

# The Effect of School Administration and Educational Supervision on Teachers teaching performance: Training Programs as a Mediator Variable

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## Abstract

The aim of the present study was to investigate the effect of educational supervision as an independent variable on English language teachers' teaching performance as a dependent variable as well as the role of training programs as a mediator variable. The investigation reported in the study was carried out among Libyan school teachers of English in the city of Zawiya in Libya. Reaching an overall number (N=3036) of teachers as reported by the Ministry of Education, the study sample was (N=351) teachers who were chosen using a random sampling technique. In order to achieve this, the study used a quantitative analysis, specifically a confirmatory factor analysis (CFA) to test the validity of the assumed relationships among these variables as well as structural equation modeling (SEM) through AMOS. The study obtained several results, most important of which indicated that educational supervision was positively correlated with teachers' performance in teaching English. In addition, the results showed that training programs played an important role as a mediator variable in a making a higher indirect positive impact of educational supervision on teachers' teaching performance. Based on these results, in order to enable the Libyan school teachers of English address their weaknesses and identify their strengths, educational supervisors should organize more effective activities related to teacher training. Their interests should not be exclusive to teachers' imperfections, but they should interact and communicate with teachers for better identifications of their strengths and weaknesses. By so doing, teachers can promote their professional knowledge, skills and experiences.

**Keywords:** educational Supervision, English teachers' performance, teacher training Programs

## 1. Introduction

Educational supervision is defined as an important process that leads to professional development. Since its focus is on teachers' performance and teaching activities, this process aims at assisting teachers to enhance their performance in teaching, thus serving as better teachers for their learners. Educational supervision places an emphasis on self-development of teachers and motives them employ effective teaching methods in the classroom (Kamel, 2009). As a part of educational administration, educational supervision is concerned basically with humans that constitute up the administrative organization or the educational institution. Thus, it aims at establishing efficient human relationships that facilitate the contributions of those people working in the education sector to enhancement of the educational process.

Recently, the concept of educational supervision has shifted in a way that includes the principles who achieve its goals. This shift is attributed to the recent developments in the behavioral sciences in various fields besides the changing approach in the educational process (Ibtisam, 2014). The aim of education is no longer limited to human needs and the present requirements of life, but also includes addressing and reflecting on how to develop human skills and capacities as well as future necessities (Hismanoglu & Hismanoglu, 2010). The present era in which the world is viewed as a 'global village' has witnessed a tremendous progress of knowledge, thus resulting into advanced methods of teaching and learning using technologies. In this regard, Kankam (2013) pointed out at the changes of learning, including the emergence of new approaches to teaching and learning brought about by the emergence of the information and knowledge-based society. Such new approaches even have re-defined the teacher's role in the classroom as a facilitator of learning. This necessitates constant and sustained professional

development of teachers in order to contribute to improvement of learning, teaching and overall education.

In line with this, Coskuner (2001) placed an emphasis on the need for teachers to meet the expectations of the increasing number of students. They should also use up-to-date teaching methodologies accompanied with their dedication and enthusiasm (Hismanoglu & Hismanoglu, 2010). Today, the increasing modern demands of teaching pose on teachers the need for undertaking life-long development in their teaching profession in addition to updating and upgrading their knowledge and skills to enhance how to teach or deliver information to their students. However, teachers' maintenance of constant professional development can be achieved by undertaking efficient teaching activities individually or in groups and professional development strategies, such as in-service training, peer training, team or group teaching, study groups, mentoring, teaching portfolios and action research (Hismanoglu & Hismanoglu, 2010). As defined by Kankam (2013), new approaches to teaching are those approaches which place an emphasis on promoting high order cognitive skills, metacognition, construction of knowledge and cognition, collaborative and cooperative learning, brain-based learning, students' multiple intelligence as well as their independent access of information through computers and advanced technologies. Therefore, the same author argues for the need of teachers' commitment to constantly engage in upgrading their knowledge and skills, reviewing their own professional learning and constantly developing themselves professionally. Thus, adding further resources into education may not result into improving the educational system because a sound improvement of education suggests that such resources need to be efficiently managed at the school level and teachers should be effectively and constantly supervised besides insuring that teachers' necessary support is not deteriorated. Engaging in collaboration that emphasizes the quality of teaching, teachers will be able to move from their subjectivity, thus drawing sound or healthy conclusions on their teaching experiences and views. This also will make teachers to realize the crucial role of educational supervision which is a co-operative problem-solving process in developing their teaching profession (Hismanoglu & Hismanoglu, 2010). It is a must for educational institutions to apply mechanism for constant assessment of the activities, especially those activities related to instruction or teaching so that they can achieve their desired goals.

Over the years, the Libyan educational system has been monitored, supervised and evaluated by the Monitoring and Evaluation Division of the Ministry of Education has been responsible. Taking into account the decentralization policy, the District, Municipal and Education Directorates have been acted as the external supervisors of the educational system. This role or responsibility has been also taken by supervisors and inspectors who are in charge of making educational policies into practice and ensuring that these policies and practices conform to policies and regulations approved by the government through the Ministry of Education. In other words, they make practical visits to classrooms and schools with the aim of supervising teaching, organize occasional conferences with teachers as well as write reports to their respective District, Municipal and Education Directorates. As the administrator of basic schools, the head teacher plays the role as an internal supervisor of teaching, which is part of his/her administrative functions (Appiah, 2009). Therefore, Wilkinson (2010) stresses other crucial functions or tasks that head teachers should play besides apart from administrative tasks. These are supervision of students, school activities and what matters most is supervising how teachers employ teaching and learning resources, including the time of instruction or teaching needed for students in acquiring the needed skills and knowledge (p. 7). As noted by Kpatakpa (2008), within the speedy failure of academic standards, teachers are becoming the target of blame for not effectively teaching their students. What has affected teachers' performance worse is that their teaching performance has negative effect on students' general output at schools. This challenge underlies the need for efficient supervision of teachers.

