

## 21. Eđitimde ölçme ve deęerlendirmede sınıf öđretmenlerinin öz yeterlik algıları

Samet ATA<sup>1</sup>

**APA:** Ata, S. (2023). Eđitimde ölçme ve deęerlendirmede sınıf öđretmenlerinin öz yeterlik algıları. *RumeliDE Dil ve Edebiyat Arařtırmaları Dergisi*, (36), 389-403. DOI: 10.29000/rumelide.1369514.

### Öz

Bu arařtırmanın amacı, sınıf öđretmenlerinin ölçme ve deęerlendirmeye iliřkin öz yeterlik algılarının bazı deęiřkenleri açısından incelenmesidir. Arařtırmada karma yöntem türlerinden açıklayıcı desen kullanılmıřtır. Arařtırmanın nicel kısmı, betimsel tarama modeliyle ve devlet okullarında görev yapan 467 sınıf öđretmeninin katılımıyla gerçekleştirilmiřtir. Ölçme aracı olarak, demografik bilgi formu ve “Ölçme ve Deęerlendirmeye Yönelik Öz Yeterlik İnanç Ölçeđi” uygulanmıřtır. Nicel verilerin analizinde Nicel bulgulara göre, sınıf öđretmenlerinin ölçme ve deęerlendirme süreçlerine yönelik öz yeterlik algılarının cinsiyet, kıdem, mezun olunan bölüm, öğrencileri dođru ölçtüklerine dair düşünceleri ve hizmet ii eğitim alma deęiřkenleri açısından farklılařtıđı tespit edilmiřtir. Arařtırmanın nitel kısmı durum alıřması deseninde yürütölmüř olup 18 sınıf öđretmeni ile yarı yapılandırılmıř görüřme gerçekleştirilmiřtir. Görüřmeler sonucunda sınıf öđretmenlerinin çođunun lisans eğitimlerini yeterli bulmadıkları, soyut konular ieren dersleri ölçme ve deęerlendirmede zorlandıkları, ölçme ve deęerlendirmeye yönelik hizmet ii eğitimlerin verilmesi gerektiđini düşündükleri tespit edilmiřtir.

**Anahtar kelimeler:** ölçme ve deęerlendirme, öz yeterlik, karma yöntem, ilkokul çocukları, çocuk geliřimi

## Classroom teachers' perceptions of self-efficacy in measurement and evaluation in education

### Abstract

The purpose of this study is to examine the self-efficacy perceptions of classroom teachers regarding measurement and evaluation in terms of some variables. In the research, explanatory design, one of the mixed method types, was used. The quantitative part of the research was carried out with the descriptive survey model and with the participation of 467 classroom teachers working in public schools. Demographic information form and “Self-Efficacy Belief Scale for Measurement and Evaluation” were applied as measurement tools. According to the quantitative findings, it has been determined that the self-efficacy perceptions of the classroom teachers towards the assessment and evaluation processes differ in terms of gender, seniority, department graduated, their thoughts about measuring students correctly, and in-service training variables. The qualitative part of the research was carried out in the case study pattern and semi-structured interviews were conducted with 18 classroom teachers. As a result of the interviews, it was determined that most of the classroom teachers did not find their undergraduate education sufficient, they had difficulty in measuring and evaluating the lessons containing abstract.

<sup>1</sup> Dr. Öđr. Üyesi, Ađrı İbrahim een Üniversitesi, Eğitim Fakóltesi, Temel Eğitim Bölümü, Okul Öncesi Eğitimi ABD (Ađrı, Türkiye), atasamett@gmail.com, ORCID ID: 0000-0002-9212-1285 [Arařtırma makalesi, Makale kayıt tarihi: 14.08.2023-kabul tarihi: 20.10.2023; DOI: 10.29000/rumelide.1369514]

**Keywords:** measurement and evaluation, self-efficacy, mixed method, elementary school children, child development

## 1. Introduction

Classroom teachers' self-efficacy perceptions directly influence the efficiency in their professional lives and the knowledge, skills and behavior models they will pass on to future generations. Classroom teachers who possess positive self-efficacy perceptions of themselves in different dimensions of the teaching profession are more active in their professional lives, more open to development and improvement, and more sensitive in family-student-teacher interaction. A teacher's belief in self-efficacy is a key concept that also plays a role in students' success (Rackley, 2004; Achu & Ehizuelen, 2015). It is also seen in a conceptual model that teachers' self-efficacy beliefs have an effect on their job satisfaction and students' academic achievement and predict students' previous success levels (Caprara et al., 2006).

The effect of teachers' self-efficacy perceptions on their professions was examined by practitioners and researchers in terms of different variables. Considering international studies, it is seen that teachers' self-efficacy perceptions are shaped according to such factors as classroom management, adaptation to school culture, and supervisory control. In a study conducted in Greece, the Educational Effectiveness Scale was applied to teachers and the evaluation of three effectiveness factors was examined under the headings (a) the effectiveness of teaching strategies, (b) efficacy for classroom management, and (c) the effectiveness of student participation. According to the results, there is a significant relationship between these three factors and it is concluded that the most important element in the education process is teaching strategies (Gkintoni et al., 2018). The results of a study aiming to determine the effects of principal supervision, school organizational culture and teacher self-efficacy on teacher performance in Indonesia point out that teacher self-efficacy has a significant effect on teacher performance, and professional performance enhances with increasing teacher self-efficacy (Komariyah et al., 2021).

