

Effect of Distributed Leadership on Teacher Engagement, Teacher Accountability, and Teacher Competencies

Zohre Jarrahzade^{*1}, Zohre Mohamadi Zenouzagh²

¹Ph.D. Candidate, English Translation and Teaching Department, Karaj Branch, Islamic Azad University, Karaj, Iran

²Associate Professor, English Translation and Teaching Department, Karaj Branch, Islamic Azad University, Karaj, Iran

DOI: [10.30495/LCT.2022.1959960.1063](https://doi.org/10.30495/LCT.2022.1959960.1063)

Received: 30/04/2022

Revised: 05/06/2022

Accepted: 10/06/2022

Abstract

The current study is mixed-method research that inspected the effect of distributed leadership on 3 factors of teacher engagement, accountability, and competencies on 15 EFL instructors and their improvements toward the abovementioned elements. To this end, the research was conducted through 2 phases, comprised of a quantitative inquiry which was intended to determine the teachers' level of engagement, accountability, and engagement through implementing 3 questionnaires. Then, the participants took part in online workshops concerning various issues of each questionnaire to share their perspectives toward them. The effect of online discussions regarding distributed leadership was depicted through implementing the questionnaires as the posttest. The second phase was qualitative and aimed to illustrate the participants' attitudes, opinions, experiences, and solutions toward the abovementioned components through writing a reflective essay. Results of the paired samples *t* test indicated a good amount of difference between the participants' performance on the pretest and posttest of the teachers' engagement, accountability, and competencies questionnaires. The contents of the participants' reflective essays were analyzed and presented in the second phase of the study. The outcomes showed that distributed leadership was a novel concept for all the participants and with presented various issues concerning each component, they achieved new insights toward their students, society, colleagues, and profession. Moreover, the resulted manifested that the participants accomplished benefit solutions and perspectives through online discussions and could find ways to develop themselves

* Corresponding Author's E-mail address: Zohreh.jarrahzade@kiaou.ac.ir



toward clinical, technical, critical, and personal competencies, all of which can lead to having a better educational atmosphere and students' achievement.

Keywords: Distributed leadership; Online discussion; Teacher engagement; Teacher accountability; Teacher competencies

1. Introduction

Administrators are encountering challenging issues several times that they possess an important function in managing their institutions or schools to generate prominent learners in academic settings and personality, respectively. In this regard, the concept of *distributed leadership* is a key factor to overcome several problematic items and eliminate them to achieve the targets, that is, learners' outcomes. The notion of the traditional leadership theory which accentuates the influence of solo person and power to manage other members of the group was replaced by the new concept of distributed leadership as decision making through diverse individuals at multiple levels in school or other organizations (Leithwood, Mascal, & Strauss, 2009). Distributed leadership is described by Spillane (2012) as "a product of the joint interactions of school leaders, followers, and aspects of their situations such as tools and routines" (p. 3). Harris (2004,2009) defined distributed leadership as an approach to institutional leadership in which every member of the group can act as a leader in a way that they can incorporate the abilities of various individuals within the institution and conquer the weaknesses. Predominantly, prescribed distributed leadership that depends on peer assessors, instructional tutors, and the like permit more teachers to consider the enhanced responsibilities normally determined through principals (Lumby, 2013; Youngs, 2014). Most recently, distributed leadership has a primary role to demonstrate in educational settings, particularly with the advent of a variety of challenges occurring in education nowadays, the necessity to exercise collaborative thinking, solutions, strategies, and authority that involving specific interactions and activities is a prerequisite to benefit more from distributed leadership and contribute it to the improvement of institution or schools and learner accomplishment (Chen, 2007). It is noteworthy to mention that instructors have more opportunity through distributed leadership to increase their potential and make them ready for future leadership (Torres, 2018).

Establishing a successful institution or any educational setting through distributed leadership relies on several components. Principals need to emphasize developing and recognizing qualified teachers to meet their educational requirements (Lewis, 2015). Teachers need to promote

themselves professionally because they have a critical role in learners' outcomes and their learning demands. They are concerned as the main source of developing their teaching practice, presenting novel teaching techniques, and increasing students' learning (Gonzalez & Skultety, 2018; Prenger, Poortman, & Handelzalts, 2017). Therefore, one component influenced by distributed leadership is teacher engagement. Teachers can upgrade their skills and knowledge by sharing them with their coworkers and specialists to promote their potential and capabilities to respond to their students' demands (El-Hani & Greca, 2013). Engaged teachers are more accountable and competent and are conventionally related to their mission (Picard & Kutsyuruba, 2017). Another component influenced by distributed leadership is teacher accountability. Distributed leadership functions effectively when leadership responsibilities and tasks are pre-designed by the strong points of members. Accordingly, the whole leadership group requires to be a cohesive team that shares similar values and a common vision. Such cohesiveness depends on collaboration, trust, and a profitable framework that clarifies responsibility and roles (Grubb & Flessa, 2009; Hulpia et al., 2009). And finally, the last component influenced by distributed leadership in this study presents itself as teacher competencies. Instructors require to be supplied with skill, in-depth knowledge, and positive values demanded in process of education to enhance learner achievement. Administrators need to manage their instructors' talents by recognizing them, implementing special training to intensify instructors' effectiveness, and increasing learner achievement to make sure that quality instructors are produced in every educational setting including school, or institution (Klenowski & Lunt, 2008).

Concerning the abovementioned studies regarding distributed leadership and its effect on different aspects of the educational system, the current study herein expands this literature and shows the relationship between distributed leadership, teacher engagement, teacher accountability, and teacher competencies. Moreover, an attempt was made to probe the effect of distributed leadership on three crucial constructs that can affect the quality of teachers, their instruction, and learner achievement. However, it is important to note that distributed leadership factor has not been investigated enough and, consequently, different remarkable components that might boost such a system have remained untouched.

2. Literature Review

2.1. Distributed Leadership

Bennett, Wise, Woods, and Harvey (2003) asserted that distributed leadership is not about doing something individually. It consists of a collection of individual actions and works which can implement and contribute within a group of people, institutions, or even an organization. It is considered as a set of activities and tasks which can be done within relationships or meetings. It appears from a diversity of sources relying on the subject and who has the related innovation or expertise. One of the contributions of distributed leadership is flexibility, which is the outcome of collaboration and enhancing immunity. It is practical in which members work together to integrate their experiences and actions, resulting in a plan that is more practical than the usual operation (Rao-Nicholson, Khan, Akhtar, & Tarba, 2020).

Several key concepts are normally cited in tracking the theoretical origins of distributed leadership. The primary features of distributed leadership are all actions intended at boosting the learner's educational experience. Each teacher of a group is supported and valued following their professional attainments (Dampson, Havor, & Laryea, 2018). In terms of collaboration, Malin and Hackmann (2017) concluded that distributed leadership provides enormous opportunities for each member to learn from each other. There can be greater engagement in administrating the goals, with more active participation in the decision-making process.

