

# Influence of Peer Coaching to Instructional Competence of High School Teachers

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**Abstract**— Peer coaching provides an opportunity for beginning teachers to improve their instructional competence and to overcome some challenges in teaching – addressing performance gaps, developing pedagogy, and mastering content knowledge. This study determines how coaching competence and extent of coaching experience influence the instructional competence of teachers. The findings reveal that instructional competence is significantly influenced by coaching competence regardless of how long the coaching has been conducted. This study recommends examining other underlying factors by observing the actual conduct of peer coaching between mentors and mentees.

**Index Terms**— Peer Coaching, Instruction, Competence, Mentors, Mentees, Teachers, Public High School, Department of Education

## 1 INTRODUCTION

Beginning teachers often expressed the challenges in teaching but this could be addressed as teachers gain years of experience (Bringman & Lee, 2008; Brown, 2010), relevant trainings (Lutonsky, 2009), and presence of social and professional support from experienced teachers that could serve as partners through peer coaching.

Peer coaching is an organised endeavour and it can flexibly done as agreed by both the mentor and mentees. However, inadequate training and financial problems seemed to be a challenge in conducting peer coaching (Aderibigbe & Ajasa, 2013). Thus, teacher training, especially of the mentors, in handling peer coaching and commitment from the mentors, the mentees, and the school administration are necessary to have successful peer coaching in school.

Peer coaching is voluntary, non-evaluative, and mutually beneficial and trusting relationship between mentors and mentees. Peer coaching offers opportunity for the beginning teachers to overcome some challenges – addressing performance gaps, pedagogy, and content knowledge (Ladyschewsky, 2010; Wadell & Dunn, 2005; Peer Coaching: What is Peer Coaching, 1997) through observation and giving of specific feedback. It helps teachers to enhance self-efficacy, teaching performance, and competence in the school environment in a short- to medium-term perspective (Ng, 2005), and thus can gain advantage in performing teaching competencies (Marshall, 2008; Timberlake, Stefanidis, & Gardner, 2018) as well as problem solving strategies (Houchens, Stewart, & Jennings, 2017).

Peer coaching positively improve the mentees'

learning participation, learning design skills, and instructional competencies and confidence (Whipp & Pengelley, 2017; Badowski & Oosterhouse, 2017). It is an essential approach for professional improvement, as mentees' perceptions on instructional competencies are influenced from fellow teachers, especially the experienced ones, and so peer coaching can help teachers transform their knowledge into practice (Ma, Xin, & Du, 2018).

Furthermore, peer coaching is a potential tool in sustaining mentees' reflection about his or her teaching (Lee & Choi, 2013). Mentors during coaching activities promotes critical self-analyses of the mentees on their teaching practice. The mentors share good teaching practices, psycho-pedagogical instruments, strategies and procedures to their mentees (Neacsu, Dumitru, & Adascalitei, 2012).

However, there was lack of empirical studies conducted on how much influence does peer coaching, based on the coaching competence of the mentor, to the instructional competence among public high school teachers. Thus, this study aimed to determine how much do coaching competence and extent of coaching experience influence the instructional competence of teachers.

## 2 CONTEXT OF THE STUDY

This research was conducted in selected public high schools of the Department of Education (DepEd) – Division of Davao City in the First (1<sup>st</sup>) Quarter of School Year (SY) 2019-2020.

Accordingly, coaching is an interactive process where Raters, the mentors, and Ratees, the mentees, aim to close performance gaps, teach skills, impart knowledge and inculcate values and desirable work behaviors. Coaching Model for DepEd includes three application opportunities: for Maximum Performance, for Work improvement, and to Strengthen Skills, Competencies and Behavior (Department of Education - Bureau of Human Resource and organizational Development, 2019). This means that coaching is applied when

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performance gaps are observed and identified. In addition, coaching is used to sustain and to improve teacher's high performance.

DepEd's coaching process follows four (4) stages – Observation, Discussion & Agreement, Active Coaching and Follow up, as shown in Figure 1. During observation stage, the rater, who is the teacher-mentor, identifies performance gap or an opportunity to improve. In the discussion & agreement stage, teacher-mentor and teacher-mentee agree on problems to be fixed and an opportunity to improve teaching performance. In the active coaching stage, teacher-mentor and teacher-mentee create and agree on the action plan to address the gap. Lastly, in the follow up stage, teacher-mentor and teacher-mentee set follow up sessions to check on the status of the agreed action plan.

