The Effect of Professional Development, Innovative Work and Work Commitment on Quality of Teacher Learning in Elementary Schools of Indonesia*

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**ABSTRACT**

**Purpose:** It is premised in this study that quality of education is largely determined by the quality of teachers, which further depends upon their continuous professional development. This study aimed to determine the effect of professional development, innovative work and work commitment on quality of teacher learning among elementary school teachers in Indonesia. Method The research sample comprised of 100 teachers of elementary schools sampled with the help of the Slovin formula. Structured questionnaires were used to collect data. Data analysis was carried out by Structural Equation Modeling (SEM) using the SmartPLS tool. Both measurement and structural models were calculated to understand the relationships between the variables of the study.

**Findings:** The results of this study indicate that professional development had a significant positive effect on teachers' work commitment, and that work commitment affects the quality of teacher learning. It was further found that innovative work also affected the quality of learning.

**Implications for Research and Practice:** It has been asserted in this study that professional development of teacher by improving work commitment and innovative work improved the quality of education and produced competitive quality human resources. This shows teachers and educational institutions can plan their strategies by taking the benefit of these findings. By making use of innovation, teachers can devise various learning models to help students achieve their learning goals.

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Introduction

The quality of education is largely determined by the quality of the teaching staff (teachers) which further depends upon the continuous professional development (PKB) opportunities available to teachers. Professional development and teachers’ effectiveness have a positive impact on school reforms and increased learning (Gopinathan, 2016). The role of teachers is increasingly being considered strategic in improving quality human resources in the face of the 4.0 industrial revolution and the 5.0 Era Society. It has been emphasized that teacher quality must be optimized in all educational formats, because it is the teacher who produces students of good quality and highly competitive potential.

The Indonesian Law Number 20 of 2003, concerning the National Education System, states that educators are professionals who are tasked with planning and implementing the learning process, assessing learning outcomes, conducting mentoring and training, and conducting research and community service (Law of the Republic of Indonesia Number 20 Year 2003 on the National Education System, 2003). The function of teachers as professionals is to increase the dignity and role of teachers as agents of learning and to improve the quality of national education. Article 8 on Teachers and Lecturers states that teachers are required to have academic qualifications, competencies, teacher certification, should be physically and mentally healthy, and have the ability to realize the goals of national education. The government’s commitment to educating the nation is shown by the existence of this Law. The academic qualification in question is that a teacher must be certified according to the type, level, and formal education unit of their assignment. Similarly, the Ministerial Regulation of Number 16 of 2009 regarding teacher functional positions and credit numbers and Law Number 14 of 2005 concerning Teachers and Lecturers have clearly stated that a teacher is a professional educator with a primary task of educating, teaching, guiding, directing, training, assessing, and evaluating students. Such government’s efforts to improve teacher professionalism have been maximally implemented with the existence of various policies, which should be implemented appropriately since teachers have a very fundamental role in improving the quality of education. A bigger challenge before elementary schoolteachers is to practice this profession by boldly facing the problems of the current time, including the global crises like the pandemic. They need to strive harder for maintaining the professionalism in discharging their duties as elementary school teachers.

A few characteristics of professional teachers to carry out teaching assignments are identified, namely (1) commitment to the interests of students and implementation of learning, (2) profoundly mastering the material and the use of learning strategies, (3) ability to think systematically and learning from experience, and willing to reflect and correct themselves, (4) making the teaching and learning process better, (5) responsibility for monitoring and observing student behavior through evaluation activities, analyzing class activities, conducting remedial evaluation programs, and implementing students’ guidance.
Teachers’ competence can only be determined by the level of education and professional development carried out by teachers. Teaching is a noble and challenging profession. Teachers’ competence can be improved through professional development programs that boost their teaching competencies and enable them to deliver in the midst of chaotic education settings common these days, and achieve the desired educational goals. Having the required teaching competence must be the responsibility of professional teachers who are willing to take educational and teaching tasks. They need to acquire special skills and abilities in the field of teacher training, considered inevitable for professional teachers to optimally carry out their duties. Acquiring new teaching competences for professional development must be planned and acquired through academic qualifications and requires professional training. The quality of teacher learning resources should also be improved through direct involvement and experience (Mendes et al., 2016). Some of the teacher professional development activities include: skills development, new knowledge acquisition, improving expertise, and individual characteristics (Hollins, 2011).