Distributed leadership is an idea used to signify a style of leadership in which the organizations of educational setting transform and develop leadership beyond individual activities (Bush, 2018; Harris, 2010; Leithwood et al., 2009). Harris (2010) also defines distributed leadership as extending the roles of leadership beyond the administrative authorities and formal management positions. Concerning the existing link between sharing and collaboration, distributed leadership can minimize the risk of errors resulting from decisions made according to limited information of each participant (Hristov & Zehrer, 2019). Moreover, Leadbeater (2004) explored the emergence of distributed leadership in education and mentioned that "the complexity of tasks need competence of its members with a shared purpose according to trust and collective endeavor". Therefore, within the concept of distributed leadership, all members in an organization can accentuate on the networking and integrating of work-based activities and touch those problematic issues which they were unable to resolve them individually.

In a similar study, Samancioglu, Baglibel, and Erwin (2020) examined the association and connection between distributed leadership in institutions or schools and the organizational commitment of instructors. According to the findings of the research, the quality of leaderships' functions and social interaction had a considerable influence on teachers' job satisfaction, organizational behavior, and commitment. In addition, coherent leadership team sub dimension affected merely job satisfaction. Most recently, Hata, Nor, and Hamid (2020) examined the distributed leadership role of the principal as a core strategic component that leads to teachers' competency. In another study, Lee (2021) discussed the importance of distributed leadership and its function in education. The researcher utilized qualitative content analysis. The findings highlighted the potential effect of collaborative practices and sharing ideas within teamwork and concluded that distributed leadership is an approach to restore the potential for change in the organization.

In this regard, Dehghani poor et al., (2021) identified the conditions for setup distributed leadership in elementary schools in Mashhad, Iran. The goal of their research was to investigate the practices of distributed leadership throughout instructors. They concluded that this is a complicated phenomenon in dimensions of mission, vision, and goal. Moreover, the level of distributed leadership status in elementary school was sophisticated. In a similar study, Aliakbari and Sadeghi (2014) studied Iranian instructors' comprehension of teacher leadership practice in schools. The findings of their study revealed that there were remarkable discrepancies in instructors' perceptions of the practice of teacher leadership due to their degree of education, level, gender, age, and teaching experiences.

2.2. Teacher Engagement

The first construct scrutinized in the current study is teacher engagement which is described by Schaufeli et al. (2006) as a fulfilling, satisfying, skilled occupation state of mind that is expressed precisely as dedication, vigor, and absorption. Teacher engagement has been related to expertise and professional development, and interaction with students is a remarkable factor in enhancing learning outcomes (Klassen et al., 2013; Lauerdale, 2011). Engagement can also be regarded as a process, which is associated with three phases of interest, motivation, and engagement (Jarvela & Renninger, 2014; Renninger & Bachrach, 2015; Renninger & Hidi, 2011). In addition, Bakker et al. (2013) considered involvement and energy as the two fundamental dimensions for engagement. Teacher engagement has multiple dimensions composed of

emotional, social, and cognitive domains. Emotionally engaged teachers experience enthusiasm, and positive emotions/reactions; socially engaged teachers deal with the relationship between students and colleagues; and, cognitively engaged teachers consider dedicated endeavor in the act of teaching.

All in all, engagement can be probed from diverse theoretical standpoints. Model engagement deals with supporting, understanding, and increasing the engagement of educators and students (Petteway's, 2012). Social, academic, intellectual, personal, and professional aspects are underlain pedagogical engagement (Dyment, Downing, & Budd, 2013). Moreover, engagement has been associated with agency and metacognition (Reeve & Tseng, 2011; van Uden et al., 2013; Zyngier, 2008). In addition to these perspectives, teacher accountability is the next construct that is explored in this study.

2.3. Teacher Accountability

Teacher accountability can be explained as an action to attain impressive, effective, and proofs that emerges from educational enterprise. This change of teaching might progress “performance cultures” (Sachs, 2016, p. 415), in which teachers utilize the power of language to make an implementation that points to the sense of system calls to develop teaching quality. It is illuminated as the degree of student advancement (Holloway, Nielsen, & Saltmarsh, 2021). Assisting students to achieve the ultimate purposes of learning and making them ready for their future can be accomplished through diligent and effective teachers whom the students can rely on responsibility and accountability. Delving more, Sachs (2016) developed a theory of accountability that attaches firmly to the field of interior comprehending that resembled through values, beliefs, and highly skilled manner perspectives by exterior policies. Two major phases of the process of learning and teaching were identified by Attarwala (2015) that emphasized students can grow or promote with a hardworking, compassionate, and honest teacher who cares about their learning and guide them to target demands. Kanika (2016) asserted that the learner's achievement should be reckoned with their attempts and capacity. Hence, teachers must be responsible for the student's progress which hinges on teachers' accountability and their competence. Huber and Skedsmo (2016) added that the primary components that can influence the enhancement and effectiveness of educational contexts are teachers with approaches and their instructional strategies. With these concerns in mind, as instructors belong to the core part of stakeholders in education, they should be accountable for every

action which occurs in this context. Furthermore, as instructors are the heart of the educational system, their development would instantly result in the improvement of all engaged learners. Accordingly, as Attarwala (2015) explained, “a teacher should devote his whole life to teaching as well as learning for the future of humanity as his role is multidimensional and multifarious” (p. 48). Finally, teachers should consider their classroom beyond the educational and school settings and be responsible regarding the community they work and live in. In doing so, Wu (2019) postulated that instructors should connect society and school and modulate different activities of the community.

2.4. Teacher Competencies

Teacher development is regarded as the construction of teaching competencies by teachers (Avalos, 2011). According to Blaskova et al. (2014), competence is clarified as a collection of professional skills that result in prosperous administration. Many scholars have discovered that teacher elements are, sometimes, considerably related to education quality as the degree through learner accomplishment. Hata et al. (2020) proposed that when instructors do not exhaust their responsibilities, learners are not capable of achieving their targets; therefore, learner performance is associated with teacher professionalism. Competence is also described as the capability to utilize knowledge and skills dynamically and coherently to eliminate the complexities and problems proficiently (Duta et al., 2014). Hence, competence encompasses three scopes: The first scope is cognitive, the second scope is functional and skills, and the third one is value and attitudes (the autonomy of teacher and responsibility; Mohammadi & Malekshahi, (2018). Similarly, Niculescu (2014) discussed various competencies like knowledge and personality traits, and some of which are developed by taking part in expertise and teacher preparation programs. Moreover, in addition to being masters in the field of education, instructors require to possess in-depth knowledge particularly and develop their traits (Salleh et al. 2011).

Concerning the significance of distributed leadership and its effect on different fields of teaching contexts, teacher engagement, teacher accountability, and teacher competencies, the present study intends to shed light on how distributed leadership can develop teacher engagement, teacher professional accountability, and teacher competencies. Hence, this study aimed to reflect on the following research questions:

1. Does distribute leadership has any significant effect on Iranian EFL teachers’ engagement?

2. Does distribute leadership has any significant effect on Iranian EFL teachers' accountability?
3. Does distributed leadership have any significant effect on Iranian EFL teachers' competencies?

3. Method

The current research was conducted in two phases, administrating an explanatory sequential mixed method design to achieve the aforementioned purposes. Correspondingly, to accomplish the desired objectives for each section, various steps were carried out, encompassing participants, instrument applied, design, data collection, and data analysis. More details of these components are in the forthcoming sections.

3.1. Participants

In carrying out this study, 16 female and male EFL instructors were involved in the data collection with the age range of 31-40. The participants were Ph.D. candidates who majored in teaching EFL, except for 2 candidates who majored in English translation in Islamic Azad University, Karaj Branch and Islamic Azad University, Quds branch. We used the nonprobability sampling method to provide better information for this research (Best & Kuhn, 2006). The demographic information of the participants is presented in Table 1.