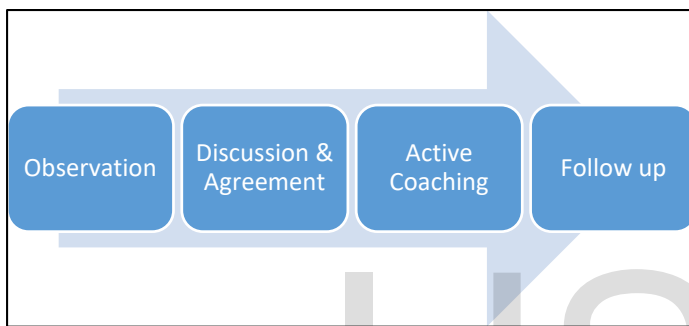


Figure 1. Four Step Processes of Coaching

### 3 METHOD

#### 3.1 DESIGN OVERVIEW

This study used descriptive and correlational research approaches. The level of instructional and coaching competence of the teacher-respondents were described. While the association of instructional competence of the mentees and instructional coaching competence of the teacher-mentors based on years of teaching experience. Also, the predictability of instructional competence of the mentees based on the extent of coaching and the coaching competence of the mentors.

#### 3.2 RESEARCH INSTRUMENT

A researcher-developed survey questionnaire, the Instructional Competence Inventory (ICI), and an adapted questionnaire, the Instructional Coaching Competence Inventory (ICCI), were used to measure the instructional competence and instructional coaching competence, respectively. Both questionnaires had 5-Point Likert-type scales expressing the extent of demonstration of each skills. ICI had nine (9) items ( $\alpha = 0.89$ ) and ICCI had 16 items ( $\alpha = 0.94$ ).

The mentees rated their assigned mentors using the

ICCI. Mentors, on the other hand, used the ICI in rating their mentees.

This study adapts the rating scale used in the Results-based Performance Management System (RPMS) (Department of Education, 2015) for both competence inventories – ICI and ICCI, as summarized in the Table 1.

Table 1. RPMS Rating Scale

Rating Scale	Adjectival Description
4.500 – 5.000	Outstanding Performance
3.500 – 4.499	Very Satisfactory Performance
2.500 – 3.499	Satisfactory Performance
1.500 – 2.499	Unsatisfactory Performance
1.000 – 1.499	Poor Performance

#### 3.3 MENTORS AND MENTEEES

Teachers from selected public high schools in Davao City were chosen as respondents of this study. Currently, DepEd (Department of Education, 2015) had identified Teachers ( $n = 60$ ) with teaching positions of I-III as mentees and Master Teachers ( $n = 60$ ) as mentors for School Year (SY) 2019 – 2020. Summary of demographic profiles of both mentors and mentees is shown in Table 2. Majority of both the mentors and the mentees had long years of teaching experiences. In addition, in terms of educational attainment, mentors had higher rate than the mentees in finishing Master's and Doctoral degrees.

Table 2. Distribution of Teachers by Demographic Profiles: SY 2019-2020

Mentors	%
<i>Gender</i>	
Male	23.3
Female	75.0
Missing	1.7
<i>Highest Educational Attainment</i>	
College Degree	1.7
Masteral Units	38.3
Master's Degree	30.0
Doctoral Units	13.3
Doctoral Degree	15.0
Missing	1.7
<i>Years of Teaching Experience</i>	
1 – 5	8.3
6 – 10	8.3
11 – 15	15.0
16 and above	66.7
Missing	1.7
Mentees	%

<i>Gender</i>	
Male	28.3
Female	70.0
Missing	1.7
<i>Highest Educational Attainment</i>	
College Degree	16.7
Masteral Units	50.0
Master's Degree	26.7
Doctoral Units	3.3
Doctoral Degree	1.7
Missing	1.7
<i>Years of Teaching Experience</i>	
1 – 5	31.7
6 – 10	33.3
11 – 15	6.7
16 and above	23.3
Missing	1.7

Further, peer coaching between mentors and mentees in public high schools had been implemented for more than three (3) years, already. A summary of the number of months of coaching is shown in Figure 2. Notice that most (40 %) of the teachers (mentors and mentees) were new to coaching process.

