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Determining The Professional Competency Levels of Social Studies Teachers: A Study of Scale Development and Application*

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Abstract

The aim of the study was to determine the areas of teachers' needs for their professional development and to develop a scale for assessing the competency levels of social studies teachers. The participants of the study were composed of social studies teachers who were selected using the convenience sampling method. In the study, a mixed research method was preferred. While the quantitative dimension of the research was conducted with 480, the qualitative dimension was conducted with 8 social studies teachers. The data were collected via the Social Studies Competency Scale, an observation form and a semi-structured interview form developed by the researcher. The data were analyzed using SPSS 23.0, AMOS 23.0, rubric, and content analysis. The findings obtained from the Social Studies Competency Scale showed that the competency levels of teachers were generally high. However, in-class observations revealed that teachers had a medium level of competence in planning and generating the teaching process, knowledge on the field and education, and in areas such as methods, techniques and equipment, and that they showed a low level of competence in some performance indicators of those areas. In this respect, it was concluded that supporting the quantitative findings obtained during the determination of professional development needs with qualitative findings was of crucial importance for an accurate determination of the areas of need.

Keywords: Professional Development, Teacher Competencies, Scale Development, Social Studies

Introduction

Discussions on the success of education systems have intensified today compared to the previous periods (Ministry of National Education of the Republic of Turkey [MoNE], 2017). Globalization and the rapid change in communication technologies resulted in a change in the social structure and a diversity in social needs. This change brought about a need for entrepreneurial individuals who can create information, use it functionally, solve problems, and think critically (MoNE, 2017). In this context, countries have tried to adapt to this global change by restructuring schools as a living space. As a result of this globalization process, the Turkish education system has redesigned its educational programs based on the constructivist approach (MoNE, 2004). Accordingly, radical changes have been made concerning some issues in training programs, such as explaining the learning goals, presenting content, conducting and evaluating the learning-teaching process (Kösterelioğlu, 2012). However, problems such as in-service training and lack of infrastructure, together with teachers' lack of equipment, pose obstacles to fully achieving the desired goal (Erdoğan, Kayır, Kaplan, Ünal, & Akbunar, 2015). Results obtained from the international exams (TIMSS-R, PIRLS, PISA), which makes it possible to evaluate the learning outcomes of the education system, in a sense, mean that the changes in the program did not contribute to the desired success. That is because the success of the education system basically depends on the quality of the education personnel (Abazaoğlu, 2014). Consequently, it

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can be said that professional development training is of vital importance concerning the ability of teachers to meet the changing needs. Determining the needs, which is one of the most important steps of professional development training, is also very important in terms of planning an effective professional development training.

The impact of professional development trainings on the participants should be manifested in multidimensional and long-term studies by taking into consideration the teachers' professional skills, competencies and innovations in the field (Boyle, Lamprianou & Boyle, 2005; Van Driel, Beijaard & Verloop, 2011). On the contrary, professional development training practices in Turkey shows inadequacy concerning the designing process, implementation and impact analysis (MoNE, 2010). Depending on these reasons, participation in professional development trainings does not reach a satisfactory level. Turkey's professional development needs index is below the average in TALIS (Teaching and Learning International Survey [TALIS], 2009).

Teachers tend to prefer training that suits their needs (Özmusul, 2011) and supports teaching processes (Cuiccio & Husby-Slater, 2018; Demirel, 2009; Mısırlı, 2011; Taymaz, 1997). As a result, it is important to prepare the contents of professional development training based on needs analysis (Taymaz, 1997) and in accordance with the teachers' field and other conditions that they possess (Kahraman Özkurt, 2019). It is obvious that the contribution obtained from the training increases even more in trainings which are based on the prior knowledge of the teacher, suitable for developmental needs and focus on field knowledge (TALIS, 2018). When evaluated together, developing measurement tools that can be used in the needs analysis phase and determining their effectiveness (Engin, 2019), which is of vital importance in planning the professional development training, emerges as a necessity. In this regard, professional development activities should be organized, including competencies and teaching strategies for social studies teachers [SST] (Reitz, 2018). Accordingly, to be developed under this study, Social Studies Teacher Competency Determination Scale [SSTCDS] and the observation form have the potential of contributing to the international scale as well as the national for determining the needs of the SST.

Literature Review

The Concept of Competence and Teacher Competencies

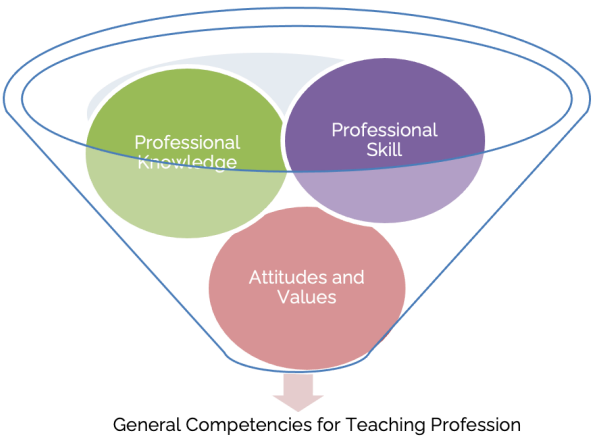
The concept of competence, which is defined as the qualities that give a person the power to fulfill a specific task (Bursalıoğlu, 1981, p.5; Şişman, 2002), can be considered, regarding education, as the qualities that must be possessed in order to fulfill the requirements of teachership (Gökçe, 1999, p. 29). Whereas these qualities are widely used when referring to the concept of "teacher efficacy" in Turkey, in the international literature, generally, 'teaching profession standards' are preferred (Zayimoğlu Öztürk, 2011). Despite the different approaches in different countries, these concepts, in practice, refer to the teachers' professional knowledge, skills, attitude and values (MoNE, 2008; National Board of Professional Teaching Standards (NCTM), 2001; Teacher Development Agency, 2007). Even though the subjects within the scope of qualifications are widely common, different models are preferred for structuring the competences. For instance, while the standards of the teaching profession are determined based on the developmental stages of children in the USA, in England, the professional development stages of teachers are taken as a reference (Zayimoğlu Öztürk, 2011). Therefore, in this study, because of its widespread use in Turkey, the concept of 'teacher competencies' and the model which takes teachers' professional development phases as the point of reference is preferred.

Competencies of SST

SST's are expected to have competencies in two areas: general teaching competencies and specific field competencies (Demirkaya & Ünal, 2017; National Council for the Social Studies [NCSS], 2002; MoNE, 2008). Specific field competencies, which refer to the competencies for teaching the subjects that are within the scope of social studies [SS], include the knowledge on the field and field education that any SST should have. Many countries have determined frameworks and standards for competencies for SST (NCSS, 1988). In the ongoing process, "national standards for social studies teachers" including subject area competencies are issued (NCSS, 2002). Specific field competencies are divided into three subsections: thematic and the competencies that belong to disciplines or the program. In addition, the institution has published "national standards for the training of social studies teachers" in 2018 in order to ensure the training of SSTs to be equipped to meet the changing needs (NCSS, 2018). The five standards that partake in this document are divided into 19 sub-factors, and the objectives and observable performance criteria for each factor are determined.

Turkey revised the general competencies for the teaching profession in 2017. As a result of these revisions, instead of determining a separate specific field competency for each teaching field, a single and holistic text is produced by adding field and field education knowledge competencies to overall competencies (MoNE, 2017). The general competencies of the teaching profession that is revised in this context consist of three complementary fields of competence: "professional knowledge", "professional skill", "attitudes and values" and of 11 competencies and 65 performance indicators (MoNE, 2017).

Figure 1. *General Competencies for Teaching Profession (MoNE, 2017)*



The 3 competency areas in Figure 1 consists of 11 competencies and 65 performance indicators related to these competencies. It is seen that the mentioned competency areas and the general framework in these areas coincide significantly with the reports of Core Teaching Standards (InTASC, 2013) and developing basic competencies in schools (European Commission / EACEA / Eurydice, 2012).

