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Improving the Teacher Training Process in Special Education: An Action Research*

Özel Eğitim Alanında Öğretmen Yetiştirme Sürecinin Geliştirilmesi: Bir Eylem Araştırması

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ABSTRACT: The special education teaching program in Turkey was united under a single roof with the decision taken by the Council of Higher Education in 2016. With this decision, the programs for teachers of the hearing impaired, the mentally disabled, the visually impaired and the gifted/special talented were organized as a new and single undergraduate program under the name of "Special Education Teaching". This research aimed to enhance the teaching practice process within the new special education program. For this purpose, the study was designed as action research. The research was conducted in a special education department in a province with a medium-sized population in Central Anatolia. The research participants included 19 faculty members, 24 undergraduate students, 12 special education teachers, one Ministry of National Education official, and one Directorate of National Education official. Semi-structured interviews, participant information forms, video recordings, documents, and a researcher diary were used for data collection. The data obtained from the research were analyzed using a systematic analysis approach. As a result of the research, arrangements were made in the new special education teacher training program in the areas needed in the teacher training process. Steps such as reorganizing the evaluation criteria and creating guidelines to determine the responsibilities of stakeholders are among these arrangements. With the Covid-19 pandemic, activities were carried out for material design and use in distance education and transfer of theoretical knowledge to the online teaching practice environment.

Keywords: Special education, teaching practice, teacher training, pandemic, distance education.

ÖZ: Özel eğitim öğretmenliği programı Yüksek Öğretim Kurulu Başkanlığı'nın 2016 yılında aldığı kararla tek çatı altında birleştirilmiştir. Bu karar ile birlikte işitme engelliler, zihin engelliler, görme engelliler ve üstün zekâlılar/özel yetenekliler öğretmenliği programları, "Özel Eğitim Öğretmenliği" adı altında yeni ve tek bir lisans programı olarak düzenlenmiştir. Araştırma kapsamında yeni özel eğitim öğretmenliği programında öğretmenlik uygulaması sürecinin geliştirilmesi amaçlanmıştır. Bu amaçla çalışma, eylem araştırması olarak desenlenmiştir. Araştırma İç Anadolu bölgesinde orta ölçekte nüfusa sahip bir ildeki özel eğitim bölümünde gerçekleştirilmiştir. Araştırma katılımcıları arasında 19 öğretim üyesi, 24 lisans öğrencisi, 12 özel eğitim öğretmeni, bir MEB yetkilisi ve bir MEM yetkilisi yer almaktadır. Araştırma kapsamında veri toplamada yarı-yapılandırılmış görüşme, katılımcı bilgi formu, video kayıtları, dokümanlar ve araştırmacı günlüğü kullanılmıştır. Araştırmadan elde edilen veriler sistematik analiz yaklaşımı ile analiz edilmiştir. Araştırma sonucunda yeni özel eğitim öğretmenliği programında öğretmen yetiştirme sürecine ilişkin gereksinim duyulan alanlarda düzenlemeler yapılmıştır. Değerlendirme kriterlerinin yeniden düzenlenmesi, paydaşların sorumluluklarının belirlenmesi adına yönergelerin oluşturulması gibi adımlar bu düzenlemeler arasında yer almaktadır. Covid-19 Pandemisiyle birlikte uzaktan eğitimde materyal tasarımı ve kullanımı, teorik bilgilerin çevrimiçi öğretmenlik uygulama ortamına transferine yönelik faaliyetler yürütülmüştür.

Anahtar kelimeler: Özel eğitim, öğretmenlik uygulaması, öğretmen yetiştirme, pandemi, uzaktan eğitim.

* This study titled "Development of Teaching Practice in Special Education: Anadolu University Example" is derived from his doctoral dissertation.

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Two main practices are utilized worldwide to ensure the qualitative development of pre-service teachers or teachers actively practicing their profession. The first of these is the pre-service program implemented for pre-service teachers, while the other is in-service training (Işık et al., 2010). In-service training refers to the process of providing scientifically proven knowledge and skills that teachers are lacking (Budak & Demirel, 2003). The pre-service teacher training process is the practice carried out through undergraduate programs using training models or approaches determined by the relevant institutions (Abazaoğlu et al., 2014). The teacher training process in the pre-service system is comprehensive and multidimensional. It includes steps such as monitoring and evaluating the whole process from theoretical training to teaching practice (Kavcar, 2002).

Teaching practice, which can be considered the last step of pre-service education, is the process in which final undergraduate students study for a certain period of time in a class appropriate to their field of specialization. In this learning process, an experienced teacher and/or faculty member takes on the role of a guide (Eurydice, 2018; Van Schagen Johnson et al., 2017). According to Darling-Hammond (2006), the most fundamental step of the teacher training process is teaching practice. Teaching practice involves applying the theoretical knowledge gained during undergraduate education to a real-life teaching environment. It is essentially the process of preparing for and gaining experience in teaching, culminating in actual teaching experience (Paker, 2008; Yücesoy Özkan et al., 2019). Developing evaluation skills involves self-inquiry, identifying gaps in knowledge and skills, becoming aware of one's own teacher identity, and developing reflective thinking skills through participation in a teaching practice course (Collier, 1999; Freese, 1999; McDuffie, 2004; Poulou, 2007).

As of 2014, the Ministry of National Education changed the principles of teacher assignment. The programs of teaching the mentally handicapped, teaching the hearing impaired, teaching the visually handicapped, and teaching the gifted were merged as special education teaching (Presidency of the Board of Education, 2014). Teacher appointments began to be made with a holistic view, considering candidates as potential special education teachers regardless of their academic background. In parallel with this development, the Council of Higher Education made a similar arrangement in 2016. In the two years until this date, graduations as teachers of the mentally disabled, teachers of the hearing impaired, teachers of the visually impaired, and teachers of the gifted and talented continued at universities. However, as of the 2016-2017 academic year, these fields were combined into a new and single undergraduate program under the title of "special education teaching" (CHE, 2016). With the new regulation, autism spectrum disorder and learning disability education were added to the special education department, which covers four different departments. Within the scope of the special education teaching program, a new course catalog was created with content from all departments. In addition to the basic courses related to special education, there are also courses related to the minor/subfields that undergraduate students can specialize in. Basic courses in special education are compulsory, and courses related to specialization in minor/subspecialty areas are elective. With this arrangement made by CHE, it is aimed at students who will graduate as special education teachers to specialize in one or more minors/subfields (CHE, 2016).

In the 2019/2020 academic year, the teaching practice course of the new special education teaching program started to be held for the first time. In our country, the teaching practice course is carried out in all faculties in cooperation with the Ministry of National Education and CHE. This cooperation process is carried out through the Ministry of National Education Information Systems (MEBBIS) in order to monitor and control the teaching practice. The system, which operates under the control of MNE, includes many modules. One is the Practicum Student Evaluation (UOD) module (MNE, 2021). Teachers and faculty members have access to the UOD module. In this module, grade scoring and course evaluations of undergraduate students who take teaching practice courses in their final year are made. After the practices carried out by the undergraduate student, teachers and academics regularly write their evaluations on the module, including their comments, and score them. Although there are many problems with the teaching practice course in the new program, the pandemic process has started. After the first case of Coronavirus (Covid-19) emerged in Wuhan, China, on December 1, 2019, the World Health Organization (WHO) declared a pandemic on March 11, 2020. The Covid-19 pandemic has made changes in health, the economy, social life, and educational practices inevitable on a global scale (Can, 2020). With this global pandemic, educational institutions have started distance education practices (CHE, 2020). The Education Information Network has pioneered the applications realized in our country. In addition, distance education was continued through TRT EBA TV, EBA Portal, live classroom applications, and other reliable open-source platforms (MNE, 2020). On the other hand, programs such as Ariel, Moodle, UNIBO, and Zoom are the platforms used by the world in distance education (Dikmen & Bahçeci, 2020). Therefore, the pandemic has directly affected special education teaching practice courses.