The academic qualification data of Singosari District reveals that there are 260 government elementary school teachers in the district. Of these, 134 are certified as elementary school teachers comprising 19 in physical education, 51 in Civics, 6 in History, 3 in Geography, 8 in English language, 21 in Indonesian Language, 2 in Islamic religious education, 1 in social studies. They also include 1 teacher each in Fine Arts, Biology, and Education Administration; 8 of them are diploma certified teacher trainers, and 4 are college certificate teachers. There are still about 107 out of 260 teachers without elementary school teaching certificates. All teachers in this data are the class teachers, except the physical education teachers (Regional Coordinator of the Singosari District Education Office, 2020).

Elementary school teachers play a strategic role in the development of children. As it is projected that their number will increase, they need to prepare themselves for future. In order to improve the quality of human resources, it requires awareness and willingness of teachers to improve their professionalism. Professional development can be done through teacher training programs in an effort to improve learning (De Farias et al., 2018). According to (Ndongfack, 2015), not all elementary school teachers are able to use technology to improve the quality of learning, because many teachers have not been trained effectively (Dalle et al., 2021; Dalle & Ariffin, 2018). Elementary school teachers also often forget the importance of learning media for students, which are largely monotonous and boring. Creative and innovative learning is an essential prerequisite for all teachers to meet the educational needs of the new generation. Past studies have shown that many teachers do not have innovative teaching competencies (Kalyani et al., 2018). According to Jeffrey A. Rosen (2010), the role of learning media is very crucial because it can generate motivation and understanding of student learning.

The current research was inspired by such challenges and problems encountered by teachers in the field of elementary education. The researchers had also observed a few immediate and urgent issues which necessitated to conduct the current study.
First, in spite of being aware of the problems in the field, elementary school teachers took teaching very lightly. This non-serious attitude towards teaching and their own professional development did not reveal their work commitment. Secondly, it was felt that an elementary school teacher did not require a degree to teach in elementary school education, but a diploma sufficed to teach in elementary schools. Thirdly, it was observed that not all elementary school teachers were certified, especially non-permanent teachers (GTT) in public elementary schools, due to the complicated bureaucratic process. Fourthly, most elementary school teachers experienced administrative difficulties in teacher ranks promotion. In addition, only the senior elementary school teachers used the lecture method, but without using creative and innovative learning media. They thought their memorization of the teaching material was enough for the teaching delivery.

The research objectives premised in this study included: to find out ways and measures how to achieve professional development of teachers, and how work commitment and innovative work of teachers can affect the quality of learning in schools. These research objectives are consistent with van Mierlo et al. (2010) who recommended to study innovative work of teachers and its role in creating conducive learning conditions. The importance of the current research lies in the realization that the role of elementary school teachers as professional teachers is indispensable. It is therefore necessary to conduct research on the influence of professional development, innovative work, and work commitment the quality of teacher learning of elementary school teachers in Indonesia.

**Literature Review**

**Learning Quality**

Learning quality is defined as a systemic and synergistic relationship between teachers, students, curriculum and teaching materials, media, facilities, and learning systems to produce optimal learning processes and outcomes. Quality education guarantees the safety, welfare and prosperity of a nation. The quality of education can be assessed through the quality of the curriculum, students, teachers, teaching methods, governance, financing, evaluation and relationships with other institutions (Sultana et al., 2009). Moreover, teachers play a central role in realizing educational goals; therefore, the quality of teachers in every field needs to be developed in terms of teachers’ competencies and skills (Choi et al., 2019). It is believed that the quality of teacher learning can develop if it is in a positive and supportive environment (Leu et al., 2006).

Education is considered an instrument of change, which currently is occurring more rapidly than in the past. During this rapid process, quality teaching much depends on engaging students in the learning process, in both theory and practice. Teachers are required to help students in research, set their learning-oriented goals, and be sensitive to student differences (Miskeljin, 2014). The quality of teacher learning is one of the most powerful elements of education in Indonesia (Adams et al., 2015). A
qualified teacher has the ability to improve his teaching by taking positive initiatives to upgrade his/her qualifications. This ensures building a positive relationship between teachers and students and an overall good achievement of learning outcomes. When there are good student academic results, it shows that students have developed well and can meet teachers’ expectations. This also requires that teachers must understand the learning needs of students (Belsito, 2016). Goe et al. (2008) assert that quality of teacher learning focuses on four quality indicators, namely teacher qualifications, teacher characteristics, teacher practices, and teacher effectiveness, which have been central to several studies in this domain of learning. Table 1 presents a few other indicators under various dimensions.

