



| Research Article / Araştırma Makalesi |

Investigating the Levels of Schools as a Professional Learning Community

Okulların Mesleki Öğrenme Topluluğu Olma Düzeylerinin İncelenmesi¹

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Keywords

1. Correlational survey
2. Learning organization
3. Professional learning community

Anahtar Kelimeler

1. İlişkisel tarama
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Abstract

Purpose: The study aims to reveal the levels of schools as being a PLC regarding the opinions of teachers working at the high schools.

Design/Methodology/Approach: The research was carried out in accordance with the correlational survey design. Participants were selected by the stratified sampling method, which is one of the random sampling types. It consists of 385 teachers. The participants of the research are from Maltepe, Sultanbeyli, Esenler and Bakırköy districts of İstanbul during 2021-2022 academic year. To get the data, PLC Scale was used and to analyze descriptive statistics and one-way analysis of variance were used.

Findings: The level of being a professional learning community is at the level of "agree". When the scale's sub-dimensions were examined, a significant difference was found between the employment type, length of service and district variables. On the basis, some suggestions are given to policy makers.

Highlights: It is important to establish an online platform that allows the expansion of the learning network. In addition, a framework plan for schools to ensure sustainability is planned. Lastly, the implementation of rotation between schools could be considered to transform individual intelligence into collective intelligence.

Öz

Amaç: Bu araştırma lise kademesinde görev yapmakta olan öğretmenlerin görüşlerine göre okulların mesleki öğrenme toplulukları olma durumlarını ortaya çıkarmaktır.

Materyal ve Yöntem: Nicel araştırma yöntemlerinden biri olan ilişkisel tarama desenine uygun olarak araştırma gerçekleştirilmiştir. Katılımcılar seçkisiz örneklem türlerinden olan tabakalı örnekleme yöntemiyle seçilmiştir. Araştırmanın örneklemini 2021-2022 eğitim öğretim yılı İstanbul Anadolu Yakasında Maltepe ve Sultanbeyli ilçeleri; Avrupa Yakasında Esenler ve Bakırköy ilçelerinde lise kademesinde görev yapan 385 öğretmen oluşturmaktadır. Araştırma kapsamında 'Mesleki Öğrenme Topluluğu' ölçeği kullanılmıştır. Verilerin analizinde betimsel istatistikler ve tek yönlü varyans analizi kullanılmıştır.

Bulgular: Mesleki öğrenme toplumu olma düzeyi katılıyorum düzeyindedir. Mesleki öğrenme toplumu alt boyutları incelendiğinde istihdam türü, hizmet yılı ve ilçe değişkenleri arasında anlamlı düzeyde farklılık tespit edilmiştir.

Önemli Vurgular: Öğrenme ağının genişlemesine izin veren çevrimiçi bir platform oluşturmak önemlidir. Bunun yanı sıra, sürdürülebilirliği sağlamak adına okullar için bir çerçeve planının hazırlanması yol gösterici nitelikte işlev gösterebilir. Son olarak, okullar arası rotasyon uygulamasının, bireysel zekayı kolektif zekaya dönüştürmek için katkı sağlayacağı düşünülmektedir.

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INTRODUCTION

Along with globalization, the world has turned into a competitive field with the removal of physical borders and the easy accessibility of information. Educational institutions play an important role for countries to maintain their existence and ensure their development. According to Fullan (2001), schools are not successful enough in terms of realizing their goals. The complexity of social life increases the need for different workforces. Schools should contribute to the training of learning citizens who can survive in the new society.