In summary, the unification of special education under a single roof has made it necessary to develop a new plan for teaching practice. With the Covid-19 pandemic, the research process has gained a new dimension. From this point of view, the study aims to improve the teaching practice process in the new special education teaching undergraduate program. Within the scope of the research, stakeholder views on the new special education program and the planning and implementation process of the teaching practice course were focused on. In addition, the effects of the Covid-19 pandemic on the teaching practice course and the teaching practice process carried out through distance education were evaluated.

Method

In order to examine and improve the teacher training process in the new special education teaching undergraduate program, the study was designed as action research. Action research is the study of a real classroom or school situation to understand and improve the quality of the teaching process (Johnson, 2019; Schmuck, 1997). It consists of the steps of identifying a problem, finding a solution to this problem, and implementing and evaluating the solutions found (Borgia & Schuller, 1996). Action research can help teachers examine their own practices or an existing problem, support teachers' professional development, and help develop programs that meet the needs of students (Dinkelman, 1997; Glesne, 2013; Johnson, 2005).

Participants

The participants of the study consisted of stakeholders involved in the teaching practice process in special education. These participants are given in Table 1.

Table 1

Participants

Participants	Number of People
Teaching practice directive preparation team members	11
Faculty members from other universities with special education departments	3
Faculty members conducting the teaching practice course in the special education department	5
Teachers in whose class teaching practice is carried out	12
MEBBİS and PSE officials working in MNE and DNE	2
Undergraduate students taking teaching practice course	24
Special education teaching practice course development commission members	5
Validity committee members	5
Thesis monitoring commission members	3

*MNE: Ministry of National Education, *DNE: Directorate of National Education, *MEBBİS: Ministry of National Education Information Systems, *PSE: Teacher Practice Evaluation System

The researcher, teaching practice directive preparation team, and special education teaching practice course development commission members in Table 1 carried out interventions to improve the process in light of the data obtained. Undergraduate students taking the teaching practicum course, faculty members conducting the teaching practicum course in other universities with special education departments, teachers conducting the teaching practicum course in their classrooms, administrators conducting the teaching practicum course in their schools, faculty members conducting the teaching practicum course in the special education department, and ministry and national education directorate officials responsible for the functioning of the MEBBIS system. The members of the thesis monitoring committee, who also served on the validity committee, were responsible for providing theoretical and methodological oversight of the interventions aimed at improving the process. In the following sections of the report, codes are used to convey information about the participants. First, the occupation was indicated, and then the number was given. Implementation Coordinator 1, Teacher 1, Teacher 2.

Research Environment

Since the research covers data collection and action plans for the special education teaching program in general, many environments were involved in the process. In addition, while face-to-face environments were used before the pandemic, the research continued on online platforms after the pandemic. Before the pandemic, the pre-pandemic research was generally conducted at the faculty of education, where the special education department is located in a province with a medium-sized population in

the Central Anatolia region. The office of the special education department head and undergraduate and graduate classes at the faculty were frequently used for planning and evaluation meetings. After the pandemic, online platforms such as Zoom, Jitsi Meet, and EBA were the environments where the study was conducted.

Data Collection

During the research process, many data collection techniques were utilized in order to ensure data diversity, increase the quality of the research, and reflect a detailed and holistic view (Creswell, 2014; Johnson, 2019; Mills, 2003). This data collection includes demographic information form, interviews, document analysis, researcher diary, field notes, and meeting minutes. Information on the data collection and data source used is given in Table 2.

Table 2

Information on the Data Collection and Data Source

Demographic Information Form	Interviews	Video Recording	Document Review	Field notes	Meeting Minutes
All participants	Teacher practice coordinator Teachers Undergraduate students MEBBIS officials Faculty members of other universities	Implementation Guide Preparation Team Validity committee Undergraduate student lecture shoots	Documents and documents of undergraduate students Documents related to teaching practice Evidence of the research implementation process	Researcher diary Researcher experiences and observations Unrecorded opinions of the participants	Implementation guide drafting team Implementation quality improvement commission Validity committees

Within the scope of the research, 15 individual semi-structured interviews were conducted. Five group interviews were conducted. Three video recordings were made with the implementation guide preparation team before the pandemic. After the pandemic, 18 video recordings were made, including informative seminars and lectures to undergraduate students. Nine validity committee meetings were also videotaped. Plans, materials, and transcripts of all undergraduate students participating in the study were backed up as documents. In addition, the minutes of the validity committee, special education teaching quality enhancement commission, and the end-of-semester meeting minutes of the practicum coordinators were also included among the documents. With the subject determination phase of the research, regular writing started on 10.06.2019. During the writing process, which continued until 08.01.2021, the last implementation, a total of 35 pages and 74 headings were kept in the diary. Information about the interviews and videos recorded within the scope of the research is given in

Table 3

Recorded Interviews and Videos

Data type	Number	Date	Duration (min./sec.)	Location
Semi-structured interviews	15	04.07.2019 08.01.2020	13:04 65:10	Participants' offices Teachers' room Telephone
Focus group interviews	5	11.11.2019 19.05.2020	19:12 24:52	Teachers' room Jitsi Meet
Lesson shots	18	23.05.2020 08.01.2021	28:55 118:10	Zoom EBA
Validity committees	9	01.07.2019 10.01.2021	32:40 66:36	Head of department Office Zoom
Guideline preparation meetings	3	24.07.2019 06.08.2019	34:21 59:45	Graduate course classes
Other meetings	5	24.12.2019 18.11.2021	21:01 72:10	Graduate course classes Lecture hall Zoom

*EBA: National education information network

As seen in Table 3, semi-structured interviews were conducted between 04.07.2019 and 08.01.2020. The shortest interview lasted 13 minutes and 04 seconds, while the longest interview lasted 65 minutes and 10 seconds. Group interviews were conducted between 11.11.2019 and 19.05.2020, with the shortest lasting 19 minutes and 12 seconds and the longest lasting 24 minutes and 52 seconds. After the pandemic, lectures with the participation of undergraduate students were filmed entirely through online platforms. The shortest lecture lasted 28 minutes and 55 seconds, while the longest was held in two sessions as an information seminar and lasted 118 minutes and 10 seconds. The validity committees were generally recorded in the office of the department head. The first one was held on 01.07.2019, and the last one was held on 10.01.2021. Three meetings were held in graduate education classes on 24.07.2019 and 06.08.2019 for the process of preparing the guidelines, stakeholder tasks, and evaluation forms for the teaching practice course. Other meetings included the end-of-semester meeting of the practicum instructors, the commission for improving the quality of the teaching practice course, and the thesis monitoring committees. The shortest of these meetings lasted 34 minutes 21 seconds, and the longest 59 minutes 45 seconds. While graduate classrooms and lecture halls were used for the meetings before the pandemic, the Zoom platform was used after the pandemic.

Data Analysis

The data collected within the scope of the research were analyzed with a systematic analytical approach. The fact that the action research cycle is constantly open

to change and the planning and realization of actions as a result of this change necessitates a systematic analytical analysis approach (Altrichter et al., 2005). The systematic analysis process consists of sequential steps such as data collection, data analysis and selection, transformation of data into findings, and interpretation of findings. Since action research is flexible and allows for change, new findings from the data analysis and selection step can be included in the report if needed (Huberman & Miles, 2002).

Within the scope of the research, the steps of determining the current situation, monitoring, and evaluation were reported through "Word Cloud" analysis. Word Cloud Analysis was conducted through the NVIVO 11 program. Word Cloud was used to support the data obtained as a result of semi-structured interviews and to concretize the emphases and trends in the views conveyed by the participants (Heimerl et al., 2014).

Validity and Reliability-Convincingness of the Data

In the environment in which qualitative research is conducted, the danger of bias may arise if the researcher is a member or employee of the organization (Hesse-Biber & Leavy, 2011). The elimination of bias and objective reflection is possible through measures to ensure research validity. In order to ensure the validity, reliability, or trustworthiness of the research, data diversity was used. The sources from which data were collected included video recordings, audio recordings, documents, research diary, meeting minutes, and products that emerged during the process. Data triangulation was used to check and verify the research in many aspects (Creswell, 2005; Yıldırım & Şimşek, 2011; Yin, 2011). The data were collected for a long period of time and in detail so that they could be analyzed in depth and described in detail. Emphasis was placed on ensuring that the data provided a coherent integration with each other and were reported in detail by linking them with the research in the literature (Denzin & Giardina, 2011). Expert opinions were consulted in the validity meetings held throughout the research process. The validity committee controlled all steps of the research process defined the role of the researcher and approved compliance with the research model (Bogdan & Biklen, 2007). In addition, thesis monitoring committee meetings were held twice a year, and arrangements were made in line with the suggestions of field experts.

