

# Teachers' Cognition and Their Teaching Practices in an EFL Classroom: A Correlational Study

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**Abstract**---English teachers play a pivotal role in language teaching to maintain a positive and effective learning environment through well-prepared and varied lessons, which cater to the range of student abilities and interests. To understand teacher quality, this study investigates the interplay between EFL teachers' cognition and their teaching practices. This study employed quantitative research in which a correlational design was adopted. Situated in one of the Indonesian secondary schools, four English teachers participated in the study. The analyses of coefficient correlation Pearson Product Moment Formula has shown that the result of the correlation between EFL teachers' cognitions and their teaching practices was 0,657; this correlation value was medium category. The result showed that there was a positive correlation between teachers' cognition and their teaching practices. There was a relationship between teachers' experience with their cognitions about their language learner. This means that teachers' experience affect teachers' cognition, and these cognitions affect what teachers' do in the classrooms. Having a low cognition resulted in undemocratic classroom atmospheres, uncreative students, and one-way classroom interactions that will be the main problems in teaching English. Furthermore, this study implies that teachers' cognition influences their goals, procedures, materials, classroom interaction patterns, their roles, their students, and the schools they work in in order to create effective teaching and learning environments.

**Keywords:** *teachers' cognition, EFL teachers, teaching practices*

## I. INTRODUCTION

This area of research provides brief historical overview of teachers' cognition and their teaching practices on EFL teaching. Despite the similarities in terms of educational background, syllabus, textbook, access to information sources and technology, and opportunities to attend pedagogical and professional trainings, teachers do have different teaching styles because they employ different strategies. That makes his/her teaching practice different from one to another. Their classroom instructions are varied. One basic reason that makes the teachers' classroom practice is different one to another is teachers' cognition.

For three fast decades, significant contributions to uncovering the effects of teachers' cognitions to teaching practices have been made widely in both mostly first language (L1) education contexts and foreign language contexts [1], [2], [3]. Teacher belief and teacher perception are terms under the big umbrella term—teacher cognition [1].

It is widely acknowledged that teachers have their own theoretical beliefs and perceptions about language learning and teaching, and that those tend to shape the teaching practices [4], [5], [6]. Teachers' cognition here refers to the unobservable measurement of teaching what teachers know, and think. Loughran defines cognition as “the mental processes used to code, store, transform and retrieve information, ideas and knowledge” [7], this subsection will examine the literature on teacher cognition. Comparison of teachers' teaching practices with their stated beliefs could be inferred from Borg (2009) [3]. Researchers have employed different instruments which are classified into four categories, including self-reports, verbal commentaries, observations, and reflective writing. Applying these instruments, the researchers have produced data from pre-service and in-service teachers in different contexts [2].

In English Language Teaching, teachers' cognition play pivotal role that makes them involves different strategies, materials, media and evaluation. Teachers are still under pressure to teach writing especially in schools. The study can help arrive at a better understanding the factors that may contribute to the devopment of teachers' cognition by examining the correlation between their cognition and their teaching practices in an EFL Classroom. Meanwhile, this study is aimed to answer these research questions: 1) Is there any significant relationship between teachers' cognition and their teaching practices in an EFL classroom? And 2) Do male and female EFL teacher have significantly different cognition in their teaching practice?

## II. METHODS

### 2.1. Participants

Four English teachers in one of the Indonesian secondary schools were selected using

convenience sampling method to participate in this study and asked to fill the questionnaires. The participants were two males and two females. Males participants had seven to eight years of experience and females participants had eleven to twelve years of experience. All of them had Bachelor degree in English language education. They taught full time 20-24 hours in that school. Males' ages ranged from 34-36 years old, females' ages ranged 42-44 years old, and class sizes ranged 30-35.

## **2.2. Instruments**

Two instruments were used in the present study: 1) teachers' cognition questionnaire and 2) teachers' teaching practice questionnaire.

