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Systematic Analysis of the Theses Conducted in the Field of Classroom Teaching in Turkey*

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Abstract

This study aims to reveal the bibliometric and contextual features and problems of postgraduate theses (master's and doctoral theses) made in the field of classroom teaching in Turkey between 2010-2019. The study was carried out with a content analysis method, one of the synthesis research methods. The scope of the study included 1083 postgraduate theses related to classroom teaching in the database of the Higher Education Council (HEC) National Thesis Center (NTC). In determining the theses to be included in the scope of the study, the following criteria were taken into account: the theses would be related to classroom teaching, and the publication date of the theses would be between 2010-2019. Data analysis in content analysis research is different from qualitative data analysis. In this study, which was carried out with content analysis, firstly, the theses were handled as the analysis unit. The basic features of the theses were digitized, and codes and categories were determined to examine the theses in depth. Of the 1083 doctoral theses examined, 956 were master's theses and 127 were doctoral theses.With 181 theses, the year with the most theses was 2019. The year with the fewest theses was 2017. With 181 theses, 2019 was the year with the most completed theses. The year with the fewest completed theses was 2017. Among the theses studied, it was found that the course "Turkish Language" was studied the most and the course "Leisure Activities" was studied the least.In addition, it was revealed that there were mistakes in method, sampling, data collection tool and content in some of the theses examined.

Keywords: Classroom teaching, Primary education, Thesis examination, Postgraduate education, Systematic research

Introduction

Universities are institutions that affect the society they are in and are affected by society. Universities train the manpower required by the society and contribute to the development of science and society by producing scientific information and transforming the produced information into technology. In this respect, a university can be defined as an institution that executes education, training and scientific research and shares its results by doing publications (Baskan, 2001). The main purpose of scientific research in universities is to discover the unknown on the basis of the known and to explain the discovered (Yaşar, 1998).In universities, scientific research becomes a report with papers, articles, master's theses and doctoral theses, and the research and research results are shared with the scientific world. The reporting of scientific research through master's and doctoral theses takes place at postgraduate level. In the Higher Education Law (No. 5347), postgraduate education includes "master's and doctorate education, specialization in medicine, dentistry, pharmacy and veterinary medicine, and proficiency in art" (Higher Education Law, 1981). Postgraduate education consists of undergraduate, graduate, doctoral education and art programs. Postgraduate education aims to enable the student to gain the ability to access information by doing scientific research and to analyze and interpret the information obtained (Higher Education Council (HEC), 1996). In this respect, postgraduate education is a function of universities and can be defined as the highest level of education received by individuals, which provides them with the opportunity to specialize in their field and which contributes to the development of the country and science-technology productivity with scientific studies. As a result of postgraduate education, the individual produces a concrete product. This product is also the master's and/or doctoral thesis based on scientific research written by an individual in a company with a supervisor in line with the subject area. Individuals are writing a master's or doctoral thesis both share their research with other researchers and use them for their professional development (career, tenure, promotion, etc.)

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by publishing the scientific research they have conducted (Tsai & Wen, 2005). Karakütük (1989) explains the importance and development of master's and doctorate education stating the following reasons: (cited in Bahçeci & Uşengül, 2018):

- *Knowledge and rapid development in technology necessitate postgraduate education even after graduating from higher education.*
- *The need for highly qualified manpower for the development of the country.*
- *The rapid development of science and technology, and universities play an important role in this regard.*
- *The prolongation of the primary education period, and the increase in the age of the population.*
- *The increasing need for faculty members in line with the increase in the schooling rate in higher education.*

Considering the above reasons, it is seen that postgraduate education is important for the development and progress of countries. Therefore, it could be stated that postgraduate education should be widespread and institutionalized, and postgraduate education is thus important in terms of scientific knowledge production. Postgraduate education is given in the areas of humanity, social, formal and educational sciences.

Scientific research in the field of educational sciences has some functions. The first is to observe, conceptualize and record learning-related events. The second function is to analyze and accurately describe the observed conditions, contexts and practices by analyzing them. The third function is to publish the information obtained as a result of observation by expanding existing educational theories or by proposing a new theory. In other words, scientific research in education is how to obtain accurate and reliable information about education (Mortimore, 2000). In addition, scientific research in education both fills the gap between theory and practice and allows education stakeholders, especially teachers, to create professionally rich learning environments (Ion & Iucub, 2016). Education programs, especially at master's and doctoral levels, contribute to the training of qualified scientists who are recognized at national and universal levels (Tavşancıl et.al., 2010). In addition to being valid and reliable studies, theses can scientifically arrange the development course of the related field with their features such as being defended in front of a scientific jury and showing methodological and thematic tendencies at certain times instead of repeating similar studies. In this respect, the best way to define a field of science is by examining the theses prepared in that field (Şenyurt & Özkan, 2017).

Examining scientific studies put forward through theses and determining the trends of scientific research act as a guide for both teachers and researchers. In other words, examining and analyzing previous studies conducted in the field of education provides teachers with information about new applications while guiding other researchers for further research (Chang, Chang & Tseng, 2010; Fensham, 2004). Moreover, questioning the quality of educational studies, obtaining results through research and revealing the quality and usability of these studies are of great importance (Karadağ, 2009).

Various studies have been conducted to examine the studies carried out in the field of educational sciences in Turkey. These studies generally cover the examination and evaluation of published articles, presented reports, master's theses and doctoral theses in the field of educational sciences, teaching and curriculum (Arık & Türkmen, 2009; Bıkmaz, et.al., 2013; Doğan & Tok, 2018; Erdem, 2011; Ergun & Cilingir, 2013; Eskici & Çayak, 2017; Fazlıoğulları & Kurul, 2012; Göktaş, et.al., 2012; Gömleksiz & Bozpolat, 2013; Karadağ, 2009; Karadağ, 2010; Koç, 2016; Kurt & Erdoğan, 2015; Saban, et.al., 2010; Taş & Özkaral, 2015; Tavşancıl, et.al., 2010), educational technologies (Alper & Gülbahar, 2009; Bozkaya, Aydın & Genç-Kumtepe, 2012; Kurtoğlu & Seferoğlu, 2013; Şimşek, et.al., 2008; taş, Emritekin & Süral, 2019), education management (Polat, 2010; Aydın & Uysal, 2011), science education (biology, physics, science) (Bacanak, et.al., 2011; Çalık, et.al., 2008; Doğru, et.al., 2011; Karamustafaoğlu, 2009; Küçüközer, 2016; Lee, Ying-Tien & Tsai, 2009; Soslu, 2016; Topsakal, Çalık & Çavuş, 2012; Wassink & Sadi, 2016), mathematics education (Baki, et.al., 2011; Çiltaş, Güler & Sözbilir, 2012; İnceoğlu, 2009; Yenilmez & Sölpük, 2014), social sciences education (Canbulat, Avcı & Sipahi, 2016; Geçit & Kartal, 2010; Oruç & Ulusoy, 2008; Şahin, Yıldız-Göğebakan & Duman, 2012; Tarman, Güven & Aktaşlı, 2011), Turkish teaching (Boyacı & Demirkol, 2018), teaching reading (Elbir & Bağcı, 2013), social life teaching (Tezcan-Apak & Güllühan-Ütkür, 2019), teacher leadership (Koşar, et. al., 2017), teaching programming (Eryılmaz & Deniz, 2019), measurement and assessment (Şenyurt & Özkan-Özer, 2017); special education (Çoşkun, Dündar & Parlak, 2014), drama in preschool education (Can-Yaşar & Aral, 2011); geography teaching (İncekara, 2009), value education (Kapkın, Çalışkan & Sağlam, 2018), classroom teaching and primary school teachers (Akpunar, Kazu & Erdamar, 2018; Anılan, et.al., 2018; Bağcı, 2012; Bektaş, Dündar & Ceylan, 2013; Doğan, 2018; Küçükoğlu & Ozan, 2013; Özenç & Özenç, 2013; Şahin, et.al., 2013; Şahin, 2019; Ünal & Arık, 2016).