Research Ethics

Ethics committee permission number 86289 was obtained from the relevant university's scientific research and ethics committee where the research was conducted. All steps of the study and the use of the data obtained were explained to the participants in detail in the informed consent form. Participant permissions were obtained verbally and in writing. While determining the participants, care was taken to ensure that they were volunteers. In addition, participants were informed that they could withdraw from the study at any time (Bogdan & Biklen, 2007). In order to prevent the principle of bias, the data collected throughout the research were transcribed verbatim as the participants reported them without any changes (Gay & Airasian, 2003). In order to realize the principle of confidentiality as stated in the informed consent form, participants were assigned code names in the form of a profession-number. In line with the principle of responsibility, action plans, and practices were carried out

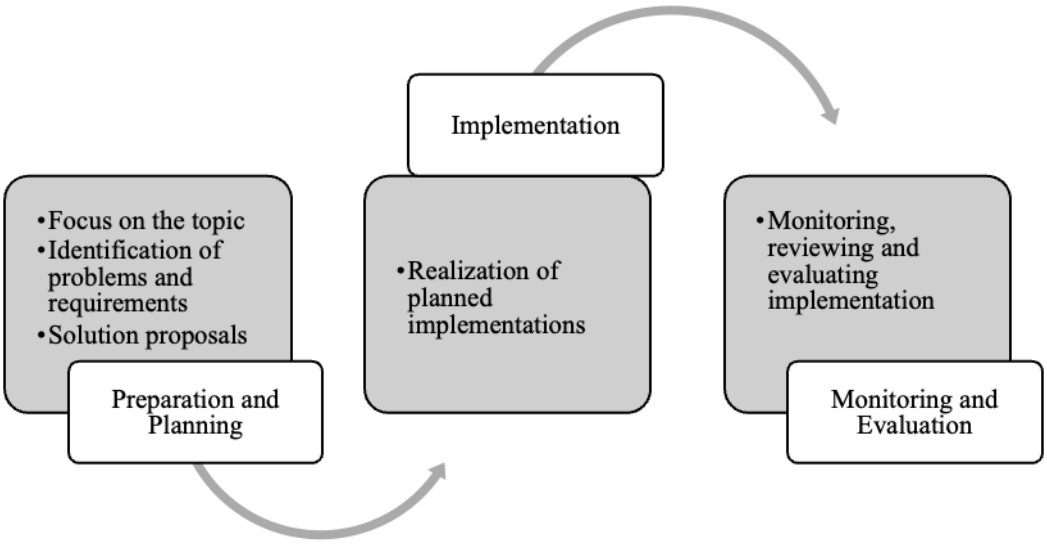
systematically. Practices were also carried out in line with the needs of all final-year undergraduate students other than the research participants. In line with the principle of transparency and honesty, all possible data were collected through audio or video recording (Denzin & Giardina, 2011; Huberman & Miles, 2002).

Findings

The study aimed to improve the teacher training process in the special education teacher training program, was carried out in three main stages. These stages, which emerged after the analysis of the data obtained, are (a) preparation and planning, (b) implementation, and (c) monitoring and evaluation. Figure 1 shows the research process cycle formed by the three basic stages.

Figure 1

General Cycle of the Research Process



As seen in Figure 1, the research process consists of three basic stages in a spiral manner. At each stage of the process, cycles emerged within themselves. The validity committee played an active role in the entire research process, from preparation to evaluation. The findings section will be presented by detailing the four main stages and the cycles within them. Therefore, in the following section, the findings obtained from the analysis of the collected data will be reported according to the order in which the stages took place.

Phase One: Preparation and Planning (10.06.2019-25.10.2020)

The research process first started with the preparation phase. At this stage, one-to-one interviews were frequently conducted between the researcher and the thesis advisor. In line with the decisions taken together with the thesis advisor, the preparation phase consisted of five steps (Researcher Diary, 17.06.2019). These steps are (a) focusing on the topic, (b) deciding on the setting in which the research will be conducted, (c) determining the research boundaries, (d) identifying stakeholders related to the topic, and (e) describing the current situation.

After the topic, location, participants, and boundaries were determined, preliminary interviews were conducted to describe the current situation (I. Validity

Committee Decisions, 01.07.2019). The questions related to the preliminary interviews are presented in Appendix 1. At this stage, the researchers sought answers to the following questions:

1. Is the special education department ready for teaching practice after the unification of the special education program at the undergraduate level?
2. How will the teaching practice course be conducted after the merger?
3. What are the problems related to the teaching practice process?
4. What are the solution suggestions of the practicum instructors regarding the problems?
5. Has the unification of the program created new requirements for the teaching practice course?
6. If so, what are these requirements, and how can they be met?

After the data collection process started, with the emergence of the Covid-19 Pandemic, similar questions were deepened to be valid for distance education. In line with these questions, preliminary interviews were conducted with stakeholders, and the current situation was described. After the analysis of the interviews, three themes were reached.

Opinions on the New Special Education Teacher Education Program

The first theme is the opinions on the new special education teaching undergraduate program. The first striking finding in the interviews was that the process of merging departments at the undergraduate level was not carried out systematically. Faculty Member 1 stated this as follows: "In my opinion, if the system had been put in place in a very appropriate way, which is not for me. I could say okay, but I always have this opinion. I think it happens in whichever field people feel competent before they make a choice when they take the university exam." It is seen that the participants have different attitudes towards the merging of special education subfields. Teacher 7 expressed her negative views on the merger as follows: "I do not find the merger of special education right because it is a four-year undergraduate degree. I mean, I think that the university students who are trained are better in special fields." Unlike the teachers, the faculty members generally have a positive view of the new special education program. There is a widespread view that this program is an inevitable step, despite its problems and shortcomings. As a matter of fact, Faculty Member 3 stated this situation as follows: "Will they be assigned to their own field regardless of which field they graduate in hearing, mind? No. It was obvious that it was going to merge, it was just a bit untimely and fast. It was already a single department years ago, and now it is again. We need to look at what to do next."

Problems Arising After the New Program

The problems brought by the new program are encountered as another theme. These problems include the incompatibility of the selected subfield and the classes in which the teaching practice will be carried out, the high number of students, the lack of communication between the faculty members conducting the teaching practice, and the differences between students with special needs encountered after undergraduate education. As an example of these problems, Faculty Member 2 said, "This will bring us the following problem: A friend of ours who chooses the hearing sub-field can also

choose the mind. But how will they do the teaching practice?". Faculty Member 3 "We had a lack of communication even when the fields were separate. Now it will become even more complicated". In addition, students trying to practice what they do not know, the short duration of the teaching practice course hours as well as the short duration of the practice periods, are seen among other problems. Teacher 8 said, "How can they practice in a field and become specialized?" and Teacher 11 said, "They are doing something they don't know, how are they doing it? I mean because he did not take the course". Lecturer 4 stated, "Practice hours are insufficient. Even in the past, we used to find them few, now they are even fewer", and Teacher 9 similarly stated, "The number of internship hours and the number of internships should be increased."