Purpose of the Research

The purpose of this research is to point out the areas which are open to professional development by determining the competency levels of SSTs. In accordance with this purpose, scale development has an important place in the study for determining SST competencies. For these purposes, the key points of the research are determined as follows:

1. How has the process of developing the SST competency assessment measurement tool progressed?

2. How are the fields regarding the proficiency level and opinions of the teachers, in which SSTs need professional development, classified?

a. What level of competence are the teachers at?

b. Is there a statistically significant distinction between teachers' competence levels and their genders, seniority, type of school, the field of study and education level?

c. What are the opinions and suggestions of teachers about their professional competence levels?

Limitation

• The results of the competency scale are limited to the data obtained from 480 teachers that are selected as the sample and with Bursa province that is selected as the universe of the study.

• Observations and interviews conducted during the needs analysis phase of the research are limited to eight social studies teachers from four schools that participated voluntarily.

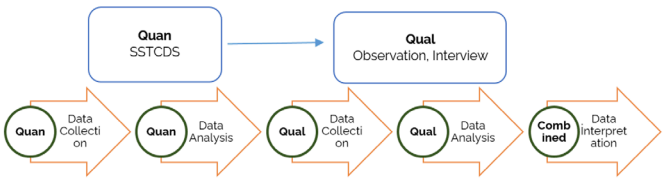
• The research is limited to 14 weeks.

Method

Research Design

The research was carried out using a sequential explanatory design (Creswell, 2003) which was one of the mixed-method research designs. In this approach, the analysis results were interpreted together after quantitative and qualitative data were collected at designated phases and analyzed accordingly (Creswell, Plano Clark, Gutmann & Hanson, 2003). In this context, a questionnaire from quantitative data collection techniques, and observation and interview among qualitative data collection techniques were used respectively in the study (Figure 2). Findings obtained by these techniques were used in different weights in accordance with the aims of the research. Scale development and application constituted the focal point of the study. The findings obtained from observation and interview were used to explain and verify the findings obtained from the scales. The quantitative and qualitative data obtained from the research were analyzed separately, except that the findings were interpreted together.

Figure 2. *Research Design Process (Creswell, Plano Clark, Gutmann & Hanson, 2003)*



Study Group

The "Convenience sampling" strategy was used to determine the participants and samples to be included in the study. During the research, SSTs were designated as the universe (Karasar, 2013), while the SSTs working in Bursa province and its districts constitute the sample of the study. Therefore, convenience sampling strategy was used in the process of selecting the samples (Balcı, 2016; Creswell, 2012). After this stage, the scale which was delivered to 500 SSTs who were determined as samples, was filled out by 480 of the volunteers. Descriptive information of those who filled out the scale is presented in Table 1.

Table 1. *Descriptive Information on the SSTCDS Samples*

Variables		*f*
Gender	Female	226
	Male	254
Seniority	0-5	73
	6-10	124
	11-15	102
	16-20	94
	21 and above	87
School Type	Institute of Education	15
	Faculty of Education	412
	Faculty of Arts and Sciences	53
Field	Social Studies	332
	History	91
	Geography	37
	Other	20
Education Level	Associate Degree	3
	Bachelor of Arts	427
	Master of Arts	41
	PhD	9
	Total	480

The research was conducted with 8 SSTs working at four schools, who were designated by purposeful sampling strategy (Patton, 2014). The teachers who would be observed and interviewed were informed beforehand about the framework and aims of the research, and they participated in the research on a voluntary basis. For ethical purposes, each participant was given a code name in order to protect their identities. Descriptive information on the participants is given in Table 2.

Table 2. *Descriptive Information on the Participants*

Code name	Gender	Field (BA)	Seniority
P1	Male	History	13
P2	Female	History	19
P3	Male	Social Studies	17
P4	Male	History	26
P5	Male	History	19
P6	Male	Social Studies	17
P7	Male	Social Studies.	15
P8	Male	Geography	30

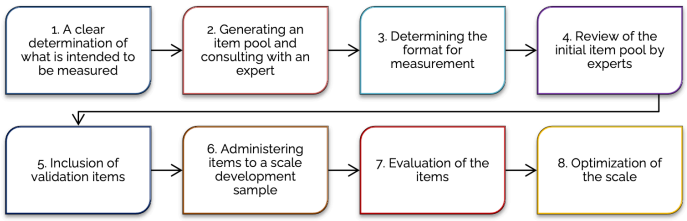
Data Collection Tools

As data collection instruments, SSTCDS (Appendix 1), observation (Appendix 2) and interview forms were used respectively in this research. Additional information on the data collection instruments is explained in the following section.

SSTCDS Development Process

SSTCDS was created based on the phases suggested by DeVellis (2017) (Figure 3).

Figure 3. *The Developmental Phases of SSTCDS*



The measurement tool intended to be developed aims to show the competency levels of teachers by determining the core competencies that a social studies teacher should have. The item pool of the scale was determined by scanning national (MoNE, 2008; 2017) and international (European Commission / EACEA / Eurydice, 2012; InTASC, 2013) literature. Besides being in accordance with corrections suggested by the experts to make it up-to-date and inclusive, the "General Competencies for Teaching Profession" (MoNE, 2017) was determined as the validation item of the scale as it contained both national and international standards. Within the scope of the study, 65 items which were designated as validation items were examined by five experts of the field by using Davis (1992) technique. In accordance with the opinions of the experts (two social studies, one geography, one educational sciences and one history), validation items were optimized by making necessary arrangements.

Likert scale was preferred as the measurement format based on its reliability to a very large extent and its success in measuring many affective qualities (Gable, 1986). The pilot testing of the validation items was carried out with social studies teachers in printed format and by Google form. Within the scope of the pilot test, which lasted approximately for 3 months, 330 social studies teachers were reached. While 315 of the data which were without defects were included in the analysis, 15 of them with missing data or missing information were not included in the evaluation process.

The tool, which consists of 65 items and aimed to measure the SST competencies, was developed based on 11 theoretical dimensions. These dimensions are field knowledge, field education knowledge, knowledge on education law, planning the teaching process, creating learning environments, management of the teaching process, measuring and assessment, engaging learners, communication and collaboration, personal and professional development, and national, moral and universal values. In this context, Exploratory Factor Analysis (EFA) was used to detect the factor structure of the tool.

Before EFA, KMO-Bartlett's test was applied in order to determine the adequacy of the sample size for factoring. The analysis indicated the KMO value as 0.95. Based on these results, it was concluded that the sample size was "perfect" for factor analysis (Leech, Barrett & Morgan, 2005; Şencan, 2005; Tavşancıl, 2014). Additionally, the results from Bartlett's test of sphericity indicate that the obtained chi-square (x2) value was significant at 0.01. Based on these results, it was acknowledged that the data results from the multivariate normal distribution. Principal component analysis was used as a factorization method in order to reveal the factor design of SSTCDS. Resulting from the prediction that the scale factors will be related to one another, 'direct oblimin', which was one of the oblique (nonorthogonal) rotation methods, was chosen as the rotation method in EFA.

Development of the Observation Form and the Process of Observation

The observation technique was used during the needs analysis phase in order to determine the competency levels of SST. The researcher took part as an observer participant in the lessons which were being observed within the scope of the research. In this context, the lessons were observed for 14 weeks, having two weeks of pilot testing and 12 weeks of administration. During the observation process, the researcher did not interfere in the lesson. The purpose of having an observer in the courses was explained to the teacher and students beforehand. Since the focal point of the study was teachers, students were not included in the process of observation.

In order to observe the competency levels of the teachers, an observation form (Appendix 2) was created by the researcher by making use of the SSTCDS. After being rearranged according to the expert opinions, the observation form, which was created during pilot testing by observing three teachers, was started to be used during the observation process. The observation form included three parts: professional knowledge, professional skills, and attitudes and values. These three parts were split into six categories (planning and generating the teaching process, engaging learners, knowledge on the field and education, communication and collaboration, usage of method, technique and equipment, and management of the teaching process) and 40 performance indicators.