Looking at the studies that have been conducted to identify general trends in education, one finds that the studies have been examined both under a general heading such as curricula and education and in the context of specific areas such as measurement and assessment in education, educational technology, and instruction. These studies focused on specific characteristics (year, method, data collection instrument, data analysis method, etc.), subject areas, number of authors, journal name, and data sources.Very few studies included mistakes and problems. In addition, year intervals were considered in some studies examining theses or articles.

The scope of this study included postgraduate theses on classroom teaching. What makes the present study different from others is the in-depth analysis of 1083 theses conducted between 2010-2019. Concerning the difference, it could be stated that there was no research conducting in-depth examination of more than 1000 theses between the years mentioned. The purpose of this study was to reveal the bibliometric features, content features and problems encountered in the theses conducted in the field of classroom teaching. In this respect, it is thought that it is important and necessary to examine the theses conducted in the field of classroom teaching and to reveal the related tendencies in detail. It could be said that this study is important to determine the issues that have not been previously studied in the field of classroom teaching, to show the research trends, to determine the problems in the theses, to serve as a guide for researchers who want to conduct research in the field of teaching, and to provide a resource that can benefit researchers in the field.

Purpose

This study aimed to reveal the bibliometric features, content features and problems encountered in the postgraduate theses (master's and doctoral theses) completed in the field of classroom teaching in Turkey between 2010-2019. Within the framework of this general purpose, the following research questions were directed:

1. What is the distribution of the theses examined within the scope of the study in terms of
   - Year,
   - Thesis type,
   - Method,
   - Data sources (Universe, sample, study group, participant)
   - Data collection tools,
   - Data analysis techniques?
2. What is the distribution of the theses examined within the scope of the study in terms of
   - Research topic
   - Field of research,
   - Education level?
3. What are the mistakes in the thesis examined in terms of the scope of the study?

Method

Research Model

This study was carried out using the content analysis method. Content analysis is defined as "a research method that provides a systematic and objective tool for making inferences from written-visual-verbal data" (Downe-Wambolt, 1992, p.314; cited in Bengtsson, 2016). Content analysis is a research method used to make repeatable and valid inferences from verbal-written-visual materials, to identify and reveal certain phenomena in these materials, to determine the main structures, to classify the main structures, and to show the trends in a field or literature (Krippendorf, 2019; Weber, 1990). In addition, content analysis method is used to reach hidden meanings based on the apparent meanings in verbal-written-visual materials (Cole, 1988). Concerning content analysis, it is a method that emerged as a research method in the 1940s with its initial aim of determining the explicit content in different materials (verbal, written and visual) and with its later aim of revealing the hidden patterns, relationships and meanings in different materials (verbal, written and visual). It could be stated that it is a method used to obtain different patterns. In recent years, content analysis can be used for both purposes (Gaur & Kumar, 2017). Content analysis is a research method for making replicable and valid inference from data to their context to provide knowledge and new insights (Elo & Kyngas, 2008). Content analysis has been used broadly to understand a wide range of themes such as social change, cultural symbols, changing trends in the theoretical content of different disciplines and making replicable and valid inference from data to their context to provide knowledge, insights (Elo & Kyngas, 2008; Prassad, 2008).
In this study, content analysis was preferred as a method because the purpose was to conduct in-depth examination of the master's and doctoral theses about classroom teaching in Turkey between 2010-2019. In the study, there were two reasons why the content analysis method was preferred:
First reason: In this study, the postgraduate theses in the field of classroom teaching were accepted as written material. This reason overlapped the content analysis purpose of "making repeatable and valid inferences from verbal-written-visual materials, identifying certain phenomena in these materials, and determining the main structures"; therefore, content analysis method was used in the study. In this respect, the aim of the study wasstudy aimed to reveal certain phenomena such as year, type, method, data sources, data collection tools, data analysis

types, topics and fields in the postgraduate theses accepted as written material and to determine the current trends in classroom teaching.
Second reason: The second reason was to identify the problems that arose in the postgraduate theses in the field of classroom teaching. These problems were not obvious problems in the theses. These were the problems revealed by the researchers within the context of the statements in the theses. Therefore, the content analysis method was used in the study because this reason overlapped the content analysis purpose of "reaching the hidden meanings based on the apparent meanings in the verbal-written-visual materials".
Third reason: Also, one of the most frequent uses of the content analysis is to study the changing trends in the theretical content a methodological approaches by content analyzing the journal articles of the discipline (Loy, 1979 cited in: Prassad, 2008). Because this study aimed to reveal the bibliometric features, content features and problems encountered in the postgraduate theses (master's and doctoral theses) completed in the field of classroom teaching in Turkey between 2010-2019, content analysis was preferred as research method in this study.

Scope of the Study

The scope of this study, which aimed to examine the postgraduate theses about classroom teaching between 2010 and 2019 in Turkey, covered 1083 postgraduate theses on classroom teaching in the database of the National Thesis Center (NTC) of Higher Education Council (HEC). Criterion sampling, one of the purposeful sampling methods, was used to select the theses examined in the study. The understanding in criterion sampling, which is a type of purposeful sampling, is to use a series of criteria while selecting the participants/scope of the study (Yıldırım & Şimşek, 2011). The criteria used in determining the theses examined in the study were as follows: the theses were conducted in the field of primary school teaching /classroom teaching; the publication date of the theses was in the range of 2010-2019; and the theses were given permission for full-text viewing/downloading. The publication date of the theses was in the range of 2010-2019 because there were frequent changes in primary school curricula between 2010-2019. The detailed search in the National Thesis Center (NTC) of Higher Education Council (HEC) database was used to determine the theses to be included in the scope of the study. Image 1 shows the detailed search interface of Internet website of HEC-NTC.

Image 1. Interface of the National Thesis Center (NTC) of Higher Education Council (HEC)

In Image 1, there are boxes such as "University", "Institute", "Division", "Discipline" and "Permission Status" in the detailed search in the HEC-NTC database. While determining the theses within the scope of the study, "Primary School Teaching" and "Classroom teaching" were written in the box of Discipline. In the box of Division, "Classroom teaching" and "Primary School Teaching" were written. In addition, in the box of Permission Status, "permitted" was written. After writing the words as mentioned earlier in the boxes, a separate search was done. As a result of the investigation, 1083 theses were reached.

Data Collection

Several steps were followed to collect data within the scope of the study. First, the years when the theses were conducted were determined following the research purpose. After reviewing the related literature, the year range was decided to be 2010-2019. The reasons for choosing the period from 2010 to 2019 were as follows: After reviewing the literature, there was no comprehensive research aimed at examining the postgraduate work on teaching conducted between these two years; and there have been frequent changes in the curricula of elementary

schools in Turkey in recent years.The “permitted” theses on classroom teaching were reached as a result of the search done by writing "Primary School Teaching", "Classroom teaching", "Primary Education" in the boxes of "Division" and "Discipline" in the "Detailed Search" section of the HEC-NTC database. As a result of these searches, 1083 postgraduate theses were reached, the last being dated 16.01.2020.
This study was limited to 1083 theses conducted between 2010 and 2019, published in the HEC-NTC database and given permission for viewing. During the data collection process, retrospective reviews were performed several times, and theses that were permitted to be viewed later were encountered and included in this study. Because the abstracts of the dissertations that were not open to acess, these dissertations were not included in the study.However, after the data collection process was completed, it was possible that there could be theses permitted for viewing. This situation constituted another limitation of the study.