Requirements After the New Program

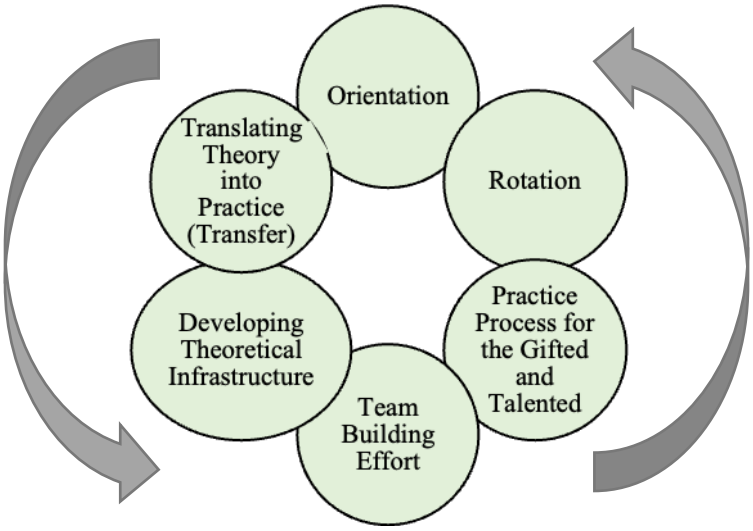
In connection with the problems listed, needs related to teaching practice also emerged. The most prominent of these needs were listed as the need for a common evaluation form due to the departmental merger, the need for a general list of directives to determine rules, responsibilities, and boundaries, and the opening of institutions and classrooms that provide education for the gifted for teaching practice. Faculty Member 5 stated the following regarding the needs: "We all need to come together and jointly review the evaluation forms that we have applied so far, which we have applied separately for hearing and separately for the mind." Faculty Member 1 stated that "There is chaos right now. No one knows what to do, where to start, and how to continue. There is a need for a new system and distribution of tasks." Faculty Member 2 stated that there is a need for BILSEM (Science and Art Education Center) for the teaching practicum course for students who choose the sub-field of giftedness: "The practice schools they can go to are very, very limited. There are BILSEMs, but they are not defined in MEBBIS program".

The findings in the word cloud overlap with the problems listed above. After the unification of special education at the undergraduate level, it was emphasized that the teaching practice system has become complex and that there is a need for objective evaluation criteria, teamwork, and cooperation. In addition, findings such as lack of communication, the high number of students and the low number of schools, and the lack of unification were found. Strengthening the theoretical background of undergraduate students and the need for teaching practice in BILSEMs for the gifted are also among the findings encountered in the word cloud.

Second Phase: Realization of Practices (06.07.2019-08.01.2021)

The data collected within the scope of the research were analyzed step by step, and six cycles were revealed with the analysis. The cycles reached within the scope of the research are given in Figure 2.

Figure 2
Cycles Realized in the Research



As can be seen in Figure 2, the research involved the orientation process, rotation, the functioning of the US implementation of gifted education, team-building efforts, the development of the theoretical infrastructure, and the transformation of theory into practice (transfer) cycles.

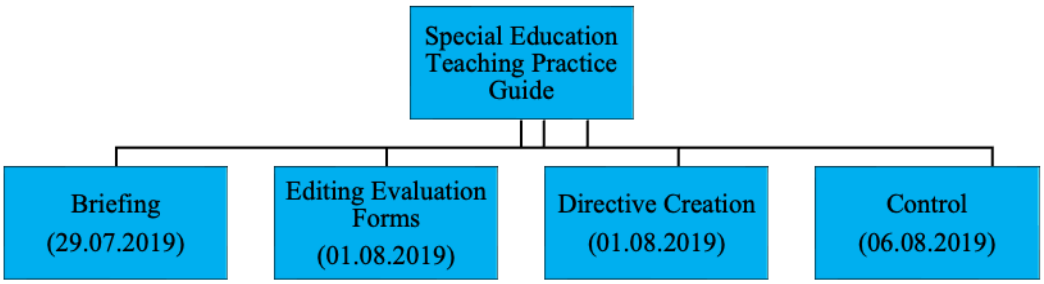
Orientation

Since the decision to implement the new program was made very close to the academic year, it was necessary to make quick decisions to solve the problems encountered. In this process, defined as orientation, preliminary interviews were conducted with faculty members, the data obtained from the interviews were analyzed, findings were reached, plans were made, and the plans were presented to the validity committee. It was decided to create a guideline for teaching practice in special education before the start of the academic year (I. Validity Committee Decision, 01.07.2019).

The need for a teaching practice guideline to be created before the start of the 2019-2020 academic year is understood from the participant statements. As a matter of fact, Lecturer 1 stated this need as "we all need to come together and jointly review the evaluation forms that we have applied so far, which we have applied separately for hearing and separately for the mind." Lecturer 2 stated that "common rules that everyone will follow are necessary." Within the framework of this guideline, two main stages can be mentioned: organizing the evaluation forms and creating instructions.

Figure 3

Application Guide Creation Steps



Three meetings were organized during the process of organizing the special education teaching practice guide, as shown in Figure 3. These meetings were held with 11 faculty members so that at least one faculty member from each sub-field in the special education department participated in these meetings. The content of the implementation guide included the creation of criteria for evaluating student practices and grading schemes in the sub-field of education of the mentally disabled (skills teaching, concept teaching, social skills teaching, behavior modification), evaluation criteria in the sub-fields of hearing, vision, and giftedness, and the duties and responsibilities of all stakeholders from the coordinator to the undergraduate student.

Rotation

Another stage that required intervention within the scope of the findings obtained from the research data was the school or class change of the students taking the teaching practice course. Teacher 7 explained this situation with the following statements: "They can see, for example, the Work School for half a semester, but in the other semester, they must see the first second level or special subclass." Therefore, the classes in which they were placed within the scope of the teaching practice course were changed twice each semester, while the schools were changed once a semester. Three meetings were held with the department head and his/her assistants, the teaching practice coordinator, and the validity committee regarding the rotation. The ideal way was sought so that school and class changes would not cause confusion and workload. At this stage, three alternatives were considered: academics moving to a different school with the undergraduate student group every semester, only students changing schools, and both. The suggestion of only students changing schools was presented to the validity committee for implementation. However, the committee members proposed a new alternative for undergraduate students to gain more diverse professional experience. It was decided that undergraduate students would carry out teaching practice in two different classes in the same school in one semester, and in the second semester, they would be placed in a new school (III. Validity Committee Decisions, 02.01.2020, p. 16). It was suggested that classroom changes within the same semester should be made at different levels as much as possible. With this decision, it was ensured that both the faculty members continue to teach in the schools where they conduct the practicum course, and the undergraduate students see four different classes in one academic year.

The Teaching Practice Process in the Department of Education of the Gifted and Talented

Faculty members working in the department of gifted education were involved in the teaching practice process for the first time in the year the research was conducted. The fact that the process was to be carried out for the first time brought along important uncertainties and problems (Researcher Diary, 24.07.2019, p. 4). The main problem encountered in this process is related to the realization of the teaching practice in classes with gifted students. Currently, general education classrooms are not available for selection by undergraduate students in the special education teaching program as part of their teaching practice. For this reason, it is not possible to assign undergraduate students to general education classes through MEBBIS. The views of faculty member 2 on this issue are as follows: "Until today, gifted students were evaluated under the classroom teaching program. However, with the merger of special education, they were included in the field of special education. Normally, these students should continue their teaching practice in general education classes, but we cannot." Initially, students were placed in the project school with which the Department of Gifted Education had a protocol. However, since there was no official basis, undergraduate students had to continue their teaching practice in special education classes after two weeks. The MEBBIS ministry official was contacted for the solution to this issue. In the interview, the official said, "The Practicum Student Evaluation (IPE) system is an element that makes the teaching practice regular and systematic and ensures that it is monitored. At this point, the functioning of MNE does not involve individuality". At this stage, the dean's office of the university where the research was conducted was also informed about the issue. In the meeting with the ministry official, it was stated that it was not possible to carry out teaching practice without a permission process and that the ministry could not make such an arrangement for students who chose a small number of subfields of gifted education (Researcher Diary, 14.01.2020, p. 18). After the meeting with the dean's office, a validity committee was organized to evaluate and decide on the final situation. As a result of the evaluation carried out in the validity committee, it was decided that undergraduate students who chose the sub-field of education of the gifted will continue their teaching practice in special education classes, including the fall semester of the current 2019-2020 academic year (IV. Validity Committee Decisions, 09.01.2020).

Team Building Effort

The findings obtained from the data showed a communication gap between the practicum instructors involved in the teaching practice in special education. Faculty member 5 expressed this situation: "Everyone is doing something, but no one knows about each other. We should be more aware of each other". Faculty member 1, who had a similar view, stated after the semi-structured interview recording was closed, "Not every academic is interested in the teaching practice; departments work independently of each other" (Researcher Diary, 04.07.2019, p. 3). In order to realize effective teamwork, this cycle consists of the steps of preparation, building a bridge between the staff, establishing a commission to improve the quality of implementation, the end-of-term meeting of the implementation coordinators, and making decisions about the next semester.