Characteristics		Frequency	Percentage
Age Range	< 30	3	18.8
	31-40	11	68.8
	41 >	2	12.5
Degree	Ph.D. Candidates	16	100
Major	TEFL	14	87.5
	English Translation	2	12.5
Gender	Male	5	31.3
	Female	11	68.8
Teaching Experience	5-10	7	43.8
	11-20	7	43.8
	21-30	2	12.5

3.2. Instruments

To answer the research questions and compile the required data, we utilized the following questionnaires for the first phase of the study, which was quantitative.

3.2.1. Multidimensional Scale of Teacher Engagement

To explore the level of the participants' engagement, we applied a questionnaire known as the Engaged Teacher Scale (ETS), which was developed by Klassen et al. (2012), comprising 16 statements relating to the particular sections of the practice of teachers in class. This questionnaire investigates four different features toward the engagement of teachers containing emotional, cognitive, social (colleagues), and social (students) engagement (Appendix A). We revised the questionnaire to involve more arguments concerning teacher engagement which was collected throughout the review of the literature. The finalized questionnaire consisted of 26 statements investigating the level of the teachers' engagement through a Likert scale of 1 (*never*) to 7 (*always*). The validity of the questionnaire was checked by some experts in TEFL, and the reliability of the questionnaire was examined through Cronbach's alpha, which turned out to be .96.

3.2.2. Teachers' Accountability Questionnaire

To investigate the teachers' accountability, a questionnaire was administered which included five features of teachers' accountability to students, schools, society, parents, and profession. This questionnaire contains six sections (Rahmatollahi & Mohammadi, 2021): Section 1 deals with teachers' age, gender, major, degree, and years of experience. The questions begin from section 2 that includes the degree of accountability toward students with six items. Section 3 encompasses six items relating to accountability toward parents. Then, the questionnaire asks about accountability toward schools. The next questions cover issues associated with accountability towards society. And, the last section explores accountability towards the profession (Appendix B). The entire number of items was 30 in five phases exploring the teachers' accountability on a Likert scale of 1 (*never*), 2 (*sometimes*), 3 (*often*), and 4 (*always*). The validity and reliability of the questionnaire enjoyed Cronbach's alpha, and the attained value was .95 which exhibits the strong reliability of the statements in the questionnaire because Hinton, McMurray, and Brownlow (2014) postulated that the values more than .8 possess a high reliability.

3.2.3. Teachers' Competencies Questionnaire

To explore the teachers' competencies, a questionnaire was conducted which was designed and developed by Mohammadi and Malekshahi (2018). This questionnaire involves three perspectives as a student, department/administrative, and learning/growth perspective, each of these perspectives covers four sections that measure technical competence, clinical competence, personal competence, and critical competence (Appendix C). The questionnaire includes items that are measured through the Likert scale of unacceptable, slightly unacceptable, neutral, slightly acceptable, and acceptable. The face and content validity of the questionnaire was confirmed by some experts in the field. Further, the reliability was measured through Cronbach's alpha concerning various standpoints and their subcategories. The estimated reliability for the main perspectives was .96.

3.2.4. Write a Reflective Essay

To reflect on the effect of distributed leadership on the three factors (i.e., teacher engagement, teacher accountability, and teacher competencies) and to achieve more in-depth information, one of the researchers asked the participants to write a reflective essay on three sessions of the discussions that were held in online workshops. Reflective essays act as a rich document which is a receptacle of opinions, obligations, and wishes, assesses the strengths and limitations, contracts, and explores possible improvement, reports, reflections on actions, and the like. They are as resources for further action and conclusion to form an intellectual backbone of the study (Silverman, 2003). In this regard, as declared by Marchington and Wilkinson (2012), "without reflection there will be no learning from experience" (p.17).

3.2.5. Online Workshop Discussion

To develop teacher engagement, teacher accountability, and teacher competencies in teaching contexts, an online workshop was administered on a WhatsApp group. All the participants were asked to join this group. The participants who consisted of TEFL and English translation Ph.D. candidates shared their perspectives, attitudes, solutions, and understandings concerning three issues one by one and reflected on proposed discussions collaboratively, the propound different challenges, some guidelines, and solutions within prescribed distributed leadership. One of the researchers took part in the discussions and often provided hints and keywords to clarify the intended purpose and led the group discussions toward the target of the study. We selected the issues of online

workshops which were predominantly accentuated on four aspects of teacher engagement (emotional, cognitive, social (colleagues), and social (students) engagement), five features of teacher accountability (to students, to parents, to schools, to society, and the profession), and four categories of teacher competencies, respectively (clinical, personal, technical, and critical).

The online workshops within WhatsApp group took some advantages for the participants and researchers. In particular, they provided a convenient time for discussion in which each participant could collaborate easily on their standpoints and experiences. The online workshops made it possible to respond to the ideas and answer the questions, and we could upload files that were effective materials for the participants and assisted them to continue their discussions to the targets. Afterward, the participants were required to answer the three questionnaires for the second time regarding teacher engagement, teacher accountability, and teacher competencies to inspect the influence of the online discussions on the WhatsApp groups on the development of three discussed factors.

3.3. Procedure

Initially, throughout the literature and all related topics and aspects of the three main factors of the study, we developed a framework demonstrating the indicators of teacher engagement, teacher accountability, and teacher competencies which were in line with the purposes of the research. Exploring teacher engagement, teacher accountability, and teacher competencies under an intriguing concept of distributed leadership, which is an umbrella term to support many contributions, will assist teachers and will help them to enhance the quality of their teaching and classrooms, respectively. Accordingly, the current research sought to evolve three questionnaires in the first phase of the study, and we utilized a teacher engagement questionnaire (four features) which was adopted by Klassen et al. (2013) and refashioned by the current researchers to implement for the present study (see Appendix A). This questionnaire had 25 statements and was measured through a Likert scale of 1 (*never*) to 7 (*always*). Afterward, the participants were demanded to reply to the second questionnaire to explore teachers' accountability which was provided by Rahmatollahi and Mohammadi (2020) and perused by the researcher. It had five separate sections with 30 items. The details of the questionnaire were negotiated in the previous section. This questionnaire was rated on a Likert scale of 1 (*never*) to 4 (*always*). Then, the participants were required to answer the third questionnaire dealing with teacher competencies, which entailed 52 items

on four diverse features of personal competence, clinical competence, technical competence, and critical competence.

To achieve a better comprehension of the essence and nature of the proposed objectives with great details, we enjoyed an explanatory sequential mixed methods design to carry out the present study (Creswell, 2018). The research was implemented into two phases. To figure out the responses to the three research questions, the quantitative nature (first phase) was conducted. In this regard, to ameliorate and progress the participants' engagement, accountability, and competencies, they were demanded to take part in a WhatsApp group discussion within 3 sessions. One of the researchers uploaded the entire concept of distributed leadership with its characteristics and, then, transmitted some questions concerning the three factors of engagement, accountability, and competencies in each session separately. In this step, the participants were required to answer the questions, share their understandings, and collaborate based on the posted issues discussion. Afterwards, the participants were required to answer the three questionnaires for the second time regarding teacher engagement, teacher accountability, and teacher competencies to inspect the influence of online discussions in the WhatsApp group on the development of the three discussed factors.