Analysis of Data

Data analysis in content analysis research is different from qualitative data analysis. Content analysis research provides the researcher with flexibility in data analysis. While analyzing the data in content analysis research, with the help of frequency, the researcher can statistically express the meaning obtained from the written/visual/verbal documents and make in-depth interpretations (Duria, Reger & Pfarrer, 2007). In addition, content analysis converts qualitative data into a quantitative form and, where appropriate, facilitates interpretation of the data within quantitative frameworks (Woods, et.al., 2005). Data analysis in content analysis studies is carried out by determining the analysis unit and codes, considering the frequency of repetition of codes, forming the categories from codes, ensuring validity of the categories created and applying the coding process to all the analysis units (Weber, 1990).
The steps applied for data analysis in content analysis studies were in the present study as follows: In this study carried out with content analysis, first, the theses were examined as analysis unit. The main features of the theses were digitized, and codes and categories were determined for in-depth examination of the theses. For this, a "publication review form" developed by the researchers was used. There were subheadings in the publication review form such as "year, thesis type, subject area, discipline, data source, method, data collection tool, data analysis, and mistakes made". The researchers examined the theses independently and filled out the thesis examination form. Using the thesis examination form, the emerging features related to the theses were digitized in the form of frequency, and the contextual features of the theses were transformed into categories and themes.

Credibility

In this study, several applications were conducted to ensure validity and reliability (Duria, Reger & Pfarrer, 2007). First, the years in which the theses to be included in the study were published were determined. To ensure the originality of the data source, the theses in the HEC-NTC database, which is an electronic information system archiving theses in Turkey, were used. The publication review form was used for the analysis of the data. The publication review form prepared by the researchers was given to two experts (in the field of classroom teaching and science education) who previously conducted similar research, and the experts were asked to evaluate the appropriateness of the publication review form in terms of its scope and content. The experts gave feedback on the publication review form, suggesting that the subheading of the data collection tools be divided into more detailed subheadings. In line with the feedback provided by the experts, the publication review form was finalized. The criteria regarding the subheadings in the publication review form were filled in separately by the researchers. After the researchers independently filled out the publication review form, they came together and evaluated the publication review forms for each thesis and reached a consensus. In cases of disagreement, the theses were examined again. After completing the publication review form and reaching a consensus on the accuracy of the data obtained through the publication review form, the data were analyzed. A coding scheme was prepared for the analysis of the data. The frequencies of the theses regarding their characteristics such as year, thesis type, data source, method, data collection tool and data analysis were noted in the form. The contextual features of theses were also turned into categories and themes. The characteristics of the theses were presented in the form of tables and figures, and examples belonging to the categories and themes were given directly. In addition, the research process was explained in detail.

Ethic

The HEC-NTC database was used to reach theses within the scope of the study. Since the theses were open access, there was no need to obtain permission from any institution. No information was given to describe a person or an institution about the name, code, author and institution of the theses examined within the scope of the study. Therefore, the theses were defined with different codes while giving direct quotations in the findings section. The coding format of the theses is shown in Image 2.

As can be seen in Image 2, the master's theses were coded as "M", doctoral theses as "D", year as "10, 15, … 19" and the sequence number as "01". The theses were numbered randomly. Numbers like 10, 15, … 19 are written for the years referred to the years 2010, 2015… 2019. For example, the code of TM1001 code in a thesis referred to the number-one master's thesis published in 2010, and the code of "TD1501" referred to a doctoral thesis published in 2015.

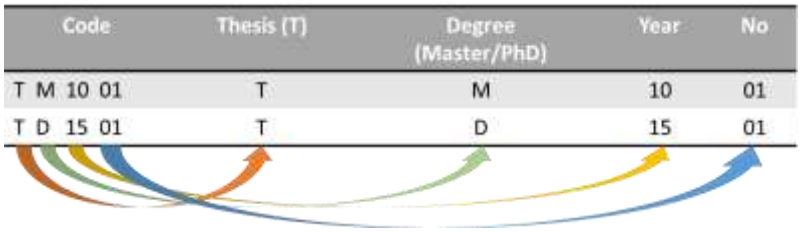


Image 2. Coding of the theses examined in the study

Findings

The data obtained in this study are presented under themes in Figure 1 in the form of "Bibliometric features", "Contextual features" and "Problems".

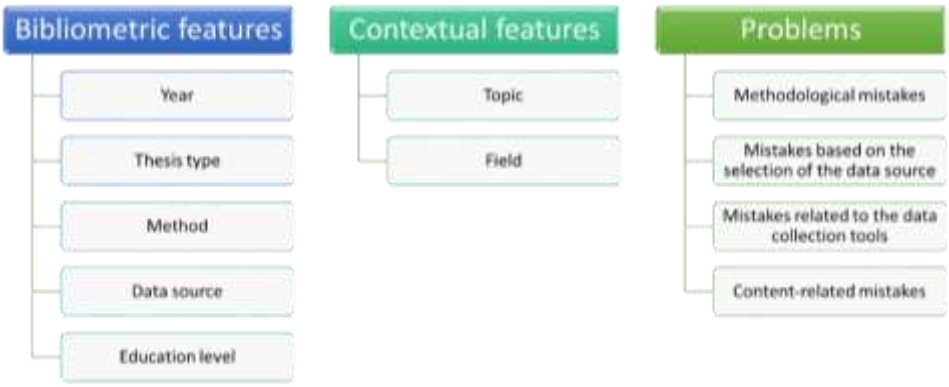


Figure 1. Features of the postgraduate theses conducted in the field of classroom teaching

Bibliometric features of the postgraduate theses conducted in the field of classroom teaching

The concept of bibliometry is defined as "the application of statistical and mathematical methods to books, journals and similar communication media" (Pritchard, 1969, cited in Özkaya, 2019). Therefore, in studies based on bibliometry, various findings are obtained by analyzing certain characteristics of documents or publications (keywords, year, methods used, etc.). In this study, the concept of bibliometry was considered as a theme. The year, thesis type, method, data source and data collection tools were considered the bibliometric features of the postgraduate theses published in classroom teaching between 2010 and 2019, and the distribution of these features was shown with frequency.

Distribution of the theses by year and thesis types

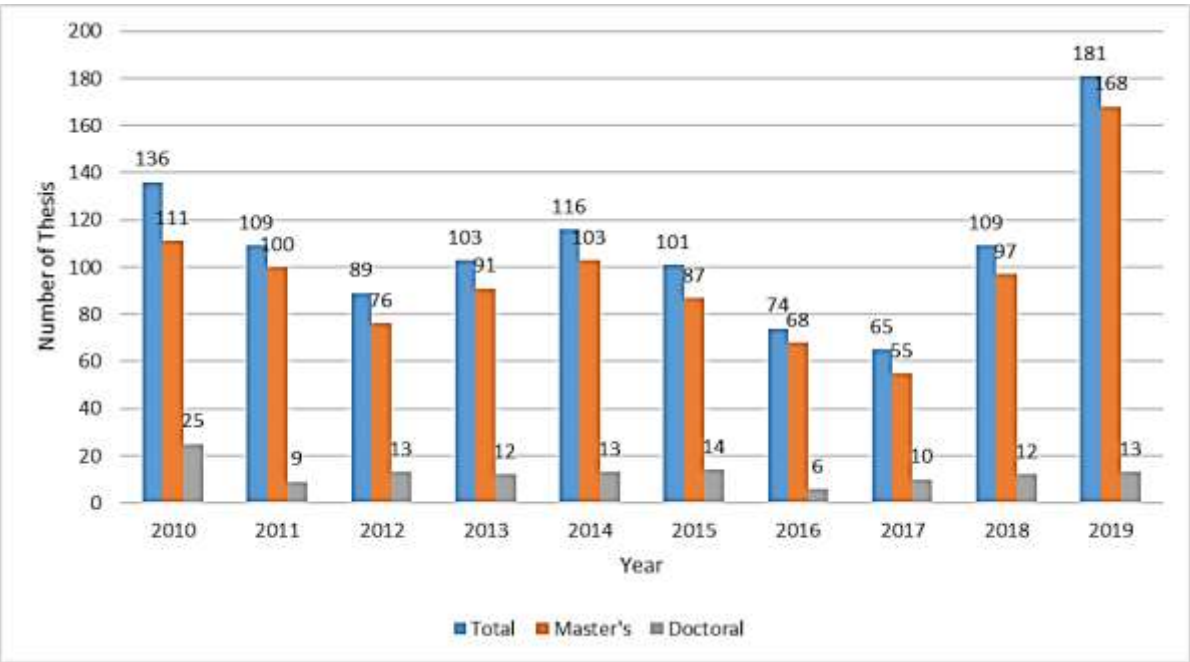
The numbers of the postgraduate theses conducted in the field of Classroom teaching can be seen in Table 1, and the distribution of these theses by year is shown in Graphic 1.