Technically, schools are surrounded with similar characteristics such as structure and instructional program. Despite of similarity, they have also some differences in implementing the program and it arises mainly from the personal experiences of the teachers working at schools (Lingard, Hayes, Mills & Christie, 2003). Bourdieu (1998) explains the case with the concept of “sameness” and “thisness”. In terms of sameness, schools have common interests and aims in raising future generations because the school is a place where learning activities are carried out within the framework of a pre-determined program and is open to the public within the specified space and time period in achieving the goals. On the other hand, thisness is used as a concept emphasizing the different in-class practices. The institutions have changing power and relationship patterns in terms of students with individual differences and the key in-school stakeholders. So, reforms that focus only on structure and do not create a common meaning should be questioned in the realization of common goals and in managing differences between schools and within schools (Harris & Lambert, 2003).

Fullan (2001) highlights three components in the policy implementation process: (1) using new materials, (2) engaging in new behaviors and practices, and (3) incorporating new beliefs. The logic lies behind the process is that it should be created a common purpose and language to reinforce the resources on the impact of students' learning. Re-using existing resources by reviewing them or strengthening them with new resources will directly affect learning activities. Changes need to be internalized so that teachers can play an active role as implementers of school development decisions and resources in the impact-making process (Hopkins et al., 2005). It is thought that revealing the beliefs and perceptions underlying teachers' behaviors and encouraging them to change may positively affect the policy implementation process. Harris and Jones (2010), on the other hand, refer to the creation of common meanings in the sustainability of the practice and the collaborative school culture. Changing the beliefs in the direction of reform seems to be associated with increasing commitment among employees.

One of the models that aim to diversify learning activities and to minimize the differences in students' achievement by evaluating the data holistically is professional learning communities (Hord, 2009; Stoll et al., 2006). There are many different definitions for the concept in the literature and it is understood that no consensus has been reached. The situation, lacking shared meaning, lead to ambiguity between the implementation (Hord, 1997; Kools & Stoll, 2016). The complexity of learning activities requires recognizing schools and their environments within the system discipline and combining environmental power with school goals. In this context, it is necessary to increase the capacities of schools and teachers ensuring the participation of out-of-school actors in goal-sharing as well (Hord, 2009; Senge et al., 2014). It is advocated that schools should be evaluated as a community, communication and feedback mechanisms should be strengthened, and students' academic achievement should be evaluated with a holistic approach. (Harris & Jones, 2010; Stoll & Seashore Louis, 2007). The model of professional learning communities (PLC) offers some suggestions for the culture and conditions of schools in the formation of learning individuals.

According to the model of PLC, schools are defined as a place open to non-school stakeholders, where the teachers are seen as action research experts (DuFour & Eaker, 2006). Schools are called as public spaces where action research is carried out to functionally increase students' social and academic success. This community is not limited to one group but includes other groups with similar goals (Annenberg Institute, 2003). Therefore, it is emphasized that schools should participate into school-related works not only in their own but also in district or regional context. A common approach should be adopted in the conducting of provincial or regional studies.

The schools considered as PLC have six sub-dimensions (DuFour, 2003; Hord, 1997; Stoll et al., 2006). These dimensions are listed below:

1. *Shared and supportive leadership*
2. *Shared values and vision*
3. *Collective learning and application*
4. *Shared practice*
5. *Supportive conditions – relationship*

6. Supportive conditions – structure

While the shared and supportive leadership dimension includes items for the development of leadership capacity and the use of participatory method in decision-making process (Harris & Lambert, 2003; Olivier, Hipp & Huffman 2010), the shared values and vision dimension includes the unity of language and meaning in collaborating goal-oriented efforts (Zhang, Yuan & Shao 2022). The collective learning and application dimension is based on the holistic evaluation of academic data and student learning in the evaluation of student achievements in the curriculum (East, 2015; Johannesson, 2022). To transform individual intelligence into organizational one, sharing in-class practices is evaluated within the scope of shared practice dimension (Evens, 2019; Stoll & Louis, 2007). The supportive conditions dimension is examined in terms of relationship and structure. While the informal features of the school are examined in the relationship dimension, the structure dimension includes the features related to the bureaucratic and formal structure of the school (Bolam et al., 2005; Leo & Cowan, 2000; Stoll et al., 2006). On the other side, there are some differences between the schools as PLC and traditional schools (Cormier & Olivier 2009). In the schools as PLC, vision is created and adopted by the actors in the school. The formation of common vision and culture process ensures the sense of mutual responsibility, and the school is a place to reinforce collaborative learning culture in which the vision isn't ignored during planning activities and evaluating them. Moreover, schools are spaces where data-driven management takes place. All activities for students and teachers, including lesson plans, are research-centered and data-driven. In traditional schools, Vision is expressed by the senior administrators of the school, and it is stated that the efforts for the realization of the vision and mission are limited individually.

