

ARTICLE

SKILLS & CONCEPTUAL TEACHING IN EDUCATION: INVESTIGATION OF POST GRADUATE THESIS

Mukaddes Sakallı Demirok^{1*}, Aysegul Sukran Oz², Harun Aysever¹, Serap Meral Karabacak¹

¹Near East University, Ataturk Faculty of Education, Department of Special Education, Nicosia, North Cyprus, Mersin 10, TURKEY

²Mustafa Kemal Universities, Faculty of Education, Department of Special Education, Hatay, TURKEY

ABSTRACT

This study was carried out to examine master and doctorate thesis about skills and concept teaching in special education between 2010-2016 years, determine the advancements in skills and concept teaching studies and pave the way for researchers in their future studies. In order to achieve this aim, thesis were evaluated based on year, method, data collection tools, research sample, data analysis technics, research areas and results. Thesis were examined with document analysis as part of descriptive approach and "Thesis Classification Form" was used for content analysis of each thesis. Open access thesis carried out between 2010-2016 related with skills and concept teaching from YOK National Thesis Database are included in the study. Content analysis method was used in data analysis. Results showed that thesis were mainly master thesis and single-subject research method as one of the quantitative research methods was frequently used in the thesis. When data collection tools of thesis were examined, it was found that observation, questionnaire and scales were frequently used, research sample mainly included students and there were 1-10 subjects in the sample. Lastly, results also showed that research areas of thesis focused on simultaneous prompting method, constant time delay procedure and teaching with video-tablet.

INTRODUCTION

Every individual is different and has different characteristics. Often these differences between individuals are not too great. Therefore, there is no problem in the utilization of these individuals from general education services under normal conditions [1].

However, as the dimension of the differences increases, the general education services provided to the individuals may be insufficient and special education services are needed [2], [3]. Individuals who need special education have different needs from other individuals [4]. It is one of the most basic characteristics of the society to provide individuals who need special education by ensuring equality of opportunity in education in early childhood and to prepare them to life in a good way. Looking at the main purpose of special education is to provide these individuals with basic living skills so that they can achieve self-sufficiency [5]. The main objective of the education is to educate the individuals who have some difficulties to gain publicity, to become independent, or to teach them the behaviors, knowledge and skills they need in order to continue their lives in the least dependent way [6], [7], [8].

The basic skills required for the individual to achieve this goal with success are; basic development skills, necessary numerical skills in everyday life, sub-skills such as reading and communication necessary in everyday life. [9]. divide these skills into four skill areas. These are the basic skills required for success, the skills required for integration, the skills of everyday life, professional preparation and professional skills, language and communication skills [10]. [11] states that independent living skills are divided into two sub-skill areas, self-care and in-home skills. These skills are the skills that individuals need to acquire in terms of achieving independence and increasing quality of life. It is necessary for these to acquire proficiency in teaching fields [12][13][14]. When the physical and mental characteristics of each individual are taken into account, how they learn and how they use what they learn differ. While some individuals use what they learn and learn quickly, some individuals need intensive and special education because they have difficulties in learning [15][16][17]. It is important to learn the skills of everyday life in order to reduce the dependence of special needs individuals on other individuals and to be successful in their future lives [18], [19]. [20] emphasized that if individuals with special needs are equipped with the skills of everyday life, their self-confidence will be enhanced and their quality of life will improve. If these skills are not acquired, it is stated that the special needs individuals are not socially accepted by the society [21], [22][23][24][25].

Teaching methods that teachers use in teaching skills and concepts influence their ability to become successful or unsuccessful in their educational life [26] and new approaches and methods are developed in education day by day [27]. The methods and techniques used in teaching provide advantages or disadvantages based on the skills and concepts to be taught [28], [29], [30]. When the relevant literature is examined, it is seen that the teachers prefer traditional teaching methods in the teaching of academic skills in general [31][32][33 [34][35]. According to, [36] teaching skills and concepts to the students with inadequacy should be taught with systematic teaching process.

KEY WORDS

Special Education, Skill, Concept, Skill and Concept Teaching.