Table 1. Numbers of the theses conducted in the field of classroom teaching between 2010-2019

	Number of theses	Master's Thesis	Doctoral Thesis
Total	1083	956	127

As can be seen in Table 1, between 2010-2019, the total number of postgraduate theses in the field of classroom teaching was 1083, including 956 master's theses and 127 doctoral theses. Accordingly, approximately 96 master's theses and approximately 13 doctoral theses were published annually.

According to Graphic 1, in terms of year of publication, the highest number of theses belonged to the year 2019, and the lowest number of theses was in 2017. Although the number of final papers varied by year, it could be seen that the number of final papers decreased until 2017 and increased after that year. However, when the number of doctoral theses was examined, it was seen that 25 doctoral theses were published in 2010 and 13 doctoral theses in 2019. Therefore, there was a decrease in the number of doctoral theses over the years. Another remarkable point was that the number of doctoral theses could not exceed 14 after 2010 and even remained below 10 in some years.



Graphic 1. Distribution of the theses by year and thesis type

Distribution of the theses concerning methods

The distribution of the theses concerning their methods can be seen in Table 2. According to the Table 2, the methods of the postgraduate theses conducted in the field of classroom teaching were the methods used in educational sciences. The intersection of rows and columns was made following the statements in the theses. For example, the intersection of the row "Quantitative" and the column "Quantitative" refers to the statement "In this study, the quantitative research method was used"; the intersection of the row "Survey" and the column "Quantitative" refers to the statement "In this study, the survey model, one of the quantitative research methods, was used"; the intersection of the "Document Analysis" row and the "Qualitative" column referred to the statement "In this study, the document analysis, one of the qualitative research methods, was used"; the intersection of the "Quantitative" row and the "Quantitative" column referred to the statement "In this study, the quantitative research method was used."

In the theses, "quantitative method" and "survey model" found under the quantitative method were the most common ones, while the “meta-analysis” method was the least used method. Below are explanations of each method and model with sample statements from the theses regarding the method used. Moreover, in Table 2, the studies that could not be classified were examined under "other studies" heading.

Table 2. Distribution of the theses with respect to their methods

	Survey	Quantitative	Qualitative	Mixed	Action	Meta-analysis	Total
Quantitative		3					3
Survey	337	135	33				505
Experimental		158					158
Causal		13					13
Scale development		3					3
Historical research method	1						1
Qualitative			34				34
Case study			78				78
Phenomenology			28				28
Ethnography			2				2
Grounded Theory			2				2
Document analysis			31				31
Naturalistic inquiry approach			2				2
Interview method			7				7
Content analysis model			2				2
Descriptive analysis method			1				1
Basic qualitative research			3				3
Historical research method			1				1
Mixed				142			142
Action			29		12		41
Meta-analysis						4	4
Total	338	312	253	142	12	4	1061

Survey Model: In the theses examined, expressions such as "survey model, general survey model, descriptive survey model, descriptive model, questionnaire-based survey model, survey model, cross-sectional survey model and relational survey" were gathered under "survey model". Accordingly, as the method applied in the studies, the survey model was used most in 505 theses, constituting almost half of the total number. In this respect, the survey model was used alone as a research method in 337 theses. The survey model was used as the sub-model or upper-model of the quantitative research method in 135 theses and of the qualitative research model in 33 theses. In addition, there were theses stating the mixed research method as a sub-model of the survey model. Relevant examples are presented in Table 3.

Table 3. Sample statements regarding the survey model in the theses examined

Code	Statement found in the method section
TM1001	*"...is a descriptive study using the survey model ..."*
TM1002	*""Descriptive method" was applied to determine the current situation in the study..."*
TM1003	*"This is a descriptive study carried out using the relational survey model of the general survey type..."*
TM1201	*"...This is a descriptive study. In the process of describing the situation, qualitative and quantitative methods (mixed method) were used together..."*
TM1401	*"...Qualitative research method was used in this study, and the general survey model was applied..."*
TM1402	"*This is a descriptive study conducted using the survey model, one of the quantitative research methods..."*
TM1403	*"In this study, the survey research model, one of descriptive methods, was used."*
TM1601	*"This study was carried out with the relational survey model to determine ..."*

When the examples in Table 3 are examined, it could be stated that there was no clear consensus on the concepts of "Survey Method/Model" and "Descriptive Method/Model". The reasons for this situation could be due to the methodology-related knowledge that the individuals who wrote the thesis acquired during their postgraduate education and different interpretations of what is written in method-related resources. In this respect, the issue of which types of studies are in the survey model can be evaluated, and solutions to the methodological concept confusion can be produced.

Quantitative Research Method: According to Table 2, the quantitative method was used in 312 of the theses. In addition, there were theses including "quantitative research, experimental, causal (correlational)" models and "scale development/adaptation" studies within the scope of quantitative method (Table 4). The theses, including the statement of "survey model, one of the quantitative research methods, was used" were evaluated above within the scope of the survey model.

Table 4. Sample statements regarding the quantitative research in the theses examined

Code	Statement in the Method Section
TM1004	*"... using the relational and casual research model"*
TD1001	*"... the casual-comparative research model was used in the study."*

As shown in Table 4, in the theses where quantitative research was used as a method, the research types found within the scope of quantitative research were used.

Qualitative Research Method: When Table 2 is examined, it is seen that the qualitative research method was used in 253 of the theses within the scope of the study. In this respect, there were theses in which the qualitative research method was used directly and theses in which the qualitative research models of "case study, phenomenology, ethnography, action research, grounded theory, document analysis, basic research model and naturalistic inquiry approach" were used.
The case study method was used most within the scope of qualitative research, while the "Grounded Theory" was used in two theses. In some studies, the grounded theory was not used alone in that it was used within the survey model in one study and as a data analysis technique in another study. Accordingly, it could be stated that there was a methodological confusion about the "Grounded Theory" method. Sample statements regarding qualitative research are presented in Table 5.

Table 5. Sample statements regarding qualitative research in the theses examined

Code	Statement in the Method Section
TM1005	*"Interview technique, one of qualitative research methods, was used."*
TM1006	*"In this study, the Grounded Theory approach, one of qualitative research methods, was used."*
TM1202	*"The qualitative research method was adopted in this study. ... qualitative research, also known as field research."*
TM1404	*"face to face interview method", one of the qualitative research methods, was used, and "semi-structured interview" in terms of structure, "personal interview" in terms of participant and "written interview" in terms of communication and recording format were used ..."*
TD1501	*"The naturalistic inquiry approach, one of qualitative research approaches, was used."*
TM1602	*"This is a qualitative study in the phenomenology design, which is included in the interpretive research paradigm."*
TM1701	*"This study was conducted using document analysis, which is one of qualitative research methods."*
TM1702	*"In this study, the qualitative method as the research method and document analysis and descriptive analysis as the research design were used."*
TM1801	*"In the study, the basic research method, one of qualitative research models, was applied."*

As shown in Table 5, it could be stated that there was a concept confusion regarding qualitative research. In addition, it is also noteworthy that the "interview method and document analysis/analysis", which are data collection tools or data analysis techniques, were handled as a research model or pattern.