### **2.3. Teacher's cognition questionnaire**

Teacher's cognition questionnaire was applied to elicit pedagogical cognition on EFL teachers. The adoption of a questionnaire as a tool for data collection in studies on beliefs is a common practice in relevant literature [13], [14]. It was contained a total of 33 items. The participants were required to mark their responses on 5-point likert-scale ranging from "strongly agree to strongly disagree".

### **2.4. Teachers' teaching practice questionnaire**

Teachers' teaching practice questionnaire: was a 24-item self-report questionnaire assessing teacher's teaching practice. It was composed of three subscales: Instructional Strategies, Classroom Management and Student Engagement. For each item, teachers responded on a 5-point Likert scale, ranged from 1 = not capable to 5 = completely capable.

## **2.5. Procedure**

The above mentioned questionnaires were typed in English. First; teachers were explained about the purpose of the study and about the problems related to this study. And also they were asked to complete the questionnaires carefully and honestly in 30 minutes. The questionnaires were distributed by the researcher through face to face contact at school.

Teachers' cognition questionnaire for determine their cognition in teaching English in an EFL classroom and teaching practices questionnaire for determine their teaching practices in EFL classroom.

The following statistical procedures were conducted.

1. To answer research question one, Pearson correlation was employed to decide on the significance of the relationship between teachers' reflection and their vocabulary teaching cognition.
2. To answer research question two, independent samples T-Test was employed.

## **III. RESULTS AND DISCUSSION**

### **2.1 Teachers' Cognition and their Teaching Practices**

What teachers do in the classroom is said to be governed by what they know and think, and these beliefs often serve as a filter through which instructional judgments and decision are made. A belief about language learning and teaching that they apply when they plan their instruction; choose the teaching strategy, the media, the material and the type of resources; interact and communicate with their students in the class; manage classroom; and react to whatever possible conditions in the classroom. Xu (2012) states that being aware or not by certain belief in their mind, the teachers are influenced by this belief when they think, react and respond during their professional routine tasks and performance [8]. Most of the time, teachers are not aware of the existence of the belief inside their mind, and that belief shape the way they do their profession for example how they view the students and the materials, how they use teacher talk and code switching, how they develop their supplementary materials, which approach they employ most of the time, and how they interact with their colleagues and students.

In language learning, teachers' cognition is considered one of the key factors in how classroom instruction is planned, managed, and evaluated, and there have been studies about it, especially the relation between teachers' cognition and the application of certain strategy or certain language skill learning, for example writing, speaking, listening and reading. Furthermore, teachers' cognition decisive role in their teaching practices, where their cognition are reflected in the teaching method, selected activities, decision making, and evaluation in the classroom has been known and studied.

### **2.2 The Role of Teachers' Cognition and their Teaching Practices**

Teaching is a routine task that teachers perform in their professional work. They plan their teaching scenario, prepare all the necessary materials and media, come to class, execute the plan, manage their class and students, evaluate their students works and their teaching and do the planning again. These process is going on and on like a cycle of day and night. Doing this routine task for years will of course shape their cognition about learning. Classroom instructions are the reflections of what is working inside teachers' mind which they perceive to be true conception about language learning. Further, Williams and Burden (1997) explain that whatever teachers do in the classroom is more or less affected by their beliefs about what learning is, no matter whether these beliefs are implicit or explicit [9]. Even if the teachers act spontaneously or routinely, their actions are

prompted by their cognition that has been implanted in their minds without being spoken or stated with or without awareness.