## **2. Problem Statement**

Since the late eighties, the Libyan educational system (both primary and secondary education) has caught the attention of educationists and governmental bodies as an interesting topic in conferences. For instance, the department of education in Benghazi in corporation with the University of Benghazi as well as other international institutions and organizations, such as (UNESCO) and (ELESCO) held several conferences on this matter. Based on the results of papers submitted and presented at these conferences, the educational system still suffers from several issues, including defects in the components of the basic and secondary education systems, weak school administrations, mechanisms of educational inspection mechanisms and Libyan teachers' performance in teaching. Other issues identified and reported at the conferences, include poor teacher training, little focus on teaching, lack of attention to teaching and teachers, low levels of educational achievement, delays developing the curricula and lack of use of instruction resources as well as inadequate methods used in teaching (Sarkz, 2013, pp. 97-98). The Libyan educational system still suffers competitive difficulties related to the educational process and tools of evaluation as indicated by the Competitive Assessment Reports of Libya (Global Education Report, 2016) was (100) in the rankings and the index of (3.74), while the quality of primary

education index occupies Libya arrangement (128) Index and (2.5). In other words, one of the challenging issues is represented by the lack of graduates having appropriate skills. These issues place the country in terms of the quality of the educational management system and the quality of the management of its educational institutions in the last rows out of (171) countries. Furthermore, educational supervision of teachers' professional performance has been researched by a few studies in Africa in general and Libya particular compared to studies carried out in Europe, America, and different parts of Asian continents. Yet, these few studies into investigating educational supervision in the Libyan context (Starratt, 2007; Tesfaw & Hofman, 2012; Tesfaw & Hofman, 2012; Choy, Chong, Wong, & Wong, 2011; Burant, 2009) have disregarded the important role of teacher training programs in teachers' professional development. Therefore, in bridging this gap in previous research, the current study aimed to investigate the impact of educational supervision on Libyan teachers' performance through training programs as a mediator variable.

### 3. The Objective of the Study

This study aimed to examine how educational supervision affects the Libyan English language teachers' performance directly and indirectly through teacher training programs in Primary and secondary education in Zawiya city, Libya. Thus, the study attempted to achieve the following specific objectives:

1. To examine the impact of educational supervision on the Libyan English teachers' performance.
2. To investigate the indirect impact of educational supervision on the Libyan English teachers' performance through the mediator variable of training programs.

### 4. Theoretical Background and Hypotheses

In general, the term of supervision refers to any administrative tools or means used by individuals and groups of people in administering their daily work or organizations (Nyarko, 2009). In relation to education, supervision referring to the process of supervising education at schools has become so important, especially in today's educational systems needing or requiring more attention due to the people's increasing awareness of the essence of education today as compared to the past (Segun, 2004). This is reflected by the tremendous interest in the daily operations of the school educational system (Bessong & Ojong, 2009). As asserted by Hismanoglu (2010), there is no consensus about one certain unified definition of what "educational supervision" is due to the diverse perceptions, familiarity and comprehension of the aspects of the framework and analysis of its content (p. 18).

This underlies the dynamic nature of educational supervision described Daresh (2001). According to this author, the term denotes the nature of supervision as a dynamic process which is conducive to studying and enhancing all factors affecting the situation of education. Similarly, as described by Kilminster, Jolly & Van der Vleuten (2007), educational supervision refers to the process of developing education by providing guidance and feedback on personal, professional and educational matters of trainees' experience. Segun (2004) went beyond this by describing educational supervision as the process of stimulating teachers' professional growth and development, setting up and reviewing educational objectives, teaching and learning methods, materials of instruction and assessing such instruction (Bessong & Ojong, 2009). Alemayehu (2008) also provided an explanation of the term, indicating that supervision is a means to providing advices or suggestions, guidance, refreshment, simulation, improvement and over-seeing specific groups who can helpfully co-operate in making supervisors' tasks of supervision successful (Bessong & Ojong, 2009). According to Bailey (2001), today's educational supervision can be described as a technical process that aims at enhancing the processes of teaching and learning by caring about, guiding and simulating constant professional development for not only teachers but also any other individual who is assumed to affect the educational context.

In the same vein, Bailey (2006) views it as a stage that requires collaboration in different stages for it welcomes various views representing the proper relationship between the supervisor and the teacher. This is in order to address the issues related to education and provide suitable solutions to them. The above various definitions of educational supervision suggest that the term has various functions (Glickman & Gordon, 2005). In this regard, as described by Hismanoglu and Hismanoglu (2010), the functions of educational supervision are categorized into six main categories: developing the curricula, supervising and organizing the educational setting, supervising teaching methods and techniques, supervising the professional development of teachers', supervising novice teachers and assessing or evaluating the process of education. Consideration of the situation of reforming the Libyan educational system, particularly, may denote the prudence of having efficient supervision in promoting and improving the quality of instructions at schools. Again, the increasing applications of Information Communication Technology (ICT) in basic schools have paved the path for emerging modern instructional materials being used in the school instructional process. These stress the need for efficient educational supervision that can not only decide the nature and content of the curriculum, but it can also select the patterns of

school organization, and offer materials that ensure students' and teachers' educational growth and development (Bessong & Ojong, 2009). As identified by Adesina (2001), one of the crucial reasons for such supervision is the fact is to ensure that the duties assigned to each individual teacher are performed by him/her well. It also aims at improving teachers' effectiveness of teaching in order to allow them to have significant contributions their maximum quota as to obtain or achieve the goals of the school (Bessong & Ojong, 2009).

As added by Nwaogu (2006), educational supervision underlies other reasons, including improvement of incompetent teachers, offering guidance for their development, assisting them to identify students' problems and needs, helping them to solve such problems and meet these needs, highlighting staff's co-operation in serving their own as well others' needs in preventing teaching difficulties, knowing the efficiency of classroom management for teachers and enhancing teaching and learning methods (Bessong & Ojong, 2009). From the era of nonscientific management, as asserted by Alemayehu (2008), supervision in the majority of schools in the world has focused its function on how to inspect and control teachers. When supervision is offered in a way that it directs and develops teachers instead of criticizing and judging them, it is possible to achieve its essence, which is improvement of teachers' professional performance (Wilkinson, 2010). This suggests that enhancement of the teaching learning process relies on the attitudes of teachers towards supervision. It also means that supervision will not have its desired impact, unless teachers see it as a process of developing teaching and learning at the same time. For Glickman, Gordon and Ross- Glickman & Gordon (2005), developmental supervision is viewed as the process of using or employing certain knowledge, interpersonal skills and technical skills in directly assisting teachers, developing or promoting their teaching, developing the curriculum and profession as well as conducting action research that makes teachers able to teach collectively and, purposefully, using organizational goals and teacher needs and enhancing learners' learning. Hence, the process of educational is viewed as a representative of a paradigm shift from being a process in which people as subordinates are merely inspected to a process in which collegial interactions are encouraged.