Developing the Interview Form and the Interviews

In this research, a semi-structured interview technique was used in order to determine the areas in which teachers need professional development, to deepen the obtained data and make comparisons, and to increase the reliability of the study (Yıldırım & Şimşek, 2013). The interview form consisted of 11 questions. The questions were prepared by the researcher based on the literature (Avcı, 2013; Bulut, 2011; Köstereliođlu, 2012; Oturak Eyecisoy, 2014). These questions were examined by two academicians, one specialized in educational administration and the other in Social Studies education, in terms of being clear and comprehensible, inclusive and efficacious. Based on the opinions of the experts, some questions were changed or new questions were added to the interview form. For instance, as it conveyed the message that there must be a problem or a need, the question "In which areas do you need professional development as an SST? Can you meet these needs in the existing system?' was reconceptualized as 'Are there any areas where you need professional development as an SST? If any, do you find the vocational training activities currently implemented sufficient to meet your needs?'. Moreover, the question 'What does professional competence mean to you?" which was not included in the drafts of the interview form, was added based on the recommendations of the experts. After these processes, interviews were conducted with eight participants by using the final interview form.

Data Collection Tools

Among the data collection techniques, scale, observation and interview were used in this study. These techniques were preferred in order to determine the level of attainments of teachers regarding their professional knowledge, skills, attitudes and values. While the scale data provided a holistic evaluation opportunity to determine the areas of need, the data collected from observation and interview gave an opportunity to evaluate the scale data comparatively. By using various data collection techniques, the areas in which teachers need professional development were tried to be determined.

Data Analysis

General information on the analysis method of the data, which will be detailed later, is shown in Table 3.

Table 3. *Data Analysis*

Data Collection Technique/ Tool	Method of Analysis	Intended Purpose
Scale	Descriptive analysis Independent Samples T-Test One-Way Analysis of Variance (ANOVA) for Independent Samples	-Assessment
Observation	Descriptive analysis (Rubric)	-Assessment
Interview	Content Analysis	-Assessment

The data obtained from the scale development was analyzed in a two-step structure: "Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA)". SPSS 23.0 was used to perform Explanatory Factor Analysis, and AMOS 23.0 was used for Confirmatory Factor Analysis on the data. EFA was used to determine the underlying structure of the item group, and CFA was used to verify the relationship pattern predicted based on theory or previous results (DeVellis, 2017). "Independent Samples T-Test" and "One-Way Analysis of Variance for Independent Samples (One-Way Anova)" were applied to the data obtained from SSTCDS. Additional descriptive analyses were performed on the obtained data.

Resulting from the analysis of the data obtained through the observation form, the areas of need were tried to be determined by calculating the total points that each participant got from the performance indicators throughout the observation process. The performance indicators taking place in the observation form were scored according to 3 levels: 1 (open to improvement), 2 (acceptable) and 3 (good). While scoring, a rubric was used as the evaluation tool (Appendix 3).

The interviews conducted during the analysis phase were recorded and taken as inventory. The interviews were then subjected to content analysis. The obtained data were classified to form meaningful sections within themselves and encoded by bringing together those that were, in a sense, related to one another. The codes, which were also examined by another researcher, were finalized according to his/her views. After the coding process was completed, categories were created out of the codes, and finally, themes surrounding these categories were created (Patton, 2014).

Validity and Reliability Measures

Validity of SSTCDS

In order to increase the validity of the scale developed within the scope of the research, primarily, every stage of the process was planned based on expert opinions and that the implementation phase was carried out under the total control of experts. Moreover, processes carried out during the development process of the data collection tool were explained in detail. Furthermore, the evaluation of the results obtained from the processes of data collection and analysis, which are presented in detail, was carried out by the researcher in accordance with the expert opinions (Brinberg & McGraft, 1985; Creswell, 2011; Fraenkel, Wallen & Hyun 2011; McMillan & Schumacher, 2010). Each participant was informed about the research, and the ones that volunteered were included in the research process. Finally, the number of items and dimensions of the scale developed were tried to be presented in detail.

Besides the descriptive validity criteria, the research was conducted in terms of content, construct and criterion-related validity in order to increase the validity of the study. While content validity was statistically examined by using Davis (1992) technique, construct validity was tried to be provided by expert opinions. As a result of the calculations made within this scope, all items within the scope of the scale have a value of 0.80 and above. This result means that the content validity of the scale was high (cited in Yurdugül, 2005). In the study, EFA and CFA were performed to ensure the construct validity. Construct validity was tried to be provided by applying CFA to the model produced by EFA.

Reliability of SSTCDS

In order to ensure the reliability of the research process, at every stage of the research, expert opinion was taken. Moreover, in order to determine the reliability among the evaluators, the values of the Content Validity Index (CVI) were calculated according to expert opinions which were obtained by Davis (1992) technique. Furthermore, the compatibility of the data was tried to be determined by examining the internal consistency of the obtained data (Ercan & Kan, 2004; Karakoç & Dönmez, 2014). In addition to all of the above, the internal consistency coefficient (Cronbach's Alpha), which was frequently used to ensure reliability in scale development researches, was calculated as 0.97. The commonly held view in literature was that it was sufficient to have a factor loading value of 0.70 and above (Büyüköztürk, 2010; Kılıç, 2016). In this context, it can be said that the reliability of the data obtained was considerably high.

Validity and Reliability of Qualitative Data Collection Tools

In the qualitative dimension of the research, the validity of the study was tried to be ensured by following the strategies of member checking, triangulation (nested) and peer debriefing (Creswell, 2014). Accordingly, the accuracy of the comments and results were confirmed by sharing the research results with the participants. In addition to this, diversity of procedure was tried to be achieved by using observation and interview simultaneously. Moreover, an expert who was closely acquainted with the research and competent in the research procedure was asked to examine the research from various dimensions.

In order to ensure the reliability of the qualitative data, the data were continuously checked and compared.

Additionally, cross-checking of the data was carried out by a researcher who was an expert on the field (Gibbs, 2007). The expert was asked to encode a certain part (25%) of the data. The percentage of the connection between the codes and categories formed in this way (Miles & Huberman, 1994) was calculated as 0.80.

Ethical Permission Information of the Study

In this study, all the rules stated in the Committee on Publication Ethics (COPE) were followed.

Results

In this section, first of all, the findings which were obtained during the scale development stages were presented, and thereafter, the findings obtained from the analysis of the result of scale, observation and interview were tried to be presented in detail under relevant problem sentences.

How Has the Process of Developing the SST Competency Assessment Measurement Tool Progressed?

The Development Process of SSTCDS

It is seen in the analysis that for 65 items, there are 11 components with eigenvalues above 1. The contribution of these components to the total variance is 65,129%. These 11 components are evaluated according to the importance of their contribution to the total variance by taking into account the total variance table. During the evaluation, it is seen that eight components have made a significant contribution to the variance and that after the ninth component, the contribution is both slight and at an approximate rate. Additionally, as a result of the one-by-one extraction of the items that are overlapping and below the acceptance level, an 8-factor structure is created by distributing the items in the first 3 factors under different factors.

The level of acceptance for factor loading values in EFA, which is used to find the factor design of SSTCDS, is determined as 32 (Tabachnick & Fidell, 2007). During the analysis of 11 factors, when the items are evaluated in terms of overlappings or acceptance levels, it is discovered that five items are overlapping (8, 40, 52, 64 and 65) and four items (18, 41, 43, and 62) have loading values below the acceptance value of 0.32. Items 8 and 65 are not removed from the list because they held a non-overlapping value in repeated analysis. Moreover, the items (25, 27, 28, 39, 53, 54, 61, and 63) that did not overlap in the beginning or have a slightly higher value than the acceptance level showed overlappings or received loading values below the acceptance level as the analyses are repeated. In conclusion, the final factor design and loading values are discovered by excluding 15 items from the analysis which overlapped or had loading values below the acceptance levels (Appendix 4).

Many fit indexes are used to discover the level of fitness of the model tested in DFA. In this study, Chi-Square Goodness of Fit Test, Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA), Root Mean Square Residuals (RMR) and non-Normed Fit Index (NNFI) are examined. The findings obtained from the DFA are given in Table 4.

After the model fit is obtained by CFA, the item factor loading values obtained from EFA and CFA are calculated (Table 5).