First of all, an e-mail group was established to ensure communication between the faculty members who are the implementation coordinators and the implementation coordinator ship. In addition to this e-mail group that provides the communication network, it was aimed to form a representative committee and to ensure the necessary coordination between the instructors. For this purpose, it was decided to establish a commission to increase the quality of practice in the planned intervention process (Researcher Diary, 18.12.2019, p. 15). The purpose of establishing the commission was planned to be the spokesperson of the personnel involved in the teaching practice in each faculty member's own department and to convey their problems, to offer solutions by identifying situations that the department chairmanship or practice coordinator ship could not notice, and to convey the progress and problems, if any, in the schools where the practice is carried out. The Commission held its first meeting with six members, one from each sub-field of special education. As a result of the meeting

- Review of compulsory courses,
- Failure to complete four observations in one period,
- Reducing the number of observations or dividing student groups into two,
- Changing the average of 70% teachers and 30% academics in the general scoring system and increasing the average of academics,
- Changes in the content of theoretical courses,
- The digitalization needs of the department,
- Suggestions such as good practice examples should be presented to undergraduate students were included (Quality Enhancement Commission Meeting Minutes, 25.12.2019).

The validity committee approved the recommendations presented by the commission, and an end-of-semester meeting was organized to announce them to the department staff and to receive their opinions. In this meeting

- Removing a school in the practice school pool from the system and not sending teacher candidates to that school,
- Directing a faculty member who has studies in this field to an institution that provides education to preschool-age special education students,
- Directing faculty members who do not have a vehicle to closer schools,
- Placement of teacher candidates in schools with vacancies in more central locations,
- Adding faculty members who want to conduct teaching practice courses to the system,
- Dividing the groups into two for faculty members who cannot complete four observations,
- Faculty members with different workloads can drop the course for this semester,
- Determination of letter grades for the teacher practice was listed as follows.

After the meeting, all the items were discussed with the researcher, the advisor, and the deputy heads of the department. It was decided that the researcher would make new arrangements for all of the items (Researcher Diary, 13.01.2020, p. 18). Within the scope of the arrangements, the faculty members in the kindergarten providing preschool education were directed to a different school. In that school, a faculty member with studies in this field was assigned to conduct the course. The school that was requested to

be removed from the implementation pool was removed from the system due to its lack of a systematic system and the absence of forms such as individualized curriculum (IEP) and rough assessment, which were expected to be ready for implementation, its unusual functioning, and problems with the deputy principal. In addition, care was taken to place non-intermediary faculty members in more central schools. Similarly, care was taken to ensure that students were not placed in more distant schools before the vacancies in the center were filled (V. Validity Committee Decisions. 13.02.2020, p. 21). Another regulation was to lower the letter grades to 90-AA and then to 85-AB, five by five. Since it was understood that there were many differences of opinion on this issue and that confusion could arise, it was decided to add this article to the directive (Researcher Diary, 29.11.2019, p. 12).

Developing Theoretical Infrastructure

On March 11, 2020, when the World Health Organization declared the Coronavirus pandemic, formal education was suspended, and online platforms were switched to online platforms. Therefore, research has gained a new dimension. Since completely new problems and solutions were needed with the pandemic, a new planning and intervention process started. The step of developing the theoretical infrastructure can also be defined as the period covering the shock process experienced by the announcement of the pandemic. In this period, when the authorities at all levels of education and training are busy with shock, panic, and question marks, the researcher is trying to find answers to the following questions (Researcher Diary, 26.03.2020, p. 24).

- How will online education be conducted?
- In particular, how can the teaching practice process be carried out online?

As a result of these inquiries, the researcher prepared a short report in light of the findings regarding the completion of the current semester and presented it to the validity committee. Among the findings obtained during the formal education and transition to the online process, it was understood that undergraduate students lacked theoretical knowledge. As a matter of fact, Teacher 6 described the situation as "For example, students who did not take a concept teaching course and did not know applied behavior analysis." Teacher 11 stated, "They are worse than every year's level, it seems like they could not get efficiency from the lessons." Undergraduate Student 2 stated, "There were places where the courses overlapped, and we could not take these courses." Therefore, it was suggested and approved by the committee to complete the semester with webinars that would improve the theoretical background of the students (VI. Validity Committee Decisions, 26.03.2020).

After analyzing the interview transcripts from teachers and undergraduate students, it became clear that there were deficiencies in teaching concepts, error-free teaching methods, social skills instruction, and career support. The cycle of developing the theoretical infrastructure consisted of preparation, implementation, and evaluation of the sessions. In the preparation phase, support was obtained from competent lecturers in the relevant fields to conduct the webinars. At this stage, students who did not take the teaching and method courses were reached through the teacher practice coordinators.

The sessions of the informative seminars, the preparations of which were completed, were started at 13:00 and completed at 17:45 with two ten-minute breaks.

The guest lecturer first gave a presentation on the concept of teaching interactively with undergraduate students. This session lasted approximately 60 minutes. In this session

- Methods used in concept teaching
- Concept analysis
- Planning and implementation of concept teaching
- Good practice examples were included.

After a short break, the session on error-free teaching methods was held. The second session lasted approximately 80 minutes. In this session;

- Reminding the concepts related to applied behavior analysis
- Definition of error-free teaching
- Fixed waiting time teaching
- Simultaneous prompting
- Increased standby teaching
- Teaching with pre-behavioral prompting and testing
- All teaching methods, such as social skills teaching, were included.

After answering the students' questions, the instructor completed the session and left the interview. The last session was conducted by the researcher. In the session called career support seminar, the topics that students were curious about in their professional careers were discussed with a presentation. In this session;

- Types of public and private institutions in special education
- Working conditions of institutions
- Personal rights of employees
- The rights of private institutions were included.

With the transition to distance education after the pandemic, the studies carried out with the undergraduate student group in the study were completed in the fall semester of 2019-2020. After this group graduated, a new process involving distance education was started with fourth-year undergraduate students who will take the teaching practice course in the 2020-2021 academic year.

Transforming Theory into Practice (Transfer)

Due to the ongoing effects of the pandemic in the 2020-2021 academic year, educational institutions have adopted a distance education approach. For this reason, under the guidance of the validity committee, planning was made to carry out the teaching practice with distance education. The planning is in the form of material design for students with special needs in the distance education process and the transfer of these designs to the real environment. As a matter of fact, Undergraduate Student 9 said, "We know the mind, but we don't know how to prepare materials for the field of special education. Like hearing, like vision, teacher." and Undergraduate Student 16 said, "The field is united after all. We have the possibility to work everywhere. We need to be able to prepare materials for all kinds of children." The cycle of transforming theory into practice consists of preparation, lectures, student material presentations, EBA sessions (transfer), and evaluation steps.

In the preparation phase, a 12-week syllabus for the material design and instructional technologies course to be conducted in the fall semester of the 2020-2021

academic year was created and approved (VII. Validity Committee Decisions, 09.04.2020). The syllabus is given in Table 4.

Table 4

Material Design and Instructional Technologies Course Syllabus

Session	Date	Topics	Content
1	07.10.2020	Planning	Sharing what will be done during the semester and the course operation
2	14.10.2020	Calendar Teaching	Calendar activity and use for students with special needs Students' calendar presentations
3	21.10.2020	Story Baking	Items to be considered in the preparation and use of storybooks for students with hearing loss Students' storybook presentations
4	28.10.2020	Material Design for Science Teaching	Preparing an experiment book for students with hearing loss Students' experiment book presentations
5	04.11.2020	Material Design for Literacy Teaching	Text analysis and voice teaching for students with hearing loss Students' presentations of text and audio work
7	11.11.2020	Material Design for Mathematics Teaching	Division with and without remainder Students' presentations of division material
8	26.11.2020	Material Design for Preschool Period	Elements to be considered in material design for students with special needs in preschool age Presentation of preschool materials by students
9	30.11.2020	Material Design for Students with Visual Impairment	Items to be considered when preparing materials for students with visual loss Presentation of materials prepared by students for students with visual impairment
10	03.12.2020	Development of Materials Involving the Use of Technology	Preparing sequential cards using Storyboardthat program Presentations of the materials prepared by the students using Storyboardthat program
11	09.12.2020	Development of Materials Involving the Use of Technology	Making a video using the Plotagon program Presentation of videos prepared by students with Plotagon program
12	23.12.2020	Development of Materials Involving the Use of Technology	Period evaluation

As given in Table 4, material development sessions were held in the areas that undergraduate students needed. The first session was held on 07.10.2020, and the last session was held on 23.12.2020. The process started with lesson planning, continued

with material design in various fields and subjects, and ended with video content preparation for students with special needs. Before the researcher's informative sessions on the topic of the week, undergraduate students presented the materials they prepared within the scope of the topic covered in the previous week. The whole process, from the planning of the lesson to its finalization, was carried out in a similar way. Examples of materials prepared by undergraduate students are given in Visual 1.