When the studies conducted in Turkey are examined, there are numerous studies on teachers and prospective teachers' self-efficacy perceptions (Şahin & Uysal, 2013; Özaydın et al., 2017; Şata & Karakaya, 2020; Aydın & Kurt, 2022). It is seen that the subject of self-efficacy in teachers has intensified in the context of assessment and evaluation since their undergraduate education. One of them is the scale developed by Nartgün (2007), which is used to determine prospective teachers' self-efficacy perceptions of assessment and evaluation. This scale includes three such dimensions as basic concepts, assessment techniques, and statistical analysis-reporting. Sabancı and Yazıcı (2017) conducted a mixed-pattern study using this assessment tool and qualitative data. In the study, they examined prospective teachers' perceptions of assessment-evaluation competence in the context of gender, age, academic achievement, graduated university, and whether the assessment-evaluation education received in undergraduate was considered sufficient. As a result of the research, a significant relationship was found between the levels of prospective teachers' finding assessment-evaluation education sufficient and their self-efficacy perceptions of assessment-evaluation. In this context, it is possible to say that different teaching models can be beneficial to improve prospective teachers' self-efficacy in assessment and evaluation. As a matter of fact, it was determined that there was a significant difference in the self-efficacy beliefs of prospective teachers who were intervened with the 5E model based on life-based teaching compared to their previous situations (Dede, 2019).

In line with current studies, it is thought that self-efficacy perceptions of assessment and evaluation are important in the teaching profession since undergraduate education. The constructivist theory-based

education curriculum, which was put into practice in 2005, brought along the originalization of assessment-evaluation techniques and tools. As in the changing education system, this innovative approach in the field of assessment and evaluation has created an opportunity for teachers to evaluate themselves in the context of self-efficacy. In a study investigating teachers' self-efficacy perceptions of assessment and evaluation within the new program, it was determined that teachers thought they were sufficient in determining student achievement by using traditional assessment tools (Gelbal & Keleciođlu, 2007). In the same study, it is stated that teachers may need training on the use and preparation of new techniques in this field in order to create a new perception of self-efficacy in teachers with the use of current assessment and evaluation tools. In a study examining primary school teachers' self-efficacy perceptions of alternative methods of assessment and evaluation tools, it was concluded that some of the assessment-evaluation tools suitable for the constructivist approach were used effectively. On the other hand, it was discovered that the use of many effective tools was not known, and in this sense, it was emphasized that classroom teachers should receive training on the use of new assessment and evaluation tools in order to develop their self-efficacy perceptions of assessment and evaluation (Karamustafaođlu et al., 2012). Similarly, according to the research conducted by Bař and Beyhan (2016), the determination of teachers' self-efficacy perceptions of assessment-evaluation at a low level in both knowledge and skills reveals the importance of educational measures to improve teachers' self-efficacy perceptions in the context of assessment-evaluation.

The fact that the teacher's self-efficacy perceptions of himself are not sufficiently developed in the academic assessment of the child may increase the possibility of misevaluation of the child. Because teachers have the opportunity to evaluate children of similar age groups in the school environment, both socially and academically (Kaner, 2009). Children's needs and interests should be determined in accordance with their developmental level, and the objectives and other dimensions of the programs should be planned accordingly. The planned and programmed preparation of the applied education should ensure that the activities are balanced in terms of duration, sequence and variety. While this situation is ensured, whether the applied curriculum, activities and programs serve the determined purposes and whether they are permanent or not can be possible with the relevant assessment and evaluation tools (Genç, 1987; Oktay, 1999; Dikmen, 2015). When evaluated in this direction, it becomes important to examine teachers' self-efficacy in assessment and evaluation in terms of children's development.

Within the scope of the literature review, it is an educational necessity to determine teachers' self-efficacy for assessment-evaluation for all branches and to provide the necessary data for taking the relevant precautions. Considering that standard measurement tools are not used in the first three years of primary school and the quality of assessment-evaluation is based on the knowledge, skills and observation of the teacher, it is important to investigate the effects of classroom teachers' self-efficacy on assessment-evaluation. In addition, it is seen that there are not enough studies within the framework of classroom teachers' self-efficacy perceptions of assessment and evaluation in child development context. It is thought that the findings obtained in the current study, in which classroom teachers' self-efficacy perceptions of assessment and evaluation are examined based on different variables, are important in terms of presenting data to practitioners and decision makers.

## 2. Method/Materials

### 2.1. Research Design

In the study, explanatory design, one of the mixed methods, was used to comprehend teachers' self-efficacy in more detail. Because, although it is thought that it is not always possible to obtain in-depth data in scientific studies conducted with large groups, it is also known that it may be better to obtain in-depth data from small groups (Büyüköztürk et al., 2012). The explanatory design is defined by Creswell and Clark (2014) as the process of collecting qualitative data by revealing the important points after obtaining the quantitative data.

While planning the quantitative part of the study, the descriptive survey model was used. Screening models are studies that are conducted as a result of collecting data from the sample group determined on the current or past variables for the predetermined situation without any influence of the researcher. Screening models are divided into different types according to the type of study (Büyüköztürk, 2013). The descriptive survey model is a survey model that aims to describe a previous or current situation by examining it from different aspects (Karasar, 1999). The qualitative part of the study was planned in the case study pattern. Merriam (2013) defines the case study as an in-depth examination of how a limited system works. In this context, it has been tried to discover how teachers' self-efficacy in assessment and evaluation works.

### 2.2. Sample

The universe of the research is the classroom teachers working actively in the 2021-2022 academic year. The sample of the quantitative part of the research consists of 467 classroom teachers working in public schools affiliated to the Ministry of National Education. The study group of the qualitative part consists of 18 classroom teachers. In the selection of the sample and study group of the research, non-probability convenient sampling (easily accessible sampling) method was used. In this sampling method, in case of existing limitations such as money, time and labor, the sample is selected from units that can be applied and easily accessible (Büyüköztürk, 2012).