It was also argued by Sergiovanni and Starratt (2007) as long as teachers see no value of supervision; it will not be potentially realized as a process that has a value in professional development no matter how capable supervisors are (Tesfaw & Hofman, 2012, p. 14). As pointed by Sergiovanni and Starratt (2007), the effectiveness of instructional supervision is realized only when supervisors pay attention to building supervisees' capacities, enable them to become autonomous practitioners and develop on them a sense of reasonability in changing their learners into efficient learners (Tesfaw & Hofman, 2012). Some previous researchers Zepeda (2007). argued that there are several factors that play a key role in affecting teachers' attitude and satisfaction of instructional supervision. These factors are mutual trust and respect between teachers and supervisors, available supervisory choices based on teachers' needs, collaboration between both sides and the smooth relationship between them (Tesfaw & Hofman, 2012, p. 15). This was proved empirically by Kutsyuruba's (2003) study. Focusing on how beginning teachers perceive such instructional supervision, Kutsyuruba (2003) reported that those teachers perceived good instructional supervision as this supervision that meets their professional needs, offers them support, gives them help and advice and strengthens a sense of collaboration and trust (Tesfaw & Hofman, 2012). Recently, a few studies have showed that insufficient amount and quality of instructional supervision result into teachers' negative attitudes and renders them disappointed with supervision processes (Choy, Chong, Wong, & Wong, 2011).

Another study by Hismanoglu and Hismanoglu (2010) reported that teachers of English in Northern Cyprus had very positive attitudes towards professional development. This is because, as perceived by them, it assists them to learn new teaching trends and fosters their awareness of other teaching opportunities. However, as found by the same study, there are two major factors: lack of time and inadequate financial resources which majorly stand as obstacles for teachers to achieve the desired professional development. Again, the teachers perceived professional development activities, though they were only 'one-shot' workshops which, as helpful for them in mastering prescribed skills and knowledge. However, the teachers described as boring and irrelevant because they much of what they have learnt. The study was concluded by revealing that the teachers viewed educational supervisors as those who were trying to find teachers' faults in classroom teaching rather than those who should have engaged the teachers in meaningful discussions as to identify and address their main concerns and challenges. Thus, overall, instructional supervision should aim at assisting teachers to enhance their teaching skills and enabling them to informed professional decision-makers (Sergiovanni & Starratt, 2007). Nolan and Hoover (2008) described instructional supervision as a crucial means of efficiently developing teachers' teaching profession. It is also viewed one function of the organization by which it looks for teachers' professional development and improvement in performance as well as learners' better learning (Tesfaw & Hofman, 2012). This implies that for teachers to develop themselves professionally, they need to constantly improve their

teaching methods and skills so that they can promote their performance. It also suggests that teacher professional development plays a vital role in the success of every school (Carter, 2001; Zepeda, 2007) stressed the need for connecting or linking instructional supervision to professional development is needed. The author added that teachers' professional development can be achieved using different approaches to instructional supervision, including clinical supervision, peer coaching, cognitive coaching and mentoring. Finally, as the findings of the study by Burant (2009) revealed that instructional supervision and professional development are significantly related (Tesfaw & Hofman, 2012).

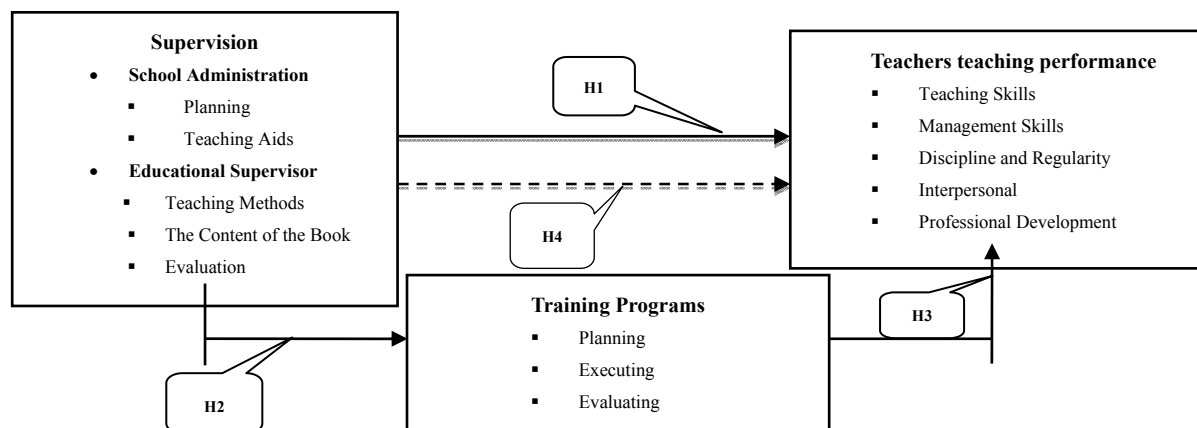


Figure 1. Research Framework

## 5. Hypotheses

In order to achieve the objectives designed for this study, the following research hypotheses are stated based on the revelation in the review of literature concerning Educational supervision and Professional Performance of teachers

*Hypotheses 6.1: There is significant positive correlation between educational supervision and teachers' teaching performance.*

*Hypotheses 6.2: There is significant positive correlation between educational supervision and Training Programs.*

*Hypotheses 6.3: There is significant positive correlation between training programs and teachers' teaching performance.*

*Hypotheses 6.4: There is significant positive correlation between educational supervision and teachers' teaching performance through training programs.*

## 6. Research Methodology

### 6.1 Data Collection

The present study used a quantitative research design, specifically the descriptive survey design. This is because such design accurately and objectively describes the characteristics of a situation or phenomenon being investigated in a given study. It provides a description of the variables in a particular situation and, sometimes, the relationship among these variables rather than focusing on the cause-and-effect relationships (Johnson & Christensen, 2012, p. 366). Thus, this study used a questionnaire which was developed from previous research in order to measure the relationships among the investigated variables: educational supervision practices, English language teachers' teaching performance and training programs. As an approach to easy collection of data, the survey used in this study encompasses two main factors: school administration and educational supervisors. It has 27 items that covered five dimensions: two dimensions for the school administration, namely; planning and teaching aids for school administration and other three dimensions for educational supervisors, namely; teaching methods, content of the book and evaluation. These dimensions of educational supervision were adopted from the literature review of previous related research on educational supervision, specifically from these studies (Starratt, 2007; Tesfaw & Hofman, 2012; Tesfaw & Hofman, 2012; Choy, Chong, Wong, & Wong, 2011; Burant, 2009; Bessong & Ojong, 2009).