In the second phase of the study, we asked the participants to write a reflective essay toward the effect of distributed leadership based on their understanding and attitudes to improve teacher engagement, accountability, and competencies. We gathered the qualitative data through the reflective essays and, then, analyzed the contents of the participants' essays through the Nvivo software.

4. Results

The current study sought the effect of distributed leadership on teacher engagement, teacher accountability, and teacher competencies. To accomplish the purposes of the study and to achieve the best results of this inquiry, the research encompassed two phases: The first phase of the study was quantitative that attempted to discover the effect of distributed leadership through questionnaires within a pretest and a posttest. On the other hand, to achieve a deeper understanding of the effect of distributed leadership, the second phase of the study was done through writing the participants' reflective essays and, then, the contents of the reflective essays were analyzed and reported after the quantitative results.

To make it clear whether parametric or nonparametric formulae are appropriate to analyze the data, we checked the normality of the data sets

through one sample Kolmogorov-Smirnov tests, and the results are provided in Table 2.

Table 2. *One Sample Kolmogorov-Smirnov Test of Pretest and Posttest Scores of the Three Questionnaires*

		Pre, TEQ	Post, TEQ	Pre, TAQ	Post, TAQ	Pre, TCQ	Post, TCQ
<i>N</i>		16	16	16	16	16	16
Normal	Mean	151.38	172.06	97.88	115.25	219.25	246.50
Parameters	<i>SD</i>	23.94	10.13	14.13	3.94	31.17	5.34
Asymp. Sig. (2-tailed)		.99	.32	.76	.90	.19	.92

Taking a look at the values reported in Table 2, the conclusion is that all the data sets are normal because the significant values of the pretest of the teacher engagement questionnaire (referred to as Pre, TEQ, and its proposed test referred as Post, TEQ), the pretest of the teacher accountability questionnaire (referred to as Pre, TAQ) and its posttest (referred to as Post, TAQ), and the pretest of the teacher competencies' questionnaire (referred to as Pre, TCQ) and its posttest (referred to as Post, TCQ) are .99, .32, .76, .90, .19, and .92, respectively, all larger than the standard .05 level of significance ($\alpha = .05$; $p > \alpha$), meaning that the data collected on the three questionnaires' pretests and posttests were normal.

The reliability of the questionnaires was also checked using Cronbach's alpha coefficient, which is a common way of calculating reliability. According to Pallant (2011), if the value is bigger than .7, we call a reliable test.

Table 3. *Cronbach's Alpha Reliability Index of Teacher Engagement, Accountability, and Competencies Questionnaires*

	Teacher Engagement	Teacher Accountability	Teacher Competencies
Number of Items	26	30	52
Cronbach's Alpha Reliability Index	.96	.95	.96

As shown in Table 3, the three values indicate strong reliability indices of the three questionnaires, as they are .96, .95. and .96 for the teacher engagement, teacher accountability, and teacher competencies questionnaires, respectively, all of which are above .7.

Next, to compare and contrast the amount of the difference the treatment had caused on the attitudes of the participants regarding the three matters of engagement, accountability, and competencies, a set of

three paired samples *t* tests were run and the outcomes are reported in the following tables.

Table 4. *Descriptive Statistics of Pretest and Posttest of Teacher Engagement Questionnaire (TEQ)*

	<i>N</i>	Mean	Std. Deviation
Pretest of the TEQ	16	151.38	23.94
Posttest of the TEQ	16	172.06	10.13

According to Table 4, there is a good amount of difference between the performance of the participants on the pretest and posttest of the Teacher Engagement Questionnaire for their mean score has changed from 151.38 to 23.94. However, whether such a difference is noteworthy or not is a matter that needed to be investigated through a paired samples *t* test, the upshots of which are presented in Table 5.

Table 5. *Tests of Differences of Pretest and Posttest of Teacher Engagement Questionnaire (TEQ)*

		Paired Differences		<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)
		Mean	Std. Deviation			
Pair 1	Pretest-Posttest	-20.68	15.50	-5.33	15	.00*

Looking into the significant value of the amount of the difference between the pretest and posttest scores of the TEQ illustrated in Table 4, which is .00 and smaller than the critical value ($\alpha = .05; p < \alpha$), it becomes clear that there was a significant difference between the performance of the participants from the pretest to the posttest, meaning that distributed leadership had a significant effect on the Iranian EFL teachers' engagement and, therefore, the response to the first research question is positive.

Then, the amount of the effect of presenting accountability issues to the participants was checked and the results are presented in Tables 6 and 7.

Table 6. Descriptive Statistics of Pretest and Posttest of Teacher Accountability Questionnaire (TAQ)

	N	Mean	Std. Deviation
Pretest of the TAQ	16	97.88	14.13
Posttest of the TAQ	16	115.25	3.94

As shown by the mean scores of the pretest and posttest of the TAQ, which are 97.88 and 115.25, respectively, there was a difference between the pretest and posttest scores obtained from the Teacher Accountability Questionnaire. However, the decision on the significance of this difference had to be made through a paired samples *t* test, the results of which are presented in Table 7.

Table 7. Tests of Differences of Pretest and Posttest of Teacher Accountability Questionnaire (TAQ)

	Paired Differences		<i>t</i>	<i>df</i>	Sig. (2-tailed)
	Mean	Std. Deviation			
Pair 1 Pretest-Posttest	-17.37	12.74	-5.45	15	.00*

The significant value demonstrated in Table 6 is again smaller than the standard .05 level of significance ($p = .00$; $\alpha = .05$; $p < \alpha$) and, therefore, the conclusion is that there was a considerable difference between the performance of the participants on the pretest and posttest of the Teacher Accountability Questionnaire. That is to say, distributed leadership had a significant effect on the Iranian EFL teachers' accountability, meaning that the second research question receives a positive answer.

Then, the amount of the difference between the pretest and posttest of the participants on the teacher competencies questionnaire is the other matter, which was checked through a third paired samples *t* test, the outcomes of which are reported below.

Table 8. Descriptive Statistics of Pretest and Posttest of Teacher Competencies Questionnaire (TCQ)

	N	Mean	Std. Deviation
Pretest of the TCQ	16	219.25	31.17
Posttest of the TCQ	16	246.50	5.34

Table 8 shows that there was a good extent of difference between the mean scores of the pretest and posttest of the Teacher Competencies Questionnaire because a change from 219.25 to 246.50 is seen in this case.

The results of checking the significance of this difference are reported in Table 9.

Table 9. Tests of Differences of Pretest and Posttest of Teacher Competencies Questionnaire (TCQ)

Pair 1	Pretest-Posttest	Paired Differences		t	df	Sig. (2-tailed)
		Mean	Std. Deviation			
		-27.25	32.04	-3.40	15	.00*

The significant value in Table 8, which is .00 and less than the standard level ($\alpha = .05; p < \alpha$), is an indication of the significance of the difference between the two sets of scores, meaning that distributed leadership had a significant effect on the Iranian EFL teachers' competencies. Therefore, the answer to the third research question is also positive.