Mixed-Method: Mixed method was used in 142 theses. It could be stated that the mixed method, which has been popular in educational sciences in recent years, has started to be used more in theses. Table 6 shows the statements about the mixed method.

Table 6. Sample statements regarding the mixed research method used in the theses

Code	Statement in the Method Section
TD1701	*"This study was carried out using mixed research method and experimental design model with pre-test and post-test control group."*
TM1603	*"In the study, quantitative and qualitative methods were used."*
TM1301	*"The study was designed with the survey model involving the questionnaire and interview techniques. For this reason, the mixed method, which includes quantitative and qualitative models successively, was used."*
TD1002	*"The study was designed following both quantitative and qualitative research techniques."*

According to the statements presented in Table 6, the mixed method was considered as a combination of qualitative and quantitative research types. However, it could be stated that there was no explanation regarding the types of the mixed method.

Action Research: As can be seen in Table 2, action research was used in 41 theses examined. However, while action research was among the qualitative research types in 29 of these theses, it was taken as a separate research method in 12 theses. The statements regarding action research are presented in Table 7.

Table 7. Sample statements regarding the action research method used in the theses

Code	Statement in the Method Section
TM1901	*"... this was a qualitative study ... "action research" design was preferred."*
TM1604	*"The action research method, one of Critical Theory Approach, was used."*
TM1703	*The action research method, which is among qualitative research models, was used.*

When the statements in Table 7 are examined, it could be stated that there was no methodological consensus regarding action research. The reason for this situation might be due to the explanations in national and international methodology-related sources regarding action research in educational sciences.

Meta-analysis: In four of the theses, the meta-analysis method was used. Unlike qualitative and quantitative research, Meta-analysis research is one of the synthesis research types (Andrews & Harlen, 2006). The reason why there are few theses in which meta-analysis is used can be attributed to its spread in recent years.

Other research methods: In 14 theses, different research methods were used other than qualitative, quantitative and mixed methods, and no research method was mentioned in 8 theses (Table 8).

Table 8. Distribution of the theses with respect to the research methods

Method	
Analytical model	1
Methodological evaluation	1
Design-based research	1
Lesson study	1
Theoretical research, review of literature	7
Basic research (simulation study)	1
No reference to a research method or model	8
Total	22

According to Table 8, these methods were "methodological evaluation, analytical model, design-based research method, lesson study and basic research". At the same time, it was seen that some of the theses were theoretical and some did not have a method part. In addition, there were theses in which the theoretical survey/analysis study was presented as the "survey model". Related statements can be seen in Table 9.

Table 9. Sample statements regarding other research methods

Code	Statement in the Method Section
TM1704	*"In this study, the literature review and analysis method was used ... its historical development was given, and the historical method (chronological information) was used to better understand this process."*
TM1605	*Basic research is a "simulation study" since its data are produced simulatively.*
TD1401	*"Design-based research method was used in this study."*
TM1203	*"This study was organized as a methodological evaluation study."*
TM1008	*"...this was a study carried out using the analytical model as it aimed to reveal the relationship ..."*

Distribution of the theses concerning the data source

The distribution of the theses in terms of the data source is presented in Table 10.

Table 10. Distribution of the theses concerning the data source

	Number of data sources					
	1	2	3	4	5	Total
Student	453	74	28	3	2	560
Teacher	284	103	39	3	2	431
Preservice teacher	92	2	2		1	97
Document (coursebook, archive, related documents, curriculum, thesis, article, storybook, etc.)	66	14			1	81
Parent	11	14	32	3	2	62
Administrator	3	20	11	3	2	39
Academician	1	3	1			5
Inspector			2			2
Other (Different age and profession groups, public education trainee, qualified instructor, etc.)	1	1	1			3
School	1					1
Total	912 theses	171 theses				

The data in Table 10 were classified following the use of the relevant data sources alone or in combination with other data sources in the theses. For example, in 453 theses, "student" was used as a single data source, while in 74 theses, it was used together with another data source and in 28 theses with two other data sources.
According to Table 10, only one data source was used in most of the theses (about 84%), while different data sources were used in other theses. In this respect, students, teachers and preservice teachers were used at most as a data source in the theses, while academicians, inspectors, other age and occupational groups and school (history) were used at least as a data source. Within the scope of the study, it could be stated that it is quite natural to work with students, teachers and teacher candidates, who are the main stakeholders in the field of classroom teaching. However, the low number of theses made with parents, administrators and academicians, who are the other stakeholders of education, can be regarded as a deficiency.

Distribution of the data sources in the theses concerning class grade and education level
Table 11 presents the distribution of the theses concerning the class grade and education level which they are related to. In the classification, attention was paid to whether or not the theses were related to the field of teaching. In this regard, the "5th grade", which was part of the primary level before 2012, was later transferred to the secondary level after 2012. Therefore, in this study, the theses involving the "5th grade" before 2012 were included in "primary school education level" and those after 2012 in "secondary school education level".

Table 11. Distribution of the data sources of the theses with respect to class grade and education level

Primary school (1st-4th grades; 1st-5th grades before 2012)		801
Primary school (1st-8th grades)		68
Secondary school (5th-8th grades after 2012)		43
Mass education		23
Non-categorical (adults, act of congress, etc.)		16
Preschool		15
Primary school, secondary school, high school (1st-12th grades)		7
Basic education (preschool and primary school level)		6
Special education		6
Secondary school (high school, adolescents (12-18 years old))		6
Child		3
University (bachelor's degree) (total: 85)	Classroom teaching	72
	Mixed (Classroom teaching and other fields of teaching)	10
	Other	3
Academician (total: 5)	Classroom Teaching	4
	Mixed (Classroom Teaching and other fields of teaching)	1
Total		1083

According to Table 11, a total of 907 theses were carried out involving data sources directly related to the field of classroom teaching (primary school students, classroom teaching preservice teachers, etc.). In addition, though accepted to belong to classroom teaching, several theses that were not directly related to this field involved different education levels (pre-school, primary school, secondary school, mass education, teaching programs other than classroom teaching). In this respect, 90 theses were conducted with data sources that were not directly related

to the field of classroom teaching, and 16 theses were not related to any education level. According to Table 11, preservice teachers were mostly used as a data source at university level. At the same time, it was seen that there were quite a few theses at postgraduate levels and with academicians. Based on this, it could be stated that there is a need for theses to be conducted with academicians and at master's and doctoral levels.

Distribution of the theses concerning the data collection tools

Table 12 shows the distribution of the theses concerning the data collection tools.

Table 12. Distribution of the theses concerning the data collection tools

Number of data collection tools						
	1	2	3	4	5	Total
Scale	499	210	42	39	7	797
Interview	91	88	58	43	7	287
Test	52	143	37	31	7	270
Document	66	38	35	37	7	183
Observation	7	24	32	35	7	105
Total	715	503	204	185	35	

As can be seen in Table 12, the tools used for similar purposes are presented under a common concept. "Inventory, scale, questionnaire, evaluation form, scoring key, and rubric," which had the same purpose, form, and content, but were expressed in different ways in the theses, were grouped under the name "scale"; "achievement test, intelligence test, skill test, etc." under the name "test"; "diary, student products, field notes, anecdotal logs, and document review form" under the name "document"; and data collection instruments indicated as "observation" and/or "video" were grouped under the name "observation." However, in reviewing the final papers, it was noted that some of the data collection instruments were used conceptually interchangeably or incorrectly. This situation has been presented in detail under the heading of "Mistakes and Problems". The most common data collection tool was "scale" in 797 theses, and the least common one was "observation" in 105 theses. One data collection tool was used in 715 theses, and more than one data collection tool was used in 368 theses.