However, findings by Bislands and Malow (2009) conclude that the teachers' beliefs were not related, disconnected, inconsistent, or misaligned with teaching practices in social studies [10]. This is also strengthened by Phipps (2009) who observed the consistency and inconsistency in the role of teachers' belief in their actual teaching practices, especially grammar teaching [11]. His finding showed that teachers' practices do not always reflect their beliefs, but show the complexity of reasons such as cognitive, affective, contextual and experiential factors. This result was one common situation where external factor hinders the enactment of teachers' belief to their teaching practices. Various external factors are identified to be the possible hindrances such as students' ability, curriculum standard, education-related policy, school culture and community, and instructional resources. These factors may impede teachers from enacting their beliefs to their teaching practices. Buehl and Beck (2015) state that some factors are sometimes beyond the teacher's authority to change and modify, for example education related policy and curriculum standard [12]. Some factors still give hopes for the teacher to employ their beliefs into their teaching practices depending on how creative, resourceful and innovative the teachers are in doing their profession. However, these factors, along with the internal factors, such as other beliefs, experience, knowledge, self-awareness and self-reflection may play as the supporters of the enactment of beliefs into the teachers' teaching practices. Teachers probably view this as challenge and in this manner these factors support them to enact their beliefs, otherwise these hinder them to employ their beliefs into their teaching practices.

As an illustration is a teacher who believes that learning a language is a lifelong process which emphasizes on the use of language as means of communication will find it difficult to enact that belief when the education related policy mandates that the learning of a language is for the sake of final examination. Teachers who view this as a challenge will make the best effort. They can accommodate the two objectives by integrating the different instructional media or modifying their lesson plans. What is important for them is what they think and know is realized and the policy pressure is accommodated. Whereas, the teachers who view this is as the obstacle will give up and let their beliefs unspoken. This happens probably because they have lack of pedagogical or professional knowledge or their cognition states that as a teacher the main task is to accommodate what the policy says.

The result of the study aimed to contribute to a better understanding of the correlational study

between teachers' cognition and their teaching practices in an EFL classroom. Result reveals that teachers' cognition about teaching and learning and about themselves as EFL teachers influence their pedagogical practices. The findings also accentuate some factors include instructional strategies, classroom management and student engagement influence their teaching practices.

The analysis of coefficient correlation Pearson Product Moment Formula in table 1 showed that the result of the correlation between EFL teachers' cognitions and their teaching value was medium category. The result showed that there was a positive correlation between teachers' cognition and their teaching practices. Teachers' experience influenced their cognitions about their language learner. This meant that teachers' experience affected teachers' cognition, and these cognitions affected what teachers' did in the classrooms.

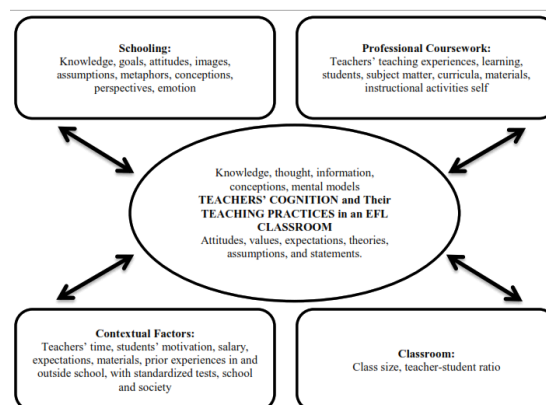
**Table 1:** Result of Pearson correlation between teachers' cognition and their teaching practices

		cognition	practices		
			Instructional Strategies	Classroom Management	Students Engagement
Cognition	Pearson correlation	.059	.075	.072	.072
	Sig. (2-tailed)	.375	.316	.336	.388
	N	4	4	4	4
Practice	Pearson correlation	.059	.101	.101	.105
	Sig. (2-tailed)	.139	.312	.356	.416
	N	4	4	4	4

Table 2 showed the independent sample T-Test for gender cognition. It analyzed that there was no significant difference between male and female's cognition.

**Table 2:** Result of Independent Sample Test for male and female cognition in their teaching practices

Cognitive	t	df	Sig.(2-tailed)	Mean difference
Equal variances assumed	.021	3.92	.023	.042
Equal variances not assumed	.020	1.74	.024	.042



**Fig. 1.** Factors that influence teachers' cognition and their teaching practice

According to figure 1, schooling, professional coursework, classroom, and contextual factors were identified as the most significant factors relates to the correlation between teachers' cognition and their teaching practices.

