). One's competence is related to success in doing work activities (Boulter et al., 2003; Gilley et al., 2009). Professional teacher competencies, according to McIntyre and Cooper (1996), namely teachers who know about learning and human behavior; has knowledge about the field of study being taught; have the right attitude about oneself, school, peers, and the field of study fostered; have good skills in teaching techniques. Referring to the Law of the Republic of Indonesia Number 20 of 2003, teacher competency standards include management of learning, development of potential, academic mastery, and personality attitudes. Whereas Law of the Republic of Indonesia Number 14 of 2005, teacher competencies include: personality competencies, pedagogical competencies, professional competencies, and social competencies. Teachers who teach according to their competencies will be better than teachers who teach differently from their professional competencies. Several research results have proven the influence of competence on the performance of Setyaningtyas et al. (2013), Lotunani et al. (2014), Renyut et al. (2017), Mukhtar (2018), Mahmood et al. (2018), Poro et al. (2019), Keerthy and Biyu (2018), Suriadi et al. (2018), Suhardi and Sari (2018), Zhang et al. (2018), Idrus (2018), Rabo (2018), and Martini et al. (2018).

According to Noe (in Hsiao & Lin, 2018); Goffin and Woycheshin (2006), competence is one's ability to do work based on knowledge, skills, work attitudes, and personality. Vindyani and Desiana's research results (Vindyani & Desiana, 2018) found that knowledge as one dimension of competence significantly affected work commitment. Someone who has competence in a type of work tends not to leave the work he does. This opinion is in line with the results of the study conducted by Setyaningtyas et al. (2013), Katawneh and Osman (2014), Kuhuparuw and Ferdinandus (2014), Lotunani et al. (2014), Suriadi et al. (2018), Zhang et al. (2018), and Martini et al. (2018).

The New Mexican School (2019) educational model of Mexico's Undersecretary for Basic Education, concerned about this global vision, states that it is essential to move towards a renewal of curricula "that contributes to the training of technically competent and socially committed people dedicated to solving major national and global problems, which involves strengthening citizen formation." The analysis Higher Education in Mexico: Results and Relevance for the Labour Market (OECD, 2019), discusses the need for a program that develops both transversal and discipline-specific competencies and that, also, has teachers who are highly trained for the development of these plans and programs, thus improving the alignment between the skills they develop and the labour market that awaits graduates of middle and higher education.

Teacher-competence framework in the Chinese context

For many years, Chinese scholars have generally acknowledged that teacher competency or capacity is a crucial aspect in the educational process that will directly impact or even decide teaching efficacy (e.g., Ning, 2010; Ye, 1998). Before the year 2000, however, only a few research in China looked at the concept of teacher competency. Furthermore, as Wei, Wang, Jia, and Chen (2017) point out, those few research mostly focused on the theoretically assumed construct of teacher competency from the standpoint of general pedagogy or psychology, rather than taking into account the features of a given schooling topic (similarly Wang, Lin, Ma, & Hu, 2012). For example, Ye (1998) suggested that cooperative educational principles, a complete professional knowledge framework, and practical skills are all required for teachers to deal with future problems. On the other hand, such theoretically motivated recommendations give little information for creating practical tools to assess teacher competency in practice, particularly for subject instructors (Wang et al., 2012).

Following China's most recent curriculum reform in 2000, there has been a growing interest in examining teacher competency, particularly how it connects to the reformed curriculum's new standards, as well as the evolution of the construct and its aspects at both the academic and policy levels (Ning, 2010). Professional criteria for teachers at various school levels were explicitly stated in the National Professional Standards for Teachers released by the Ministry of Education China in 2012. (see Table 1 for a brief description).

Wei et al. (2017) constructed a teaching-competence model based on interviews with expert instructors in China who highlighted the most significant talents for teachers. The six features of the resultant model are as follows: 1) subject literacy, which includes subject-specific knowledge, skills, methods, and thinking; 2) basic teaching skills, which include using language, body language, and text to express ideas clearly so that students can understand them, as well as ICT skills; 3) general pedagogical knowledge and subject pedagogical content knowledge; 4) ability to design, implement, and evaluate teaching; 5) regard for teaching ethics, self-efficacy, and other aspects; 6) ability to reflect on teaching. In a study done in China by Wang and Hu (2016), similar features were discovered.