Demographic data about the teachers participating in the study are given in Table 1.

**Table 1.** Teacher's demographic information

Sample	Variable	Participant	F	%	
Quantitative Research Sample	Gender	Female	292	62.5	
		Male	175	37.5	
	Seniority	1-5 year	45	9.6	
		6-10 year	53	11.3	
		11-15 year	98	21.0	
		16-20 year	119	25.5	
		21-25 year	90	19.3	
	Graduated Faculty	Education faculty	26 years and over	62	13.3
			Other	64	13.7

		Thinking they measure their students correctly	Yes	413	88.4
			No	54	11.6
		Total		467	100.0
Qualitative Research Group	Participant	Gender	Professional seniority (Year)	Enjoying teaching	
	P1	Female	10	Yes	
	P2	Female	24	Yes	
	P3	Male	16	Yes	
	P4	Female	8	Yes	
	P5	Male	8	Yes	
	P6	Female	6	Yes	
	P7	Male	17	Yes	
	P8	Male	12	Yes	
	P9	Female	6	Yes	
	P10	Female	17	Yes	
	P11	Male	16	Yes	
	P12	Female	11	Yes	
	P13	Male	11	Yes	
	P14	Male	10	Yes	
	P15	Female	16	No	
	P16	Male	19	Yes	
	P17	Female	11	Yes	
P18	Female	18	Yes		

While 25.5% of the teachers whose data were collected for the quantitative part of the study had a seniority between 16-20 years, the average of the professional seniority of those who participated in the qualitative part was determined as 13.1. 62.5% of the participants in the quantitative part of the study and 55.6% of those who participated in the qualitative part of the study were females. It is seen that only one participant in the qualitative part does not like her profession. In addition, the average age of the teachers participating in the quantitative study was 40.04.

### 2.3. Data Collection Tools

In order to obtain the participants' demographic information, the "Demographic Information Form" consisting of 6 questions prepared by the researcher was used.

Quantitative data in the study were collected using the "Self-Efficacy Belief Scale for Assessment and Evaluation" developed by Özdemir (2008). The scale consists of three sub-dimensions. The Cronbach Alpha internal consistency coefficient ratios reached in line with the development of the measurement tool are as follows; It was found to be .67 for the "Planning" factor; .84 for the "Application" factor; .76 for the "Evaluation" factor and .88 for the whole scale. The intervals in answering the items in the scale

were designed in a five-point Likert type. These intervals are expressed as “1-I totally disagree” and “5-I totally agree”.

As a qualitative measurement tool, semi-structured interview questions were developed to gain in-depth information about classroom teachers' self-efficacy in assessment and evaluation. In line with the opinions of experts in the field of Child Development, Classroom Education and Assessment and Evaluation, a semi-structured interview form with 9 questions was used.

## 2.4. Data analysis

Before applying the quantitative analyses of the study, whether the dimensions of the scale meet the assumptions of normality and homogeneity and its descriptive statistics are examined in Table 2.

**Table 2.** Descriptive statistics of prospective teachers' self-efficacy beliefs about the teaching process scale

Dimension	N	$\bar{X}$	Median	Mode	S.d.	Skew.	Kurto.	Min	Max
Planning	467	33.30	33	40	4.88	-.86	2.31	8	40
Application	467	81.87	83	95	10.35	-1.29	4.88	19	95
Evaluation	467	54.96	54	52	7.38	-.67	1.53	13	65

According to the Kolmogorov-Smirnov test performed in this direction, it was observed that the data did not show normal distribution ( $p < 0.05$ ). In addition, as a result of the analysis of the Q-Q Plot and Histogram graphs of the dimensions, and the Skewness-Kurtosis coefficients, it was supported that the data were not normally distributed. Therefore, non-parametric tests were used. Spearman correlation analysis was used to determine the relationship between age and scale dimensions. Cohen (1988) states that there is a small relationship for  $r = .10$  and  $.29$ , moderate for  $r = .30$  and  $.49$ , and a large relationship for  $r = .50$  and  $1.00$ . In the qualitative part of the study, in-depth interview questions developed by the researchers were collected via telephone interviews with the participants. Approximately 10-15 minutes of interviews were held with each participant. The interviews were audio recorded and transcribed. The findings were divided into themes and sub-themes through the MAXQDA package program within the framework of the common views of the two researchers. After the researchers independently distributed the interviews into themes and sub-themes, they reached a common consensus and formed the final version.

## 3. Findings

### 3.1. Quantitative Findings

Table 3 presents the Mann Whitney U Test results of the teachers' scores on the Self-Efficacy Beliefs Related to the Teaching Process Scale according to their gender.

**Table 3.** Mann Whitney U Test result of the difference according to the teachers' gender

Dimensions	Gender	N	Rank mean	Rank total	U	z	p
Planning	Female	292	224.95	65685.50	22907.500	-1.878	.060
	Male	175	249.10	43592.50			
Application	Female	292	226.45	66123.50	23345.500	-1.563	.118
	Male	175	246.60	43154.50			
Evaluation	Female	292	224.17	65458.00	22680.000	-2.041	.041*
	Male	175	250.40	43820.00			

\*p&lt;0.05

According to the Mann Whitney U test result given in Table 3, no significant difference was found in the Planning and application dimensions according to the gender variable ( $p>0.05$ ). It was observed that there was a significant difference according to gender in the evaluation dimension ( $U=2680.000$ ,  $z=-2.041$ ,  $p<0.05$ ). It is seen that the difference is in favor of male teachers. Accordingly, male teachers' self-efficacy beliefs about the teaching process are significantly higher than female teachers in the evaluation dimension.