Concerning the findings of the content analysis through the reflective essays, we can argue that distributed leadership influenced the improvement of teachers' engagement, accountability, and competencies. As the participants discussed the first issue regarding engagement of teachers, the following statements are instances of the effect of distributed leadership in this domain:

Distributed leadership in teaching was a new and practical topic for me which introduces the role of sharing ideas between teachers. I participated in a discussion between EFL teachers regarding this topic which gave me new ideas about teacher engagement. A teacher should be able to build a friendly, stress-free environment for the students. I believe it enhances the process of learning. Building a good relationship with colleagues also provides opportunities for getting positive feedbacks and getting advantages of new ideas . . .

Or, as another participant mentioned:

In my opinion discussion on teacher engagement has provided new insights into my profession as I enjoyed new views of practitioners in the field, and I received some constructive feedback. Teacher engagement is now becoming prominent for teachers themselves . . .

Participant 3:

Accordance with debates, the students' activities in the classroom is a crucial and essential skill in teaching. Engaging them in the learning process supplies the opportunity to receive input and to share a particular activity with other students that makes it possible to execute their knowledge as well. Based on Maznevski (1996) from the participation of teachers can get a more accurate idea that what is the understanding level

of students about the concept being taught. Active learning implicates students to do relevant learning activities and to think about what they are doing. The core components of active learning embody students' activity and engagement in the learning process. Interaction, engagement, and communication are the items that connect the learners. As it was discussed, engaging should be considered based on students' needs ...

Thus, considering the first research question, we can claim that distributed leadership had a significant effect on the improvement of teachers' engagement within four components of emotional, social engagement; colleagues, cognitive engagement, and social engagement of students. In a similar vein, to respond to the second research question, we can maintain that the participants' consciousness of accountability of teachers were developed because participant 7 asserted that:

Regarding debates, "accountability" refers to making, keeping, and conducting agreements and expectations. As evaluations of teachers are often based on student performance and data, teachers feel not only accountable but responsible for what their students learn. Educational accountability enhances teaching and learning in the school system. Its facilities promote the realization of institutional objectives. In terms of accountability to society, the teacher should actively take part in societal negotiations and suggest guidance and commitment to administrations. An accountable instructor should also work continuously toward empowering the students in education. About the profession, they are held accountable for implementing curriculum, testing and grading policies, assignment and promotion rules ...

Furthermore, participant 5 claimed that:

Teacher accountability has been almost an important issue in teaching and plays a chief role in the learning of the learners while the different aspects toward different components such as parents, schools, and society were somehow covert, this debate allows us to look at the comprehensive side more ...

Or, as participant 1 mentioned:

Throughout this discussion, we became familiar with the concept of teacher accountability as well. Furthermore, I do believe that this discussion was beneficial to me in different ways by providing an example of how distributed leadership can affect teacher accountability. Furthermore, when we consider teacher accountability, we consider teachers' responsibility for students' learning and student performance. The aforementioned discussion regarding teacher accountability in this section shows some significant points related to. For example, teachers should be accountable towards their students and parents, as well through

keeping in touch with parents and providing them with a report of the class ...

Participant 4:

Teacher accountability has been almost an important issue in teaching and plays a chief role in the learning of the learners while the different aspects toward different components such as parents, schools, and society were somehow covert, this debate allows us to look at the comprehensive side more. As an instance, a teacher should care about society by teaching students to act according to moral standards and cultural issues of society, they should also be accountable towards the profession within work collaboratively with colleagues and help them. They can also attend seminars or workshops to be fashionable ...

Similarly, to answer the third research question which focused on teachers' competencies, we can conclude that distributed leadership had remarkable effects on teachers' competencies. The following upshots of online debates illustrate the contents:

Participant 9:

A teacher should be able to solve problems in classes. Building a good relationship is my prior factor as a teacher and I think I am strongly capable of it. In terms of critical competencies first I had nothing to discuss but now I have some ideas regarding reducing social inequalities in my classes. Talk about it and work on students' awareness of this matter. Engaging students is a very important aspect of teaching, repetition, personalization, and participating in discussions can be used in classes ...

Or, as another participant stated:

The teacher competence with those four fantastic attributes made me more competent about development in different issues, as critical and personal were made a good accomplishment to increase the role of leadership of teachers in preparing themselves before the class, reduce the diversity and increase the intimate relationship, as well as making solutions for those instant and expected issues ...

Participant 8:

Teacher competence is a pattern of thinking, feeling, and acting. It causes a teacher to accomplish and manage his duty successfully. In another word, competencies are the skills and knowledge that make capable a teacher do his job intentionally and deliberately. For enhancing students' confidence, it is needed to help students to grow thinking individuals for critical thinking and problem-solving. Teacher competencies involve their interpersonal skills and flexibility that make students well develop in certifying learning ...

Furthermore, participant 10 affirmed that:

As a matter of fact, teacher competence is a pattern of thinking and feeling that causes a teacher to be successful in his or her job. Furthermore, we have regard to the fact that there are some problems in the process of teaching and teachers should be aware of them and solve them by considering some steps ...

Participant 12:

Teacher competencies are vital but concealed parts of a teacher's work. So, as the discussion went on these hidden parts became more lightened and apparent so that I could use the provided information for further actions in the future. in terms of clinical competence, using different views could provide rigorous strategies for unexpected situations in classrooms... '.

From their standpoints, all in all, distributed leadership can be beneficial through the thoughtfulness of all different parties. It will enable teachers to establish a better view regarding teachers' engagement, teachers' accountability, and teachers' competencies by the use of different sights and experiences. It examines different ways to deal with obstacles affecting halts in the responsibility of all parties involved in the process of learning. Therefore, distributed leadership acts as a predominant and prerequisite element to develop and enhance teachers' engagement, accountability, and competencies through sharing opinions, experiences, solutions, and diverse attitudes toward various components and issues which are essential to know to help students' targets.

5. Discussion

The present study attempted to probe the effect of distributed leadership on teacher engagement, teacher accountability, and teacher competencies. Based on the results, remarkable influences were figured out in improving three components of teacher engagement, accountability, and competencies from their answers to three questionnaires as pretest respecting the participants' reflective essays as the posttest on account of the effects of distributed leadership that was implemented through an online workshop in a WhatsApp group.

To respond to the first research question, the effect of distributed leadership on teacher engagement was explored. The results revealed that teacher engagement was improved from the pretest to the posttest which was due to the online workshop discussions. This study produced results that corroborate the findings of a great deal of the previous work in this domain. As an instance, Coban and Atasoy (2020) investigated the relationship between distributed leadership, innovativeness and

collaboration of instructors through a quantitative study. They argued that the connection of distributed leadership has an impact on organizational innovativeness that occur through the collaboration of instructors. The findings of the first research question are consistent with that of Tashi (2015) who found that the participation of the teachers increased throughout the practices of distributed leadership, and that the maximum of partaking responsibility was attained.

A study carried out by Harrison (2005) indicated that the leaders and teachers felt the necessity to collaborate to provide a common goal. Increased activation of engagement of teachers in this study also corroborates the findings of Hulpia et al. (2011) that stated instructors should be encouraged to engage in making decisions that have an impact on learners because they have a significant role in student achievements. These findings, further, support the idea of Vlachadi and Ferla (2013) who mentioned that the practice of distributed leadership resulted in more engagement of teachers.