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*Corresponding Author

Email:
mukaddes.sakalli@neu.edu.tr
Tel.: +90 392 223 64 64

When the literature is examined, it is seen that various researches have been done to determine the tendencies and disciplines of post graduate theses in the field of special education [37], [38], [39], [40], [41][42][43][44][45][46][47]. The studies are aimed at examining post graduate theses in different disciplines in various special education fields. In this research, there was no research that examined the post graduate theses on knowledge and skills teaching in special education. It is believed that this study is important in terms of setting up post graduate research orientations in the teaching of skills and concepts in the field of special education, in terms of contributing to the field and shedding light on the areas in which future studies can be conducted. Examination of master's and doctoral dissertations in the field of skills and concept teaching in special education for the recent years can determine the predominant subject areas, methods or sampling characteristics, which can be directed to students who receive under post graduate education. It is thought that it can be a guide for students who have difficulties in deciding on research in post graduate education can to see the frequently or rarely studied subject areas on the field.

The aim of this study is to examine post graduate and doctoral theses made with skill and concept education in the field of special education in Turkey between 2010-2016 and to reveal the research trends of the skills and concept teaching studies.

In response to this main objective, the following questions have been sought.

The special thesis on skills and concept teaching in the field of special education included in the YÖK National Thesis Databases.

1. Levels and Distribution of years of publication
2. Distribution of methods according to years
3. Distribution of levels according to methods
4. Distribution of the levels according to the data collection tools used
5. Distribution by sampling group
6. Distribution by sample size
7. Distribution of data analysis method by years and levels
8. How is the distribution of topics for years and levels?

Limitations

The sample of the study constitutes master and doctoral theses published in YOK Thesis between 2010-2016. The YOK has been searched with the key words of skill and concept teaching in skills teaching, concept teaching and special education in the thesis search engine.

MATERIALS AND METHODS

In this study, content analysis method was used from qualitative research methods. Content analysis, widely used in social sciences and widely used in qualitative research, is a technique that is coded and summarized based on a set of rules [48]. The basic process of content analysis is to compile and interpret data that are similar to each other in a way that the reader can understand these terms and concepts collected and gathered together on the basis of certain themes and concepts [49].

Data sources

In this study, post graduate dissertations on skill and concept teaching in special education, which was published as a full text between 2010-2016 in YOK National Thesis Database in Turkey, were included. Theses included in the scope of the study are 79 Master of Science (MSc) and 17th Doctoral Thesis. Firstly, the theses published on the skills and concept teaching in the special education which is included in the Higher Education Thesis Database by YOK have been determined by the researchers and the master and doctorate theses published in these theses in the last 7 years have been investigated. While the theses were determined, a list of theses related to the skills and concept teaching in the YOK National Thesis Database was firstly listed in the field of special education and after the theses including the key words "skill, concept, concept teaching, skill teaching" were added to the list. As a result of the study, between 2010 and 2016, 96 studies on skills and concept teaching in the field of special education were reached.

Data collection tool

In this study, "Thesis Classification Form" developed by [50] was used as data collection tool. The form consisting of 5 parts was examined by three people who were teaching members in the field of educational sciences and the scope of the form was validated. The form basically consists of five parts which are method of thesis, method of data collection, sample / sample size and data analysis methods. The scope of the form is validated [50].

Analysis of data

In the scope of the study, data obtained from master and doctoral theses analyzed by content analysis method were analyzed using descriptive statistical method. Each thesis was examined using the Thesis Classification Form and then analyzed in SPSS 20 program. Percentages and frequencies of data were calculated to reflect the purpose of the study with respect to the data and the response to the questions constituting the sub-objective. The results collected at the end were put in tables.

RESULTS

Findings and comments

The findings and interpretations obtained from the statistical analysis of the data collected according to the general and sub-objectives of the study are included in this section. Frequency and percentage values of the theses studied are given in [Table 1].

Table 1: Level of theses examined and distribution according to prepared years

Year	Masters		Doctorate		Total	
	f	%	f	%	f	%
2010	8	8.3	0	0	8	8.3
2011	14	14.6	3	3.1	17	17.7
2012	12	12.5	4	4.2	16	16.7
2013	7	7.3	1	1.0	8	8.3
2014	10	10.4	2	2.1	12	12.5
2015	16	16.7	3	3.1	22	22.9
2016	12	12.5	4	4.2	16	16.7
Total	79	82.3	17	17.7	96	100

8 (8.3%) of the 79 post graduate theses examined in Table 1 were studied in 2010, 14 (14.6%) in 2011, 12 (12.5%) in 2012, 7 (7.3%) in 2013, 10 (10.4%) in 2014, 16 (16.7%) in 2015 and 12 (12.5%) in 2016. It was determined that 3 out of 17 doctoral theses (3.1%) were made in 2011 and 4 (4.2%) were made in 2012 regarding skills and concept teaching in special education. In 2013, when there was no doctoral dissertation written and in 2010 only 1 (1.0%) thesis was written and this number increased in other years. Frequency and percentage values of the research design according to years are presented in [Table 2].