Table 4. *Findings of Confirmatory Factor Analysis*

Index	Perfect	Good/ Acceptable	Research Findings	Result
x2 / df	<2	<5	2.19	Acceptable Compliance
RMSEA	≤ .05	≤ .08	0.05	Perfect Compliance
SRMR	≤ .05	≤ .08	0.05	Perfect Compliance
CFI	≥ .95	≥ 90	0.90	Acceptable Compliance
NNFI/TLI	≥ .95	≥ .90	0.90	Acceptable Compliance
GFI	≥ .90	≥ .85	0.85	Acceptable Compliance

References: (Schreiber, Stage, Barlow & King, 2006; Byrne, 2016; Hair, Black, Babin & Anderson, 2010; Hooper, Coughlan & Mullen, 2008; Kline, 2019; Marcoulides & Schumacker, 2001; Munro, 2005; Schumacker & Lomax, 2010; Tabachnick & Fidell, 2013).

Table 5. *Item Factor Loadings Obtained from EFA and CFA*

		Factor Loadings				Factor Loadings	
Item	Factor	EFA	CFA	Item.	Factor	EFA	CFA
1	pgtp 1*	0,43	0,71	26	cc1*	0,63	0,63
2	pgtp 2	0,56	0,73	27	cc 2	0,57	0,53
3	pgtp 3	0,53	0,71	28	cc 3	0,67	0,73
4	pgtp 4	0,66	0,77	29	cc 4	0,54	0,64
5	pgtp 5	0,67	0,70	30	cc 5	0,66	0,73
6	pgtp 6	0,69	0,74	31	cc 6	0,48	0,77
7	pgtp 7	0,48	0,69	32	cc 7	0,76	0,72
8	pgtp 8	0,45	0,71	33	kel1*	0,77	0,60
9	pgtp 9	0,35	0,70	34	kel 2	0,70	0,75
10	el1*	0,59	0,61	35	kel 3	0,67	0,77
11	el2	0,68	0,83	36	kel 4	0,44	0,44
12	el3	0,82	0,83	37	umte1*	0,50	0,65
13	el4	0,79	0,81	38	umte 2	0,84	0,67
14	el5	0,62	0,78	39	umte 3	0,52	0,83
15	el6	0,69	0,71	40	umte 4	0,55	0,78
16	kfe1*	0,62	0,74	41	mtp 1*	0,32	0,69
17	kfe 2	0,77	0,72	42	mtp2	0,62	0,74
18	kfe 3	0,79	0,74	43	mtp 3	0,64	0,63
19	kfe 4	0,76	0,66	44	mtp 4	0,47	0,74
20	kfe 5	0,60	0,68	45	nmuv1*	0,54	0,64
21	kfe 6	0,56	0,68	46	nmuv 2	0,58	0,72
22	kfe 7	0,49	0,72	47	nmuv 3	0,66	0,63
23	kfe 8	0,42	0,70	48	nmuv 4	0,61	0,54
24	kfe 9	0,59	0,72	49	nmuv 5	0,45	0,66
25	kfe 10	0,36	0,62	50	nmuv 6	0,34	0,79

*Planning and generating the teaching process (pgtp), engaging learners (el), knowledge on the field and education (kfe), communication and collaboration (cc), knowledge on education law (kel), usage of method-technique and equipment (umte), management of the teaching process (mtp), national, moral and universal values (nmuv).

How Are the Fields Regarding the Proficiency Level and Opinions of the Teachers, in which SSTs Need Professional Development, Classified?

In this section, the areas that teachers need professional development are tried to be determined by presenting the findings brought out by the observations and interviews, which were carried out by using the competency scale that was developed and applied within the scope of the research. These need areas are given in Table 6.

Table 6. *The Areas that Teachers Need Professional Development*

Areas of need	Scale	Observation	Interview
Knowledge on the field and education	-	+	+
Knowledge on education law	-	-	-
Planning and generating the teaching process	+	+	+
Management of the teaching process	-	+	+
Usage of method-technique and equipment	-	+	+
Engaging learners	+	+	+
Communication and collaboration	-	-	-
National and moral values	-	-	-

According to the findings presented in Table 9, the categories of planning and generating the teaching process and engaging learners appear to be the areas in which teachers need professional development based on the data of all three criteria: scale, observation, and interview. By contrast, although the categories of knowledge on the field and education, management of the teaching process, and usage of method, technique and equipment do not appear as areas of need according to the findings, observations and interviews show that teachers also need professional development in these areas. In addition, categories of knowledge on education law, communication and collaboration, and national and moral values appear to be the areas that teachers are most competent.

What Level of Competence Are the Teachers at?

SSTCDS findings (Appendix 5).

The findings of the analysis of SSTCDS and in-class observations on SSTs are presented under this title. When the descriptive analysis results (Appendix 5) are examined, the item 'I take into account individual differences and socio-cultural characteristics of students while planning the teaching process', which takes place under the factor of planning and generating the teaching process, appears as the one with the highest average ($\bar{x}$ = 4.42), while "I create the learning environment according to the outcomes of the course" appears as the one with the lowest average ($\bar{x}$ = 3.92).

According to the findings, while 'I value each student as a person and an individual' which is listed under engaging learners, is the item with the highest average ($\bar{x}$ = 4.65), the item 'I respect individual and cultural differences' has the lowest average ($\bar{x}$ = 3.89). Although these two items correspond with each other, it is striking that 'I respect individual and cultural differences' has the lowest average.

While 'I prepare and use measurement and evaluation tools suitable for SS' which is listed under the factor: knowledge on the field and education, is the item with the highest average ($\bar{x}$ =4.48), the item 'I associate my knowledge on the development of students and their learning characteristics with the teaching processes' has the lowest average ($\bar{x}$ = 4.11).

While 'I actively participate in activities for school development' which is under the communication and collaboration factor, is the one with the highest average ($\bar{x}$ = 4.85), 'I make self-assessment by benefitting from the opinions and suggestions of the stakeholders' is the item with the lowest average ($\bar{x}$ = 4.21). According to these results, self-assessment based on the feedbacks of the stakeholders appear to be an area which is open to improvement.

The item 'I have knowledge on the rules and regulations concerning the teaching profession' which is listed under the knowledge on education law factor, has the highest average ($\bar{x}$ = 4.86), while the item with the lowest average ($\bar{x}$ =4.35) is 'I differentiate the rights and responsibilities of my education stakeholders'. Distinguishing the rights and responsibilities of stakeholders has a relatively lower average than the knowledge on the legislation regarding the profession.

While 'I use information and communication technologies effectively in the teaching process' which is listed under the usage of method, technique and equipment factor, is the item with the highest average ($\bar{x}$ = 4.50), 'I benefit from the experiences of my colleagues concerning the usage of method, technique and equipment' has the lowest average ($\bar{x}$ = 4.37).

The item 'I use time effectively in the learning process' which is listed under the management of the teaching process factor, has the highest average ($\bar{x}$ = 4.60), while 'I ensure the participation of students in learning processes' is the item with the lowest average ($\bar{x}$ = 4.25). The low level of competency regarding the participation of students in the course is another important aspect.

While the item 'I care about social values as a citizen' which is listed under the factor of national, moral and universal values, is the one with the highest average ($\bar{x}$ = 4.71), 'I plan my lessons by looking out for the values of the SS curriculum' has the lowest average ($\bar{x}$ = 4.58).

Is There a Statistically Significant Distinction Between Teachers' Competence Levels and Their Genders, Seniority, Type Of School, Field Of Study And Education Level?

Independent samples t-test and one-way analysis of variance (ANOVA) for independent samples are applied to the data obtained from SSTCDS. The conditions which should be met in order to get reliable results from the analyses (Can, 2013) have been examined and the results obtained are presented in Table 7. Another aspect, equality of variances, is also examined according to Levene Test results.

According to the results presented in Table 7, it can be said that since $p< 0.05$, the data is not distributed normally. However, as it can be seen in the table, the coefficients of skewness (-0.656) and kurtosis (-0.040) take values between -1.5 and +1.5. Thus, it can be said that the data are normally distributed and achieve the prerequisite for normality (Tabachnick & Fidell, 2013). After this stage, another prerequisite, the Levene Test, which tests the equality of

variances, is conducted. According to Levene Test results (p= 0.299), since p> 0.05, it is seen that there is no significant difference between the variances of the groups. In this respect, the independent samples t-test is applied to the data, and the results are presented in Table 8.