In Table 4, the Mann Whitney U Test results of the scores obtained by the teachers from the Self-Efficacy Beliefs Related to the Teaching Process Scale according to the faculty they graduated from are presented.

**Table 4.** The Mann Whitney U Test result of the difference according to the faculties of the teachers

Dimensions	Faculty	N	Rank mean	Rank total	U	z	p
Planning	Education faculty	403	230.38	92841.50	11435.500	-1.461	.144
	Other	64	256.82	16436.50			
Application	Education faculty	403	229.38	92440.50	11034.500	-1.858	.063
	Other	64	263.09	16837.50			
Evaluation	Education faculty	403	227.26	91585.50	10179.500	-2.719	.007*
	Other	64	276.45	17692.50			

\*p&lt;0.05

According to the results given in Table 4, no significant difference was found in the planning and application dimensions according to the faculty type variable ( $p>0.05$ ). It was observed that there was a significant difference in the evaluation dimension ( $U=10179.500$ ,  $z=-2.719$ ,  $p<0.05$ ) according to the type of faculty graduated. It is seen that the difference is in favor of the teachers who graduated from other faculties. Consequently, teachers graduating from other faculties have statistically significantly higher self-efficacy beliefs regarding the teaching process than teachers graduating from education faculties in the evaluation dimension.

In Table 5, the Mann Whitney U Test results of the scores obtained from the Self-Efficacy Beliefs in the Teaching Process Scale according to the teachers' thinking that they measure their students correctly are presented.

**Table 5.** The Mann Whitney U Test result of the difference according to teachers' correct measurement opinions

Dimensions	Measuring correctly	N	Rank mean	Rank total	U	z	p
Planning	Yes	413	245.81	101521.50	6271.500	-5.249	.000*
	No	54	143.64	7756.50			
Application	Yes	413	243.30	100484.50	7308.500	-4.125	.000*
	No	54	162.84	8793.50			
Evaluation	Yes	413	243.11	100404.50	7388.500	-4.050	.000*
	No	54	164.32	8873.50			

\*p&lt;0.05

According to the results of the Mann Whitney U test given in Table 5, it was seen that there was a significant difference in the dimensions of planning (U=6271.500, z=-5.249, p<0.05), application (U=7308.500, z=-4.125, p<0.05) and evaluation (U=7388.500, z=-4.050, p<0.05) in terms of thinking about measuring correctly. It is seen that the difference in all dimensions is in favor of the teachers who think that they measure correctly. As a result, there is a statistically significant difference between the teachers who think they measure their students correctly and those who do not think they measure their students correctly in the dimensions of planning, application and evaluation of self-efficacy beliefs about the teaching process.

In Table 6, the Spearman Correlation results of the relationship between the teachers' ages and the scores they obtained from the Self-Efficacy Beliefs in the Teaching Process Scale are presented.

**Table 6.** The relationship between teachers' ages and self-efficacy

Variable	Spearman's Rho	Planning	Application	Evaluation
Age	Rho (r)	.206**	.133**	.174**
	p	.000	.004	.000
	N	467	467	467

\*\*p&lt;.01 (2-tailed)

When the relationship between the teachers' ages and the scores they obtained from the planning, application and evaluation dimensions are examined, it can be said that there is a small statistically significant positive relationship between age and self-efficacy beliefs regarding the teaching process in terms of the dimensions of planning, application and evaluation (Table 6). Accordingly, it can be said that as the teachers' ages increase, their self-efficacy beliefs about the teaching process also enhance in the dimensions of planning, application and evaluation.

### 3.2. Quantitative Findings

As a result of the content analysis, teachers' self-efficacy for assessment and evaluation was examined. The opinions received from the teachers. When teachers' views on their self-efficacy were examined. Teachers' evaluations of the education they received while they were undergraduates, the difficulty of assessment, the benefits of assessment and evaluation, and their views on in-service training for assessment and evaluation are included. When the benefits they received in undergraduate education were examined, most of the teachers did not find the education they received in the undergraduate education sufficient. For this general view, P18 says, *"The lessons were not practical. I think that the lectures that are focused on theory are not efficient. I entered university in 1998. In those years, technology was not as advanced as it is today. The Internet was not very common; there were no tools such as WEB2.0 tools, and Google forms. In assessment and evaluation, basic concepts such as*

*multiple choices test preparation and open-ended preparation were taught theoretically. In the years when I started teaching, I tried to prepare enjoyable measurement tools using cartoon characters. My aim was to enable the child to develop a positive attitude towards assessment and evaluation and to learn while having fun.”* However, there are also opinions of teachers who think that the education they received is beneficial. P3 expresses the benefit of the education he received in the field of assessment and evaluation in his undergraduate education as follows: *“Obviously, although the courses I took at university seem to be of little use in theory when I think about it, I see the effects of what I received at that time when I evaluate in the process and during the synthesis of the data obtained as a result of assessment.”*

When the difficulty of measurement is examined, it is seen that teachers have difficulties in abstract lessons. P4 expresses her difficulties as follows: *“Due to the crowdedness of my class, I sometimes have difficulties in following each of my students on a process-based basis. If I don't take notes momentarily, it can escape my notice. In this sense, it is necessary to be planned. Since I am not a very organized person in general, sometimes I have a hard time. In addition, learning may not always be observed concretely. When I look at their performance in the classroom, some of my students do not answer because they are shy or do not want to answer, even though they know the answer. This may prevent me from evaluating them in the process.”* Similarly, P11 expresses *“I should state that the 'must be improved, good and very good' grades in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> grades put teachers in a very difficult situation. Having to give the same grade to students with very different qualifications in this system saddens me conscientiously. I think that the 5-point (applied in the 90s) evaluation is much more logical and useful.”* He points out that this difficulty stems from the education system.