Content features of the theses

Within the scope of the study, the characteristics of the theses related to the courses and the field were considered as contextual features. The distribution of the theses concerning the disciplines can be seen in Table 13.

Table 13. Distribution of the theses with respect to the related courses

Disciplines	Master's Degree	Doctoral Degree	Total
Turkish Instruction	161	37	198
Literacy Teaching	34	6	40
Mathematics	102	13	115
Science	93	13	106
Social Sciences	59	18	77
Social Life	43	5	48
Information Technologies	20	2	22
Human Rights, Democracy and Citizenship	15	2	17
Fine Arts and Art Education	11		11
Music	8	1	9
Media Literacy	8		8
English	6	3	9
Physical Education and Playing	2		2
Religion and Moral Values	2		2
Traffic Safety	1		1
Leisure Activities	2		2
More than one discipline (Interdisciplinary) (Social Life and Social Science-2, STEM-5, Turkish and Mathematics-4, Turkish and English-1)	10	2	12
Total	577	102	679

According to Table 13, most of the theses were related to Teaching How to Read and Write in Turkish. In addition, it was striking that the number of theses related to the courses of Mathematics, Science, Social Science and Social Life was high. However, there were fewer than 10 theses regarding Music, Media Literacy, English, Physical Education and Playing, Religion and Moral Values, Traffic Safety and Leisure Activities. It was seen that the number of doctoral theses related to the courses of Social Life, Information Technologies, Human Rights, Democracy and Citizenship, Music and English was 5 or lower. Moreover, there was no doctorate thesis related to the courses of Fine Arts and Art Education, Media Literacy, Physical Education and Playing, Religion and Moral Values, Traffic Safety and Leisure Activities". Within this framework, it could be stated that most postgraduate thesis focuses on the basic courses of the primary school period. Most of the postgraduate theses focused on the basic courses of the primary school period. This situation could be explained with the preferences of postgraduate students, with the importance attached to the basic courses at primary school level, the high number of expert academicians giving these courses, the low number of academicians expert in other courses.
Apart from the theses prepared in relation to the courses, there were also other theses that were not conducted within the scope of any course but included various subjects of the related education. Table 14 presents the distribution of the theses concerning their topics.

Table 14. Distribution of the theses concerning their topics

	Master's thesis	Doctoral Thesis	Total
Educational management, class management	56	2	58
In-service education, teachers (skills, views, etc.)	51		51
Special Education (inclusive, gifted, other impairment groups)	45		45
Teacher training, preservice teachers	30	8	38
Educational policies (curriculum, laws and decisions, councils, etc.)	25	2	27
Psychological Counseling and Guidance	24	2	26
Cognitive characteristics (academic achievement, thinking skills, etc.)	22	3	25
Values education	22	2	24
Other (Healthy diets, homework, unions)	20	1	21
Affective characteristics (attitude, perception, motivation, etc.)	20		20
Measurement and evaluation	13	3	16
Environmental education (literacy, consciousness, etc.)	12		12
Family participation, family training, parental views	8	1	9
Drama	7		7
Migration, multicultural, foreign students	7		7
Educational philosophy, sociology (critical education)	5		5
Science education	4		4
History of education	4		4
Mass education (public education, life-long learning, etc.)	2		2
Museum education	1		1
Early childhood education	1		1
Methodology (examining related research)	1		1
Total	380	24	404

In Table 14, the directly related topics are presented together. For example, theses written about affective characteristics such as "attitude, perception and motivation" were categorized as "Affective characteristics", and theses written regarding cognitive features such as "academic achievement, levels of learning and levels of understanding" were categorized as "Cognitive features".
According to Table 14, the theses were mostly based on topics related to education management (including "classroom management"). In addition, topics concerning special education, teacher training and education policies were also prominent. It was seen that the least frequent topics were museum education and early childhood education. In general, it could be stated that the postgraduate theses conducted in classroom teaching focused on different topics. This diversity could be considered important for enriching the field of classroom teaching.

Mistakes made in postgraduate theses in the field of Classroom teaching

Various mistakes were encountered in some of the theses examined. These mistakes were classified in terms of "method", "sample ", "data collection tools" and "content ". Figure 1 presents the methodological mistakes.

The methodological mistakes made in some theses were categorized as content not reflecting the heading of the method, incorrect use of concepts and misconception. Table 15 shows sample statements regarding the methodological mistakes.
The methodological mistakes made in some theses were categorized as content not reflecting the heading of the method, incorrect use of concepts and misconception. Table 15 shows sample statements regarding the methodological mistakes.

Table 15. Sample statements regarding the method logical mistakes in the theses examined

Code	Mistake	Sample Statement
TM1010	Content not reflecting the heading of the method	The research model is not included under the heading of the method. Under the heading of "*Data Collection Techniques" was the statement, "the research data were gathered using documentary analysis and qualitative research techniques. In addition, verbal data were obtained with the interview method*."
TM1103	Content not reflecting the heading of the method	Under the heading of "Method" was the statement of "*Findings were obtained following qualitative research techniques, and the analysis part was conducted with the chi-square test, which is one of the quantitative research techniques. All the results were interpreted using a descriptive research design*."
TM1204	Misconception	"In the study, *... the experimental design with pretest and posttest control group was used to reveal the difference between ... skills and attitudes ... Our study also involves the action research design… That's, we used both methods together to collect data regarding a subject with qualitative research methods, to interpret the collected data, to clarify the quantitative findings and to explore different dimensions of the data obtained from the participants; thus, we also used the mixed research method in our study.*"
TM1205	Misconception	"*This is a case study in which qualitative and quantitative research methods were used together… Case studies can be carried out with a quantitative or qualitative approach… This study was conducted using a descriptive design with the survey model to determine the activities, methods, strategies, techniques and materials used by primary school teachers."*
TM1405	Misconception	"*Although the experimental study conducted by the researcher in this study had a quantitative design, the observation form used while observing student behavior had a qualitative aspect. In this study, qualitative and quantitative research methods were used together*."
TM1406	Incorrect use of concepts	"*The method used in this study was the survey model, which is one of the quantitative analysis methods*."
TM1902	Misconception	"*Descriptive research, interview and survey method were used in this study*."
TM1903	Incorrect use of concepts	*"This study was conducted with the qualitative research method… the Interview technique, one of the descriptive research techniques, was used in this study."*
TM1904	Incorrect use of concepts	*"Document analysis method, one of the qualitative research models, was used in this study."*

When the statements in Table 15 were examined, it was seen about the methodological mistakes that the method heading in some theses did not reflect the content of the method. For example, in some theses, the research method was not clearly stated. Research methods based on different paradigms were not used to form a logical whole. While this is a scientifically important problem, it may also cause serious confusion for the reader.
One of the methodological mistakes is confusion. In particular, there were theses in which qualitative and quantitative research methods were used for one another or mixed, qualitative and quantitative research methods and action research approaches were used together. Depending on this situation, it could be stated that the philosophical sub-structures and paradigms on which the research methods were based were not understood sufficiently. Because these theses were approved by the supervisor, the thesis monitoring committee and the jury, it may indicate serious problems likely to be experienced in the scientist training process.
Another methodological mistake was incorrect use of concepts. For example, document analysis is not a method but a qualitative data collection tool. The survey model is not a quantitative analysis method but a research method. Therefore, these mistakes may confuse readers and make it difficult to understand the methodological structure of the theses and may cause problems with the issues of validity, reliability and ethics in terms of the scientific nature of the theses.