When the studies in the literature are examined; Achieving desired results with PLC (Leithwood, Leonard & Sharratt, 1998), increasing academic success (Goldenberg, 2004; Louis & Kruse, 1995; Saunders & Goldberg, 2005; Stoll & Seashore Louis, 2007), achievement-oriented teacher behavior change (DuFour & Eaker, 1998; Little, 1982), reinforcing collective capacity (Harris & Jones, 2010), teacher leadership (Newmann, 2000), and positive impact on student learning (Fullan, 2001; Hord, 1997; Stoll & Seashore Louis, 2007) have been reported.

The general purpose of the study is to determine the level of being a professional learning community according to the opinions of teachers working in high schools. The sub-objectives of research is listed below:

1. According to the opinions of teachers working in Anatolian high schools during 2021-2022 academic year, is there any significant difference btw sub-dimensions of PLC and the variables of type of employment, school district and length of service?
2. According to the opinions of teachers, what is the level of PLC scale in terms of sub-dimensions of schools?
3. According to the opinions of teachers, what is the level of schools as PLC?

METHOD

In this section, the research model, population and sample, data collection tool, and analysis of data are given.

The Research Model

It is aimed to determine the level of schools as a PLC based on the opinions of teachers. So, the correlational survey method, one of the quantitative research methods, was used. It aims to determine the degree of change among the variables (Karasar, 2022). It determines whether there is a difference between the variables, and if so, it shows the direction of the significant difference. "PLC Scale" was used to collect data. The independent variable of the research is the type of employment, district, and years of service. The dependent variable is the professional learning community.

Population and Sample

The population of the research is limited to Istanbul and consists of 1472 teachers working at the high school level in Maltepe, Sultanbeyli, Esenler and Bakırköy districts in the 2021-2022 academic year (MEBBİS, 2021). The sample consists of 385 teachers who work in the districts of Bakırköy, Esenler, Maltepe, and Sultanbeyli in İstanbul province during 2021-2022 academic year. The sample is determined by stratified sampling which is one of the random samplings. The population is divided into layers by the researcher according to some characteristics and samples are taken from each subgroup of the universe (Creswell, 2017). The schools in the sampling were classified regarding human development index (INGEV, 2017; 2020). While Maltepe and Bakırköy represents the group of very high development, Esenler and Sultanbeyli represents the group of high and medium level of human development. The teachers working in the districts were reached through MEBBİS. 385 surveys were reached. The acceptable margin of error in social sciences was 0.05 (5%) in the sample size calculations.

Data Collection Tool

The scale of PLC was used to get the data. The scale developed by Olivier Hipp, and Huffman in 2010 was translated by Öğdem (2015). The translated version was used. The scale consists of 52 items and 6 sub-dimensions. The sub-dimensions and Cronbach's alpha coefficients conducted by Olivier Hipp and Huffman are given in table 1 below.

Table 1. Cronbach's Alpha Coefficients

Sub-dimensions	Cronbach's Alpha Coefficients
Shared and supportive leadership	.90
Shared values and vision	.92
Collective learning and application	.91
Shared practice	.87
Supportive conditions - relationship	.82
Supportive conditions - structure	.88

The sharing and supportive leadership refers to the decision processes and practice in the school. Shared values and vision consists of items related to creating common meaning. Collective learning and applications includes methods used within the program to ensure holistic development of students. The shared practice refers extending in-class practices into the whole school. The informal aspect of school is emphasized in the supportive conditions-relationship, and the formal aspects of the school are expressed in the supportive conditions-structure.