Numerous frameworks fit the needs of language instruction following the most recent language curriculum reform in terms of the professional competence of language instructors. For example, Fu and Liu (2005) looked at the theoretical notion of language instructors' competency. Similar concepts may also be found in the most current frameworks produced by scholars in the field of language instruction (e.g. Zhang & Xu, 2016). Teacher competence or teaching ability frameworks created in China have been examined and encompass various areas of teacher competence. Overall, the frameworks shared the following characteristics: 1) knowledge; 2) teaching-related skills such as designing and implementing instruction, assessing students' learning, and evaluating and reflecting on

instruction; 3) conducting educational research; and 4) professional ethics and moral values. Given its recurrence across research, it seems that we now have a perfect understanding of the substance of professional competence as it applies to (language) teachers. However, there have been no tools available to test such dimensions of teacher competency in China until today.

Factors impacting on Teacher's Competences

Basic ability

An effective teacher can lead and guide their classroom; they can manage several different personalities, including misbehaving children, and steer them in the right direction. They lead by example and are an important role model in their students' lives. Concerning K-12 teacher training, experts have discussed various content areas of education. For example, Richards (Richards, 1998) has summarised six fields of the core knowledge base in SLTE, that are 1) theories of teaching, 2) teaching skills, 3) communication skills, 4) subject matter knowledge, 5) pedagogical reasoning and decision making (an interactive decision), and 6) contextual knowledge. In addition, Harmer (2017) argues that there are three more outstanding knowledge fields that EFL teachers need to have besides the previous six areas. They are 1) learners and teachers, 2) managing classroom learning, and 3) testing and evaluation. All in all, this can be concluded by Freeman (2019), who proposes a design of SLTE that "training in knowledge and skills is the core of professional development in teaching career (p. 14)."

However, Franz and Teo (2018) examined EFL teachers' perceptions in secondary schools about their English proficiency test (conducted in 2015) that was below the national standard regarding CEFR standard (Ministry of Education, 2016; Worawong, 2019). The results showed that the English proficiency of Thai teachers was problematic as it showed that ninety-four per cent of English teachers failed to reach the targeted proficiency level of B2 in the national test. Surprisingly, findings revealed the participants ignored this. They ignored the CEFR assessment used by the Ministry of Education even though the purpose was to raise the English proficiency standard of EFL secondary school teachers in the country. On the other hand, the Ministry of Education had lately redesigned to extend one more year for students' teaching practicum of English teacher education program. In other words, to graduate with a bachelor degree in an English education program, student-teachers have to complete five years of education program instead of four years as they used to be. This is applicable for pre-service EFL teachers since they have to spend two semesters of their practice teaching for their internship (teaching practicum) in the final year. To elaborate, Chinese K-12 teachers must complete their language content courses before completing a one-year teaching practicum or internship (Saen, 2020).

Language ability

Defining proficiency is not a straightforward task. Proficiency is contextually bound, and different levels and types of proficiency are required for different contexts and purposes. Compounding this complexity is the existence of different varieties of English. Proficiency in one variety does not necessarily mean proficiency in all types (Mahboob & Dutcher, 2014). Hence, the issue of teacher language proficiency and the question of what level of proficiency is required for teachers to be effective is complicated.

Much of the research in the area of teacher language proficiency has emphasised general proficiency for teachers (e.g. Chacon, 2005; Eslami & Fatahi, 2008), often a source of concern for non-native English speaking teachers (NNESTs) (e.g. KamhiStein, 2009; Murdoch, 1994). Richards (2010) argued that teachers need to reach a certain proficiency threshold to teach effectively. Emphasising the notion of a threshold level, Tsang (2017) argued that teachers' general proficiency plays a substantial role in the classroom but only to a certain extent: Once a certain proficiency threshold is met, other factors such as teachers' pedagogical skills and personality play a more vital role. However, considering the various contexts, tasks, contents, and cultures teachers are required to perform in, this threshold remains an elusive notion (Elder & Kim, 2014).