Visual 1

Examples of Materials Prepared by Students

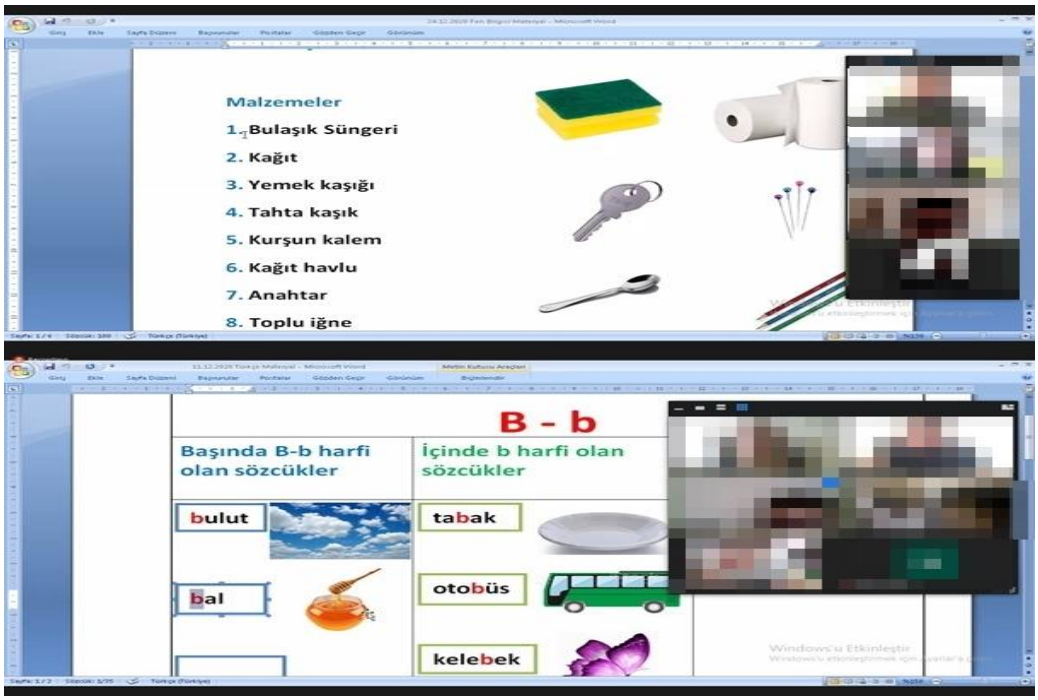
Each undergraduate student prepared a total of 11 materials during the semester. The two examples selected in the visuals were chosen from the materials that the students presented after the sequential card preparation and video content preparation courses using technology. A screenshot of the material prepared as a video was taken and added to the visual.

While the instructional technologies and materials course continues, teacher practice courses are conducted through EBA and Zoom. The process of transferring the theoretical knowledge learned in the instructional technologies and materials course of undergraduate student 24 to the real teacher practice environment was observed and evaluated.

EBA lessons were conducted with the participation of the researcher, undergraduate student, and teacher 12. The online courses were conducted in an online classroom for fourth-grade children with hearing loss. There were six students in the class, including two children diagnosed with mild intellectual disabilities. The students were involved in the process within the framework of Teacher 12's lesson program, and 24 undergraduate students prepared plans and materials on the topics the teacher gave and carried out their practices.

Visual 2

EBA Lesson Visuals



In the visual, there are video recordings taken from two different lessons. The first video recording was taken from science (classification of substances), and the second from Turkish (phonics). Undergraduate Student 24 observed the students in the classroom for two weeks before starting the implementation. She tried to determine students' academic level with hearing loss by observing them for 12 hours two days a week. Information about the lessons on EBA is given in Table 5.

Table 5

Information on EBA Sessions

Session	Date	Lesson	Topic
1	11.12.2020	Turkish	Sound Teaching
2	17.12.2020	Mathematics	Geometric Objects
3	24.12.2020	Science	Classifying Substances
4	31.12.2020	Mathematics	Currencies
5	07.01.2021	Social Studies	Neighboring Countries
6	08.01.2021	Turkish	Emergency Teams (Sequential card)

Table. 5 shows that six EBA sessions were conducted. In the sessions, 24 undergraduate students prepared based on the instructional technologies and materials course teachings in Turkish, mathematics, science, and social studies. All sessions lasted 20 minutes. The lessons were observed and evaluated by the researcher and the classroom teacher.

In the cycle of transforming theory into practice, the evaluation step was realized in two dimensions. Instructional technologies, material design courses, and EBA sessions were evaluated with different criteria. In evaluating the materials prepared by undergraduate students within the scope of the course, the academic level of students with special needs and the criteria of suitability to the characteristics of the disability group were taken into consideration. In addition, the materials were evaluated every week during the presentations with the criteria of size, comprehensibility, visuality, design, and economy. Undergraduate students also shared how they planned to use their materials during their presentations. In this context, the appropriateness of the prepared material to the determined aims and objectives was also evaluated. During the EBA sessions, the development of Undergraduate Student 24's teaching skills and the transfer of the teachings in the instructional technology course to the real practice environment were evaluated. After each session, the development process was evaluated by the researcher and Teacher 12. First, Undergraduate Student 24 evaluated herself, then the researcher and the teacher shared their observations. Undergraduate Student 12 was quite successful in some areas from the beginning of the process. For example, the classroom teacher said, "His plans and materials are always good, he is very devoted in this regard...". However, it was observed that support was needed in some areas. In the beginning, Undergraduate Student 24 had difficulty controlling the classroom because the lessons were online. She started to conduct more controlled lessons by considering the feedback given by the researcher, such as "Try to make more interesting moving materials, draw attention with your tone of voice from time to time, speak monotonously, force students to participate in the lesson." In the general evaluation made with the classroom teacher, the statements "He improved every day, how can I say, despite distance education..." showed that the process progressed as desired.

In addition to trying to improve the teaching skills of undergraduate student, the courses also had indirect benefits. In the post-lesson evaluations, the researcher asked undergraduate student 24 the question, "How did you make this material?" and asked her to show it briefly on the computer. The aim here was to support Teacher 12 in preparing materials with instructional technologies through implicit learning. As a matter of fact, it was understood that progress was made towards this goal at the end of six weeks. The opinions of Teacher 12: "I learned it too, thanks to him, I know we are old, but you need to improve yourself, you encounter everything at any time" support this opinion.

Third Phase: Monitoring and Evaluation (09.01.2021-29.01.2021)

After the completion of the implementations, the monitoring and evaluation phase started. At this stage, it was decided to review the practices carried out within the scope of the research in the interviews held with the thesis advisor and the validity committee. In the review process, it was aimed to interpret and evaluate the practices realized by conducting final interviews with the research participants. For this purpose, it was decided to conduct final interviews with faculty members, teachers, undergraduate students taking instructional technology and material design courses, and undergraduate students and teachers who conducted EBA sessions (IX. Validity Committee Decisions, 10.01.2021).

Before the Pandemic

Three sub-themes were found in the theme of evaluating the practices before the pandemic. These sub-themes are opinions about the teaching practice before the research, opinions about the practices carried out during the research process, and problems and solutions in the teaching practice process.