Table 1

| No. | Dimension              | Indicator                                                                 |
|-----|------------------------|---------------------------------------------------------------------------|
| 1   | Teacher learning behavior | Teaching according to learning objectives                                 |
|     |                        | Creating a positive learning atmosphere with students                     |
| 2   | Student activities     | Student active participation                                              |
|     |                        | Student achievement scores                                               |
| 3   | Learning Climate       | An active learning climate                                                |
|     |                        | Learning satisfaction                                                    |
| 4   | Learning materials     | Interactive learning material                                            |
|     |                        | Material arranged according to the curriculum                            |
|     |                        | Material structured and student-oriented                                  |
| 5   | Learning Media         | Interactive learning media                                               |
|     |                        | Student-oriented learning media                                          |
|     |                        | Learning media according to learning material                           |
| 6   | Learning system        | Active learning                                                          |
|     |                        | Student centered learning                                                |

Source: Chalmers, (2008); Ministry of National Education, (2009)

Professional Development

Previous studies have asserted that certain types of professional development determine teacher quality and work commitment. It is also mandated in these studies that professional development can be sustained only if it is aligned with the curriculum; if it focuses on pedagogy; and if it influences the students’ learning achievement (Cohen et al., 1998; Kannapel et al., 2005). However, a few studies like (Harbison et al., 1992) found no beneficial relationship between professional development and student achievement in the context of Brazilian schools due to non-availability of underqualified teachers for participation in the professional development programs studied. Likewise, (Postholm, 2012) believed that teacher professional development meant how teachers learnt and applied their knowledge to improve learning for students. Other studies regarded teachers as the center of the education system and at the forefront of national development (Flores et al., 2011) as
well as active agents of professional development (Stoll et al., 2012). All these studies unanimously agreed that quality of teacher learning is a result of knowledge, which is a construction of meaning and understanding in social interactions. Elementary school teachers also play a strategic role in the development of children of future, and preparing them for Vision 2045. Improving the quality of human resources requires awareness and willingness of teachers to improve their professionalism. Teacher competency improvement programs need to be supported by all components of educators, in order to produce creative and innovative thoughts. Teachers must always try to improve their profession, because professional development is related to the level of output provided by teachers in the teaching and learning process (Sengupta et al., 2016).

Some of the methods for developing teacher professionalism include: (1) the lesson study which aims to make learning processes more effective with various input improvements from those given by peers, (2) improving teacher performance in terms of discipline, motivation, administration, creativity, innovation, etc., (3) conducting classroom action research (CAR) as a means of reflecting on deficiencies in learning for improvement, (4) attending workshops, teacher working groups, participating in reading group activities, writing journals/ articles, portfolios, peer observations peers, and mentoring (Flores et al., 2011). Table 2 lists a few other indicators or requirements of professional development of teachers.

Table 2
Indicators or Requirements of Professional Development of Teachers

| No. | Dimension          | Indicator                                                                 |
|-----|--------------------|---------------------------------------------------------------------------|
| 1   | Intellectual Ability| Special knowledge in a certain field                                      |
|     |                    | Intellectual abilities                                                    |
|     |                    | Writing ability of scientific papers                                     |
| 2   | Self-development   | Post qualification certification and continuous learning                  |
|     |                    | Keeping abreast of information on the development of science and technology|
|     |                    | and supporting the profession through various scientific activities      |
|     |                    | Ability to develop various learning models                                |
|     |                    | Participation in curriculum development activities                       |
| 3   | Performance competence | Capacity to work independently                                           |
|     |                    | Attention to professional culture                                         |
|     |                    | Responsibilities at work                                                  |

Source: Adey (2006); Collinson et al., (2009)

Innovative Work

Innovative work is defined as creation and application of new ideas in an organization to support organizational performance (Ghani et al., 2009) within the work role and to benefit both the individual and organization (West, 1990; Yean et al., 2016). Past studies have identified as few determinants or antecedents of innovative work such as job commitment, job autonomy, job insecurity, rewards and job designs
(Awang-Hashim et al., 2017; Bawuro et al., 2018; Dhar, 2016). However, most of these studies focus on service and manufacturing sectors. Parthasarathy et al. (2017) rightly pointed out education has not received much attention, which is consistent with Messmann et al. (2018), who also lamented on very little study carried out on innovative work of teachers.