Figure 2. Sampling mistakes

Figure 2 shows the sampling mistakes encountered in the theses examined. These are mistakes caused by "lack of explanation regarding the sampling method" and "choosing the wrong sampling method". Related examples can be seen in Table 16.

Table 16. Sample statements regarding the sampling mistakes

Code	Mistake	Sample Statement
TM1502	Choosing the wrong sampling method	*"The sample of the study was determined using the purposeful sampling method, one of probabilistic sampling methods."*
TM1302	Choosing the wrong sampling method	*"This is a case study, and the single survey model was used within the scope of qualitative research method... Cluster sampling and stratified random sampling, which are among the probabilistic sampling methods, were used together to determine the research sample."*
TM1011	Lack of explanation regarding the sampling method	*"For the selection of the participants, the courses and the classes that the supervisor was responsible for were considered. In this respect, the supervisor was teaching ... in the department of primary school teaching, and to conduct my thesis, I chose a class I knew before."*

When the statements in Table 16 were examined, it was seen in some of the theses that although they belonged to different paradigms, probabilistic and purposeful sampling methods were used together. In some studies, the type of sampling was not mentioned. It should also be pointed out that sampling mistakes negatively affect the scientific quality of the thesis.

The mistakes related to the data collection tool encountered in theses are given in Figure 3.

Figure 3. Mistakes related to the data tools

As shown in Figure 3, the mistakes made regarding the data collection tool in the theses arose from the incorrect use of concepts and from misconception. Sample statements regarding these mistakes are shown in Table 17.

Table 17. Sample statements regarding the mistakes related to the data collection tools in the theses

Code	Mistake	Sample statement
TM1012	Incorrect use of concepts	*"A critical thinking inventory was developed by the researcher and finalized by taking the opinions of experts …*"
TM1303	Misconception	"*The study was carried out by applying a questionnaire according to the qualitative research model and by using the survey method according to the quantitative research model*."

TM1407	Misconception	"*The study was conducted using the descriptive research design based on the survey model*."
TM1802	Incorrect use of concepts	*"In the study, … the course book of … taught at primary school 4th grade level and the coursebook of … taught at the same level were used as the data collection tool."*

According to Table 17, in some of the theses, there were mistakes regarding the incorrect use of concepts and misconception concerning the data collection tools. For example, the coursebook, which is a data source, was presented as a data collection tool. Besides, according to the literature, the "a questionnaire-based survey model" is not one of the research models. In fact, the questionnaire is not a research type but a data collection tool. In this respect, as it can be understood from the statements in the theses, both misconception and incorrect use of concepts were encountered concerning data collection tools in some theses. Therefore, making incorrect/incomplete/inappropriate interpretation and definition of concepts and making mistakes due to interchangeable use of these concepts bring about the need for revising the methodological structures in theses.

Content-related mistakes made in the theses can be seen in Figure 4.

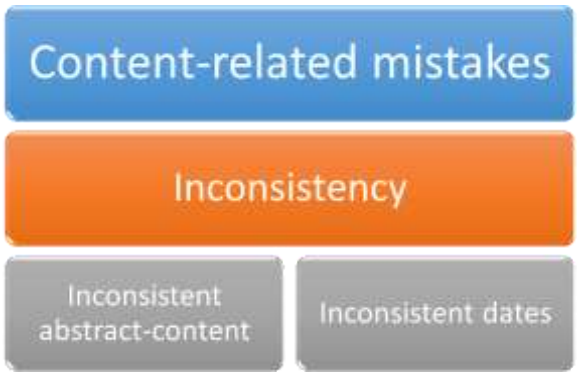


Figure 4. Content-related mistakes

As can be seen in Figure 4 content-related mistakes encountered in the theses were based on "incompatibility". Related examples are given in Table 18.

Table 18. Sample statements regarding content-related mistakes

Code	Mistake	Sample statement
TM1905	Abstract-content inconsistency	Abstract: "*In the introduction part of the study, 'thesis title', 'problem statement', 'problem situation', 'research purpose', 'importance of the research' and the method used in the study are presented. Information was given about '...' in the first section, about '...'. Education' in the second section, and about '... Books" in the third section, and the necessary subheadings were classified. The fourth section included the findings obtained and the related evaluations. The research results were presented in the last section, and the related suggestions were put forward*."
TM1206	Abstract-content inconsistency	Abstract: The thesis study included "introduction" and the "first", "second", "third" and "conclusion" sections after the introduction. At the end of the study, the references, which we *directly or indirectly benefitted from, were presented*."
TM1705	Abstract-content inconsistency	Abstract: "*In this study, which was carried out using the quasi-experimental design without a pretest-posttest control group, …"* Method: "*In this study, the mixed research method, which included qualitative and quantitative research techniques, was used*."
TD1402	Abstract-content inconsistency	Abstract: "*The real experimental model with a pretest-posttest control group was used*." Method: "*The study was designed using the mixed method*."
TM1013	Abstract-content inconsistency	Abstract: *"This was a quantitative study regarding the analysis techniques. For the analysis of the data, frequencies and percentages were calculated to determine the opinions of teachers and students.*" Method: "*In this study, the qualitative research method was applied*."

TM1607	Inconsistent dates	"The study group of the study included individuals who completed the program of … between 2009-2010 ..."

According to Table 18, mistakes related to "inconsistencies" such as "abstract-content inconsistency" and "inconsistent dates " were striking. Regarding the "abstract-content inconsistency", one could say that in some of the theses the things mentioned under the heading "abstract" do not overlap with those mentioned under the heading "method". Furthermore, there were theses where the abstract did not reflect the content of the research. It was seen that in terms of "inconsistent dates", there were theses based on the data collected 6-7 years ago. Accordingly, it could be stated that a thesis prepared based on an up-to-date topic is based on "up-to-date data" determines the actuality and functionality of the information produced. However, some of the theses could be said to lack such up-to-datedness.

Generally speaking, both master's and doctoral theses included these mistakes. The mistakes encountered in the theses did not just negatively affect the scientific quality of the theses; besides, it could be thought that academicians, who produce scientific information and train scientists, should revise their knowledge, skills and scientific understanding.

Conclusion, Discussion and Suggestions

This study aimed to reveal the bibliometric and content-related features and problems of master's and doctoral theses on classroom education in Turkey between 2010 and 2019. In line with this purpose, the results of the study are given by comparing them with the results obtained in similar studies in the literature.