Table 2: Frequency and percentage distributions of methods of masters thesis according to Years

Year	Quantitative			Qualitative			Mixed Model		Total	
	Real Experimental	Descriptive scanning	Relational Search	Single Subject Research	Descriptive and relational screening	Causal and relational screening	Case study	Action Study		Explicit mixed model
	f %	f %	f %	f %	f %	f %	f %	f %	f %	
2010	0 0.0	1 1.0	0 0.0	6 6.3	0 0.0	0 0.0	0 0.0	0 0.0	1 1.0	8 8.3
2011	0 0.0	2 2.1	0 0.0	10 10.4	1 1.0	1 1.0	0 0.0	0 0.0	3 3.1	17 17.7
2012	1 1.0	5 5.2	2 2.1	7 7.3	0 0.0	0 0.0	0 0.0	0 0.0	1 1.0	16 16.7
2013	1 1.0	0 0.0	1 1.0	5 5.2	0 0.0	0 0.0	0 0.0	0 0.0	1 1.0	8 8.3
2014	0 0.0	0 0.0	0 0.0	11 11.5	0 0.0	0 0.0	1 1.0	0 0.0	0 0.0	12 12.5
2015	1 1.0	2 2.1	2 2.1	13 13.5	0 0.0	0 0.0	1 1.0	0 0.0	0 0.0	19 19.8
2016	0 0.0	0 0.0	1 1.0	11 11.5	0 0.0	0 0.0	2 2.1	1 1.0	1 1.0	16 16.7
Toplam	3 3.1	10 10.4	6 6.3	63 65.6	1 1.0	1 1.0	4 4.2	1 1.0	7 7.3	96 100

As seen in [Table 2], when the research designs of the theses examined according to the years are analyzed, it is seen that the single subject research model from the quantitative research methods is used more frequently than the other research models. When the same table is considered, the model of action research is used only in 2016, the descriptive and relational model and the causal and relational screening model are only used in 2011.

Table 3: Frequency and percentage distributions of Thesis levels according to methods

Method		Masters		Doctorate		Total	
		f	%	f	%	f	%
	Real Experimental	2	2.1	1	1.0	3	3.1
	Descriptive scanning	9	9.4	1	1.0	10	10.4
	Relational Search	6	6.3	0	0.0	6	6.3
Quantitative	Single Subject Research	54	56.3	9	9.4	63	65.6
	Descriptive and relational Screening	0	0.0	1	1.0	1	1.0
	Causal and relational screening	0	0.0	1	1.0	1	1.0
Qualitative	Case Study	3	3.1	1	1.0	4	4.2
	Action Study	0	0.0	1	1.0	1	1.0
Mixed	Quantitative / Quantitative (Explanatory)	5	5.2	2	2.1	7	7.3
Total		79	82.3	17	17.2	96	100

[Table 3] contains the findings of percentage and frequency analysis of the research design of the post graduate these included in the scope of the research. It is seen that the research designs used in master's thesis are mostly done with single-subject research model included in the quantitative method. The same situation emerges in doctoral theses examined. This finding suggests that mostly quantitative research methods are preferred in master and doctoral theses related to skills and concepts in the field of special education. In addition it was concluded that 3 master's theses, 2 doctoral theses done with qualitative research; and 5 master's degrees done with mixed method. Action research, descriptive and relational screening, and relational and causal screening models were used in more in master's thesis and less in doctorate thesis.

Table 4: Levels of theses Frequency and percentage distributions according to data collection tools

Data Collection Tool	Masters		Doctorate		Total	
	f	%	f	%	f	%
Observation form	49	51	7	7.3	56	58.3
Interview form	6	6.3	0	6.3	6	6.3
Questionnaires / Scales	14	14.6	2	16.7	16	16.7
Observation and Survey	4	4.2	3	3.1	7	7.3
Interview Form and Questionnaire	2	2.1	1	1.0	3	3.1
Observation and Interview Form	1	1.0	2	2.1	3	3.1
Interview Form, Observation and Survey	1	1.0	1	1.0	2	2.1
Alternative Assessment Tools	2	2.1	1	1.0	3	3.1
Total	79	82.0	17	17.7	96	100

In [Table 4], when the data collection tools of the post graduate these were examined, it was determined that the observation form was used in 49 of the master theses examined, the questionnaire / scale was used in 14, and the interview form was used in 6. In the doctoral dissertations examined, it was determined that the usage frequency of the observation form is higher than other data collection tools as it is in the master thesis.