Since the teaching practice will be carried out for the first time after the unification of the special education program, the opinions are generally positive. Because for many years, a systematic teaching practice process has been carried out in sub-fields such as education of the mentally disabled and education of the hearing impaired. As a matter of fact, Lecturer 3 stated this situation as follows: "We had a system. Hearing was unaware of the mind, the mind was unaware of hearing, but everyone was conducting it within their own system." However, opinions change completely when asked about the current situation as the 2019/2020 Fall Semester approaches after the merger. Faculty Member 1 stated, "There should not have been such a transition. There was no preparation, so no one knew what was going to happen. There is a flood of questions but no answers, you know what I mean" is one of the best examples of the negative atmosphere. Faculty Member 6 stated that the merger process was sudden and unplanned with the views, "I mean, it could have been done with a pilot practice, this chaos also turned the existing system upside down."

Opinions about the practices carried out during the research process were generally positive. Faculty Member 4 stated that "Many new decisions were made, and practices were implemented. Of course, some things would have happened even without the research. But it would have happened with a meeting between the lecturers. Stakeholders' opinions were taken and researched, and that's how it was done. I think it was much better with the research." It is understood that the contribution of the research to the organization of the system is important. Faculty Member 7 said, "If we look at it scientifically, it seems like an original study. A new process is a subject that has not been studied. From our point of view, we conveyed almost every problem we had. Some of them were solved, and some were not, but I think it was good that the beginning was like this, it was not left in the air. There may be follow-up studies." She stated that the research could be a guide to the literature and subsequent research.

The issues mentioned in the sub-theme of problems encountered within the scope of the research and solutions for eliminating these problems are frequently related to cycles. As a matter of fact, the preparation of the teaching practice guide during the rotation process was evaluated as a functional practice by all faculty members. For example, Faculty Member 7 said, "Evaluation forms were very good. Grading was one of the most complicated issues." On the other hand, it is seen that the directive on special education teaching practice, which is another section in the manual, prevents confusion. Faculty Member 3 said about the directive: "We were at the beginning of a very messy process. I think it was like a road map. I think it was an important move of the research."

After the Pandemic

Three sub-themes were reached in the main theme of evaluation of the practices carried out after the pandemic. These sub-themes are opinions on teaching practice after the pandemic, opinions on the practices carried out within the scope of the research during the pandemic process, and problems and solutions in the pandemic process.

Following the pandemic announcement, the teaching practice process in the special education program has gained a new dimension. In order to understand the current situation, the expressions of the participants whose opinions were taken were generally in the direction of a new complexity. Teacher 9 described this situation as follows: "There was no infrastructure, of course, we did not know what to do at first. Special education and distance education are very difficult things. We don't know what teacher candidates should do", emphasizing that a difficult process will start again. Undergraduate Student 5 from the first group of special education graduates (2019/2020 Spring Semester), whose teaching practice was left unfinished after the pandemic announcement, stated the following opinion: "We were already having difficulty in practice, in fact, it was distance education, it went without practice in two months." It has become clearer how distance education will take place in the new academic year (2020/2021 Fall Semester) that started with the continuation of the Covid-19 Pandemic. The opinions of undergraduate students taking the teaching practice course are generally related to how they will carry out an effective learning and teaching process with distance education. For example, Undergraduate Student 16 said, "Online practice was not good, teacher. Maybe the most important part of the school. How will we prepare materials, let's do it, how will we teach the lesson." On the other hand, Faculty Member 7 said, "There was a new practice that we just got used to. Now that the pandemic has come out, things are settling down, it will be even more difficult now. Who knows how long it will last." She stated that the teacher practice process after the merger of the special education program became more complicated with the pandemic.

In the last interviews, the participants were also asked questions about the practices carried out during the pandemic process. Undergraduate students and teachers generally thought that the practices were useful and functional. Undergraduate Student 18, who took the instructional technologies and material design course, reflected on this situation with the view, "It was an intense content, but we are sure that you will benefit from it." On the other hand, Undergraduate Student 4, who participated in the sessions to strengthen the theoretical infrastructure held at the beginning of the pandemic, stated, "I was feeling incomplete, to be honest, although I still have a concern, we needed such an organized course, it was a hit." Teacher 12 expressed his views on the transfer process related to EBA sessions as follows: "It was an orderly, systematic progress, teacher, I think it was good for myself and for the student. It was not done for the sake of being done, I mean, I felt like a real internship, even from a distance". Faculty member 6 said, "I think whatever can be done remotely was done. I mean, teaching practice is a live-blooded process, so I think the students were satisfied, frankly." He stated his opinion. In this direction, it is thought that the stages of developing the theoretical infrastructure and transferring this knowledge to the real practice environment in light of the data collected before and after the pandemic are functional.

The last heading in the monitoring and evaluation theme includes the problems experienced during the pandemic process and the solutions produced for these

problems. It is seen that the fact that the post-pandemic teaching practice will be carried out through distance education causes anxiety and uncertainty among stakeholders such as undergraduate students and teachers. Within the scope of the research, it was tried to realize the closest teaching practice course to the ideal. Participant opinions regarding the solutions employed for the problems encountered in this endeavor are quite positive. As a matter of fact, Teacher 12 said, "We fell into a chaotic situation. I wasn't sure if those who came for the practicum would come just for the sake of it or if they would be able to do something. We have many years of experience, but distance education is a difficult job, this is a special education class. But I was very satisfied. The student improved day by day and did more than his/her best." statements support this impression. On the other hand, Undergraduate Student 24's statement, "At first I did not know what to do, but as I progressed, I gained self-confidence. My knowledge increased, and the feedback was useful. There was always a problem, but it was always solved. I feel more ready for teaching" are similar to the teacher's views. Undergraduate Student 20 said, "It was very good to find someone we could tell our deficiencies and weaknesses and get support. Compared to other groups, we saw hundreds of material examples in one semester. At first, I felt like I didn't know anything", she commented on her individual development. Finally, among the problems observed within the scope of the research is the lack of technological knowledge of the classroom teacher as well as the undergraduate students. The sessions on EBA also contributed to the technological development of the classroom teacher. Teacher 12 summarized this contribution by saying, "Of course, MNE had prepared an infrastructure for the lessons, but beyond that, I have seen many applications from applications where I can use the blackboard to animated content."

Discussion

In 2014, the Ministry of National Education's Board of Education decided to appoint graduates of teaching programs in hearing impairment, mental disability, and visual impairment as 'special education teachers' by amending the Principles of Teaching Fields, Assignments, and Course Teaching. Accordingly, in 2016, CHE announced a new special education teaching program by combining all subfields at the undergraduate level. Learning disabilities and autism spectrum disorder education were added to the special education teaching program. Within the scope of the research, the participants' opinions regarding the unification of all sub-fields as a single undergraduate program under the umbrella of special education teaching were taken. It was understood that the stakeholders participating in the research had different opinions about the new special education program. In this direction, different evaluations were included according to the perspectives of faculty members, teachers, undergraduate students, and MNE officials.

In the focus of the teaching practice course, the research findings show that the implementation period is short. In the literature, there are many research findings that the teaching practice course duration in special education is insufficient (Aydın & Şentürk, 2021; Güleç-Aslan, 2014; Karabıyık & Uğurlu, 2019; Ulay, 2018). In addition, there were problems in placement in schools structured according to the type of disability in accordance with the sub-fields chosen by the students. In their study, Büyükalan Filiz et al. (2018) predicted that the duration of teaching practice would not

be sufficient, there would be problems in school-student matching, and there would be insufficient faculty members to conduct the course. As a matter of fact, this prediction coincided with the findings of the study. Participants considered the implementation periods of the new special education teacher training program inadequate. The main reason for the problem in school-student matching is that there are two universities with special education departments in the province where the research was conducted. Lack of communication between universities causes conflicts in placements. Due to the research assistants who are on the staff of different universities and who continue their postgraduate education in the department where the research was conducted, there was no problem regarding the insufficiency of faculty members. However, it is foreseen that this problem will be on the agenda in the coming years. At this point, the number of students admitted to the special education teaching program may be reduced.