When the subject is approached from a different angle, the points where teachers feel inadequate should also be evaluated. P13 states *“The fact that there is a lack of materials in village schools rather than insufficiency makes our work even more difficult. For example, Physical Education and Game lesson. We can also add Visual Arts course.”* He talks about the difficulty created by the lack of materials in the practical courses. P18 draws attention to the lack of infrastructure in such classes and expresses her views as follows: *“I feel inadequate in painting and music classes. Since we do not receive adequate training in these courses, we give very high grades. Apart from this, one of the courses that I am incapable of although I have a good command of the courses is Turkish. Because in Turkish lessons, attitudes such as participation in the lesson and taking the right to speak, other than concrete measurement tools, come into play. I think that I evaluate subjects such as mathematics more clearly because their boundaries are clear.”*

When the teachers' opinions about which methods are more useful in assessment and evaluation are examined, P2 expresses his thoughts as follows: *“Since I work with primary school students, I think it is best to evaluate each student within himself and not make comparisons. Because every child's starting level and ability are not the same. The important thing is to evaluate the child's initial level and the last level reached and this process. I think that several methods should be used rather than a single evaluation method. Oral, multiple-choice exams, gap filling and matching, open-ended written exams, performance and a little bit of project work, peer and self-assessment are the methods I use.”* P6 says, *“I usually use the method of observation and drama. I think these two methods are useful.”*

When the teachers' opinions on the need for in-service training on assessment and evaluation are examined, it is seen that they think that face-to-face training should be given. P5 points out *“Yes, it should be given. I want all our friends, experienced or inexperienced, to improve themselves. I think*

*that these trainings should also be face to face. I don't think distance education is efficient enough. This topic is very broad, so I could write so much here. But while these trainings are being prepared, I think that they should prepare a training taking into account the opinions and wishes of fellow teachers from different schools and from different segments.” P8 signifies, “Yes, I think so. These trainings should be taken face to face and there should be applications in the process, with feedback. Individual and collective assessment. A teacher should be able to prepare his own assessment and evaluation. Also, a teacher should be able to deliver what he/she has prepared according to the needs and situation of the classroom to his/her students. It should not be dependent on source books and educational sites.”*

#### 4. Discussion and Conclusion

This research aims to examine classroom teachers' self-efficacy perceptions of teaching processes in terms of different variables. According to the results, while there was no difference in the sub-dimensions of planning and application in terms of gender, there was a difference in favor of male teachers in the dimension of evaluation. When the literature is examined, it has been observed that teacher self-efficacy does not differ in terms of gender, mostly in parallel with the research findings (Taşkın & Hacıömeroğlu, 2010; Kaçar, 2016; Ayra & Kösterelioğlu, 2016; Güneş, 2016; Özkurt, 2017; Erkoç, 2017; Sağlam, 2018; Demirhan, 2019; Şahin, 2019; Duman, 2020; Elgit, 2020; Kaşçı, 2021). However, it is seen that there are studies showing the results of differences in terms of gender (Korkut & Babaoğlu, 2012; Yeşilyurt, 2013; Selçuk, 2016; Baloğlu, 2020). In addition to the studies in which female teachers' self-efficacy levels are higher than males (Başer et al., 2005; Baş & Beyhan, 2016), there are also studies in favor of male teachers, similar to the evaluation findings of the current study (Pektaş, 2010). It is seen that there are various studies in the literature in terms of both self-efficacy perceptions in general and evaluation sub-dimension and different findings are obtained. This difference is thought to be due to the fact that it was carried out in different years and in different sample groups.

When the teachers' self-efficacy perceptions in terms of the faculty they graduated from were compared in the study, there was no difference in terms of planning and application sub-dimensions, but a difference was found in favor of the graduates of other faculties in the evaluation sub-dimension. When the literature on the subject was examined, Yokuş et al. (2017) found that those who received formation education had higher self-efficacy perceptions than the students of the faculty of education. Similarly, Arastaman (2013) found that teachers who graduated from the faculty of science and literature had higher attitudes towards the profession than teachers who graduated from the faculty of education. On the other hand, in their studies with prospective teachers, Elkatmış et al. (2013) found that self-efficacy beliefs did not make any difference in terms of faculty types. Also, Üstüner et al. (2009) found that there was no difference in terms of the type of higher education institution graduated from in their studies with secondary school teachers. When the literature is examined only in terms of the evaluation dimension, it is seen that participants' attitudes towards the assessment-evaluation course differ for those who take formation at the student level and those studying at the faculty of education (Süral, 2014; Altun, 2017). Süral (2014) obtained findings in favor of education faculty students in the dimensions of importance and cognitive competence, and in favor of formation students in the dimension of negative approach. While Altun (2017) found a difference only in the level of importance, it is seen that this difference is in the education faculty students. Aktaş and Alici (2013), on the other hand, discovered that there was no significant difference, inconsistent with other research findings. In the light of all this information, while there was no finding in favor of pedagogical formation among the groups for the assessment-evaluation course during the student life, it is an issue that should be examined that the

graduates of different faculties at the teaching level have higher self-efficacy assessment sub-dimension perceptions than the graduates of the faculty of education.