Table 5: Frequency and percentage distributions according to sampling group

Sample	Masters		Doctorate		Total	
	f	%	f	%	f	%
Pre-school	11	11.5	3	3.1	14	14.6
Primary Education	28	29.2	7	7.3	35	36.5
Secondary education	22	22.9	5	5.2	27	28.1
Primary and Secondary Education	2	2.1	0	0.0	2	2.1
Parent	1	1.0	0	0.0	1	1.0
Teacher	8	8.3	0	0.0	8	8.3
Parent and Primary Education	2	2.1	1	1.0	3	3.1
Parent and secondary education	3	3.1	1	1.0	4	4.2
Teacher and parent	1	1.0	0	0.0	1	1.0
Teacher and student	1	1.0	0	0.0	1	1.0
Total	79	82.3	17	17.7	96	100

When we look at the sample group of the theses examined as seen in [Table 5], it is seen that the theses made in the masters and doctorate fields are frequently formed by the students in the sample group. It

was determined that 35 of the post graduate these studied were primary education, 27 were secondary education and 14 were preschool students.

Table 6: Frequency and percentage distribution according to sample size

Sample Size	Masters		Doctorate		Total	
	f	%	f	%	f	%
1-10	55	57.3	11	11.5	66	68.8
11-30	7	7.3	3	3.1	10	10.4
31-100	8	8.3	2	2.1	10	10.4
101-300 and above	9	9.4	1	1.0	10	10.4
Total	79	82.3	17	17.7	96	100

As seen in [Table 6], When the sample size of the theses included in the scope of the study is examined, it is seen that 66 of the theses examined are for the sample group between 1 and 10 people.

Table 7: Frequency and percent distribution of data analysis methods of post graduate these by Years

	Frequency / standard deviation		Graphic Display		Descriptive and predictive statistics		Quantitative and qualitative analysis		Content analysis		Descriptive analysis (qualitative)		Total	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
2010	1	1.0	5	5.2	1	1.0	1	1.0	0	0.0	0	0.0	8	8.3
2011	1	1.0	10	10.4	3	3.1	3	3.1	0	0.0	0	0.0	17	7.7
2012	3	3.1	6	6.3	6	6.3	0	0.0	1	1.0	0	0.0	16	16.7
2013	0	0.0	6	6.3	2	2.1	0	0.0	0	0.0	0	0.0	8	8.3
2014	0	0.0	11	11.5	0	0.0	0	0.0	1	1.0	0	0.0	12	12.5
2015	0	0.0	13	13.5	4	4.2	0	0.0	0	0.0	2	2.1	19	19.8
2016	1	1.0	12	12.5	2	2.1	1	1.0	0	0.0	0	0.0	16	16.7
Total	6	6.3	63	65.6	18	18.8	5	5.2	2	2.1	2	2.1	96	100

As seen in [Table 7], when the data analysis methods are analyzed according to years, it is determined that the most used analysis method is graphical representation and 13 (% 13.5) theses are used as data analysis method in 2015. However, descriptive analysis (qualitative) method is used only in 4 (4.2%) of the surveys in 2015.

Table 8: Frequency and Percentage distribution of data analysis methods

Sample	Masters		Doctorate		Total	
	f	%	f	%	f	%
Frequency and Standard Deviation	6	6.3	0	0.0	6	6.3
Graphic Display	51	53.1	12	12.5	63	65.6
Descriptive and Estimative	14	14.6	4	4.2	18	18.8
Quantitative and qualitative research	4	4.2	1	1.0	5	5.2
Content Analyses	2	2.1	0	0.0	2	2.1
Descriptive Research (qualitative)	2	2.1	0	0.0	2	2.1
Total	79	82.3	17	17.7	96	100

As can be seen in [Table 8], when the data analysis methods of the theses are examined, it is seen that the thesis done in master and doctorate theses shows graphical representation in 63, descriptive and predictive in 18, frequency and standard deviation in 6 and quantitative and qualitative data analysis method in 5. Among the findings obtained are that content analysis and descriptive (qualitative) data analysis are used in 2 theses.