The study also used another questionnaire of teachers' teaching performance as the dependent variable. This

self-rating questionnaire (TJPSQ) was adopted for the purpose of measuring this variable, and it has 26 items. The items cover five facets of teachers' performance which are teaching skills, administration skills, discipline and regularity, interpersonal, and professional development. Moreover, relations were added to this questionnaire, which were adopted from Amin, Shah and Atta (2013).

For training programs, the mediator variable in this study, it consists of three dimensions, namely; planning, executing and evaluation. This questionnaire was adopted from Al Kamel (2009), Ziad (2005), Ibtisam (2014), Fouad (2010) and Basil (2014). It has 21 items. Thus, the entire survey used in this study comprises 74 items which had to be responded to by the respondents using a five- points Likert scale: 1= strongly disagree to 5 = strongly agree. Before distributing the survey to the participants, it was translated into Arabic because the participants cannot read in English. This was also attached with a short description of the researcher's intention to collect the data. It was administered to 500 participants. However, only 394 questionnaires were returned, which accounted for nearly 79%. For those incomplete returned questionnaires, they were not used in this study as they missed important information. Therefore, the useable questionnaires used for analysis in this study were 351. The data was collected over a period of time from (January to March, 2016).

## 6.2 Sampling Technique

The population targeted by the present study encompassed the Libyan primary and secondary school teachers of English in Zawiya, the west Region of Libya. Overall, it consists of (3036) teachers: (1973) teachers are distributed in (142) primary schools and (1063) teachers are distributed in (92) secondary schools. However, after using a stratified random sample, only (500) were selected for this study: (325) primary school teachers and (175) secondary schools teachers. The information of the schools, their names and locations as well as their teachers of English was obtained from the relevant Executive District Offices (Ministry of Education). The teachers selected as the study sample had at least one year work experience.

## 7. Statistical Analysis Used in This Study

### 7.1 Confirmatory Factor Analysis

In order to test the validity constructs and the research hypotheses the Structural Equation Modeling (AMOS) model-fitting program is used. The model fit is evaluated by using four indices of the model goodness-of-fit: (1) the comparative fit index (CFI) (2) the chi-square statistics McDonald and Marsh (1990); (3) (RMSEA) between (0.08) to (0.10) indicates a mediocre fit Browne and Cudeck (1993) and would not employ a model a RMSEA greater than 0.1 ( $>0.1$ ) (MacCallum et al., 1996). (4) The minimum value of the discrepancy between the observed data and the hypothesised model divided by degrees of freedom (CMIN/DF) or normed chi-square. Marsh and Hocevar (1985);

### 7.2 Construct Validity

According to Hair, Black, Babin, Anderson and Tatham (2006) the employment of factor loading composite reliability (CR) and average variance extracted (AVE) to determine the convergent validity if it equals to or greater than 0.5 ( $\geq 0.5$ ) and the composite reliability equals to or greater than 0.7 ( $\geq 0.7$ ) if were recommended by Hair et al. (2006). Also, (AVE) reading values should be greater.

## 8. Data Analysis and Result Discussions

### 8.1 Confirmatory Factor Analysis for Variables and Measurement Scales

#### 8.1.1 Independent variable (Second order) Supervision

##### (1) (CFA) School Administration

The outcome of the goodness-of-fit of the end revision of the first factor of educational supervision variable displayed that normed chi- square (CMIN/DF) was (2.907) which did not exceed (5), the (CFI) was (0.982) which was higher than (0.90), and the RMSEA index was (0.074) which was less than (0.080). Figure (2) shows the adequacy of the final revised of the School Administration model.

##### 1) Construct Validity

In the present study, loading for the parameters factor ranged from 0.73 to 0.91, with all parameters were above 0.5 ( $\geq 0.5$ ). In addition, the AVE reading was 0.70 for the first dimension (Planning), While the second dimension (Teaching Aids) was 0.65 where the values were greater than 0.5 ( $\geq 0.5$ ). Consequently, all results fulfilled the AVE, and the parameters factor discriminant validity of the model. In general, the measurement model of the School Administration model was fit and fulfilled the construct as depicted in Table 1.

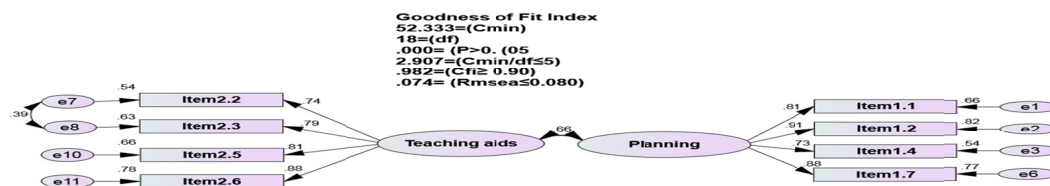


Figure 2. School administration model after amendment

Table 1. Construct validity of the school administration model

Dimension	Items	Estimate	S. E.	C. R.	P	Loading	R	AVE
Planning	1.1	0.947	0.047	20.036	0.000	0.81	0.66	0.70
	1.2	1.000	-	-	-	0.91	0.82	
	1.4	0.819	0.048	16.901	0.000	0.73	0.54	
	1.7	0.941	0.040	23.247	0.000	0.88	0.77	
Teaching Aids	2.2	0.796	0.052	15.418	0.000	0.74	0.54	0.65
	2.3	0.876	0.051	17.311	0.000	0.79	0.63	
	2.5	0.887	0.049	18.034	0.000	0.81	0.66	
	2.6	1.000	-	-	-	0.88	0.78	

## (2) (CFA) Educational Supervisors

The results of the goodness-of-fit of the second factor of educational supervision variable model displayed that normed chi-square (CMIN/DF) was (2.952) which did not exceed (5), the (CFI) was (0.978) which was higher than (0.90), and the RMSEA index was (0.075) which was less than (0.080). Figure (3) shows the adequacy of the final revised of the Supervisors model.

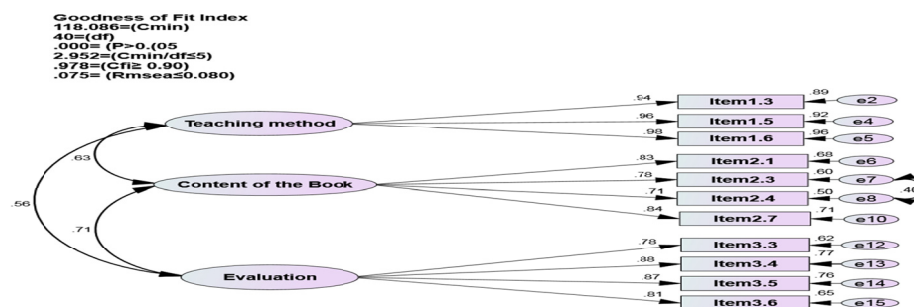


Figure 3. Educational Supervisor's model after amendment

## 2) Construct Validity

In this study, the loading for the parameters factor ranged from 0.71 to 0.98, with all parameters was greater and above 0.5 ( $\geq 0.5$ ). In addition, the AVE reading were between 0.70, 0.92. Consequently, all results fulfilled the AVE, and the parameters factor ranged of the model. In general, the measurement model of the Supervisor's model was fit and fulfilled the construct as depicted in Table 2.