According to the results presented in Table 8, no statistically significant difference between the female ($\bar{x}_K$= 4.44, ss= .398) and male ($\bar{x}_E$=4.39, ss=.372) groups is found [$t_{(480)}$= 1.51,p= .131].

One-Way Anova for Independent Samples is applied in order to determine whether there is a significant difference in general competency scores regarding the variables of professional seniority, school type, field and education level. The conditions which should be met in order for these analyses to offer reliable results (Can, 2013, p.116) have been examined and the results obtained are presented in Table 7. Another condition: the equality of variances, is also examined based on the Levene Test results (Table 9).

According to Table 9, it is seen that there is no statistically significant difference (p> 0.05) between the variances of these groups, the difference of which will be questioned and which also meet the normality condition. Based on this, One-Way ANOVA for independent samples is applied to the data and the results obtained are presented below in separate tables.

According to Table 9, it is seen that there is no statistically significant difference (p> 0.05) between the variances of these groups, the difference of which will be questioned and which also meet the normality condition. Based on this, One-Way ANOVA for independent samples is applied to the data and the results obtained are presented below in separate tables.

According to the analysis results presented in Table 10, no statistically significant difference is found between the average competency scores regarding the variable of professional seniority [f= .707, p= .588].

According to the analysis results presented in Table 11, no statistically significant difference is found between the average competency scores regarding the variable of school type [f= 1.935, p= .146].

Table 7. *Normality Test*

	Kolmogorov-Smirnov			Shapiro-Wilk			Skewness-Kurtosis Coefficients	
	Statistic	*df*	*p*	Statistic	*df*	*p*	Skewness	Kurtosis
Average of General Competency	0.073	480	0.000	0.958	480	0.000	-0.656	-0.040

Table 8. *Independent Samples t-test Results*

Dimension	Gender	n	$\bar{x}$	ss	Sd	t	f	p
Professional Competency Level	Female	226	4.44	0.397	476	1.51	1,083	0.131
	Male	254	4.39	0.373				

Table 9. *Levene test results*

	Levene Statistics	df1	df2	Sig.
Seniority	1.072	4	475	0.370
School Type	1.860	3	476	0.135
Field	1.259	3	476	0.288
Education Level	1.105	3	476	0.347

Table 10. *One-Way ANOVA Results*

Dimension	Professional Seniority	*n*	$\bar{x}$	ss	*f*	*p*
Professional Competency Level	0-5	73	4.36	0.045	0.707	0.588
	6-10	124	4.40	0.404		
	11-15	102	4.41	0.361		
	16-20	94	4.41	0.369		
	21 and Above	87	4.47	0.403		

Table 11. *One-Way ANOVA Results*

Dimension	School Type	*n*	$\bar{x}$	ss	*f*	*p*
Professional Competency Level	Institute of Education	15	4.24	0.383	1.935	0.146
	Faculty of Education	408	4.42	0.379		
	Faculty of Arts and Sciences	57	4.41	0.420		

Table 12. *One-Way ANOVA Results*

Dimension	Field	*n*	$\bar{x}$	ss	*f*	*p*	Significant Difference
Professional Competency Level	SS	332	4.42	0.021	5.334	0.001	SS/Other
	History	91	4.43	0.040			History/Other
	Geography	37	4.45	0.058			Geography/Other
	Other	20	4.10	0.071			

Table 13. *One-Way ANOVA Results*

Dimension	Education Level	*n*	$\bar{x}$	ss	*f*	*p*
Professional Competency Level	Associate Degree	3	4.52	0.232	0.153	0.928
	BA	427	4.41	0.018		
	MA	41	4.44	0.055		
	PhD	9	4.40	0.116		

According to the analysis results presented in Table 12, a statistically significant difference is found between the average competency scores regarding the variable of field [f_=5.334,p=.001]. Tukey test, which is one of the Post Hoc tests, is used to test the source of this difference. The direction of the difference is designated as (SB)-(Other), (History)-(Other) and (Geography)-(Other).

According to the analysis results presented in Table 13, a statistically significant difference is not found between the average competency scores regarding the variable of education level [*f*= .153, *p*= .928].

Observation Findings

According to the analysis of observation findings, 'Creating healthy, safe and aesthetic learning environments' which is listed under planning and generating the teaching process factor, is the item with the highest average ($\bar{x}$ = 30), while 'taking into account students with special needs while generating the teaching and learning processes' has the lowest ($\bar{x}$ = 13). It is a striking finding that teachers have not included students with special needs in the curriculum enough in this factor.

According to the findings obtained from the observations, five items (10, 11, 12, 14 and 15) which are listed under the engaging learners factor are the items with the highest average ($\bar{x}$ = 36). On the other hand, also included in this factor, the item 'Striving to contribute to the growth of students in becoming individuals who are respectful to national and moral values and open to universal values' has a relatively low average ($\bar{x}$ = 34). However, this 2-point difference is not considered as a significant difference.

'Analyzing topics and concepts related to SS' which is listed under knowledge on the field and education factor, has the highest average ($\bar{x}$ = 28), while 'associating my knowledge on student development and learning characteristics with teaching processes and managing the SS curriculum' is the one with the lowest average were ($\bar{x}$ = 23).

The item 'active participation in activities concerning school development', listed under the communication and collaboration factor, is the one with the highest average ($\bar{x}$ = 36), while 'self-assessment benefiting from the opinions and suggestions of stakeholders' has the lowest average ($\bar{x}$ =29).

The item 'benefiting from the experience of my colleagues concerning the usage of method, technique and equipment, and usage of information and communication technologies effectively in the teaching and learning process' which is listed under the usage of method, technique, and equipment factor, is the one with the lowest average ($\bar{x}$ =25). Listed under this factor, the items' achieving effective learning by using appropriate strategies, methods and techniques in the teaching and learning process and using appropriate tools, equipment and materials effectively in the teaching and learning process' have a relatively higher average ($\bar{x}$ = 26).

While the item 'Using time effectively during the learning process' which is listed under the management of the teaching process factor, is the one with the highest average ($\bar{x}$ = 36), 'ensuring the active participation of students in learning processes' is the one with the lowest average ($\bar{x}$ = 20). Thus, while it is noteworthy that teachers' competencies regarding the effective usage of time are high, it is also noteworthy that their competencies are low regarding the active participation of students in the course.

*Interview Findings**

The theme obtained after the analysis of the interview data is the 'need' theme. This theme is divided into two sub-themes: general competencies-specific needs and field-specific needs. Regarding general competencies, it is important that effective usage of technology and developing appropriate curriculums are considered as a need area by all participants. Concerning this, by stating that 'the efficient use of technology and content development is also important. In my opinion, the ministry should offer training programs on this subject' P1 has expressed thoughts that may reflect all participants' opinions. The 'Program and Philosophy of SS', which is listed under the sub-theme of field-specific needs, has been another subject that is mentioned by all participants. By stating that 'I personally find my knowledge on the field sufficient, but the program and philosophy of SS is a field that I need', P6 has drawn attention to the field-specific needs like the other participants. Besides, the majority of the participants (P1, P2, P3, P6, P8) expressed that they need training for teaching SS and preparing activities for low-achieving students and students of an inclusive classroom. Moreover, teaching history in SS (P2, P3, P6) and development of field-specific content suitable for the interactive board (P1, P2, P3) appear as other areas where needs are directed at. When evaluated together, it can be said that although the teachers mentioned general competency-

specific needs, the essential need is concentrated on the field-specific competencies.

* Since the interview form is prepared within the scope of a dissertation, only the data concerning the research is included in this table.

Discussion, Conclusion and Suggestions

The categories of planning and generating the teaching process and engaging learners have emerged as areas in which teachers need professional development, not based only on scale but also on observation and interview data. On the contrary, although knowledge on the field and education, management of the teaching process, and usage of method, technique, and equipment did not appear as areas of need based on the findings of scale, observations and interviews held showed that SST' competencies in these areas are low. Additionally, categories of knowledge on education law, communication and collaboration, and national and moral values have emerged as the areas where teachers are most competent in. In the light of these explanations, detailed evaluations of competency areas are presented under related headings below.