Table 7: Analysis of frequency and standard deviation of the thesis subjects by years

	2010		2011		2012		2013		2014		2015		2016		Total	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Constant time delay procedure	1	1.04	1	1.04	2	2.08	0	0.0	1	1.04	1	1.04	3	3.12	9	9.37
Simultaneous Prompt Teaching	1	1.04	5	5.20	3	3.12	3	3.12	4	4.16	1	1.04	0	0.0	17	17.70
Video Tablet Teaching	0	0.0	0	0.0	0	0.0	0	0.0	4	4.16	4	4.16	2	2.08	10	10.41
Teaching with Social Story and Video Model	1	1.04	0	0.0	0	0.0	0	0.0	0	0.0	4	4.16	1	1.04	6	6.25
Family education programme	0	0.0	0	0.0	1	1.04	1	1.04	0	0.0	1	1.04	0	0.0	3	3.12

Teaching With Behavior Testing	1 1.04	0 0.0	0 0.0	2 2.08	0 0.0	0 0.0	0 0.0	3 3.12
Opinion	1 1.04	1 1.04	2 2.08	0 0.0	1 1.04	1 1.04	0 0.0	6 6.25
Replicate Silencing	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	2 2.08
Teaching with progressive help	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	0 0.0	1 1.04	2 2.08
Direct Teaching Method	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	2 2.08
Gagne and Merrill Teaching Method	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	0 0.0	1 1.04
State Analysis	1 1.04	0 0.0	0 0.0	1 1.04	0 0.0	2 2.08	3 3.12	7 7.29
Teaching Social Skills	0 0.0	1 1.04	4 4.16	1 1.04	0 0.0	0 0.0	0 0.0	6 6.25
Teaching Language Skills	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	1 1.04	0 0.0	2 2.08
Teaching with Drama	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Activity Programme	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	1 1.04	1 1.04	3 3.12
Teaching by Peer	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	1 1.04
Embedded Teaching	0 0.0	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Concept Map	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Aqua Therapy	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	1 1.04
Scale Development	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	1 1.04
Teaching Academic Skills	0 0.0	1 1.04	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	2 2.08
Scheme Approach	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	0 0.0	1 1.04
Self Orientation Technique	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Picture Exchange Based Education	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Non-Formal Reading Inventory	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Opportunity Education	0 0.0	1 1.04	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04
Teaching Motor Skills	0 0.0	1 1.04	2 2.08	0 0.0	0 0.0	0 0.0	0 0.0	3 3.12
Teaching Social Thinking Skills	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	1 1.04	0 0.0	1 1.04
Total	8 8.33	17 7.7	16 16.6	8 8.33	12 12.5	19 9.7	16 6.6	96 100

As seen in [Table 7], it is seen that the teaching methods used in special education are used in the teaching of skills and concepts when examining the study subjects of master and doctorate theses examined. The orientation of special education theses about skills and concept teaching between 2010 and 2016 has been achieved as a result of intensive education with video tablet compared to past years.

Table 8: Frequency and standard deviation analysis of trends of thesis

	Masters		Doctorate		Total	
	f	%	f	%	f	%
Constant time delay procedure	9	9.37	0	0.0	9	9.37
Simultaneous Prompt Teaching	1	16.66	1	1.04	17	17.70
Video Tablet Teaching	8	8.33	2	2.08	10	10.41
Teaching with Social Story and Video Model	4	4.16	2	2.08	6	6.25
Family education programme	1	1.04	2	2.08	3	3.12
Teaching With Behavior Testing	3	3.12	0	0.0	3	3.12
Opinion	6	6.25	0	0.0	6	6.25
Replicate Silencing	2	2.08	0	0.0	2	2.08
Teaching with progressive help	1	1.04	1	1.04	2	2.08
Direct Teaching Method	2	2.08	0	0.0	2	2.08
Gagne and Merrill Teaching Method	1	1.04	0	0.0	1	1.04
State Analysis	5	5.20	2	2.08	7	7.29
Teaching Social Skills	6	6.25	0	0.0	6	6.25
Teaching Language Skills	1	1.04	1	1.04	2	2.08
Teaching with Drama	1	1.04	0	0.0	1	1.04
Activity Programme	3	3.12	0	0.0	3	3.12
Teaching by Peer	0	0.0	1	1.04	1	1.04
Embedded Teaching	0	0.0	1	1.04	1	1.04
Concept Map	1	1.04	0	0.0	1	1.04
Aqua Therapy	1	1.04	0	0.0	1	1.04
Scale Development	1	1.04	0	0.0	1	1.04
Teaching Academic Skills	1	1.04	1	1.04	2	2.08
Scheme Approach	1	1.04	0	0.0	1	1.04
Self Orientation Technique	1	1.04	0	0.0	1	1.04
Picture Exchange Based Education	1	1.04	0	0.0	1	1.04
Non-Formal Reading Inventory	0	0.0	1	1.04	1	1.04
Opportunity Education	1	1.04	0	0.0	1	1.04
Teaching Motor Skills	1	1.04	2	2.04	3	3.12
Teaching Social Thinking Skills	1	1.04	0	0.0	1	1.04
Total	79	82.30	17	17.70	96	100