Table 2. Construct Validity of the educational Supervisor's model

Dimension	Items	Estimate	S. E.	C. R.	P	Loading	R	AVE
Teaching method	1.3	0.958	0.021	44.733	0.000	0.94	0.89	0.92
	1.5	0.975	0.019	50.884	0.000	0.96	0.92	
	1.6	1.000	-	-	-	0.98	0.96	
Content of the Book	2.1	0.968	0.056	17.419	0.000	0.83	0.68	0.62
	2.3	0.896	0.056	16.030	0.000	0.78	0.60	
	2.4	0.830	0.059	14.066	0.000	0.71	0.50	
	2.7	1.000	-	-	-	0.84	0.71	
	3.3	0.873	0.048	18.077	0.000	0.78	0.62	
Evaluation	3.4	1.000	-	-	-	0.88	0.77	0.70
	3.5	0.955	0.044	21.668	0.000	0.87	0.76	
	3.6	0.934	0.049	18.906	0.000	0.81	0.65	

### 8.1.2 Mediator variable, Training Programs (CFA)

The outcome of the goodness-of-fit of the end revision of the Training Programs model displayed that normed chi-square (CMIN/DF) was (2.568) which did not exceed (5), the (CFI) was (0.966) which was higher than (0.90), and the RMSEA index was (0.067) which was less than (0.080). Figure (4) shows the adequacy of the final revised of the Training Programs model.

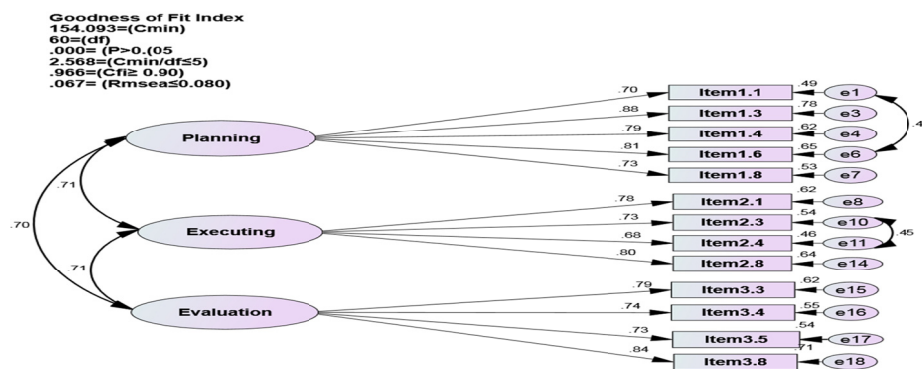


Figure 4. Training Programs model after amendment

### (1) Construct Validity

In the present study, the loading for the parameters factor ranged from (0.70 to 0.88); with all parameters were above 0.5 ( $\geq 0.5$ ). Furthermore, the AVE readings were (0.61, 0.61, 0.60) where the value was greater than (0.5) ( $\geq 0.5$ ). Universally, the measurement model of the Training Programs model was fit and met the criteria as shown in Table 3 and Figure 4.

Table 3. Construct validity of the training programs model

Dimension	Items	Estimate	S. E.	C. R.	P	Loading	R	AVE
Planning	1.1	0.880	0.59	14.805	0.000	0.70	0.49	0.61
	1.3	1.000	-	-	-	0.88	0.78	
	1.4	0.918	0.54	17.799	0.000	0.79	0.62	
	1.6	0.972	0.52	18.555	0.000	0.81	0.65	
	1.8	0.889	0.56	15.831	0.000	0.73	0.53	



	2.1	0.914	0.62	14.644	0.000	0.78	0.62	0.61
<b>Executing</b>	2.3	0.901	0.66	13.589	0.000	0.73	0.54	
	2.4	0.824	0.66	12.415	0.000	0.68	0.46	
	2.8	1.000	-	-	-	0.80	0.64	
	3.3	0.914	0.55	16.478	0.000	0.79	0.62	0.60
<b>Evaluation</b>	3.4	0.856	0.56	15.276	0.000	0.74	0.55	
	3.5	0.914	0.59	15.003	0.000	0.73	0.54	
	3.8	1.000	-	-	-	0.84	0.71	

### 8.1.3 Dependent Variable, Performance of Teachers (CFA)

The results of the goodness-of-fit of the final revised of the teachers' teaching Performance model showed that normed chi-square (CMIN/DF) was (2.606) the CFI was (0.944) and RMSEA was (0.068). Figure (5) shows the adequacy of the final revised of the teachers' teaching Performance model.