Permen PAN and RB Number 16 of 2009 article 6, postulates the obligation of teachers in carrying out their duties, improving and developing their academic qualifications and competencies on continuous basis, and in line with the development of science, technology and arts (Ministry of National Education, 2009; Derlina et al., 2018; Baharuddin et al., 2018). Learning activities also comprise such teacher activities like preparing learning plans, implementing quality learning, assessing and evaluating learning outcomes, compiling and implementing student improvement and learning enrichment programs. Gallagher Browne (2010) emphasizes that meaningful learning is more important and must be carried out by guiding students towards innovative knowledge creation practices.

Innovative work comprises works of development, modification or new discovery, in the form of teachers’ contribution to improving the quality of the learning process in schools and contributing to the world of education, science / technology, and art. Teachers should use all their tools to trigger stimuli that can be processed and ensure that all information is easily understood and retained in learners’ memory. Such a proactive learning will ensure the development of the required skills in the students. Some of the skills that must be possessed by 21st century students include thinking and learning skills to learn; cultural competence, communication skills and self-expression; taking care of yourself and daily skills; literary skills; ICT competence; life skills and entrepreneurship; and participation and readiness skills to build a sustainable future. Table 3 presents a few other skills that can act as quality indicators in teaching and learning.

**Work Commitment**

Work Commitment is often defined as the attitude or the feeling of like or dislike for an organization at work (Robbins et al., 2013). It also represents prioritizing the interests of an organization to individual interests (Albareda, 2020). Mowday et al. (2013) had defined it theoretically calling it the strength of individual involvement in an organization. It included several factors like trust, support for organizational goals, and making genuine efforts for the success of the organization. Luthans (1995) linked work commitment with the attitude and the loyalty of an employee. Work commitment, according to the Decree of the Minister of National Education in 2002, is a person's loyalty to sacrifice and devote all his / her energy to an organization. It is a psychological attachment and togetherness between individuals and organizations to achieve organizational goals. A person's psychological relationship to the job can provide an overview of a person's work behavior in working to achieve goals. In other words, work commitment is a promise to yourself or to others that is reflected in
action. People who are committed to their work will try to carry out their duties and duties and maintain involvement in the work.

Table 3

Quality Indicators in Teaching and Learning

| No. | Dimension | Indicator |
|-----|-----------|-----------|
| 1.  | Opportunity Exploration | Creating new ideas for difficult issues |
|     |           | Supporting mobilization for innovative ideas |
|     |           | Introducing innovative ideas in the work environment systematically |
| 2.  | Idea generation | Initiating new ideas |
|     |           | Changing the existing ideas into new ones |
|     |           | Filtering and reducing the number of ideas by finding and eliminating ideas |
| 3.  | Championing | Having a commitment to work actively |
|     |           | Committing to bring about change |
| 4.  | Implementation | Fighting for productive change |
|     |           | Building on existing ideas |
|     |           | Applying the ideas, you have |
|     |           | Testing existing ideas |

Source: McCann & Sparks (2019); Stoffers et al., (2020)

On the front of education, Kurniadi et al. (2017) argued that teacher work commitment is an internal analysis of teachers to decide how they should absorb and interpret their work experience; supported by (Harinoto et al., 2018), who believed that teachers with high work commitment always give better performance. Incidentally, teachers’ work commitment is a factor considered a prerequisite for teachers’ performance. Lack of work commitment comprises arriving late to school, showing indifference to students results; and continuing with poor quality of teaching and learning material. Research studies have proved a relationship be results have proven that commitment can affect work performance (Arjunan et al., 2013; Estiningtyas et al., 2018; Kaplan et al., 2018; Oyeniyi et al., 2017; Yamali, 2018).

To get rid of such deficiencies and in order to improve performance, Albareda (2020) emphasize that teachers should devote more time and energy to preparing, implementing, and evaluating students’ progress (Altun, 2017). A similar view was held by a number of other studies who found work commitment significantly needed to improve performance (Bandula et al., 2016; Gunawan et al., 2017; Hidayah et al., 2018; Kaplan et al., 2018; Lotunani et al., 2014; Paramita et al., 2018).