How Has the Process of Developing the SST Competency Assessment Measurement Tool Progressed?

The tool, which aims to measure the competency levels of SSTs and consists of 65 candidates, is prepared based on 11 theoretical dimensions. The result of the first EFA conducted for this purpose showed that out of the 65 items included in the analysis, there are 11 components with an eigenvalue above 1. The contribution of these components to the total variance is 65,129%. These 11 components are evaluated by taking into account the total variance table presented regarding the importance of their contribution to the total variance. During this evaluation, it is seen that eight components have made a significant contribution to the variance; after the ninth component, the contribution is both small and at approximate values. Additionally, as a result of removing the items one by one which are overlapping and with values below the acceptance level, an eight-factor structure is created by distributing the items from the first 3 factors under different factors. It is seen that these eight factors explain 63,013% of the total variance. In multi-factor designs, it is considered sufficient when the explained variance is between 40% and 60% (Büyüköztürk, 2010; Tavşancıl, 2014). Regarding this, it can be said that the contribution of each factor to the total variance is sufficient.

Before EFA is performed, a KMO test is applied in order to test the suitability of sample size to factoring. The result of the analysis showed the KMO value as 0.95. Based on this finding, it is concluded that the sample size is "perfect" for factor analysis (Leech, Barrett & Morgan, 2005; Şencan, 2005; Tavşancıl, 2014). Moreover, Bartlett sphericity test results show that the obtained chi-square (x2) value is significant at 0.01. Based on these results, it is accepted that the data are drawn from the multivariate normal distribution.

In the analysis, when the items are evaluated in terms of meeting the acceptance level and adherence, it is seen that five items are overlapping, and four items have loading values below the acceptance level of 0.32 (Tabachnick & Fidell, 2007). Two items out of these are not removed because of having a non-overlapping value in repeated analyses. Furthermore, the items that did not overlap at first or had values at least above the acceptance level overlapped or received loading values below the acceptance value as the analyses are repeated. Therefore, the final factor design and loading values are determined by excluding 15 items from the analysis which are overlapping or have a loading value below the acceptance level (Appendix 4).

According to the findings obtained from the research, it is seen that the items are mostly gathered under the theoretically predicted factors (MoNE, 2017). However, seven items which were theoretically expected to gather under measurement and evaluation and personal and professional development factors are excluded because of overlapping or being below the acceptance value, and five items are gathered under other factors. Therefore, factor load values can be described from "reasonable" to "excellent" regarding magnitude, except for four items; the load values of these items can be described as "weak" (Comery & Lee, 1992).

When the results related to CFA are evaluated together, and when the model is evaluated according to x2 and the ratio of degrees of freedom (2.03), it can be said that the fitness of the model is at a good/acceptable level. When other fit indexes are examined, results for this model are: RMSEA = 0.04; SRMR = 0.05; CFI = 0.91; NNFI/TLI = 0.90 and GFI = 0.85. When the modification proposals for the model are examined, it can be stated that there is not any modification that will contribute significantly to the x2 value. Regarding this, for the fitness of a model, it is expected that the x2/sd ratio should be below 5, CFI, GFI and NNFI/TLI values should be above 0.90, and RMSEA and SRMR values should be below 0.05 (Jöreskog & Sörbom, 1993; Marsh & Hocevar, 1988; Schumacker & Lomax, 2016). However, the following should also be considered as acceptable in assessing a model fitness: GFI> 0.85 and AGFI> 0.80 (Anderson & Gerbing, 1985; Cole; 1987; Marsh, Balla & McDonald, 1998; Marcoulides & Schumacker, 2001). When the fit indexes of the model are examined, it can be said that the RMSEA and SRMR values indicate a perfect fit, and CFI, NNFI/TLI and GFI values of x2/sd ratio represent a good fit. In this context, it can be agreed that the model put forward by this study is confirmed.

SSTCDS happens to be a 5-point Likert type and consists of 50 items and 8 factors. The lowest score that one can get from the scale is 50, and the highest score is 250. As the score obtained from the scale increases, it means that one has a higher level of competence; as the score obtained decreases, one has a lower level of competence. Accordingly, the score interval of the scale is determined as follows: between 50-89 points 'incompetent', between 90-129 points 'not enough competent', 130-169 points 'moderately competent', 170-209 points 'competent', 210-250 points 'complete competence'. There are no reverse-scored items in the scale. The time limit for the response to the scale is approximately 10 minutes. When the validity and reliability evidence are evaluated together, it can be said that the SSTCDS is a valid and reliable measurements tool that can be used in subsequent studies.

How Are the Fields Regarding the Proficiency Level and Opinions of the Teachers, In Which SSTS Need Professional Development, Classified?

According to the scale results obtained by the research, it is seen that teachers' competency levels are generally high in eight areas (knowledge on the field and education, knowledge on the education law, planning and generating the teaching process, management of the teaching process, usage of method-technique and equipment, engaging learners, communication and collaboration, national and moral values). Zayimoğlu Öztürk (2011), who reached results that support these findings, determined that SSTs have

high self-assessment throughout the self-assessment scale which has been applied. On the other hand, in-class observations that have been conducted revealed that teachers have a medium-level competence in planning and generating the teaching process, knowledge on the field and education, and usage of method-technique and equipment. Additionally, although it is seen that the teachers generally have a medium level of competency in these fields, it has been determined that they are at a lower level of competence in certain performance indicators of these fields. For instance, taking into account students with special needs, preparing activities for analytical thinking, and preparing teaching materials suitable for learning outcomes, appear as the areas where the competency is low. Regarding Turkey (16.0%) and the OECD average (22.2%), TALLIS (2018), which particularly supports evidence that emerged particularly concerning the education of students with special needs, reveals that special needs students training is one of the areas in which the teachers need professional development the most (TEDMEM, 2019). Unlike the research results, Koç (2019) concluded in a study which is conducted with mathematics teachers that they considered themselves as "competent" concerning "the students with special needs". This notable difference can be stemming from the region or the field that the scale is applied. In this respect, considering the results of different studies, in order to determine professional development needs correctly, it can be said that making needs analyses at the local scale and extended over time and making professional development training plans according to these needs will significantly contribute to the professional development of teachers. Findings obtained from the interviews conducted with teachers also support this situation. Teachers have expressed the subjects in which they need professional development to be compatible with the competency areas, which the observation findings also reveal. For instance, the program and philosophy of SS, preparing activities, teaching history and geography in SS, and preparing and using teaching materials specific to the field are placed forward by teachers as areas of need. While the areas of need that emerged bear similarities with previous studies (Avcı, 2013; Bulut, 2011), understanding the program and philosophy of SS have become an area of need that did not become prominent in other studies. Additionally, teachers have stated that they found themselves incompetent in 'measurement and evaluation', which did not appear as an area of need in this study (Cüce, 2019). In the light of these findings, it can be said that teachers need professional development activities in the following fields: planning and generating the teaching process, knowledge on the field and education, and the usage of method-technique and equipment. Studies under different disciplines have also been conducted in order to determine competencies. For instance, an analysis of the questionnaire for the general professional competencies for classroom teachers is conducted by Özdemir (2020) which concluded that teachers are competent in the sub-dimensions such as knowledge on the field, knowledge on the education and knowledge on educational law, as well as, planning the education, creating learning environments, management of learning and teaching processes. Similar results are reached in another study conducted with mathematics teachers, which revealed that the teachers considered themselves "competent" regarding the whole scale (Koç, 2019). Although these findings coincide with the findings obtained from the SSTCDS, it is seen that they similarly differ regarding the observation data. In this context, although SSTCDS makes a significant contribution by filling a gap in the field, it is meaningful, in the name of determining the needed areas, that they are supported by qualitative findings such as observation and interview in order to minimize the problems that are caused by the limitations of the scales. In this context, it is considered necessary that the professional development training in Turkey should be planned based on multidimensional needs analysis studies. As a result, it is considered important that professional development trainings should reach the OECD average (76.0%), predominantly, regarding the field and teachers' knowledge and understanding on the field.