There are similarities between the effect of distributed leadership on teacher accountability that was examined in the second research question and those described by Holloway et al. (2017) that prescribed distributed leadership in the accountability domain in the US. They used this model to achieve a deeper understanding of how teachers enhance their responsibilities and roles within the concept and function of distributed leadership. This also accords with Hatcher (2005), Lumby (2013), and Bolden (2011) that showed that distributed leadership might assist institutions or schools in answering the exterior policy requisition.

To answer the third research question, exploring the effect of distributed leadership on teacher competencies, the candidates' argumentations were scrutinized. The results of the current research are also in line with Hata et al. (2020) that indicated that distributed leadership acts as an important component and a tactic phase that can guide teachers' competency and results in sharing different perspectives towards various challenges, makes leaders and teachers act well in different situations, and encourages them to involve more within this key strategy. The findings of this study pointed out the considerable interrelation between distributed leadership circumstances and the increased level of teachers' competency.

The findings of the current study seem to be consistent with other studies (Bektash et al., 2020; Joo, 2020) that probed the relationship between distributed leadership and professional learning of teachers in Turkey. They concluded that distributed leadership has a positive influence on the professional learning of instructors indirectly. Therefore, the results demonstrate a positive linkage between distributed leadership

and professional learning. Regarding the application of an online workshop debate setting, the present study revealed findings that are concurrent with other studies. For instance, Zenouzagh (2019) inquired about teachers' competencies utilizing electronic collaborative discussion. Zenouzagh (2019), designated that the teachers' competencies were enhanced through taking part in ECFD. In a similar vein, Lee et al. (2015) maintained that teacher transformative learning can be the result of online dialogue argumentations.

6. Conclusion

The present study investigated the effect of distributed leadership on teacher engagement, teacher accountability, and teacher competencies. Distributed leadership acts as a novel concept that enables every individual, particularly teachers, to be a leader in every field and develop their characteristics to be the best teacher in the class, provide a better atmosphere for educational targets, and finally help students to improve themselves that is the main target of their achievements. The concepts of teacher engagement, accountability, and competencies were explored and pinpointed theoretically within the Literature Review section. The results indicated that the participants' level of engagement, accountability, and competencies developed and enhanced through online workshops discussions toward the factors that were held in the three sessions. The participants met novel issues regarding the components of each topic, contributed their perspectives, shared their understanding, prepared solutions for necessary items, and expressed their attitudes to achieve the best outcome of each session of discussion. One of the researchers asked each participant to write a reflective essay to reflect on his or her understanding and identify the effect of distributed leadership toward the discussed indicators. The analysis of the reflective essays' contents showed that the participants benefited from the effect of the distributed leadership concept because it could open a new window and recommended many effective views to develop their levels regarding engaging more in their classes, being more accountable towards students, parents, schools/institutions, society, and the profession. Moreover, they claimed that distributed leadership could develop them to improve clinical, personal, critical, and technical competencies.

The current research deals with significant implications for all managers of schools/institutions, teachers, and teacher education. The discussed issues can assist expert teachers to reflect on their actions in different situations and help them to promote their position and enhance the achievements of students. Moreover, the outcomes of this study can

be useful for novice teachers, too. Although this study had intriguing results, it did have with some limitations. The participants were Ph.D. candidates; future studies can be carried out with more participants and preservice or in-service teachers. Furthermore, future studies can consider other factors and indicators of engagement, accountability, and competencies.

Funding: This research received no external funding from any agency.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Aliakbari, M., & Sadeghi, A. (2014). Iranian teachers' perceptions of teacher leadership practices in schools. *Educational management administration & leadership*, 42(4), 576-592.
- Attarwala, P. A. R. U. L. (2015). A study of teachers' accountability in relation to teachers' professionalism of primary schools of Kadi. *International Journal of Research in Humanities & Soc. Sciences*, 3(8), 47-50.
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, 27(1), 10-20.
- Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *The International Journal of Human Resource Management*, 24(14), 2760-2779.
- Bektaş, F., Kılınç, A. Ç. & Gümüş, S. (2020). The effects of distributed leadership on teacher professional learning: mediating roles of teacher trust in principal and teacher motivation. *Educational studies*, 1-23.
- Best, J. W., & Kahn, J. V. (2006). *Research in education* (3rd ed.). Boston: Pearson Education Inc.
- Blašková, M., Blaško, R., & Kucharčíková, A. (2014). Competencies and competence model of university teachers. *Procedia-Social and Behavioral Sciences*, 159, 457-467.
- Bolden, R., Petrov, G., & Gosling, J. (2009). Distributed leadership in higher education: Rhetoric and reality. *Educational Management Administration & Leadership*, 37(2), 257-277.
- Bolden, R. (2011). Distributed leadership in organizations: A review of theory and research. *International Journal of Management*, 13(3), 251-269.

- Bush, T. (2018). School leadership theories and the Malaysia education blueprint. *International Journal of Educational Management*, 32(7), 1245-1265.
- Chen, Y. H. (2007). *Principals' distributed leadership behaviors and their impact on student achievement in selected elementary schools in Texas*. Texas A&M University.
- Çoban, Ö. & Atasoy, R. (2020). Relationship between Distributed Leadership, Teacher Collaboration and Organizational Innovativeness. *International Journal of Evaluation and Research in Education*, 9(4), 903-911.
- Creswell, J. (2018). *Research design: Qualitative, quantitative, and mixed-method approaches* (4th ed.). London: SAGE.
- Dampson, D. G., Havor, F. M., & Laryea, P. (2018). Distributed leadership an instrument for school improvement: The study of public senior high schools in Ghana. *Journal of Education and e-Learning Research*, 5(2), 79-85.
- Dehghani Poor, F., Hosseingholizadeh, R., & Javidi Kalateh Jafarabadi, T. (2021). Identifying the conditions for the establishment of distributed leadership in the primary schools in Mashhad, Iran. *Journal of School Administration*, 9(2), 516-490.
- Duță, N., Pânișoară, G., & Pânișoară, I. O. (2014). The profile of the teaching profession—empirical reflections on the development of the competencies of university teachers. *Procedia-Social and Behavioral Sciences*, 140, 390-395.
- Dymont, J., Downing, J., & Budd, Y. (2013). Teacher educator engagement in an online environment. *Australian Journal of Teacher Education*, 38(1), 134-149.
- El-Hani, C. N., & Greca, I. M. (2013). ComPratica: A virtual community of practice for promoting biology teachers' professional development in Brazil. *Research in Science Education*, 43(4), 1327-1359.
- González, G., & Skultety, L. (2018). Teacher learning in a combined professional development intervention. *Teaching and Teacher Education*, 71, 341-354.
- Gronn, P. (2002). Distributed leadership as a unit of analysis. *The leadership quarterly*, 13(4), 423-451.
- Grubb, W. N., & Flessa, J. J. (2009). A job too big for one. *Multiple principals and other non-traditional approaches to school leadership*. En Leithwood, K., Mascall, B. y Strauss, T. *Distributed leadership according to the evidence*. New York: Routledge, 137-164.