Table 4 lists a few indicators of a teacher’s work commitment.
Table 4

Indicators of Teachers’ Work Commitment

| No | Variable                  | Indicator                                                                 |
|----|---------------------------|---------------------------------------------------------------------------|
| 1  | Teacher Work Commitment   | Teacher opportunities to learn                                             |
|    |                           | Teacher autonomy and influence                                             |
|    |                           | Teacher collegiality and suitability of objectives                         |
|    |                           | Teacher Efficacy                                                           |
|    |                           | Responsible as an educator                                                 |
|    |                           | Awareness as an educator                                                   |
|    |                           | Commitment to work                                                        |
|    |                           | Commitment to school                                                      |

Source: Canrinus et al., (2012); Celep (2000); Hausman & Goldring (2001)

Research Model

Based on the above review and to establish the relationship between the variables of the study, a research model was devised for the current study. Figure 1 presents the relationships between the independent and dependent variables. To understand their relationships, the following five hypotheses were established for this study:

- H1: Professional development affects work commitment
- H2: Innovative work has an effect on work commitment

![Research Model Diagram]

Figure 1. Research Model
- H3: Professional development affects the quality of teacher learning
- H4: Innovative work affects the quality of teacher learning
- H5: Work commitment affects the quality of teacher learning

Method

Research Design

This study used a quantitative approach to get a clear and detailed picture of the effect of teacher professional development, innovative work, and work commitment to the quality of elementary school teacher learning in Malang Regency. While survey research focused on disclosing the causal relationship between variables that occurred with the aim of separating the effect of an exogenous variable on endogenous variables. The independent variables (exogen) are professional development ($X_1$), innovative work ($X_2$), work commitment ($Z$), and quality of teacher learning ($Y$).

Research Sample

The population in this study comprised 354 teachers in grades 4, 5, and 6 of elementary schools in the selected sub-districts of Malang Regency. The Slovin formula was used to determine the sample. From the calculation of the formula, a sample of 97.2 was obtained, which was rounded up to 100 teachers.

Data Collection Instruments and Procedures

Data collection techniques included questionnaires.

Data Analysis

Quantitative analysis model SEM (Structural Equation Modeling) assisted by SmartPLS was used as data analysis tool. In the smart PLS, there are 2 types of reliability tests, namely the Cronbach Alpha test and the Composite Reliability test.

Results

Evaluation of Measurement Model: Convergent Validity, Construct Reliability and Validity

Convergent validity aims to determine the validity of each indicator relationship with other constructs or variables. The instrument was declared valid if it has a loading factor value $> 0.6$. The results of calculating the validity using SmartPLS stated that all questionnaire questions were valid with a loading factor score $> 0.6$. Table 5 illustrates the loading factors of the instrument.

Cronbach Alpha measures the lowest (lowerbound) value of reliability while composite reliability measures the real reliability value of a variable. Based on the calculations carried out, it was found that all instrument items were reliable with a Cronbach Alpha and Composite Reliability score of more than 0.5. Table 6 presents reliability and validity of the instrument. Table 7 presents the r-square showing that professional development and innovative work have an effect on work commitment.
by 65.6%, and the remaining 34.4% is influenced by other variables outside of this study.

Professional Development and Innovative Work also affect the quality of teacher learning by 69.6%, and the remaining 30.4% is influenced by other variables outside of this study. In the PLS test, each relationship test is carried out using a simulation with the bootstrapping method of the sample. Figure 2 depicts the calculation result based on the direct indirect effect. The basis for decision making is determined by original sample, t statistics and P-Value as shown in Table 8. Original sample shows the direction of the relationship. The hypotheses are thus accepted when the data is significant with T statistics > 1.96 and at P value < 0.05 (Table 8 and 9).

Evaluation of the Structural Model or Inner Model

R-Square Test

Analysis of Variant (R2) or Determination Test is to determine the influence of exogenous variables on these endogenous variables. Table 7 presents R-Square of variables.

Table 5

| Instrument’s Loading Factor | Instrument Code | Outer Loading | Remark |
|-----------------------------|----------------|--------------|--------|
| Professional Development    | X1.1           | 0.747        | Valid  |
|                             | X1.2           | 0.732        | Valid  |
|                             | X1.3           | 0.708        | Valid  |
|                             | X1.4           | 0.740        | Valid  |
|                             | X1.5           | 0.746        | Valid  |
|                             | X1.6           | 0.749        | Valid  |
|                             | X1.7           | 0.738        | Valid  |
|                             | X1.8           | 0.743        | Valid  |
|                             | X1.9           | 0.784        | Valid  |
| Innovative Work             | X2.1           | 0.763        | Valid  |
|                             | X2.2           | 0.755        | Valid  |
|                             | X2.3           | 0.735        | Valid  |
|                             | X2.4           | 0.800        | Valid  |
|                             | X2.5           | 0.700        | Valid  |
|                             | X2.6           | 0.762        | Valid  |
|                             | X2.7           | 0.765        | Valid  |
|                             | X2.8           | 0.745        | Valid  |
|                             | X2.9           | 0.694        | Valid  |
|                             | X2.10          | 0.716        | Valid  |
|                             | X2.11          | 0.648        | Valid  |
|                             | X2.12          | 0.703        | Valid  |
Table 5
Continues