It was examined whether the perceptions of the teachers participating in the study about whether they measured their students correctly or not differed, and it was found that there were differences. It was seen that these differences were in favor of the teachers who stated that they measured their students correctly. No similar study was found in the literature review. In this context, it is an expected result that the teachers who think that they measure correctly will create a significant difference in the assessment dimension. However, whether there is a significant difference in the dimensions of planning and implementation emerges as a subject that can be researched.

In the study, the relationship between teachers' ages and their self-efficacy levels was examined and a small and positive significant relationship was found in all sub-dimensions. When the literature regarding the finding is examined, it is seen that there are parallel findings with the current study as well as studies that do not have a relationship. In this context, Çimen (2007), Koç (2013), Uysal and Kösemen (2013), Ayra and Köstereliođlu (2016), Şahin (2019) and Kaşçı (2021) obtained different findings from the current research findings in their studies. On the other hand, Güneş (2016), Erkoç (2017) and Duman (2020) reached results in parallel with the current research findings in their studies. Although there are different findings in the literature, it can be stated that the relationship between age variable and self-efficacy is an expected result, considering that professional seniority, as another variable in the research, causes differentiation in the planning and evaluation dimensions of self-efficacy perception. At the same time, it can be expressed that professional seniority does not cause differentiation in the practice dimension of self-efficacy, but although the meaningful relationship level of age and practice dimension seems to be contradictory, the reason for the very low level of relationship may stem from this. It is also thought that different findings on the subject may be due to different samples in the studies and applications at different times.

When the quantitative and qualitative data of the study are evaluated together, it is seen that teachers' self-efficacy in assessment and evaluation is affected by various variables. It is concluded that teachers need various trainings on their self-efficacy for assessment and evaluation in education. It has been stated by the teachers that there are numerous deficiencies in the evaluation of children. As can be seen from the quantitative data, it has been found that male teachers have higher self-efficacy than female teachers, those with higher professional seniority have higher self-efficacy than those with less experience, and teachers who graduated from education faculties have lower self-efficacy than those who graduated from other faculties. Considering the importance of conscious assessment and evaluation in determining the educational situations that require early intervention at primary school level, teacher groups that need to be supported in assessment and evaluation can be determined according to the findings obtained in the current study.

### ***Child Development Perspective***

When the relevant findings in terms of child development are examined, measures should be taken to improve teachers' self-efficacy perceptions of assessment and evaluation so that the academic development of children can be accurately measured and necessary interventions can be made. Because developmental delays such as specific learning difficulties that the family does not realize can be noticed in the primary school period. Identifying situations that require such early intervention depends on a healthy assessment-evaluation process.

## 5. Recommendations

The following suggestions were developed within the framework of the limitations of the study, findings and literature:

- Self-efficacy differed significantly in favor of male teachers only in the evaluation sub-dimension in terms of gender variable. When the literature was examined, it was seen that many different findings were obtained. From this point of view, a qualitative dimension can be added to the reasons why this variable, which is frequently examined quantitatively, may or may not make a difference in future studies. The subject can be examined in depth via teacher interviews or observations.
- When the relationship between self-efficacy and age variable is examined, it is seen that many different studies have been conducted. However, it can be stated that the subject of assessment-evaluation self-efficacy has not been examined much. In future studies, the age variable as a demographic variable can be examined for assessment-evaluation self-efficacy.
- It has been noticed that the self-efficacy of teachers who think that they measure students correctly is high. At the same time, teachers who receive in-service training have high self-efficacy. In-service trainings to be organized within this scope should be disseminated and encouraged in order to increase teachers' self-efficacy.
- It is an unexpected result that teachers graduating from different faculties have higher self-efficacy levels compared to teachers graduating from education faculties and that similar results are obtained in the literature. In the literature, especially in terms of assessment-evaluation competence, while education faculty students have a higher perception of competence at the student level, it is suggested that the resources that reverse this situation in teaching should be discussed in future studies.

## Ethics Committee Approval Information

As of 2020, researchers applying are required to upload the Ethics Committee Approval Document. This study was performed in line with the principles of the Declaration of Helsinki. Ethics approval was obtained from the Ethics Committee Board of author's university in accordance with the Declaration of Helsinki with 03.03.2022 date and with E.35602 number.

## References

- Achu, D. O., & Ehizuelen, M. M. (2015). *How teacher self-efficiency can be a driver for student success*. In Third 21st CAF Conference at Harvard, in Boston, USA (Vol.6,No. 1).
- Aktaş, M., and Alıcı, D. (2013). Eğitimde ölçme değerlendirme dersine yönelik tutum ölçeğinin geliştirilmesi. *Journal of Qafqaz University*, 33, 66-73.
- Altun, A. (2017). Öğretmen adaylarının ölçme ve değerlendirme dersine yönelik tutum ve yeterlik algılarının incelenmesi. *Kafkas Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 20, 361-375.
- Arastaman, G. (2013). Eğitim ve fen edebiyat fakültesi öğrencilerin öz-yeterlik inançları ve öğretmenlik mesleğine karşı tutumlarının incelenmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 14 (2), 205-217.
- Aydın, R., & Kurt, S. (2022). Examination of Teachers' Perceptions of Self-Efficiency and Program Literacy. *Education Quarterly Reviews*, 5(1).