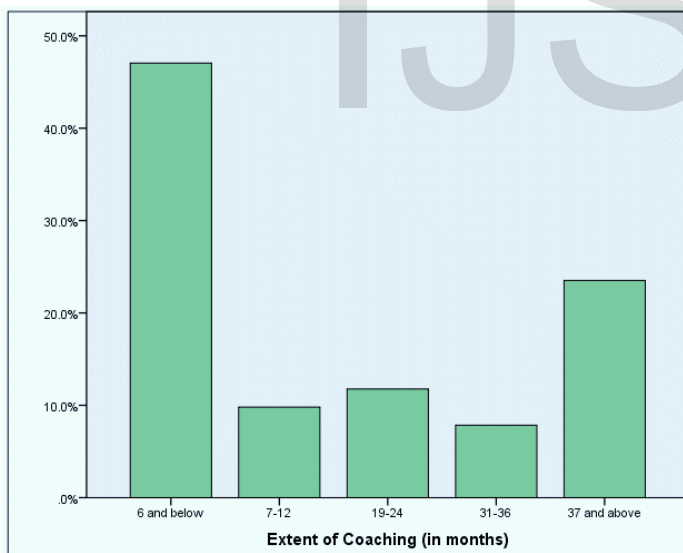


Figure 2. Distribution of Peers by Extent of Peer Coaching

## 4 RESULTS AND DISCUSSION

### 4.1 INSTRUCTIONAL COACHING COMPETENCE

The mean Instructional Coaching Competence (ICC) of the mentors was considered to be Outstanding ( $M = 4.52$ ,  $SD = .48$ ). The mentors, who are the Master Teachers, were able to provide necessary support to their mentees pre-, during, and post-classroom visits. Further, the mentors exhibited excellently coaching the mentees in terms of pedagogy, content knowledge, and initiatives (Department of Education, 2015). Here, the mentors assisted the mentees to become more self-reflective about their teaching practices and students' learning. This result was consistent with the studies conducted by Lee & Choi (2013) and Whipp & Pengelley (2017) who emphasized that peer coaching is feasible tool to initiate and sustain teacher's reflection on their instruction. Lastly, as shown in Figure 3, more than sixty percent (60 %) of the mentors exhibited an outstanding level.

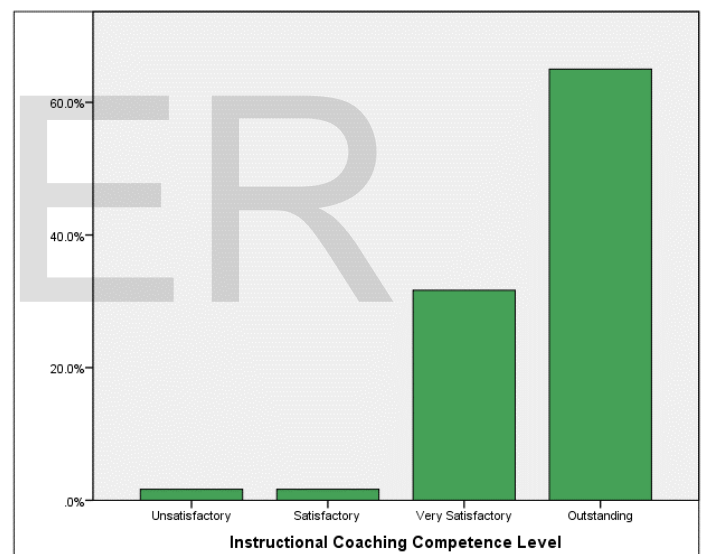


Figure 3. Distribution of Mentors by Instructional Coaching Competence Level

### 4.2 INSTRUCTIONAL COMPETENCE

The mean Instructional Competence (IC) of the mentees was considered to be Very Satisfactory ( $M = 4.45$ ,  $SD = .46$ ). The mentees instructional competence had exceeded expectations. This means that goals, objectives, and targets were achieved above the teaching skills in the ICI. Here, the mentees had applied content standards to other context, used instructional materials to enhance learner's language and mathematical abilities. Furthermore, the mentees had developed critical thinking skills of students during classroom activities. As shown in Figure 4, that majority (97%) of the

mentees had exceeded expectations in exhibiting their instructional competence.