- Harris, A. (2004). Distributed leadership and school improvement: Leading or misleading? *Educational management administration & leadership*, 32(1), 11-24.
- Harris, A. (2010). Distributed leadership. In T. Bush, L. Bell, & D. Middlewood (Eds.), *The principles of educational leadership and management* (pp. 55-69). London: SAGE.
- Harrison, N. (2005). *The Impact of distributed leadership on teachers*. (Doctoral dissertation, Indiana University, 2005). Dissertation Abstracts International, AAT3189149.
- Hata, H. A. M., Nor, M. Y. M., & Hamid, A. H. A. (2020). The influence of distributed leadership on teachers' competency in secondary school. *International Journal of Academic Research in Progressive Education and Development*, 9(4), 53-66.
- Hatcher, R. (2005). The distribution of leadership and power in schools. *British Journal of Sociology of Education*, 26(2), 253-267.
- Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS explained*. London: Routledge.
- Holloway, J., Nielsen, A., & Saltmarsh, S. (2017). Prescribed distributed leadership in the era of accountability: The experiences of mentor teachers. *Educational Management Administration & Leadership*, 46(4), 538-555.
- Hristov, D., & Zehrer, A. (2019). Does distributed leadership have a place in destination management organizations? A policymaker's perspective. *Current Issues in Tourism*, 22(9), 1095-1115.
- Huber, S. G., & Skedsmo, G. (2016). Teacher evaluation—accountability and improving teaching practices. *Educational Assessment, Evaluation and Accountability*, 28(2), 105-109.
- Hulpia, H. et al. (2011). The relation between school leadership from a distributed perspective and teachers' organizational commitment: Examining the source of the leadership function. *Educational Administration Quarterly*, 47(5), 728-771.
- Järvelä, S., Järvenoja, H., Malmberg, J., Isohätälä, J., & Sobocinski, M. (2016). How do types of interaction and phases of self-regulated learning set a stage for collaborative engagement? *Learning and Instruction*, 43, 39-51.
- Joo, Y. H. (2020). The effects of distributed leadership on teacher professionalism: The case of Korean middle schools. *International Journal of Educational Research*, 99, 101-115.
- Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring Teacher Engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research*, 1(2), 33-52.

- Klenowski, V., & Lunt, I. (2008). Enhancing learning at doctoral level through the use of reflection? *Assessment & Evaluation in Higher Education*, 33(2), 203-217.
- Lauderdale, S. M. (2011). *Student-teacher relationships in early elementary school and impact on later academic engagement*. University of California, Riverside.
- Leadbeater, C. (2004). *Personalization through participation: A new script for public services*. Demos.
- Lee, H. Y. (2021). Qualitative content analysis: The significance of distributed leadership and its role in education. *Journal of Distribution Science*, 19(9), 65-77.
- Leithwood, K., Mascall, B., & Strauss, T. (Eds.). (2009). *Distributed leadership according to the evidence*. New York: Routledge. <https://doi.org/10.4324/9780203868539>
- Lewis, A. H. (2015). *Developing Global Citizens: Perceptions Regarding Educational Leadership in an International Expatriate School* (Doctoral dissertation, Walden University)
- Long, C. S., Ibrahim, Z., & Kowang, T. O. (2014). An Analysis on the Relationship between Lecturers' Competencies and Students' Satisfaction. *International Education Studies*, 7(1), 37-46.
- Lumby, J. (2013) Distributed leadership: The uses and abuses of power. *Educational Management Administration & Leadership*, 41(5), 581-597.
- Malin, J. R., & Hackmann, D. G. (2017). Enhancing students' transitions to college and careers: A case study of distributed leadership practice in supporting a high school career academy model. *Leadership and Policy in Schools*, 16(1), 54-79.
- Marchington, M., & Wilkinson, A. J. (2012). *Human resource management at work*. London: SAGE.
- Mohamadi, Z., & Malekshahi, N. (2018). Designing and validating a potential formative evaluation inventory for teacher competencies. *Language Testing in Asia*, 8(1), 1-21.
- Niculescu, B. (2014). Specific Competencies Required in Promoting the Quality of the English Language Teaching Process. *Scientific Bulletin-Nicolae Balcescu Land Forces Academy*, 19(2), 144.
- Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows (4th ed.)*. Crows Nest NSW 2065 Australia.
- Pettaway, A. S. (2018). *A Case Study of an Outperforming Urban Magnet High School* (Doctoral dissertation, University of Southern California).

- Picard, K., & Kutsyuruba, B. (2017). Teachers' engagement in professional development: A collective case study. *Educational Policies and Current Practices*, 2(2), 89-100.
- Prenger, R., Poortman, C. L., & Handelzalts, A. (2017). Factors influencing teachers' professional development in networked professional learning communities. *Teaching and teacher education*, 68, 77-90.
- Rabindarang, S., Bing, K. W., & Yin, K. Y. (2014). The influence of distributed leadership on job stress in technical and vocational education. *International Journal of Academic Research in Business and Social Sciences*, 4(1), 490.
- Rahmatollahi, M., & Zenouzagh, Z. M. (2021). Designing and validating an evaluation inventory for assessing teachers' professional accountability. *Language Testing in Asia*, 11(1), 1-21.
- Rao-Nicholson, R., Khan, Z., Akhtar, P., & Tarba, S. Y. (2020). The contingent role of distributed leadership in the relationship between HR practices and organizational ambidexterity in the cross-border of emerging market multinationals. *The International Journal of Human Resource Management*, 31(2), 232-253.
- Reeve, J., & Tseng, C. M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 36(4), 257-267.
- Renninger, K. A., & Hidi, S. E. (2015). *The power of interest for motivation and engagement*. Routledge.
- Sachs, J. (2016). Accountability, standards and activism: A challenge or opportunity for teacher education. In *Quality and change in teacher education* (pp. 251-262). Springer, Cham.
- Salleh, K. M., Othman, M. Y. H., Radiman, S., Dakir, J., Tamuri, A. H., Alwi, N. H., & Badzis, M. (2011). Teachers' concerns, perception and acceptance toward tauhidic science education. *イスラーム世界研究: Kyoto Bulletin of Islamic Area Studies*, 4(1-2), 124-155.
- Samancioglu, M., Baglibel, M., & Erwin, B. J. (2020). Effects of distributed leadership on teachers' job satisfaction, organizational commitment, and organizational citizenship. *Pedagogical Research*, 5(2), em0052. <https://doi.org/10.29333/pr/6439>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, 66(4), 701-716.

- Silverman, D. (2001). *Interpreting qualitative data* (2nd ed.). London: SAGE Publications.
- Spillane, J. P. (2012). *Distributed leadership* (Vol. 4). John Wiley & Sons.
- Stein, M., K., Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448.
- Torres, D. G. (2018). Distributed leadership and teacher job satisfaction in Singapore. *Journal of Educational Administration*.
- Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement. *Regional Educational Laboratory Southwest (NJI)*.
- van Uden, J. M., Ritzen, H., & Pieters, J. M. (2013). I think I can engage my students. Teachers' perceptions of student engagement and their beliefs about being a teacher. *Teaching and Teacher Education*, 32, 43-54.
- Vlachadi, M., & Ferla, M. (2013). Differentiation of teachers' and principals' engagement in distributed leadership according to their demographic characteristics. *Journal of Education and Learning*, 2(4), 19-30.
- Wu, C. S. (2019). The Concepts and Practice of Teacher Professional Accountability. *Journal of Education Research*, (302), 4-24.
- Youngs, H. (2014). Moving beyond distributed leadership to distributed forms: a contextual and socio-cultural analysis of two New Zealand secondary schools. *Leading and Managing*, 20(2), 89-104.
- York Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, 74(3), 255-316.
- Zenouzagh, Z. M. (2019). The effect of online summative and formative teacher assessment on teacher competencies. *Pacific Education Review*, 20(3), 343-359.
- Zyngier, D. (2008). (Re) conceptualizing student engagement: Doing education not doing time. *Teaching and Teacher Education*, 24(7), 1765-1776.