Data Analysis

Collecting the data, questionnaires were checked. It was reached to 385 scales. SPSS 21 package program was used to analyze. To determine the level of schools as a PLC; arithmetic mean, frequency, standard deviation, and percentages were calculated for each sub-dimension. Before starting the statistical calculations, the normality test was performed, and the results are given below.

Table 2. PLC The Normality Test Results

Sub-dimensions	N	\bar{X}	SS	Skewness	Kurtosis	
Shared and supportive leadership	385	3.62	.93	-.348	-.909	Normal
Shared values and vision	385	3.64	.88	-.678	.048	Normal
Collective learning and application	385	3.61	.88	-.471	-.109	Normal
Shared practice	385	3.55	.90	-.427	-.435	Normal
Supportive conditions - relationship	385	3.60	.96	-.627	-.199	Normal
Supportive conditions - structure	385	6.6	.90	-.541	-.195	Normal
Overall	385	6.6	.90	-.430	-.220	Normal

According to Hair et al. (2003) the normal distribution of the data can be understood by looking at the skewness and kurtosis values between -1.0 and +1.0. When Table 1 is examined, the skewness and kurtosis values between -1 and +1 show that the data has a normal distribution. Therefore, the data was analyzed using parametric tests.

Ethic

The researcher applied to Yildiz Technical University for ethics committee permission. Then, the researcher submitted the necessary documents to the Istanbul Provincial Directorate of National Education. After permission was obtained, the permission document was sent to the schools via the DYS system. Finally, the researcher visited the schools and distributed the forms to the teachers. The names of the participants were not included in the scale.

FINDINGS

In the section, the findings related to the sub-objectives of the research are given in order.

Findings Regarding the Length of Service Variable

According to the opinions of teachers, the findings regarding the significant difference between the variable of length of service and the level of being PLC of the schools are given in Table 3.

Table 3. ANOVA Results for Length of Service Variable

Sub-dimensions	Years of Service	n	\bar{X}	SS	F	p
Shared and supportive leadership	1-3 (1)	217	3.77	.88	14.457	<.001*
	4-6 (2)	84	3.16	.92		
	7-9 (3)	84	3.69	.93		
Shared values and vision	1-3 (1)	217	3.72	.90	8.818	<.001*
	4-6 (2)	84	3.30	.91		
	7-9 (3)	84	3.81	.71		
Collective learning and application	1-3 (1)	217	3.71	.92	4.971	.007*
	4-6 (2)	84	3.35	.81		
	7-9 (3)	84	3.60	.82		
Shared practice	1-3 (1)	217	3.62	.94	4.237	.015*
	4-6 (2)	84	3.30	.86		
	7-9 (3)	84	3.61	.81		
Supportive conditions - relationship	1-3 (1)	217	3.68	1.02	5.886	.003*
	4-6 (2)	84	3.28	.88		
	7-9 (3)	84	3.70	.92		
Supportive conditions - structure	1-3 (1)	217	3.67	.91	3.797	.023*
	4-6 (2)	84	3.69	.79		
	7-9 (3)	84	3.55	.70		
Overall	1-3 (1)	217	3.70	.83	8.628	<.001*
	4-6 (2)	84	3.29	.76		
	7-9 (3)	84	3.67	.67		

*p<.05

It has been understood that there is a significant difference in the perceptions of teachers towards the professional learning community with the variable of length of service. Based on the findings, it was found that teachers of 1-3 service years have more positive thoughts about sharing leadership in their schools and their schools being a PLC. When the overall score is considered, it can be interpreted that school administrators share their authority, have a common vision in in-school activities, and teachers share in-class practices with other colleagues.