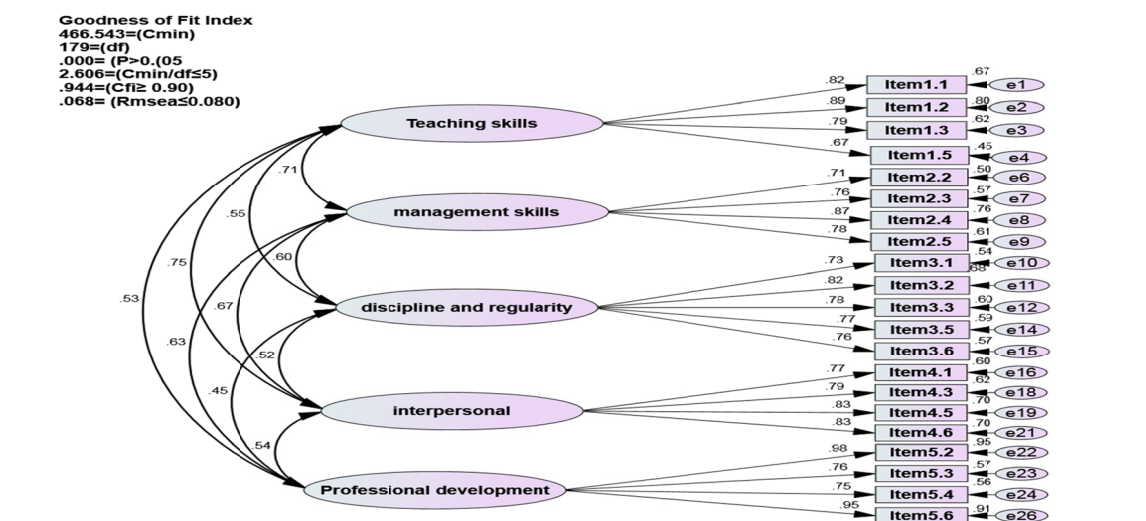


Figure 5. Teachers' teaching performance model after amendment

### (1) Construct Validity

In the present study, the loading for the parameters factor ranged from 0.67 to 0.98, with all parameters was above 0.5 ( $\geq 0.5$ ). In addition, Furthermore, the AVE readings were (0.64, 0.61, 0.66, 0.75) where the value was greater than 0.5 ( $\geq 0.5$ ). Consequently, In general, the measurement model of the teachers' teaching Performance model was fit and fulfilled the construct as depicted in Table 4.

Table 4. Construct validity of the teachers' teaching performance model

Dimension	Items	Estimate	S. E.	C. R.	P	Loading	R	AVE
<b>Teaching skills</b>	1.1	0.919	0.047	19.398	0.000	0.82	0.67	0.64
	1.2	1.000	-	-	-	0.89	0.80	
	1.3	0.870	0.048	18.182	0.000	0.79	0.62	
	1.5	0.732	0.050	14.319	0.000	0.67	0.45	
<b>Management Skills</b>	2.2	0.820	0.055	14.911	0.000	0.71	0.50	0.61
	2.3	0.897	0.055	16.411	0.000	0.76	0.57	
	2.4	1.000	-	-	-	0.87	0.76	
	2.5	0.940	0.055	17.189	0.000	0.78	0.61	

	3.1	0.909	0.067	13.572	0.000	0.73	0.54	0.60
	3.2	0.920	0.060	15.377	0.000	0.82	0.68	
<b>Discipline and Regularity</b>	3.3	0.923	0.064	14.484	0.000	0.78	0.60	
	3.5	0.916	0.064	14.251	0.000	0.77	0.59	
	3.6	1.000	-	-	-	0.76	0.57	
	4.1	0.955	0.058	16.362	0.000	0.77	0.60	0.66
<b>Interpersonal</b>	4.3	0.947	0.056	16.786	0.000	0.79	0.62	
	4.5	1.000	-	-	-	0.83	0.70	
	4.6	0.989	0.055	18.133	0.000	0.83	0.70	
	5.2	1.000	-	-	-	0.98	0.95	0.75
<b>Professional development</b>	5.3	0.731	0.036	20.319	0.000	0.76	0.57	
	5.4	0.739	0.037	19.850	0.000	0.75	0.56	
	5.6	0.976	0.023	41.946	0.000	0.95	0.91	

## 9. Testing the Theoretically Hypothesized Research Model Using Integral Structural Equation Modeling (SEM)

### 9.1 Testing the Standard Theoretical Research Model Using a CFA

#### 9.1.1 Main Standard Model

Figure (6) is an illustration of the theoretically hypothesized research model through the measurement model. The three tested factors are correlated and such correlations were obtained using the AMOS as shown in the bidirectional arrow ( $\longleftrightarrow$ ). The three factors in the measurement models did not take into account identifying the independent and dependent factors which were identified later as discussed in the second section.

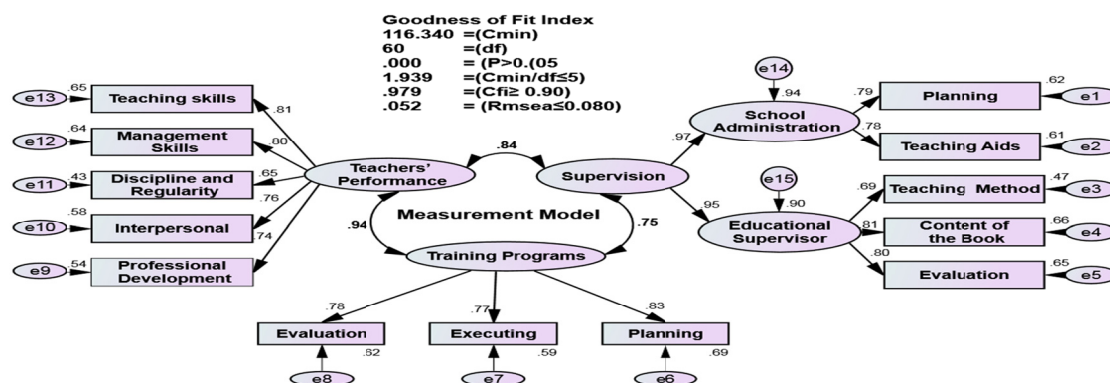


Figure 6. Main measurement model

It is evident from the same figure that the Main measurement model it is free of illogical correlation reaching or exceeding the integer (1). Such results indicate that there is no problem with the measurement model that includes the three factors which are the (Supervision, Training and Supervising Programs and performance of teachers). As seen in Table 5, indicators of agreement for the Main measurement model it did not exceed the (C.R). In addition, the value of The (Cmin) was (116.340), degrees of freedom (60), the significance level (0.000) (which was statistically significant), in addition to the -Chi-square (1.939), which was less than (5), and (CFI) was (0.979), and which was higher than (0.90) all provide evidence confirming that the measurement model fits or has relations with the variables intended to measure in this study. Furthermore, RMSEA index was (0.052), which is less than (0.080). In general, the Main measurement model was fit and fulfilled the construct as depicted in Figure 6 and Table 5.