This emphasis on teacher language proficiency, while a necessary discussion, has resulted in undesired outcomes. For example, native speakers are often favoured over non-native speakers in hiring practices because some contexts associate 'nativeness' with effective teaching (Freeman, 2016). Referred to as native-speakerism (Holliday, 2006), this remains a highly pervasive ideology in ELT, and subsequently, 'nativeness' continues to be listed as a hiring criterion (Mahboob & Golden, 2013).

However, many have argued that native-like mastery of the English language is not necessary for teaching it well (Canagarajah, 1999; Richards, 2017). Richards (2017) argued that most English teachers worldwide are not native speakers and 'do not have nor need native-like ability' (p. 9) to teach well. Freeman (2017) also challenged that general proficiency is needed for classroom purposes. Based on Language for Specific Purposes ideas, he argued that teachers need English-for-teaching (Freeman, Katz, Garcia Gomez, & Burns, 2015). This specific language set highlights common words and phrases used by teachers in the English language classroom. The English-for-teaching approach, though still developing, is one approach that researchers argue can help the field of ELT better prepare English teachers for specific tasks enacted in the classroom (Freeman, 2017; Richards, 2017).

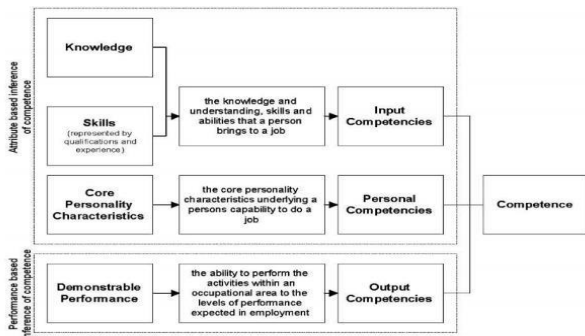
Other ability

Understanding the relationship between language proficiency and teaching ability has recently re-emerged as a focus in second language teacher education, particularly through work on teacher cognition and teaching knowledge (e.g. Freeman, 2002; Freeman, 2016; Freeman et al., 2015). As Freeman has observed, teaching English through English

requires consideration of some related issues. Language is both the content of teaching and the means by which it is taught in language teaching. 'Unlike mathematics or other school subjects, the medium becomes the message in language classrooms. Language in the classroom plays two roles simultaneously as the lesson content and as the means of teaching that content' (2016: 178). Three interrelated elements are involved in what Freeman (2016) refers to as knowledge-for-teaching, which we will call here content knowledge, pedagogical knowledge and ability, and discourse skills. The distinction between these three aspects of a teacher's knowledge and ability provides a useful analytic framework to help understand the nature of teaching English through English.

Content knowledge refers to the teachers' understanding of their teaching subject. In the case of English, this includes a variety of sources of language-related knowledge that derive from those disciplines in which language is the object of studies, such as linguistics, second language acquisition, sociolinguistics, and discourse analysis. (For convenience, I am grouping knowledge of subject content and understanding of learning, which is often separated as in Freeman, 2016). From these and other sources, teachers acquire a body of knowledge about their teaching subject as part of their professional education. However, there is no clear consensus in the TESOL profession as to what the essential content knowledge required by TESOL teachers should consist of. The kind of content courses teachers may be required to study generally reflects where they complete their graduate course and the interests and background of the academics who teach such classes. For example, the core courses in the M.ED TESOL degree at the University of Sydney (2016) are Discourse and Language Teaching, Second Language Acquisition, Methodology and Language Teaching, Literacy and Language Teaching, Language, Society and Power while those in the MA English Studies (TESOL) degree at City University of Hong Kong (2016) are Approaches to Language Teaching, Discourse Analysis, Dissertation, Language in its Social Context, Literary and Cultural Studies, Research Methods in English Studies, Second Language Acquisition. While courses may not have immediate practical application, they are assumed to form part of the actual content or disciplinary knowledge language teachers are expected to know. An instructor on such a course commented: 'There is a body of encyclopaedic knowledge that an English teacher must know, even though ... it is of very little practical use' (Bartels, 2005: 75). Language-related knowledge of this kind has sometimes been referred to as 'language awareness' (Andrews, 2001), and this has traditionally referred to a teacher's understanding of language systems, particularly grammar.