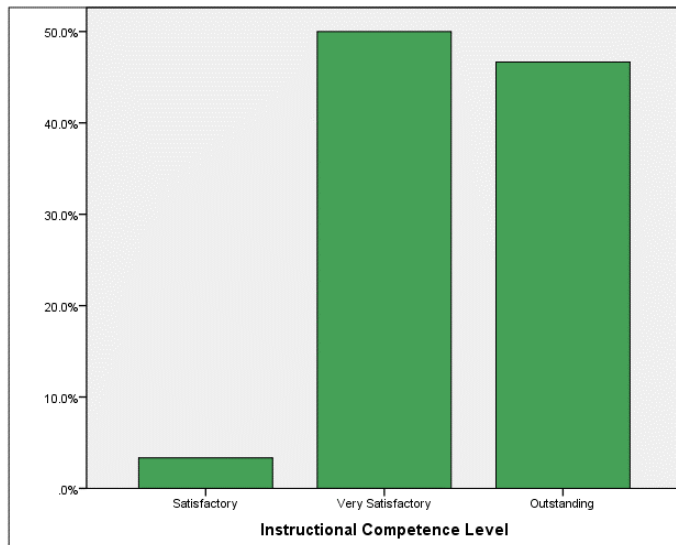


Figure 4. Distribution of Mentees by Instructional Coaching Competence Level

### 4.3 TEACHING EXPERIENCE AND COMPETENCE

Upon examination on the association of teaching experience (in years) and competence of mentors and mentees, there was a nonsignificant correlation,  $r = -.11$  ( $p = .40$ ), between teaching experience and ICC of the mentors. Also, nonsignificant correlation,  $r = .09$  ( $p = .52$ ), was found between years of teaching experience and IC of the mentees. A summary is shown in Table 3. These findings were inconsistent to study of Brown (2010) which concluded that years of teaching experience effectively improve the instructional competencies of teachers.

Table 3. Correlation Matrix for Teaching Experience and Competence

Correlation (Pearson r)	Mentors' Instructional Coaching Competence (ICC)	Mentees' Instructional Competence (IC)
Years of Teaching Experience	-.11	.09

### 4.4 EXTENT OF COACHING, MENTORS' COACHING COMPETENCE, AND MENTEES' INSTRUCTIONAL COMPETENCE

Using multiple linear regression to test the influence of two measures (Instructional Coaching Competence Rating, Extent of Coaching (in Months)) to predict levels of Instructional Competence. A significant regression equation was found ( $F(2, 48) = 4.35$ ,  $p = .018$ ), with  $R^2 = .154$ . Mentees' predicted Instructional Competence (IC) was equal to  $2.74 + .374(ICC)$ , where ICC ( $beta = .394$ ,  $p = .005$ ) is coded in 1 – 5. Note that the Extent of Coaching was not included due to its nonsignificant ( $beta = .064$ ,  $p = .633$ ) contribution to the model. The mentees' Instructional Competence was increased .374 scale for each unit scale of Instructional Coaching Competence. Thus, only the coaching competence of the mentors significantly influence the teaching competence of their mentees regardless how long the coaching process had been conducted. Some unidentified factors must have influenced the instructional competence of the mentees that needed to be explored.

### 5 CONCLUSION AND RECOMMENDATION

This study examined the influence of peer coaching given by mentors to mentees of public high school teachers. Peer coaching was an interactive process which mentors, with teaching positions of Master Teachers, aimed to close performance gaps, to impart pedagogy and content knowledge, and to develop values and desirable work behaviors with the mentees, with teaching positions of Teachers I – III.

The instructional coaching competence of the mentors was considered outstanding. Majority of mentors had excellently coached the mentees with pedagogy, content knowledge, and some practical approaches in addressing identified performance gaps. The educational attainment of the mentors may have an impact on their coaching competence.

Overwhelming majority of the mentees was found to be very satisfactory and exceeded expectations. The mentees had successfully applied the subject content to other context and used instructional materials to enhance learner's language and mathematical skills. The professional trainings and development of the mentees may have enhanced their instructional competence. The length of teaching experience had no association with the instructional coaching competence and instructional competence of the mentors and mentees, respectively. This finding was incoherent with some previous studies (Bringman & Lee, 2008; Lutonsky, 2009; Brown, 2010).

The instructional competence of mentees was influenced by coaching competence of the mentors regardless how long the coaching had been conducted. Peer coaching among public high school teachers had immediate effect on the instructional competence of the



mentees. However, some unidentified factors must have strong influence on the instructional competence. Thus, this study recommends to the management and leadership of DepEd, particularly in public high school to examine other underlying factors, aside from the coaching competence of the mentors, during the peer coaching process that must have strong influence on the instructional competence of the teachers.

Furthermore, an examination on how the peer coaching was implemented and how the interactions between the mentors and mentees on each stage of the process must be conducted.

## ACKNOWLEDGMENT

The authors wish to thank the Schools Division Superintendent Maria Ines C. Asuncion, CESO V, School Heads, Master Teachers, and Teachers of the participating Public High School of Davao City Division.

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