- Ayra, M., and Kösterelioğlu, İ. (2016). Öğretmenlerin mesleki öz-yeterlik inançlarının çeşitli değişkenler açısından incelenmesi. *Gümüşhane Üniversitesi Sosyal Bilimler Enstitüsü Elektronik Dergisi*, 7(17), 81-101.
- Baloğlu, C. (2020). *Sınıf öğretmenlerinin öz yeterlilik inançları ile örgütsel yaratıcılık düzeyleri arasındaki ilişki (Kütahya Merkez İlçesi örneği)*. Unpublished Master Thesis, Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü, Aydın.
- Baş, G., & Beyhan, Ö. (2016). Öğretmenlerin eğitimde ölçme ve değerlendirmeye yönelik öz yeterlik algılarının bazı değişkenler açısından incelenmesi. *Journal of Measurement and Evaluation in Education and Psychology*, 7(1), 18-32.
- Başer, N., Günhan, B.C. and Yavuz G. (2005). *İlköğretim öğretmen adaylarının ve öğretmenlerin öğretmen yeterlik algılarının karşılaştırılması üzerine bir araştırma*. XIV. Ulusal Eğitim Bilimleri Kongresi, Denizli.
- Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş., and Demirel, F. (2012). *Bilimsel araştırma yöntemleri*. Ankara: Pegem Akademi Yayınları.
- Büyüköztürk, Ş. (2013). *Sosyal bilimler için veri analizi el kitabı (18. Baskı)*. Ankara: Pegem Akademi Yayınları.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44(6), 473-490.
- Cohen, J. (1988). *Statistical power. Analysis for the behavioral sciences*, 273-406.
- Creswell, J. W., & Clark, V. L. P. (2014). *Karma yöntem araştırmaları: Tasarımı ve yürütülmesi*. Anı Yayıncılık, Ankara.
- Çimen, S. (2007). *İlköğretim öğretmenlerinin tükenmişlik yaşantıları ve yeterlik algıları*. (Unpublished Master Thesis), Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü, Kocaeli.
- Dede, H. (2019). An Investigation of the effects of 5E Model based on context-based instruction approach on the attitudes and perception of self-efficacy of pre-service teachers towards the assessment and evaluation course. *Kastamonu Eğitim Dergisi*, 27(6), 2547-2558.
- Duman, Ü. (2020). *Sınıf öğretmenlerinin öz yeterlik algıları ile sınıf içi ders işleme sürecindeki soru sorma teknikleri arasındaki ilişkinin incelenmesi*. Unpublished Master Thesis, Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Elgit, B. (2020). *Sınıf öğretmenlerinin öz yeterlik inançları ile sınıf içi davranışlarının incelenmesi*. Unpublished Master Thesis, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Adana.
- Elkatmış, M., Demirbaş, M., and Ertuğrul, N. (2013). Eğitim fakültesi öğrencileri ile formasyon eğitimi alan fen edebiyat fakültesi öğrencilerinin öğretmenlik mesleğine yönelik öz yeterlik inançları. *Pegem Eğitim ve Öğretim Dergisi*, 3(3), 41-50.
- Erkoç, K. (2017). *Sınıf öğretmenlerinin öz yeterlik algıları ile problem çözme becerileri arasındaki ilişkinin incelenmesi*. Unpublished Master Thesis, Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü, Erzurum.
- Demirhan, S. (2019). *Sınıf öğretmenlerinin öğretmen öz-yeterlik inançları ile değişime hazır olma durumları arasındaki ilişki*. Unpublished Master Thesis, Bolu Abant İzzet Baysal Üniversitesi, Eğitim Bilimleri Enstitüsü, Bolu.
- Dikmen, B. (2015). *Okulöncesi eğitim kurumlarında uygulanan serbest zaman etkinliklerinin öğretmen görüşlerine dayalı olarak değerlendirilmesi*. Unpublished PhD Thesis, Eğitim Bilimleri Enstitüsü, Anadolu Üniversitesi.
- Gelbal, S., & Kelecioğlu, H. (2007). Öğretmenlerin ölçme ve değerlendirme yöntemleri hakkındaki yeterlik algıları ve karşılaştıkları sorunlar. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 33(33), 135-145.