Content knowledge in itself does not provide a sufficient basis for teaching a language. A student majoring in linguistics might be skilled in the use of systemic functional grammar as a resource for the analysis of texts or have a good understanding of the nature of English phonology; however, such knowledge would not enable them to know which aspects of English grammar or phonology are needed at different levels of language proficiency, nor how best to organise a syllabus to teach them and what teaching



strategies could be used. Another source of knowledge is needed that we will call pedagogical knowledge and ability.

Underpinning Theories

Theory of Personality-Job Fit (TP-JF)

The Personality-Job Fit Theory assumes that a person's personality traits will reveal insights into their adaptability within an organisation. The degree of confluence between a person and the organisation is expressed as their Person-Organisation (P- O) fit (Edwards, 1991). This is also referred to as a person-environment fit. A standard measure of the P- O fit is workplace competencies, the rate at which workers can deliver job performance (Cable & Parsons, 2001; June & Mahmood, 2011). By matching the right personality with the right job, company employees can achieve better synergy and avoid pitfalls such as high turnover and low job satisfaction. Employees are more likely to stay committed to organisations if the fit is 'good.' In practice, the P-O fit would be used to gauge integration with organisational competencies. These competencies are assessed, which reveals efficacy, motivation, influence, and co-worker respect. Competencies can be assessed using various tools such as psychological tests, assessment centres, competency-based interviews, situational analysis, etc.

To capture the complexity of the profession with the required elements of polytechnic teacher competencies and to derive the measurement framework, this theory is set as the focal constructs to include both job and personal competencies. To ensure that it will lead to the individual polytechnic teacher competence, this theory is integrated with the Crawford Integrated Model of Competence and Model of Pedagogical Competence given K-12 teacher competencies.

Integrated Model of Competence

Crawford (2005) addresses the overall concept of competence with the Integrated Model of Competence. This attribute-based competency approach is represented in the model where knowledge and skills are regarded as input competencies, and personality characteristics are regarded as personal competencies. The performance-based competency approach is denoted in the model as output competencies and is based on demonstrable performance in accordance with the job expectations. Integrating the

Personality-Job Fit Theory with this model addresses the need for an individual teacher under the elements of input and personal competencies and the outcome of competence. The Model of Pedagogical Competence is used to set up the competency measurement framework from the focal constructs towards the specific elements of polytechnic teacher competencies. Figure 2.1 illustrates the Integrated Model of Competence and how the basis of individual and job are used as the focal constructs of polytechnic teacher competence.

Figure 2. 1: Integrated Model of Competence

(Source: Crawford 2005, p.5)

Model of Pedagogical Competence

The Model of Pedagogical Competence for K-12 teachers by Diep and Hartmann (2016) is relevant following the changes in the world of work attributed to globalisation, knowledge economy, technology advances, and global labour mobility. This mechanism requires a highly skilled workforce supplied by high-quality vocational education and training systems following sustainable development. The quality of vocational teachers directly affects the achievement of vocational learners. Therefore, it is essential to include a model of pedagogical competence of vocational teachers in sustainable development to contribute to building sustainable vocational education and training systems for all regions in the world.

This model includes four main competency elements: teaching competencies, professional competencies, communication competencies, and personal competencies. Based on this model, a comprehensive measurement framework and instrument for competency measurement framework is set up.