Findings Regarding the Employment Type Variable

According to the opinions of the teachers, the findings regarding the significant difference between the level of being a PLC of the schools and the employment type of the teachers (tenured-contracted-paid) variable are given in Table 4.

Table 4. ANOVA Results for Employment Type Variable

Sub-dimensions	Employment Type	n	\bar{X}	SS	F	p
Shared and supportive leadership	Tenured (1)	289	3.53	.92	6.285	.002*
	Contracted(2)	77	3.94	.90		
	Paid(3)	19	3.75	.84		
Shared values and vision	Tenured (1)	289	3.61	.87	1.227	.294
	Contracted(2)	77	3.78	.95		
	Paid(3)	19	3.56	.75		
Collective learning and application	Tenured (1)	289	3.57	.87	3.046	.049*
	Contracted(2)	77	3.80	.90		
	Paid(3)	19	3.34	.89		
Shared practice	Tenured (1)	289	3.51	.88	2.334	.098

	Contracted(2)	77	3.73	.97		
	Paid(3)	19	3.34	.78		
Supportive conditions - relationship	Tenured (1)	289	3.56	.95		
	Contracted(2)	77	3.77	1.00	1.682	.187
	Paid(3)	19	3.47	.91		
Supportive conditions - structure	Tenured (1)	289	3.59	.89		
	Contracted(2)	77	3.74	.96	1.681	.188
	Paid(3)	19	3.34	.85		
Overall	Tenured (1)	289	3.56	.78		
	Contracted(2)	77	3.81	.87	3.161	.044*
	Paid(3)	19	3.47	.72		

*p<.05

There is a significant difference between the type of employment variable and the perception of being a PLC. This difference can be seen in the sub-dimensions of shared and supportive leadership, collective learning and practices, and overall score. It was determined that the contracted teachers achieved the highest average in the supportive leadership sub-dimension. Based on the data, it can be inferred that these teachers use the holistic approach in the evaluation of students' academic data in their schools and they think that leadership capacity is shared.

Findings Regarding the School District Variable

According to the opinions of the teachers, the findings regarding the significant difference between the level of being a PLC of the schools and the variable of the school district where the teachers work are given in Table 5.

Table 5. ANOVA Results for School District Variable

Sub-dimensions	School District	n	\bar{X}	SS	F	p
Shared and supportive leadership	Bakırköy (1)	106	3.18	.89		
	Esenler(2)	128	4.02	.69	29.023	<.001*
	Maltepe(3)	74	3.21	.87		
	Sultanbeyli(4)	77	3.96	.95		
Shared values and vision	Bakırköy (1)	106	3.34	.86		
	Esenler(2)	128	3.96	.77		
	Maltepe(3)	74	3.29	.81		
	Sultanbeyli(4)	77	3.87	.90		
Collective learning and application	Bakırköy (1)	106	3.33	.86	9.649	<.001*
	Esenler(2)	128	3.78	.84		
	Maltepe(3)	74	3.40	.79		
	Sultanbeyli(4)	77	3.89	.94		
Shared practice	Bakırköy (1)	106	3.28	.91	9.208	<.001*
	Esenler(2)	128	3.73	.80		
	Maltepe(3)	74	3.33	.83		
	Sultanbeyli(4)	77	3.83	.96		
Supportive conditions - relationship	Bakırköy (1)	106	3.28	1.02	12.473	<.001*
	Esenler(2)	128	3.85	.82		
	Maltepe(3)	74	3.30	.84		
	Sultanbeyli(4)	77	3.89	.99		
Supportive conditions - structure	Bakırköy (1)	106	3.41	.08	11.134	<.001*
	Esenler(2)	128	3.78	.06		

	Maltepe(3)	74	3.26	.100		
	Sultanbeyli(4)	77	3.93	.108		
	Bakırköy (1)	106	3.30	.77		
	Esenler(2)	128	3.85	.65		
Overall	Maltepe(3)	74	3.29	.68	18.741	<.001*
	Sultanbeyli(4)	77	3.90	.91		