Appendix A: Teachers' Engagement Questionnaire

Options		1	2	3	4	5	6	7
Emotional Engagement (EE)								
1	I am delighted while teaching.							
2	I enjoy teaching greatly.							
3	I am excited about teaching.							
4	Teaching is interesting for me.							
5	I am full of energy, while teaching.							
6	I am satisfied by being a teacher.							
7	I cannot discount myself from teaching.							
Social Engagement: Colleagues (SEC)								
8	I value the relationships I build with my colleagues.							
9	I am committed to helping my colleagues at institute.							
10	I care about the problems of my colleagues at institute.							
11	I connect well with my colleagues at institute.							
12	I engage in informal dialogue with my colleagues on how to improve our teaching.							
13	Interaction with my colleagues is important for me.							
Cognitive Engagement (CE)								
14	While teaching I pay a lot of attention to my work.							
15	I care about students' problems in class.							
16	While teaching, I really throw myself into my work & time passes quickly.							
17	While teaching, I work with intensity.							
18	I do my best to perform well while teaching.							
19	I rely on my past personal experience and professional development to predict probable upcoming constraints.							
20	I have positive attitudes towards the class & my students.							
Social Engagement: students (SES)								
21	In class, I care about the problems of my students.							
22	In class, I am empathetic towards my students.							
23	In class, I am aware of my students' feelings and needs.							
24	In class, I demonstrate warmth to my students.							
25	I contact with my students out of classroom.							
26	Interaction with my students out of classroom is important for me							

1=Never, 2= Almost never, 3= only occasionally, 4= Sometimes, 5= usually, 6= Almost always, 7= Always

Appendix B: Teachers' Professional Accountability

Options		1	2	3	4
A. Accountability towards students					
1	I help students in achieving educational goals through providing maximum learning opportunities.				
2	I provide students with the information they require and the materials they need.				
3	I have a good rapport with students and behave all students patiently & equally well.				
4	I use different approaches, methods, techniques, and resources to improve students' performance.				
5	I encourage a sense of hard work in students and motivate them to strengthen their weak points.				
6	I assess students' performance objectively.				
B. Accountability towards parents					
7	I have a sense of respect for parents.				
8	I keep in touch with parents and inform them about students' academic performance.				
9	I carefully listen to parents & help them with students' affairs.				
10	I made a relationship with parents based on trust and understanding.				
11	I work well with parents to enhance students' progress.				
12	I give parents a report on the way they can accomplish their duties.				
C. Accountability towards Schools					
13	I cooperate well with the administrative system.				
14	I am punctual and well-disciplined.				
15	15. I enable schools to provide high-quality education & achieve their objectives.				
16	I adhere to the principals and rules of school.				
17	I demonstrate recent personal behavior & attitudes towards school principals & staff.				
18	I provide school principals with a report on students' performance & inform them about students' wants & needs.				
D. Accountability towards Society					
19	I teach students to act according to moral standards and cultural issues of society.				
20	I motivate socioeconomic sections of society to educate.				
21	I try to eliminate violence, and social ills & bring equality.				
22	I coordinate and participate in different social affairs.				
23	I dedicate myself to students' social and emotional development.				
24	I am eager to provide deprived students with updated technology, libraries, & other school resources.				
E. Accountability towards the profession					

25	I try to have lifelong learning to guarantee professional development.				
26	I work collaboratively with colleagues and help them improve.				
27	I attempted to have sufficient knowledge & skills and take courses if necessary.				
28	I promote the teaching profession by doing research.				
29	I attend seminars, workshops, & other programs to be up-to-date.				
30	I try to integrate theory and practice to implement the programs in a best way.				

This instrument is composed of 30 statements concerning teachers' professional accountability. Please indicate the degree to which each statement applies to you by marking whether you: **Never =1; Sometimes=2; Often=3; Always=4**

Appendix C: Teacher Competencies Questionnaire

Options		UA	SU	Ne	SA	Ac
Student perspective						
Technical competence						
1	Syllabus completeness and learning expectation					
2	Undertaking planning to support students learning					
3	Applying a professional knowledge base to the design of learning experiences					
4	Selecting and using instructional resources and information and communication technology.					
5	Allowing the students to organize and distribute part of the assignments to be performed in the course.					
6	In forming the students of the competencies, they will be expected to acquire.					
7	Allowing and encouraging student participation.					
Clinical competence						
8	Promoting individual work.					
9	Promoting team work.					
10	Encouraging students' interest and motivation to learn.					
11	Fostering research and critical spirit in students.					
12	Managing teaching and learning processes.					
13	Promoting students learning.					
14	Monitoring and assessing student learning outcomes and reporting progress to parents.					
Personal competence						
15	Easily accessible.					
16	Building and maintaining learning partnership with students.					
17	Interacting satisfactorily with students.					
18	Responding clearly to questions asked in class.					

19	Out of classroom contact hours.				
20	Facilitating student-student and student-professor interaction.				
Critical competence					
21	Honors thesis advisor.				
Administrative perspective					
Technical competence					
1	Teaching at multiple locations.				
2	Preparing students for sequential courses.				
3	Number of teaching hours per course conduct.				
4	Presenting the minimum content of his/her subject matter, tailored to students' knowledge.				
5	The mastery of methods.				
6	Providing students with scientific information that allows students to gain a better and deeper understanding of the subject matter.				
7	Providing the contents following a clear and logical framework.				
8	Applying the established curriculum with a certain amount of flexibility for a better class dynamic.				
9	Determining in advance what is to be learned, how is to be learned.				
10	Organizing activities for students to actively participate in course assignments.				
Clinical competence					
11	Relating the techniques to the professional environment.				
12	Teaching courses out of routine, teaching cycle when required.				
13	Updating teaching materials/keeping curriculum current.				
14	Issuing of results on time.				
Personal competence					
15	Working so cooperatively with colleagues.				
16	Feeling sense of community and colleague ship with other teachers.				
17	Resolving issues of power, authority, and responsibility facing moral dilemmas in teaching / evaluation ethical.				
Critical competence					
18	Classroom observation by peers/ depart. Chair				
19	Developing and applying to the curriculum policy and program teamwork.				
20	Contributing to the curriculum policy and program team meetings.				

21	Participating in task to support the work of curriculum policy and program teams.					
Learning and growth perspective						
Technical competence						
1	Using of technology when conducting lectures.					
2	Using of pedagogical journal articles when teaching.					
Clinical competence						
3	Reflecting on professional experiences.					
4	Examining what one is doing in the classroom and making needed changes.					
Personal competence						
5	Engaging in informal dialogue with your colleagues on how to improve your teaching.					
6	Participation in a network of teachers formed specifically for the professional development of teachers.					
Critical competence						
7	Number of professional development conferences or workshops attended.					
8	Using innovative pedagogy.					
9	Initiating action to promote ongoing professional growth.					
10	Explaining own developing approach to teaching and learning.					

UA: Unacceptable, SU: Slightly Unacceptable, Ne: Neutral, SA: Slightly Acceptable, AC: Acceptable