Table 5. Parameter and non-parameter estimates of the theoretical measurement model

Variables	Factors	Dimensions	Estimate	S. E.	C. R.	P	Loading	SMC
<b>Supervision</b>	School	Planning	1.000	-	-	-	0.79	0.62
	Administration	Teaching Aids	0.969	0.066	14.770	0.000	0.78	0.61
	Educational Supervisor	Teaching Method	0.683	0.052	13.232	0.000	0.69	0.47
		Content of the Book	1.000	-	-	-	0.81	0.66
		Evaluation	0.994	0.062	16.022	0.000	0.80	0.65
<b>Training Programs</b>		Planning	1.000	-	-	-	0.83	0.69
		Executing	0.799	0.050	16.138	0.000	0.77	0.59
		Evaluation	0.813	0.049	16.527	0.000	0.78	0.62
		Teaching skills	0.996	0.066	15.106	0.000	0.81	0.65
		Administration skills	0.974	0.065	15.012	0.000	0.80	0.64
<b>Teachers' teaching performance</b>		Discipline and regularity	0.941	0.078	12.096	0.000	0.65	0.43
		Interpersonal	0.967	0.068	14.193	0.000	0.76	0.58
		Professional	1.000	-	-	-	0.74	0.54
		Development						

The same can apply to the other remaining latent factors and their underlying variables in this study. Here, the value of this relationship should be at least (0.50). As seen in Figure 5 and Table 5, the saturation or correlation estimates of the factors exemplified by (rectangle shapes) and the underlying variables represented by circles were great; besides that, they exceeded (0.50). These are normally termed factor loadings. In this research, Table 5 depicts the (CR) for every relationship between the factors and its underlying variables. The results show that the value was higher than (1.964) for each relation, which was also statistically significant or the significance level (0.05). Hence, considering the (CR) was greater than (1.964), this is indicative of the statistically significant level, thus confirming of the relationship between the factors of the model and the underlying variables.

## 10. Testing of the Main Research Hypotheses of the Model

After certifying the observed relationships between the underlying variables and the factors as formerly reviewed, the main hypotheses of the research model were tested as follows:

### 10.1 (H1): There Is Significant Positive Correlation between Supervision and Teachers' Teaching Performance

The research hypothesis confirmed the positive and direct effect of Supervision on teachers' teaching performance. Based on the research model illustrated in Figure 7, Table 6 showing the output of Amos, this research hypothesis was of statistically significant level since the (C. R) was (4.678), which was greater than (1.964), and the value of the significance level (0.000) was lower than (0.05). In addition, the path coefficient was (0.30), a decisive direction, which confirms that the Policies used in Supervision to an increase in the development of the teachers' teaching performance.

Table 6. Results of the levels of correlations between the variables

Latent Variable	S. R. W	Latent Variable	E	S. E	C. R	P-Value	S. R. W
Supervision	.....▶	teachers' teaching performance	0.302	0.065	4.678	0.000	0.30
Supervision	-----▶	Training Programs	0.884	0.076	11.569	0.000	0.75
Training Programs	.....▶	teachers' teaching performance	0.601	0.063	9.478	0.000	0.72

**R.S.W:** Standardized Regression Weights, **C.R:** Critical Ratio, **S.E:** Standard Error, **E:** Estimate.

### 10.2 (H2): There Is Significant Positive Correlation between Supervision and Training Programs

The second research hypothesis also confirmed a presence of a decisive and direct effect of Supervision on the Training Programs. As depicted in Figure 7 of the research model and the output of Amos in Table 6, the impact

was statistically significant as the (C. R) value was (11.569), being greater than (1.964), and the significance level (0.000) was less than (0.05). Furthermore, the path coefficient was (0.75), suggesting that the impact was in a decisive direction and confirming that the heightened consideration paid towards Supervision causes an increase in the Training Programs. Thus, (56%) of the Training Programs is attributed or explained by Supervision, which is considered as a major influence of the underlying variables since it is higher than (25%), (cohen, 1988).

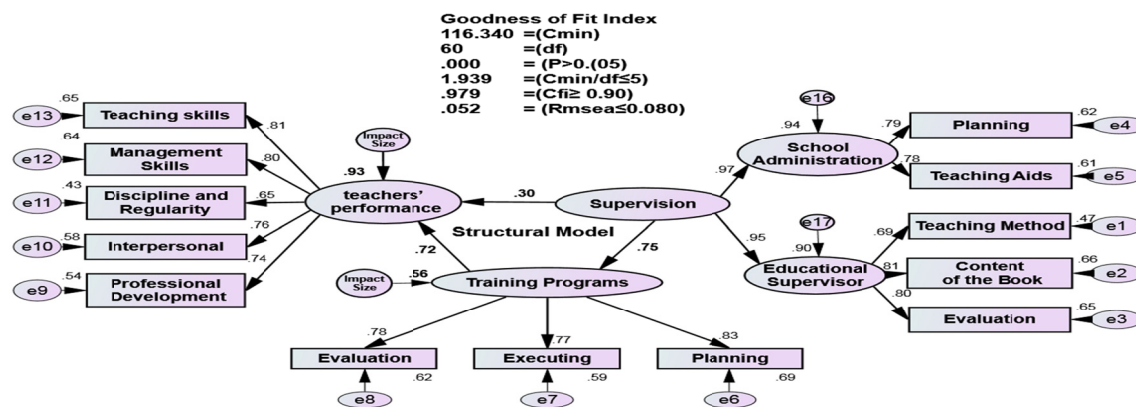


Figure 7. Structural Model

### 10.3 (H3): There Is Significant Positive Correlation between Training Programs and the Teachers' Teaching Performance

Concerning this, the results of the third research hypothesis showed the presence of a decisive and direct effect of the Training Programs on the teachers' teaching performance. This is evidenced as seen in the research model displayed in Figure 7 and Table 6. The impact stated in this research hypothesis was statistically significant because the (C. R) value was (9.478), which was greater than (1.964), and the significance level (0.000) is less than (0.05). Moreover, the path coefficient was (0.72), which indicates that there is a positive direction, highlighting the evidence that the increased attention to the Training Programs to the development of performance of teachers. The results also show that the overall impact on the teachers' teaching performance was estimated (0.93), which means that (93%) of the teachers' teaching performance was due to both Supervision and the Training Programs.

### 10.4 (H4): There Is Significant Positive Correlation between Supervision and the Teachers' Teaching Performance through Training Programs

The study's hypothesis confirmed the positive and indirect effect of Supervision on the teachers' teaching performance through Training Programs. According to the outcome in Table 7, the value of this indirect impact (0.54) was the resultant rate of multiplying the path coefficient of the relationship among Supervision and the Training Programs (0.75) and the path coefficient of the relationship between Training Programs and the teachers' teaching performance (0.72). The overall impact was (0.84), which a result of adding the direct and indirect impact between Supervision and the performance of teachers (0.54+0.30=0.84).