*p<.05

There is a significant difference between the perception of being a PLC and the school district. When the overall score and sub-dimensions were evaluated, the difference resulted in favor of the teachers working in Esenler and Sultanbeyli districts. According to the 2017 and 2020 data prepared by the Human Development Foundation (INGEV), Esenler and Sultanbeyli districts are in the high and medium development level group, while Bakırköy and Maltepe are in the high human development group. According to the findings, it can be inferred that teachers working in districts with a relatively low level of human development share leadership capacity in their schools, ensure participation in decisions, have strong communication mechanisms, evaluate students' success levels holistically, and have a school culture that allows sharing in-class practices.

Findings Regarding the Sub-dimensions of PLC Scale

According to the opinions of the teachers, the findings obtained as a result of the sub-dimensions of the level of being a PLC of their schools are given in Table 6.

Table 6. Sub-dimensions of PLC

Sub-dimensions	Mean	Standard Deviation
Shared and supportive leadership	3.62	.93
Shared values and vision	3.64	.88
Collective learning and application	3.61	.89
Shared practice	3.55	.90
Supportive conditions - relationship	3.60	.96
Supportive conditions - structure	3.61	.90

When the table is examined, it is seen that the shared practice dimension has the lowest average ($\bar{x}=3.55$). Based on the data, it can be said that sharing personal experience among teachers should be improved compared to other dimensions. Shared value and vision ($\bar{x}=3.64$) sub-dimension have the highest mean. In this context, it is concluded that the school vision is formed through participation and the vision is considered by teachers in classroom practices.

Findings Regarding the PLC Scale

According to the opinions of the teachers, the findings obtained as a result of the examination of the level of their schools being a PLC are given in Table 7.

Table 7. PLC Scale

Scale	Mean	Standard Deviation
PLC Scale	3.60	.80

When the table is examined, it is seen that the level of being a professional learning community of schools at the high school level is in the range of I agree ($\bar{x}=3.60$). Therefore, it can be referred that power of administrators are shared and collective efforts of teachers in organization of learning environments are encouraged at schools. Moreover, all staff actively participate in decision-making process. At schools, the dominant culture is collaborative learning and common language is created on the school vision. Lastly, it can be mentioned that among teachers, some activities allowing productive dialogue are conducted.

DISCUSSION

According to the opinions of the teachers working at the high schools, the status of being a PLC is in the range of "agree". While shared values and vision dimension has the highest average, the lowest average was recorded as shared practice. Reviewing literature, only a few studies have conducted on high schools. In the recent study, Ekinci's (2018) research reported that high schools were at the level of "agree". For the elementary schools, the perceptions of being a PLC were found to be at the level of

agree (Cücem, 2018; Ilgan et al., 2011; ; Kalkan, 2015; Öğdem, 2015; Ünver, 2021). The other study stated they were at the level of “very agree” (Taş, 2021). So, it can be stated that our finding is consistent with what has been found in previous research.

The highest average indicates that schools have a collectively prepared vision and mission document. It has been adopted by the teachers and it is possible to see its reflections in their classroom practices. The lowest dimension states that lesson observations and feedback practices should be given more to evaluate students holistically. Contrary to the results, in Ekinci's (2018) study, it was noted that the highest dimension was shared and supportive leadership.

Our study also indicates that there is a significant difference between the employment type and PLC status. It is seen that the perceptions of tenured teachers have more negative thoughts than those working in contracted teachers. Regarding previous research, no study to date has examined the variable. However, when the commitment variable is searched, on the contrary of our findings, tenured teachers have more positive thoughts (Savgun, 2009). The researcher mentions that it is because of tenured teachers' right and responsibilities.