The orientations of the theses studied are given in Table 8. It is seen that 16 theses (16.66%) are about simultaneous clue teaching, 9 thesis (9.37%) with fixed waiting time teaching and 8 theses (8.33%) with video-tablet teaching. In the doctoral theses studied, it was determined that there are two theses in all of the mentioned orientations; teaching with video tablet, social story and video model, family education program, situation analysis and teaching motor skills. The details of the theses are given in the above table.

DISCUSSION AND CONCLUSION

This research was carried out between 2010 and 2016 with the aim of examining the post graduate theses published in YOK National Thesis Database regarding the skills and concept teaching in the field of special education in terms of various variables. When the findings obtained for this purpose were examined, the following results were obtained;

In the study, 79 master's thesis and 17 doctorate theses on the skill and concept teaching in special education were reached. Examining the years of study of theses, it is observed that the number of master's theses on skills and concept teaching increased in 2015. In 2010 there were no doctoral theses on skills and concept teaching, but it was determined that until 2016 there was an increase in the number of studies in this area. In parallel with the findings, it was concluded that the doctoral theses are fewer than the master theses [43], [51], [52], [53].

Based on the study design of the postgraduate theses examined, it was determined that the older child was made by quantitative research methods. Quantitative research is a form of research that quantifies any phenomenon or situation through observation, experimentation, testing, and objectification [54].

When the research designs of the theses examined are analysed it is concluded that the quantitative research methods are more frequently used than the other research models. A single subject research method is the study of the behavior of a student or a student, under specific circumstances and with repeated measures in the field of special education.

It is called a research that establishes a reliable relationship between dependent and independent variables [55].

More frequent use of single-subject research methods in skill and concept teaching and less use of qualitative or mixed research and it is also seen that the use of the single-task research model has increased much more over the years. [46] reached the conclusion in the content analysis research they conducted that the single-item research model was used more than the other research models. This result supports the research findings.

When the data collection tools of the theses examined are analysed it is seen that observation form and questionnaire / scale are used. In a similar study, it was determined that the observation form and the use of questionnaire / scale were used more than the other data collection tools in the study of the master teacher theses not only in special education field studies. Similarly, in the study of post graduate theses in the field of teacher education [50], the observation form and the use of questionnaire / scale were used more than other data collection tools.

When the theses examined were analysed according to the sample group and sample size, it was determined that the sample group was formed mostly by students and the sample size was between 1 and 10 people. When the data analysis methods of the research were examined, it was determined that the data were more graphically analyzed. At the same time it was found that the graphical analysis method has been preferred more over the post graduate theses over the recent years. The data analysis method used in the single subject research method in the field of literature carries the characteristics of sample group and sample size. Given the single-subject research method, the sample group generally varies from three to eight students and the obtained data are analyzed by graphical analysis method [56], [57], [58], [59].

When looking at the subjects of the examined masters and doctorate thesis it has been determined that there has been an increase in the number of simultaneous clue teaching, fixed waiting time teaching and video-tablet teaching according to years. Similar outcomes were obtained from the study conducted by [47], in Turkey, that the frequency of use of single-subject research models is determined by the fact that inaccurate teaching methods, video model teaching and direct teaching methods are frequently used and their orientations are in this direction. As a result, it was determined that the post-graduate theses related to skills and concepts in the field of special education were more oriented towards teaching and were mostly conducted by single-subject research method.

Recommendations

- Comparisons can be made by examining the distribution of theses on skills and concept teaching in special education according to universities.
- Studies on the titles and theses of thesis advisor can be done.

- The theses that are studied about skills and concept teaching can be expanded by extending the years.
- It can be compared with research done abroad on skills and concept teaching.

CONFLICT OF INTEREST

There is no conflict of interest.

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