According to the research findings, areas such as 'knowledge on educational law, communication and collaboration, and national, moral and universal values' appear as the areas in which SSTs have the highest competency. It is seen that these areas also appear like the ones in which teachers' professional competencies are high in studies involving similar subject matters (Özdemir, 2020; Zayimoğlu Öztürk, 2011).

Özdemir (2020) concluded that classroom teachers considered themselves "competent" in personal and professional development sub-dimensions such as national, moral and universal values, engaging learners, communication and collaboration. On the other hand, Cüce (2019), in the study conducted with SS teachers and candidates, determined that both teachers and candidate teachers considered themselves as less sufficient in the field of 'collaboration with school, family and society'. This situation can be interpreted as, although SSTs are generally competent in the field of communication and collaboration, they need professional development in certain performance indicators. When evaluated together, the need-oriented planning of professional development activities is considered very important for the willingness of teachers to participate in the activities, to benefit from the activity (Boydak-Özan, Şener, & Polat, 2014; TALIS, 2018) and to carry their achievements to the implementation dimension (Duffield, Wegeman & Hogde, 2013). In this respect, it can be said that the competency determination scale and observation form which emerges within the scope of the study will contribute to the field.

Is There a Statistically Significant Distinction Between Teachers' Competence Levels and Their Genders, Seniority, Type of School, Field of Study and Education Level?

According to the findings obtained from the competency scale, no statistically significant difference is found between teacher competencies and gender, seniority, school type and education level. Furthermore, no statistically significant difference is found between competency levels and gender, seniority, school type and education level also in studies of different disciplines on similar subjects (Çın, 2014; Koç, 2019; Özdemir, 2020). Based on these results, it can be said that gender, seniority and school type do not have a significant effect on professional competency levels. On the contrary, according to the research results, the difference between competency level and the field variable is considered as statistically significant. The direction of the difference is designated as SS-other, history-other and geography-other. These findings correlate significantly with the researches which conclude that field is effective on the self-efficacy level (Kahraman Özkurt, 2019; Zayimoğlu Öztürk, 2011). Kahraman Öztürk (2019) concludes that teachers who are not English language teaching program graduates and work in secondary schools need professional development training more than others. Based on these results, it can be said that the field of graduation has a significant effect on competency levels. When evaluated together, it is an expected result that a teacher who happens to be a Social Studies teaching graduate is more qualified than a teacher who has

graduated from a field other than history and geography. However, it is notable that the competency levels of history and geography graduates are higher than the graduates of these 'other' fields. This situation may be originating from the fact that the content of the SS course is composed heavily of history and geography, even though it is created with a multi-disciplinary approach (history, geography, citizenship, psychology, economy, law, philosophy, etc.). In this respect, it is important that the teachers who will teach an SS course should be selected primarily among the SS teaching graduates, and in case of need, from the graduates of history and geography, for the course to achieve its objectives.

Conclusion

Based both on the data collected from scale, and observation and interview; planning and generating the teaching process and engaging learners appear as areas where professional development is needed. On the contrary, although knowledge on the field and education, management of the teaching process, and usage of method, technique and equipment do not appear as areas of need based on the findings of the scale; observations and interviews show that the competency levels of teachers in these areas are low.

It can be said that the teachers are at a sufficient level regarding the analysis of the topics and concepts specific to the field. This competency is important as it will help students make sense of the lessons learned and create permanent learning. On the contrary, it can be said that associating the development and learning characteristics of the students with the teaching processes and managing the curriculum are competencies that should be improved. When evaluated together, even though the teachers mentioned specific needs for general competencies, it is seen that the main need is concentrated on the field-specific competencies.
While managing the teaching process, it is important to take into account the individual differences of the students to enable them to reach their goals. It is a significant result that teachers did not include special students enough in their curriculum.

To value the student as a person and an individual is important as it not only contributes to the communication between the teacher and the student but also increases the student's interest in the lesson. However, it is striking that the item "I respect individual and cultural differences," which corresponds to this one has the lowest average. Regarding this, for some teachers, respect for differences appears as an area open to improvement.

Suggestions

Depending on the results obtained from the study, various suggestions are made for researchers, and designers and practitioners of professional development programs. These suggestions are presented in detail under separate headings in the following section.

Suggestions for Designers and Practitioners of Professional Development Programs

1. According to the findings of this study, it is seen that the competency levels of SST are generally high. However, in-class observations revealed that the competency levels of teachers are at a lower level than the scale results concerning the fields: knowledge on the field and education, management of the teaching process, usage of method-technique and equipment. In this respect, regarding the studies which are aimed at determining professional development needs, it is suggested to support quantitative findings with qualitative findings in order to determine the areas of need accurately.

2. According to the findings obtained from the competency scale, the difference between teacher competency level and the field variable is considered to be statistically significant. The direction of the difference is designated as SS-other, history-other and geography-other. Based on these findings, teachers who graduated from 'other' fields can be subjected to a separate study in which the relationship between their graduation fields and competency levels can be investigated in a multifaceted way.

3. The findings obtained within the scope of the research assert that the field-specific needs analyses have not been conducted sufficiently, and therefore the professional development trainings planned for the field are far from the ability to meet the needs. In this respect, while planning professional development trainings, it is suggested that field-specific needs should be determined by using different data collection techniques.

Suggestions for Researchers

4. Although it is believed that the scale which is developed within the scope of the research will fill an important gap in the field, it is suggested that an academic study on this issue should be conducted since creating sub-scales by detailing the factors that emerged in the scale will contribute to presenting teacher competencies more comprehensively.

5. When the scale, observation and interview data developed within the scope of the study are evaluated together, it is seen that the main need is concentrated on the field-specific competencies even though the teachers mentioned general competencies-specific needs. In this respect, it may be useful to examine the reasons for teachers' avoidance of expressing professional development needs that are specific to their fields under another study.

6. It will be beneficial to conduct a study that includes professional development training, which is based on practice and spread over the process, in order to increase teacher competencies in areas where professional development is needed.

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Appendicies

Appendix-1. Social Studies Teacher Competencies Determination Scale

PART-I PERSONAL INFORMATION					
1. Gender ( ) Female ( ) Male					
3. Type of school graduated from? ( ) Institute of Education ( ) Faculty of Education ( )Faculty of Arts and Sciences					
PART-II After reading each of the statements below, mark your competency level: 1 for the lowest and 5 for the highest.	1	2	3	4	5
1. I take into account individual differences and socio-cultural characteristics of students while planning the teaching process.					
2. I create healthy, safe and aesthetic learning environments.					
9. I re-organize the learning process by making a self-assessment based on the data obtained from measurement and evaluation.					
10. I conduct measurement and evaluation fair and objectively.					
11. I respect child rights and human rights.					
12. I respect individual and cultural differences.					
13. I strive to contribute to the growth of students in becoming individuals who are respectful to national and moral values and open to universal values.					
19. I classify basic research methods and techniques related to social studies.					
20. I explain all the components of the social studies curriculum.					
29. I place importance to sharing knowledge and experience with my colleagues.					
30. I actively participate in activities for school development.					
31. I make self-assessment by benefitting from the opinions and suggestions of the stakeholders.					
32. I collaborate with families in educational activities.					
38. I use information and communication technologies effectively in the teaching process.					
40. I use appropriate tools, equipment and materials effectively in the teaching process.					
41. I use time effectively in the learning process.					
42. I ensure the active participation of students in learning processes.					
50. I plan my lessons by looking out for the values of the SS curriculum.					