Table 7. Results of the levels of effect between the factors of the model

Independent	Mediation	Dependent	Indirec Effect	Total Effect	Indirec Effect Test		
					Result Sobel Test		
					S.T.S	O.T.P	T.T.P
Supervision	Training Programs	teachers' teaching performance	0.54	0.84	7.331	0.000	<b>0.000</b>

T.T.P :Two-tailed probability O.T.P : One-tailed probability S.T.S : Sobel test statistics

## 11. Conclusion and Discussion of Results

The study aimed at investigating the effect of Educational Supervisor on teachers' teaching performance and Training Programs in the Libyan schools. Based on the results of the study, Educational Supervisor had a positive impact on teachers' teaching performance. Specifically, this positive impact was estimated at (0.30) with positive direction. This indicates that the Educational Supervisor factor contributes to increasing teachers' teaching performance in these schools. Such result corroborates results reported in previous related research (Bessong & Ojong, 2009; Adesina, 2001; Nwaogu, 2006; Alemayehu, 2008; Wilkinson, 2010; Glickman & Gordon, 2005; Tesfaw & Hofman, 2012; Choy, Chong, Wong, & Wong, 2011). Moreover, in measuring the relationship between the Educational Supervisor factor and the Training Programs, it was estimated around is (0.75), thus suggesting that it was a positive correlation. The results also show that there is value direct impact between the two variables (0.56). Furthermore, the impact of the Training Programs factor on the factor of teachers' teaching performance was (0.72), which is positive as well. These results support those reported in some previous studies (Hismanoglu, 2010; Sergiovanni & Starratt, 2007). It was found that overall effect on teachers' teaching performance was 93%, which implies that 92% of teachers' teaching performance could be attributed to good Educational Supervisor and the Training Programs. In this study, Educational Supervisor positively (0.54) and indirectly through the Training Programs impact. This particular result agrees with result obtained by (Carter, 2001; Zepeda, 2007; Burant, 2009; Tesfaw & Hofman, 2012). Based on the results, it is important for all policy makers of Educational Supervisor to focus developing policies and practices relevant to development or improvement of teachers' teaching performance. It can be also suggested that those policy makers in the schools should pay attention to teachers' emotional aspects since they positively affect their performance.

## 12. Limitations and Future Studies

In spite of the theoretical and practical implications the results of this underlying, the study still has some limitations that should be addressed for future research. First, generalization of the results of the study will be restricted because of the specific domain of the study, the Libyan schools. Therefore, future studies should focus their investigation the relationship between Educational Supervisor and teachers' teaching performance in other countries in the same region. Another limitation of the present study could be the cross-sectional research design. Therefore, future studies with the same focus or aim of investigation should employ a longitudinal research design. They may also use a different mediator variable.

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## Appendix A

Measures used for (Supervision)	Items	Description
1. School Administration	Factor (1)	-
Planning	1.1	The school principle helps me to achieve the general objectives related to the syllabus of English.
	1.2	The school principle helps me in preparing the lesson plans (annual, quarter and daily).
	1.4	The school principle takes part with me in planning solutions or plans for improvement of students' achievement.
	1.7	The school principle guides me how to distribute and invest the class time effectively.
	2.2	The school principle encourages me to visit the center of teaching aids at the Directorate for knowledge and benefit.
Teaching Aids	2.3	School administration selects me to join workshops of training on how to employ or use educational devices.
	2.5	I am encouraged by the school principle to participate in the exhibition of teaching aids.
	2.6	School administration is trying to provide educational technology and educational technological devices.
2. Educational Supervisor	Factor (2)	Description
	1.3	The educational supervisor guides me to keep updated with new teaching methods used in teaching English.
Teaching Methods	1.5	I am encouraged by the educational supervisor to activate students' collaborative learning.
	1.6	The educational supervisor shows me different teaching methods according to students' learning styles in learning English.
	2.1	The educational supervisor with the curriculum guidance, which assists or helps me in the application of the curriculum.
	2.3	The educational supervisor of English helps me in putting solutions of some difficult problems related to the subject being taught.
The Content of the Book	2.4	The educational supervisor provides me with some references, books and websites that enrich the topics of the syllabus.
	2.7	The educational supervisor of English follows up what has been accomplished/achieved in the syllabus according to the set plans.
	3.3	The educational supervisor of English offers me new ideas on how to improve my ways of evaluation of students' learning.
Evaluation	3.4	The educational supervisor of English provides me with question bank to take advantage of it.
	3.5	The educational supervisor urges me to diversify my ways of evacuating students' learning.
	3.6	The educational supervisor of English helps me to carry out diagnostic tests at the beginning of the educational situations.
Professional Performance of teacher	Items	Description
	1.1	I use different methods of teaching.
Teaching Skills	1.2	I teach every student according to his abilities.
	1.3	If any student ask question I try to satisfy him at every level.

Management Skills	1.5	I make no injustice in marking the papers.
	2.2	Apart from teaching I fulfill other responsibilities very nicely.
	2.3	I don't let co- curricular activities to affect my class teaching
	2.4	I don't let my domestic affairs to interfere in my duty
	2.5	If someone changes my responsibilities then I adjust myself.
Discipline and Regularity	3.1	I come to school regularly.
	3.2	When present at school I attain my class on time.
	3.3	I don't do irrelevant activity in my period.
	3.5	I fulfill my assigned activities on time.
Interpersonal	3.6	I maintain discipline in my class.
	4.1	Apart from teaching I try to solve any problem of the student
	4.3	I enjoy good relations with my colleagues.
	4.5	I co-operate with my colleagues in any work.
Professional Development	4.6	I consult my colleagues in solving of my class problems.
	5.2	I conduct research and educational studies and take part or participate in research competitions
	5.3	I enrich myself with reading and knowing what new in the English Language is.
	5.4	I make sure that I develop and employ contemporary teaching techniques and use them in effectively delivering information to the learner.
Training and Supervising Programs	5.6	I try to keep up with the developments in the field of learning and teaching theory.
	Items	Description
	1.1	Training programs benefit me in developing my ability to prepare the annual plan.
	1.3	They benefit me in the necessity of diversity of the goals to include the three areas of conceptual and procedural knowledge and problem-solving.
Planning	1.4	They guide me in selecting suitable educational aids and techniques for creating effective learning activities.
	1.6	They help me to choose learning and teaching activities in a way that contributes to achieving the goals.
	1.8	They enable me to formulate various classroom questions.
Executing	2.1	Training programs benefit me in how to raise learners' motivation.
	2.3	Training programs develop my skill of raising classroom questions.
	2.4	Training programs help to take into account individual differences.
	2.8	They develop my teaching of facts, concepts and principles.
Evaluating	3.3	Training programs improve my ability to prepare objective tests.
	3.4	They improve my ability to prepare oral tests.
	3.5	Training programs help in the preparation of improved essay tests that reveal learners' weaknesses.
	3.8	They enable to acquire the skill of building or developing treatment plans based on the results of the evaluation.

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