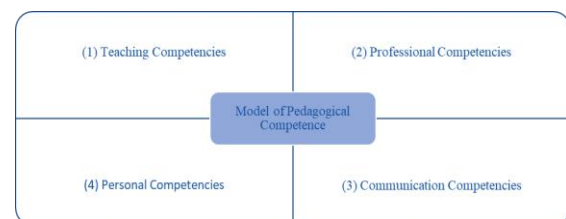


Figure 2. 2: Model of Pedagogical Competence

(Source : Diep & Hartmann 2016, p. 7)

Conceptual Framework

The following conceptual framework has been formulated from the primary literature review:

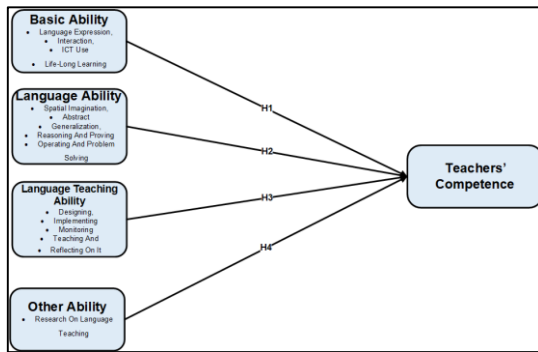


Figure 2. 3: Conceptual framework of the study

Hypothesis

H1: Basic Ability has a significant influence on Teachers' Competence

H2: Language Ability has a significant influence on Teachers' Competence

H3: Language Teaching Ability has a significant influence on Teachers' Competence

H4: Other Ability has a significant influence on Teachers' Competence

Summary

The present study has reviewed and synthesised the relevant literature on K-12 teacher competencies. Based on the researcher's review, areas need to be included in developing the conceptual framework, such as teaching competencies, language ability, other abilities, and other skills. A comprehensive element should include all these required criteria as the main reference for developing bodies in managing the competency performance of K-12 teachers. Overall, competence is an important aspect that needs to be prioritised. The competence of K-12 teachers is expected to result in an effective teaching and learning process. The next chapter will discuss the research methodology.

IV. RESEARCH METHODOLOGY

Introduction

This chapter presents the methodology that was adopted in this study. It elaborates on the procedures that were followed in developing competencies: research design development; context of the study; study population and sample; integrated approach on instrument development; development and validation; and data analysis plan. The ethical considerations that will be implemented in these procedures are also discussed.

Research Design

This study will employ a quantitative approach following a correlational research design. To ensure that the research data obtained will provide answers to research questions, according to Sekaran & Bougie (2016), it is

important to use appropriate research methods and tools in every research. The quantitative process uses a scientific methodology to obtain data, and it is deductive. This design has been used extensively in all fields (Creswell, 2012), such as social sciences, psychology, sociology, economics, marketing, information technology, political science, anthropology, and history.

Population and sampling

The population is characterised as a category that can be generalised, according to Alias et al. (2013). This study carried out a study consisting of 384 K-12 language teachers in Guangdong from different academic backgrounds, school locations (rural and urban), and varying teaching experiences.

The research sample corresponds to a particular category of individuals who can provide the desired details, according to Sekaran et al. (2016). The sample of this study was chosen using the random sampling method, which provides an equal chance of being selected as a subject. Since the focus of this study is to examine the mediating role of contextual ambidexterity in the relationship between digital platform capability and SME performance, convenience sampling techniques will be employed to perform a survey among the participants. According to Raosoft, at confidence level of 95%, the recommended sample size is 384 language teachers in China.

Instruments

The instrument of this study is adapted from the previous literature. The questionnaire designed for the collection of primary data is fragmented into four sections. The first section attempts to explain the background of the teacher's competencies, the following paragraphs are about basic skills, language ability, other abilities. A five-point Likert scale is employed, ranging from strongly agrees to disagree with it strongly.

Data Analysis

The collected quantitative data will be analysed using SPSS 25 and Smart-PLS 3 software. The participants' answers will be marked by the researchers. The data from the questionnaire will also be analysed using descriptive statistics, including frequencies, means, standard deviations, and percentages. To address the study questions, the results from the survey will be carefully evaluated using multiple regression to achieve the objective of relationships among the variables.

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