#### IV. CONCLUSIONS

Teachers' cognition is something dynamic, changeable, and resistant. However, it is still relevant topic to study from time to time especially the psychological and pedagogical domains. Within Indonesian context, in which the process of shaping its educational system is on process, and secondary education, discussion on this topic will contribute immensely in the teacher professional development program. Teachers think that what drives them to perform and make a decision about their classroom is just because of the students and the environment. They believe that it is the students who make them to be effective or ineffective teachers. In fact, teachers, students and the environment play a significant role in influencing each other. Teachers' are not aware that their beliefs are resulted from factors such as training, professional development, and etc. This makes them reluctant in joining such program to upgrade their pedagogical competence. They believe that it does not significantly contribute to their beliefs which subsequently influence their teaching practice.

Various activities can be conducted to enhance the teachers' pedagogical competence such as workshop on teaching methodology, training on professional development, seminar on pedagogical and professional aspects and even giving financial support for teachers to extent their study to higher level.

#### REFERENCES

- [1] Borg, S.: *Teacher cognition in language teaching: a review of research on what language teachers think, know, believe, and do*. Language Teaching, 36(2), 81-109. <http://dx.doi.org/10.1017/S0261444803001903>. (2003).
- [2] Borg, S.: *Teacher cognition and language education: Research and practice*. London: Continuum. (2006)
- [3] Borg, S.: *Language teacher cognition*. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to second language teacher education* (pp. 163-171). Cambridge, UK: Cambridge University Press. (2009)
- [4] Pajares, M. F.: *Teachers' beliefs and educational research: cleaning up a messy construct*. Review of Educational Research, 62(3), 307-332. <http://dx.doi.org/10.3102/00346543062003307>. (1992)
- [5] Woods, D.: *Teacher Cognition in Language Teaching*. Cambridge: Cambridge University Press. (1996)
- [6] Hung, N. V.: *Why should we investigate secondary school teacher beliefs and teacher perceptions of English Language Teaching?* VNU Journal of Science: Foreign Languages, 27(2), 124-131. (2011)
- [7] Loughran, J.: *What expert teachers do: enhancing professional knowledge of classroom practice*. Abingdon: Routledge. (2010)
- [8] Xu, L.: "The Role of Teachers' Beliefs in the Language Teaching-learning Process." *Theory and Practice in Language Studies*, Vol. 2, No. 7: pp. 1397-1402. (2012)
- [9] Williams M. & Burden R. L.: *Psychology for Language Teachers: a Social Constructivist Approach*. Cambridge University Press, Cambridge. (1997)
- [10] Bisland, B., O'Connor, E. & Malow-Iroff, M.: *Beliefs and Issues in Social Studies Instructional Practices: A Case Study of Alternately Certified Elementary Teacher*. Paper presented at the College and University Faculty Assembly of the National Council for the Social Studies, Atlanta, GA. (2009)
- [11] Phipps, S.: *The Relationship between Teacher Education, Teacher Cognition and Classroom Practice in Language Teaching: A Case Study of MA Students' Beliefs about Grammar Teaching* The University of Leeds School of Education. A dissertation. The University of Leeds. (2009)
- [12] Buehl, M.M., & Beck, J.S.: *The Relationship between Teachers' Beliefs and Teachers' Practices*. In *International Handbook of Research on Teachers' Belief*, edited by H. Fives & M.G. Gill, pp. 66-84, New York: Routledge. (2015)
- [13] Horwitz, E.K.: *Using Student Belief About Language Learning and teaching in the foreign language methods course*. Foreign language Annals 18 (4), 333-340. (1985)
- [14] Peacock, M.: *Beliefs about language learning and their relationship to proficiency*. International journal of applied linguistics 9 (2), 247-265. (2001).