Among the 1083 postgraduate theses examined within the scope of the study, 956 were master's theses and 127 were doctoral theses. It was seen that the number of master's theses was considerably higher than that of doctoral theses. In similar studies, the number of doctoral theses was less when compared to that of master's theses (Bağcı, 2012; Doğan, 2018; Küçükoğlu & Ozan, 2013; Şahin et.al., 2013; Tavşancıl, et.al., 2010). There might be different reasons for this situation. These reasons could be the long duration of the doctoral process, the involvement in the doctoral process of those who want to become academics, the failure of universities to create the conditions for opening a doctoral program in the field of teaching pedagogy, the personal, family and institutional problems of those who want to do it but cannot (denial of permission, erection of obstacles, refusal to reduce the workload, lack of legal infrastructure between institutions, etc.).The research results revealed that the research method mostly preferred in the theses was the quantitative research method. It was seen that the most frequent research type among quantitative research types was the survey and experimental model. In this respect, similar results were obtained in studies examining the studies carried out in the field of education (Bıkmaz et.al., 2013; Chen & Hirschheim, 2004; Karadağ, 2010; Koşar et.al., 2017; Kurtoğlu & Seferoğlu, 2013; Lee, Tien & Tsai, 2019; Polat, 2010; Şenyurt & Özkan-Özer, 2017; Topsakal, Çalık & Çavuş, 2012). In the theses where qualitative research methods were preferred, case study and phenomenological methods were used extensively. The reason why quantitative research methods were preferred more in the theses could be the fact that the process of data collection reaches more people in a shorter time and that the process of data collection and analysis is more time-consuming and tedious in qualitative research methods (Kozikoğlu & Senemoğlu, 2015).. Although quantitative research methods were mostly preferred in postgraduate theses, it was seen that there was an increase in the theses where qualitative research methods were preferred (Tereci & Bindak, 2019). In addition, methods such as mixed method and meta-analysis were preferred as well. Apart from these, there were theses in which different methods such as analytical model, methodological evaluation and design-based research were used. Preference of different methods in the theses could be considered important in obtaining, producing and spreading new, diverse and good-quality scientific information and offering new perspectives to different fields and studies. Concerning this, it could be stated that different methods, especially quantitative and qualitative methods, were used in the theses examined. Use of other methods in theses may ensure production of diverse and good-quality scientific information, yet it might be important that the research topic of the thesis is in integrity with the method used in the thesis.

In the theses examined within the scope of the study, it was seen that students were the most preferred source of data. Moreover, there are also theses conducted with teachers and preservice teachers. This result was obtained in similar studies (Doğan, 2018; Ergun & Çilingir, 2013; Koç, 2016; Tereci & Bindak, 2019). Therefore, the fact that students, teachers and preservice teachers, who are the main stakeholders in classroom education, were the most frequent data sources could be said to be a correct choice. However, it is important to increase the number of studies conducted with parents, school administrators and academicians, who are among other stakeholders.

Among the theses examined, there were also theses in which students taking secondary school education and individuals taking mass education, who are not direct stakeholders of classroom education, were included as data sources. This situation can be evaluated in terms of contributing to classroom education. On the other hand, theses to be conducted on classroom education in the context of the institution, individuals and the topic covering the

field of classroom education are important in terms of reflecting the problems, developments, existing situations and practices in the field.

In the theses examined, "scale", one of the quantitative data collection tools, was used most, and the same result was obtained in similar studies (Akpunar, Kazu & Erdamar, 2018; Arık & Türkmen, 2009; Eryılmaz & Deniz, 2019; Eskici & Çayak, 2017; Karadağ, 2010; Kozikoğlu & Senemoğlu, 2015; Kurtoğlu & Seferoğlu, 2013; Şahin, 2019; Wassink & Sadi, 2016). This situation could be a natural result of using quantitative research approaches as a method most. The scale was preferred most among the data collection tools might be studying topics related to the development of cognitive features such as achievement and skills of students or preservice teachers, who are sources of data. It may also be related to reaching more people through quantitative data collection tools and the economic process of data collection in terms of implementation time and implementation costs (Sert et.al., 2012). In the theses based on the qualitative research approach, it was seen that the interview method as a data collection tool was used most. This result is similar to the one obtained in a study examining theses on Turkish Language education (Boyacı & Demirkol, 2018). In addition, more than one data collection tool in some theses were used. This situation could be considered important in providing data richness, validity, and reliability. In this respect, it is important that thesis authors be aware of and be encouraged to use more than one data collection tool in thesis studies.

It was noted that the theses focused mainly on the course of Turkish language (including the teaching of reading and writing), as well as courses such as mathematics, science, social sciences and social life. The postgraduate theses on classroom education could be said to be related to the basic courses taught at elementary school level. This situation was also noted in the results of other similar studies (Bağcı, 2012; Bektaş, Dündar & Ceylan, 2013; Doğan, 2018; Şahin et.al., 2013; Ünal & Arık, 2016). However, it was revealed that the number of theses on fine arts, Physical Education and Playing, and Music was low. The reasons for the low number of postgraduate theses related to these courses, which are important for the affective development of elementary school students could be said to include the followings: the postgraduate theses related to these courses were low in number; the weekly course hours of these courses were low in number; not enough importance was given to these courses; these courses lacked acceptance in national and international exams; there were few experts/academicians to teach these courses in the field of classroom education; and the courses were not popular among postgraduate students.

When the postgraduate theses were examined concerning their topics, it was seen that most of the theses were conducted on education management. There were also theses on educational policies such as in-service training, special education, teacher training, elementary school curricula and laws. It could be stated that these topics were related to classroom education. This situation was also reflected upon other similar studies (Eskici & Çayak, 2017; Fazlıoğulları & Kurul, 2012; Şahin, Göğebakan-Yıldız & Duman, 2010; Tereci & Bindak, 2019; Tezcan-Apak & Güllühan-Ütkür, 2019). Studying different topics in the field of classroom education could guide further research in terms of the future of the field.

As a result of the research, it was revealed that there were various mistakes made in theses examined. These mistakes were in the method part of the theses as follows: incompatible content, misconception, incorrect use of concepts, and lack of explanation regarding the sampling method. This situation was also reported in other similar studies (Bacanak et.al., 2011; Bağcı, 2012; Ergun & Cilingir, 2013; Karadağ, 2009; Koşar et.al., 2017; Oruç & Ulusoy, 2008; Saban et.al., 2010; Şahin et.al., 2013; Tosuntaş, Emirtekin & Süral, 2019). Strikingly, there were content and methodological mistakes in some of the theses. There might be various reasons for this situation such as insufficient quality of scientific methodology courses during postgraduate education, lack of knowledge and skills of the student writing the thesis about scientific research, lack of knowledge and skills of thesis supervisors and jury members about the methods and techniques, and lack of detailed examination of theses before the thesis defense. In today's world where we can directly access information, making obvious mistakes in theses reduces the quality of the thesis and therefore the reliability of the information produced. To eliminate the mistakes that arise in theses, the literature on the thesis topic should be reviewed well; and scientific articles should be read especially during postgraduate courses so that students can master the scientific paradigms and methodologies; and precautions should be taken to minimize the mistakes as the thesis supervisor follows the process of the thesis preparation. Assuming that individuals who become expert in the field by completing their theses will produce scientific information, develop theories, give lectures and contribute to the training of new scientists through thesis consultancy in future, minimizing these problems should be considered important.

Some measures could be taken to increase the quality of the theses conducted in the field of classroom education. Postgraduate education in classroom education could be strengthened; the number of doctoral programs could be increased; and postgraduate students could be encouraged to choose topics related to their thesis subjects and study on more original topics. In addition, elementary school teachers could be encouraged to take postgraduate education so that new scientific information in the field of classroom education can be produced; new field experts can be trained; theory and practice can be combined; and the number of postgraduate theses can be increased. However, to facilitate these processes and related permissions, legal infrastructures could be strengthened (permission, adjustment of work load, direct contribution to salary and career development, etc.), and transforming this process into a policy - in the context of classroom education – will lead to an increase in qualified manpower

in the country in the medium and long term. In this respect, for better-quality theses, instructors who supervise theses could manage the process more carefully, and a "thesis monitoring committee" could be required during the master's thesis process.
This study was carried out using a systematic research approach for detailed examination of postgraduate theses in the field of classroom education. To conduct in-depth examination of postgraduate theses, theses related to special topic in the field of classroom education could be examined in-depth, and meta-synthesis studies could be conducted to obtain more information about the nature of theses.

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Authors Contribution Rate

The authors contributed equally to the study.

Conflicts of Interest

No potential conflict of interest was reported by the authors.

Ethical Approval

Ethical permission (07.01.2021-2021-06) was obtained from Usak University's Social and Humanities Sciences Ethics Commitee for this research.

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