When the school district variable was examined, it was concluded that there was a significant difference. The difference in the overall score and in all sub-dimensions resulted in the disadvantage of Bakırköy and Maltepe districts. According to the human development index (INGEV, 2017; 2021), Bakırköy and Maltepe districts are in the very high category, while Esenler and Sultanbeyli are in the high/medium category, respectively. In this context, it is possible to talk about an inverse relationship between PLC level and the level of human development index.

It was expected that there would be a positive relationship between the increase in the development level of the districts and the perceptions of being a PLC. However, the study states the opposite of this situation. It is thought that this situation is related to the student profile in the districts. It is stated that access to many institutions such as health and education is easier in districts with a high human development index. Easy access and higher socio-economic status can be interpreted as a better student profile in academic terms. Considering the minimization of student failure, which is the basis of the model, it can be considered as an expected situation that the perception of being a community is high in districts with lower groups in the human development index. It can be deduced that increasing the level of success and lowering disciplinary problems increase the commitment of the teacher community. Besides, when the comments of the teachers were listened while the questionnaires were being solved at the schools, it was heard that the teachers in Bakırköy and Maltepe districts complained more about their situation and that the branch teachers' board (ŞÖK), general assembly meetings and group meetings were not effective in decision making.

A significant difference was found between the length of service variable in the schools of high school teachers and their perceptions of PLC. It has been concluded that the perceptions of teachers of 1-3 years in the schools they are working in have more positive perceptions than those of 4-6 years. Put differently, as the length of years increase, firstly the perceptions decrease, and then as the years pass, it has been determined that the perceptions return to the positive side.

Similar findings were found in the literature regarding the length of service variable (Cücem, 2018; Taş, 2021; Ünver, 2021). Contrarily, Bal (2011) stated that there was no significant difference in the variable of years of service as a learning organization. Şen (2019), on the other hand, found a difference in the size of mental models of learning organizations. Şen explains this difference by referring to career stages. Aydemir, and Koşar (2019), did not find a significant difference in the general average, but found a significant difference between the sub-dimensions only in the dimension of shared vision.

Regarding the literature, there are mainly quantitative studies, but only limited qualitative research were studied (Dervişoğulları, 2014; Karadağ & Bellibaş, 2017). Both research states that there aren't any class observations or reflection activities, sharing authority is limited. Besides, Karadağ and Bellibaş mentions that schools' supporting conditions-structures aren't sufficient to sustain the community.

Recommendations:

- Considering the findings obtained from the length of service variable, it can be recommended to use the rotation between schools to ensure that individual effort is transformed into a collective effort. Because the finding regarding the years of service shows that as the service period of teachers increases, their level of being a professional learning community weakens except the dimensions of shared values and vision and supportive conditions relationship.
- Considering the findings obtained from the district variable, it can be suggested to benefit from collective experience in the formation of collective intelligence. Grouping between schools can be made. The grouping criteria may vary, and the human development index can be used as in the study. According to the results of the human development index, high and medium group level of schools can be matched to provide information and practice flow in the field. This can contribute to the dissemination of good practices.
- Based on the findings obtained from the level of being a PLC of schools, it can be suggested that administrators set special time periods and implement reflective dialogue practices among colleagues to allow the sharing of in-class practices among teachers to support shared personal practices of the lowest average. Teachers can be grouped to solve the problems encountered in the school and teamwork can be carried out for the solution of the teachers. The level of effectiveness of teamwork can be evaluated by assigning certain performance tasks by the school administration. Thus, it is expected that it will contribute to data-based management, which has an important place in the community model, and to the interpretation of data in a meaningful way.

- d. It is recommended for future researchers to conduct interviews with school administrators to reveal the strategies and practices of the schools towards becoming a professional learning community. They may also review official documents.
- e. Lastly, by using maximum diversity sampling, interviews with school administrators and teachers can be conducted and field practices can be used for future applications.

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We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

Researchers' contribution rate

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Ethics Committee Approval Information

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