- Gkintoni, E., Georgiadi, M., Plexousakis, S., Halkiopoulos, C., & Katsanta, D. (2018). *Evaluation of the Self-Efficiency of Primary and Secondary Education Teachers via Machine Learning Methods*. In INTED2018 Proceedings (pp. 6901-6909). IATED.
- Güneş, A. M. (2016). *Sınıf öğretmenlerinin sınıf yönetim becerileri, teknoloji kullanımları ve öz yeterlik inançları arasındaki ilişki*. Unpublished PhD Thesis, Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.
- Kaçar, T. (2016). *İlköğretim öğretmenlerinin öz yeterlik inançları*. Unpublished Master Thesis, Dokuz Eylül Üniversitesi Eğitim Bilimleri Enstitüsü, İzmir.
- Kaner, S. (2009). Zihin engelli çocukların duygusal ve davranışsal problemlerinin değerlendirilmesinde ana-baba ve öğretmen tutarlılığı. *Ankara Üniversitesi Eğitim Bilimleri Dergisi*, 42 (2), 249-274.
- Karamustafaoglu, S., Çağlak, A., & Meşeci, B. (2012). Alternatif ölçme-değerlendirme araçlarına ilişkin sınıf öğretmenlerinin öz yeterlikleri. *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, 1(2), 167-179.
- Karasar, N. (1999). *Bilimsel araştırma yöntemi: Kavramlar, ilkeler, teknikler*, Ankara: Nobel Yayınevi.
- Kaşçı, T. (2021). *Sınıf öğretmenlerinin teknolojik pedagojik alan bilgileri ile öğretmen öz yeterlik inançlarının incelenmesi*. Manisa Celal Bayar Üniversitesi Sosyal Bilimler Enstitüsü, Manisa.
- Kılınc, M. (2011). Öğretmen adaylarının eğitimde ölçme ve değerlendirmeye yönelik öz yeterlik algı ölçeği. *Journal of Kirsehir Education Faculty*, 12(4)
- Koç, C. (2013). Sınıf öğretmenlerinin öz yeterlik algıları ve yapılandırmacı öğrenme ortamı oluşturma becerilerinin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, Özel Sayı (1), 240-255.
- Komariyah, L., Haryaka, U., & Wulandari, T. (2021). *The effect of school principal supervision, school organizational culture and teacher's self-efficiency on teacher performance at smk negeri tenggarong kota*. Pendas Mahakam: Jurnal Pendidikan dan Pembelajaran Sekolah Dasar, 6(2), 126-133.
- Korkut, K., and Babaoğlu, E. (2012). Sınıf öğretmenlerinin öz yeterlik inançları. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 8(16), 270-282.
- Merriam, S. B. (2013). *Nitel araştırma: Desen ve uygulama için bir rehber* (3. Baskıdan Çeviri, Çeviri Editörü: S. Turan). Ankara: Nobel Yayın Dağıtım.
- Nartgün, Z. (2008). Öğretmen adayları için ölçme ve değerlendirme genel yeterlik algısı ölçeği: Geçerlik ve güvenilirlik çalışması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 8(2), 85-94.
- Özaydın, T. E., Çavaş, P., & Cansever, B. A. (2017). Sınıf öğretmeni adaylarının öz yeterlik inançlarının değerlendirilmesi. *Ege Eğitim Dergisi*, 18(1), 1-30.
- Özdemir, S. M. (2008). Sınıf öğretmeni adaylarının öğretim sürecine ilişkin öz-yeterlik inançlarının çeşitli değişkenler açısından incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 54(54), 277-306.
- Özkurt, M. F. (2017). *Sınıf öğretmenlerinin öz yeterlik algıları ile öğretim teknolojileri ve materyal tasarım becerileri arasındaki ilişki*. Unpublished Master Thesis, Necmettin Erbakan Üniversitesi Eğitim Bilimleri Enstitüsü, Konya.
- Pektaş, S. (2010). *Öğretmen adaylarının ölçme ve değerlendirme yeterlik algılarının incelenmesi*. Unpublished Master Thesis, Abant İzzet Baysal Üniversitesi, Bolu
- Rackley, R. A. (2004). *A longitudinal investigation of change in teacher efficacy and perceptions of leadership following participation in a technology integration program*. Unpublished PhD Thesis, Teaxs A&M University.
- Sabancı, O., & Yazıcı, K. (2017). Öğretmen adaylarının ölçme ve değerlendirmeye yönelik yeterlik algılarının incelenmesi. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 7(1).

- Saęlam, H. (2018). *đretmenlerin duygusal zekaları ve z yeterlik inanları ile sınıf ynetimi becerileri arasındaki iliřkinin incelenmesi*. Unpublished Master Thesis, Kastamonu niversitesi Sosyal Bilimler Enstits, Kastamonu.
- Seluk, G. (2016). *đretmen adaylarının yařam boyu đrenme yeterlik algıları ve z-yeterlik inanlarının đretmen yetiřtirme programı kapsamında incelenmesi*. Unpublished PhD Thesis, Yakın Doęu niversitesi Eđitim Bilimleri Enstits, Lefkořa.
- Sral, S. (2014). Eđitim fakltesi đrencileri ile pedagojik formasyon alan đrencilerin lme deęerlendirme dersine ynelik tutumlarının incelenmesi. *Adnan Menderes niversitesi Sosyal Bilimler Enstits Dergisi*, 1(3), 63-75.
- řahin, M., & Uysal, İ. (2013). đretmen adaylarının lme ve deęerlendirme konusundaki z-yeterlik algılarının incelenmesi. *Bartın University Journal of Faculty of Education*, 2(2), 190-207.
- řahin, B. (2019). *Sınıf đretmenlerinin z yeterlik inanları, mesleęe ynelik tutumları ve yařam doyumlarının incelenmesi*. Unpublished Master Thesis, Mehmet Akif Ersoy niversitesi Eđitim Bilimleri Enstits, Burdur.
- řata, M., & Karakaya, I. (2020). Investigation of the use of electronic portfolios in the determination of student achievement in higher education using the many-facet rasch measurement model. *Educational Policy Analysis and Strategic Research*, 15(1), 7-21.
- Tařkın, C. ř., and Hacımeroęlu, G. (2010). Sınıf đretmeni adaylarının z yeterlik inanları: nicel ve nitel verilere dayalı bir inceleme. *İnn niversitesi Eđitim Fakltesi Dergisi*, 11(1), 21-40.
- Uysal, İ., and Ksemen, S. (2013). đretmen Adaylarının Genel z-Yeterlik İnanlarının İncelenmesi. *Eđitim ve đretim Arařtırmaları Dergisi*, 2(2), 217-226.
- stner, M., Demirtař, H., Cmert, M., and zer, N. (2009). Ortađretim đretmenlerinin z-yeterlik algıları. *Mehmet Akif Ersoy niversitesi Eđitim Fakltesi Dergisi*, 9(17), 1-16.
- Yeřilyurt, E. (2013). đretmen adaylarının đretmen z yeterlik algıları. *Elektronik Sosyal Bilimler Dergisi*, 12(45), 88104.
- Yokuř, E., Cck, E., Bařaran, M., and Yıldırım, İ. (2017). đretmen adaylarının mesleęe iliřkin z yeterlikleri ile bilgisayar destekli eđitime ynelik tutumları arasındaki iliřkilerin incelenmesi. *Electronic Turkish Studies*, 12(32), 147-161.