| Quality of Teacher Learning | Y1.1  | 0.705 | Valid |
|-----------------------------|-------|-------|-------|
| Y1.2                        | 0.704 | Valid |
| Y1.3                        | 0.661 | Valid |
| Y1.4                        | 0.698 | Valid |
| Y1.5                        | 0.646 | Valid |
| Y1.6                        | 0.793 | Valid |
| Y1.7                        | 0.778 | Valid |
| Y1.8                        | 0.767 | Valid |
| Y1.9                        | 0.768 | Valid |
| Y1.10                       | 0.785 | Valid |
| Y1.11                       | 0.698 | Valid |
| Y1.12                       | 0.694 | Valid |
| Y1.13                       | 0.679 | Valid |
| Y1.14                       | 0.696 | Valid |

| Work Commitment             | Z1.1  | 0.693 | Valid |
|-----------------------------|-------|-------|-------|
| Z1.2                        | 0.720 | Valid |
| Z1.3                        | 0.700 | Valid |
| Z1.4                        | 0.773 | Valid |
| Z1.5                        | 0.762 | Valid |
| Z1.6                        | 0.764 | Valid |
| Z1.7                        | 0.762 | Valid |
| Z1.8                        | 0.786 | Valid |

Table 6
Reliability and Validity of the Instrument

|                                           | Cronbach’s Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------------------------|------------------|-------|------------------------|----------------------------------|
| Professional Development (X1)             | 0.908            | 0.909 | 0.924                  | 0.548                            |
| Innovative Work (X2)                      | 0.921            | 0.923 | 0.933                  | 0.538                            |
| Work Commitment (Z)                       | 0.886            | 0.889 | 0.909                  | 0.556                            |
| Teacher Learning Quality (Y)              | 0.928            | 0.929 | 0.938                  | 0.520                            |
Table 7

R-Square of Variables

|                               | R-Square | Adjusted R-Square |
|--------------------------------|----------|-------------------|
| Work Commitment (Z)           | 0.656    | 0.649             |
| Teacher Learning Quality (Y)  | 0.696    | 0.687             |

Figure 2. Calculation Result Based On The Direct Indirect Effect.

Table 8

Sample, t-Statistics and P-Value.

| Hypothesis                                | Beta  | T-Statistics | P-Values | Result     |
|-------------------------------------------|-------|--------------|----------|------------|
| Professional Development (XI) -> Teacher Commitment (Z) | 0.309 | 3.227        | 0.001    | Significant|
| Innovative Work (X2) -> Teacher’s Commitment (Z) | 0.536 | 5.779        | 0.000    | Significant|
| Professional Development (XI) -> Quality of Learning (Y) | 0.457 | 3.935        | 0.000    | Significant|
| Innovative Work (X2) -> Quality of Learning (Y) | 0.084 | 0.727        | 0.468    | Not significant|
| Teacher Commitment (Z) -> Quality of Learning (Y) | 0.355 | 4.270        | 0.000    | Significant|
### Table 9

| Hypothesis                                                                 | Result |
|---------------------------------------------------------------------------|--------|
| H1 Professional development affects work commitment                       | Accepted|
| H2 Innovative work has an effect on work commitment                        | Accepted|
| H3 Professional development affects the quality of teacher learning        | Accepted|
| H4 Innovative work affects the quality of teacher learning                | Rejected|
| H5 Work commitment affects the quality of teacher learning                | Accepted|

### Discussion

**The Influence of Professional Development has an effect on the Work Commitment of Elementary School Teachers**

The first hypothesis in this study stated that professional development affects the work commitment of elementary school teachers in Malang Regency. The results of hypothesis testing indicated that this hypothesis was accepted by the results of empirical research. This is evidenced by the t value of 4.270 which is greater than the t table (1.960). The results of this study are consistent with (Hidayah et al., 2018; Imron et al., 2020) which stated that professional development of teacher work commitment can improve the quality of education and produce quality human beings who are able to compete competitively. Professional career development is an employment activity to help employees plan their future careers well and benefit the institution.