Appendix-2
Social Studies Teacher Competencies Observation Form

Competencies		Performance Indicators	1	2	3
Planning and Generating the Teaching Process	1	Taking into account individual differences and socio-cultural characteristics of students while planning the teaching process			
	2	Creating healthy, safe and aesthetic learning environments			
Engaging Learners	10	Conducting fair and objective measurement and evaluation			
	12	Showing respect to individual and cultural differences			
Knowledge on the Field and Education	16	Analyzing topics and concepts related to SS			
	18	Classifying the basic information and data sources about Social Studies			
Communication and Collaboration	26	Working for the protection of natural environment and historical and cultural heritage			
Management of the Teaching Process	33	Using time effectively during the learning process			
	34	Ensuring the active participation of students in learning processes			
Usage of Method, Technique and Equipment	37	Benefiting from the experience of my colleagues concerning the usage of method, technique and equipment			
		Usage of appropriate tools, equipment and materials effectively in the teaching and learning process			

Appendix-3
Social Studies Teacher Competencies Rubric

Line	INDICATORS	1	2	3
		Open to Improvement	Acceptable	Good
1	Taking into account individual differences and socio-cultural characteristics of students while planning the teaching process.	It is considered that the teacher prepares the teaching plan according to average conditions without taking into account the individual differences and socio-cultural characteristics of the students.	While preparing the teaching plan, the teacher takes into account different pre-school experiences, needs and socio-cultural characteristics of the students.	While preparing the teaching plan, the teacher takes into account different pre-school experiences, needs and socio-cultural characteristics of the students. When determining the methods, the teacher takes into account individual differences and makes individual learning plans if necessary. The teacher diversifies measurement and evaluation approaches by taking individual differences into consideration. By taking into account the different needs of students, the teacher uses technologies which support student-centered strategies.
3	Preparing teaching materials suitable for the outcomes.	The teaching material prepared by the teacher does not comply with the outcomes.	Pays attention to the compliance of the material prepared with the content to be learned. Takes into account the characteristics of students in selecting and developing appropriate materials to facilitate learning.	The teacher can plan the materials to be used which is consistent with the aims and outcomes of the curriculum, with a student-centered approach. The teacher also takes into account characteristics of students and their views while preparing materials during the teaching-learning process.

Appendix-4
Factor Pattern and Loading Values Which Emerge After Excluded Items

Item	Planning and Generating the Teaching Process	Engaging Learners	Knowledge on the Field and Education	Communication and Collaboration	Knowledge on Education Law	Usage of Method Technique and Equipment	Management of the Teaching Process	National, Moral and Universal Values	Common Factor Variance
i26	,695								0,53
i24	,670								0,49
i23	,662								0,46
i21	,560								0,38
i22	,535								0,38
i32	,485								0,41
i34	,458								0,36
i19	,432								0,34
i44	,357								0,32
i46		,824							0,7
i47		,796							0,66
i55		,697							0,54
i45		,688							0,54
i49		,621							0,54
i42		,592							0,46
i3			,797						0,65
i2			,770						0,67
i4			,761						0,70
i1			,622						0,46
i6			,603						0,42
i10			,592						0,41
i7			,564						0,47
i8			,496						0,34
i9			,429						0,29
i40			,360						0,34
i57				,762					0,61
i51				,671					0,48
i58				,666					0,48
i48				,634					0,47
i50				,572					0,37
i56				,543					0,47
i60				,480					0,35
i13					,771				0,68
i15					,704				0,57
i16					,672				0,54
i65					,445				0,52
i36						,847			0,75
i38						,558			0,43
i37						,525			0,43
i35						,505			0,41
i31							,641		0,45
i30							,623		0,47
i33							,474		0,36
i29							,321		0,26
i11								,662	0,52
i12								,610	0,44
i20								,580	0,42
i14								,545	0,47
i5								,451	0,39
i17								,346	0,24

Appendix-5
Descriptive Statistical Analysis Results of the Social Studies Teacher Competency Scale

Item	Never/None		Rarely		Partly		Usually		Always			
	f	%	F	%	f	%	f	%	f	%	M	Ss
1	0	0.0	2	0.4	34	7.1	203	42.3	241	50.2	4.42	.641
2	0	0.0	2	0.4	56	11.7	213	44.4	209	43.5	4.31	.688
3	0	0.0	4	0.8	70	14.6	217	45.2	189	39.4	4.23	.721
4	0	0.0	8	1.7	79	16.5	205	42.7	188	39.2	4.19	.765
5	1	0.2	13	2.7	117	24.4	238	49.6	111	23.1	3.92	.773
6	1	0.2	6	1.3	70	14.6	219	45.6	184	38.3	4.20	.746
7	0	0.0	1	0.2	42	8.8	211	44.0	226	47.1	4.37	.650
8	0	0.0	3	0.6	61	12.7	230	47.9	186	38.8	4.24	.692
9	1	0.2	10	2.1	64	13.3	223	46.5	182	37.9	4.19	.759
10	0	0.0	4	0.8	55	11.5	210	43.8	211	44.0	4.30	.702
11	2	0.4	16	3.3	117	24.4	217	45.2	128	26.7	3.94	.824
12	2	0.4	13	2.7	131	27.3	221	46.0	113	23.5	3.89	.802
13	0	0.0	4	0.8	62	12.9	165	34.4	249	51.9	4.37	.737
14	1	0.2	0	0.0	21	4.4	120	25.0	338	70.4	4.65	.582
15	0	0.0	2	0.4	38	7.9	191	39.8	249	51.9	4.43	.655
16	0	0.0	3	0.6	57	11.9	218	45.4	202	42.1	4.28	.694
17	2	0.4	8	1.7	65	13.5	234	48.8	171	35.6	4.17	.752
18	0	0.0	5	1.0	66	13.8	222	46.3	187	39.0	4.23	.718
19	1	0.2	3	0.6	61	12.7	213	44.4	202	42.1	4.27	.719
20	0	0.0	4	0.8	76	15.8	239	49.8	161	33.5	4.16	.708
21	1	0.2	6	1.3	79	16.5	182	37.9	212	44.2	4.24	.784
22	0	0.0	10	2.1	80	16.7	233	48.5	157	32.7	4.11	.751
23	0	0.0	3	0.6	54	11.3	202	42.1	221	46.0	4.33	.697
24	0	0.0	5	1.0	38	7.9	176	36.7	261	54.4	4.44	.684
25	0	0.0	1	0.2	28	5.8	186	38.8	265	55.2	4.48	.616
26	0	0.0	0	0.0	13	2.7	130	27.1	337	70.2	4.67	.523
27	0	0.0	2	0.4	19	4.0	137	28.5	322	67.1	4.62	.582
28	0	0.0	0	0.0	6	1.3	68	14.2	406	84.6	4.83	.405
29	0	0.0	0	0.0	29	6.0	181	37.7	270	56.3	4.50	.609
30	0	0.0	0	0.0	6	1.3	60	12.5	414	86.3	4.85	.390
31	1	0.2	14	2.9	67	14.0	196	40.8	202	42.1	4.21	.806
32	0	0.0	0	0.0	10	2.1	60	12.5	410	85.4	4.83	.425
33	2	0.4	2	0.4	40	8.3	181	37.7	255	53.1	4.42	.698
34	0	0.0	0	0.0	8	1.7	51	10.6	421	87.7	4.86	.392
35	0	0.0	2	0.4	39	8.1	224	46.7	215	44.8	4.35	.646
36	0	0.0	0	0.0	5	1.0	96	20.0	379	79.0	4.77	.439
37	0	0.0	2	0.4	40	8.3	212	44.2	226	47.1	4.37	.654
38	0	0.0	2	0.4	54	11.3	126	26.3	298	62.1	4.50	.707
39	2	0.4	10	2.1	55	11.5	129	26.9	284	59.2	4.42	.805
40	0	0.0	3	0.6	41	8.5	181	37.7	255	53.1	4.43	.674
41	0	0.0	0	0.0	26	5.4	139	29.0	315	65.6	4.60	.590
42	1	0.2	7	1.5	73	15.2	187	39.0	212	44.2	4.25	.779
43	0	0.0	4	0.8	50	10.4	187	39.0	239	49.8	4.37	.703
44	0	0.0	3	0.6	27	5.6	154	32.1	296	61.7	4.54	.631
45	1	0.2	3	0.6	22	4.6	111	23.1	343	71.5	4.65	.618
46	0	0.0	1	0.2	21	4.4	97	20.2	361	75.2	4.70	.555
47	0	0.0	5	1.0	26	5.4	106	22.1	343	71.5	4.63	.634
48	0	0.0	3	0.6	11	2.3	108	22.5	358	74.6	4.71	.538
49	0	0.0	2	0.4	16	3.3	129	26.9	333	69.4	4.65	.564
50	0	0.0	0	0.0	22	4.6	155	32.3	303	63.1	4.58	.578