**The Influence of Innovative Work on Elementary School Teachers’ Work Commitment**

The second hypothesis in this study stated that innovative work had an effect on teacher work commitment. Based on the research results, it is known that innovative work had an effect on elementary school education work commitment in Malang Regency. This is evidenced by the t value of 5.779> t table (1.960). This research is in line with the results of research conducted by (Ismail et al., 2019; Kaplan et al., 2018; Oyeniyi et al., 2017) which argued that innovative work had an effect on work commitment so that it would change teacher teaching practices. With the innovative work done, it can increase work commitment. A teacher who had a high perception of innovation would be more confident in pouring out his ideas and thoughts so that their performance is getting better.

**Professional development affects the quality of teacher learning**

The third hypothesis stated that professional development affected the quality of teacher learning. The results of hypothesis testing indicated that this hypothesis was accepted by the results of empirical research. This is evidenced by the t value of 3.227 which is greater than the t table (1.960). The results of this study are consistent with research (DeMonte, 2013) and Caena (2011) where professional development affects the quality of learning. With professional development, the way students learn will be
better. Professional teachers are able to educate their students with various efforts through various strategies and learning models according to the students' conditions. By creating all the creativity and innovation, and using the right approach will also determine the effectiveness and efficiency of learning. The use of a variety of approaches will greatly assist students in achieving learning goals.

The Effect of Innovative Work on the Quality of Teacher Learning

The fourth hypothesis in this study stated that innovative work had an effect on the quality of elementary school learning. The results of hypothesis testing indicate that this fourth hypothesis was rejected by the results of empirical research. This is evidenced by the t value of 0.727 which is smaller than the t table (1.960). The results of this study reject research conducted by (Cvetkovic et al., 2017) and (Lee et al., 2017) which stated that innovative work had an impact on the quality of teacher learning. Not all innovative works affect the quality of teacher learning because it requires several strategies including active, creative, effective, and fun learning models as strategies for creating innovative learning strategies.

Work commitment affects the quality of teacher learning

The fifth hypothesis in this study stated that work commitment affects the quality of teacher learning. The results of hypothesis testing indicate that this fifth hypothesis was accepted by empirical research. This is evidenced by the t value of 3.935 which is greater than the t table (1.960). The results of this study are in accordance with the research of Altun (2017) and Bandula et al. (2016) which stated that the commitment of a teacher can improve the quality of learning. This is also supported by a few research studies (Gunawan et al., 2017; Hidayah et al., 2018; Kurniadi et al., 2017). These studies are also the evidence of the strong correlation between the quality of successful learning and teacher work commitment, because teacher work commitment is a key factor affecting the learning process (Mart, 2013).

Conclusion

This research study thus concludes that there are various factors like work commitment and innovative behavior that determine the process and quality of teacher learning. Work commitment has been proved to be an internal factor of teacher behavior. The better the teacher's commitment, the greater is the teacher's behavioral performance. This study's findings showed some compliance with those of previous studies, but also noted some deviation in a few instances. Most findings supported the assertion that professional development of teacher work commitment improved the quality of education and produced competitive quality human resources as it enabled employees plan their future careers as well as benefits from the institution. It has also been evident from this study that the effect of innovative work on work commitment may foster change in teachers' teaching practices. A teacher with a high sense of innovation is more likely to be confident in airing out ideas that improve their performance.
Teachers’ work commitment provides them not only the opportunities of professional development, but also helps them engage students and devise various strategies and learning models that suit students’ conditions. Coupled with creativity and innovation, and using the right approach to determine the effectiveness and efficiency of learning, teachers can also use a variety of approaches that will greatly assist them in achieving learning goals. Findings of this study disagree with previous studies which stated that innovative work has an impact on the quality of teacher learning. Not all innovative works affect the quality of teacher learning because it requires several strategies including active, creative, effective, and fun learning models as strategies for creating innovative learning strategies. Work commitment was found to be having a significant effect on the learning quality of elementary school teachers. Work commitment being an internal factor of teachers’ behavior revealed how a teacher’s commitment was key to their performance as there was a strong correlation between learning and teacher work commitment, suggesting teacher work commitment as a key factor affecting the learning process.

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