Among the aims of education is for individuals with special needs to become self-sufficient, acquire independent living skills, and integrate with society. In order to improve the life functions of individuals, instructional arrangements are needed. One of the methods used to help individuals gain independent living skills within the scope of instructional arrangements is incorrect teaching methods (Aksoy, 2019). In the special education teaching program, it is seen that the errorless teaching method course is defined as an elective course. False teaching methods are among the effective methods for teaching skills and behaviors to individuals with different needs in various age groups (Tekin, 1999). Most of the teacher participants of the study stated that the undergraduate students who took the teaching practice course after the special education teaching program did not know or did not know the errorless teaching methods. It was determined that undergraduate students generally did not take this course. In this context, it may be considered to make this course compulsory for undergraduate students who choose the subfields of education of the mentally disabled and autism spectrum disorder education.

Ulay (2018) evaluated the merged special education teaching undergraduate program in the context of the competencies of teachers of the mentally disabled. As a result of the evaluation, changing the concept of teaching courses as compulsory courses is among the recommendations. A similar finding was found in this study. It was observed that senior undergraduate students who completed their theoretical education in the new program and passed the teaching practice stage did not take the concept teaching course because it was in the elective category. It was determined that the lack of knowledge about concept teaching, especially pointed out by the teacher participants, was tried to be overcome during the practice. In parallel with Ulay's (2018) suggestion, it is considered necessary to include this course in the compulsory course category, at least for undergraduate students who choose the sub-fields of education of children with ASD and education of the mentally retarded.

Karasu et al. (2014) examined the changes that need to be made from the teachers' perspective in the teaching program for the mentally disabled. Their findings include creating new alternatives by increasing the number of elective courses, enriching the course content, and increasing the practice opportunities. It is seen that the new special education teaching program has made changes that overlap with these findings. It is understood that elective course alternatives have been increased considerably, and course contents have been enriched according to the teacher training

program for the mentally disabled. However, contrary to the findings of Karasu et al. (2014), it is seen that practice opportunities are limited. There are two teaching practice courses for undergraduate students who are expected to acquire teaching skills in six sub-fields. Within the scope of the research conducted, it is reported that practice opportunities have become more inadequate compared to the old program, especially in the opinion of teacher participants.

After the unification of the special education teaching program at the undergraduate level, one of the priority issues that came to the agenda was quality. In order for the students who will graduate from this program to be seen as a qualified special education teacher, attention is drawn to the necessity of increasing the practice periods, revising the program content, and the obligation of faculty members to give courses within the scope of their own expertise (Büyükalan Filiz et al., 2018). The findings obtained within the scope of the research show that in order to train teachers who have mastered all sub-fields of special education, practice hours and duration should be increased. As stated in the previous paragraphs, courses that are considered elective courses should be recategorized as compulsory courses. Büyükalan Filiz et al. (2018) state that with the new curriculum, the initiative to be trained in a qualified way is left to the students' choices through elective courses, albeit partially. Special education teachers should be adequately equipped in the education and training processes of students with special needs (Billingsley & McLeskey, 2004; Özyürek, 2008). The undergraduate students who participated in the study stated that they did not see themselves as a special education teacher with adequate equipment. In this direction, there is a need to review the program and make arrangements in light of scientific data.

Some of the participants also had positive opinions about the current situation after CHE announced the new special education teaching program. Some of the participants consider the new program, which is organized in parallel with the appointment criteria of the Ministry of National Education, to be applicable, provided that they also express its shortcomings. On the other hand, they also stated that this program is a need. It was stated that there is a need for a unified special education teaching program because, in the old programs, teachers were appointed as teachers without taking into account the special education field they graduated from. In the study conducted by Büyükalan Filiz et al. (2018), some participants stated that the old program did not provide teacher candidates with the skills to teach students in different disability groups and that the new program was formed in line with the need and met the expectation to meet the teacher shortage in the field of special education. In the current study, participants who were special education teachers generally had negative attitudes towards the merged program. Faculty members, on the other hand, besides their positive views, think that a pilot study or gradual implementation would be a more systematic approach. In summary, no matter how and in what form the special education teaching program is implemented, it is important to make it more qualified by focusing on solving problems and meeting the needs since it is already being implemented in universities.

Teaching practice, which can be considered the last step of pre-service education, is defined as a period of time in which final undergraduate students study in a classroom appropriate to their field of specialization, with an experienced teacher and/or faculty member acting as a guide (Eurydice, 2018; Van Schagen Johnson et al., 2017).

Within the scope of the research, the first problem encountered in the teaching practice process was rotation. All participants, especially teachers and undergraduate students, requested rotation during the teaching practice process in order to gain more experience and get to know students and teachers. This request was not left unanswered, and a system was established in which they could carry out the practicum in a new classroom each semester with new teachers and faculty members. During the practicum, senior undergraduate students have the opportunity to apply and reflect on the theoretical knowledge and skills they have acquired throughout their education in a real-world environment (Conderman et al., 2005; Hurioğlu, 2016; Woods & Weasher, 2003). On the other hand, the new special education teaching program facilitates the transition between subfields (Büyükalan Filiz et al., 2018). Meeting the demands for a transition to different fields without causing confusion has become easier with rotation. With the realization of rotation, undergraduate students had the opportunity to transform their theoretical knowledge and skills into practice in different environments and classes in the subfield they specialized in or in the same field.

Instructors have stated that newly graduated teachers have the necessary theoretical knowledge and theoretical infrastructure. However, they will have difficulties in their professional development because they cannot find enough opportunities to test and develop this knowledge in practice in undergraduate education (Aksoy et al., 2018; Kış et al., 2017). In this study, similar findings regarding teaching practice and contrasting findings regarding theoretical knowledge and theoretical background were found. Some of the participants, including senior undergraduate students, think that their theoretical knowledge and theoretical background are not sufficient. However, it is seen that the main reason underlying the insufficiency is the course choices of undergraduate students. It was determined that even the courses related to their chosen subfields of specialization were not taken if they were not compulsory. Another research finding of Kış et al. (2017) is that teachers are not taught professional development models. It can be stated that professional development models have gained more importance in the new program in which choices other than compulsory courses are left to student preferences. Adding course content related to these models to the first year of the undergraduate program will indirectly benefit students' professional development in the future.

Aydın and Şentürk (2021) compared the new special education teaching program with the old program that produced graduates in terms of departments. The participants who graduated from the old program emphasized that the program content contained inefficient and inadequate practice courses, that they were not trained at the desired level in family education, and that it was insufficient to meet the problems and needs encountered in professional life. In addition, they evaluated the curriculum content and academic staff as inadequate. Regarding the new special education teaching program, 65% of the participants expressed negative opinions. In this study, similar results were observed regarding the unification of special education. However, it should be noted that only some of the teachers expressed negative opinions. The striking finding in Aydın and Şentürk's (2021) study is that although most of the participants expressed negative opinions about the new program, only 6% of the participants were informed about it. To put it briefly, many of the participants both criticized the old curriculum and expressed negative opinions about the new curriculum without knowing

the details. The most common suggestion for the solution to the consequences of this critical view is to increase the quality and quantity of practice. Although the results regarding the teaching practice are similar to the study, it can be stated that contrasting findings were reached in terms of course variety and content.

After the pandemic, the teaching practice course was conducted on the EBA platform. The Zoom program was defined on EBA, and relevant faculty members also participated in the lessons. Among the implicit benefits of the research in the distance education process is the development of the teacher in whose classroom the teaching practice was carried out. In her study, Sertkaya (2021) found that special education teachers' self-efficacy regarding the use of technology was at a high level. However, contrary to this finding, it was observed that the teacher did not have sufficient knowledge and equipment about the programs that can be used in the e-learning process, preparing materials, and using these materials in distance education. Therefore, evaluations were made after each lesson to improve the teacher's technological knowledge and equipment. In addition, the construction process of the materials used in the lessons was introduced in a way to include each stage.

Karasu et al. (2014) emphasized the necessity of revising the teacher training program in special education before the special education department was merged due to changing student profiles and types of disabilities, and technological developments. In addition, he emphasized that producing materials was one of the most difficult subjects for teachers who graduated from the old program. Although the special education teaching program has changed, it is seen that no progress has been made in technological development and material issues. In the research conducted, especially with the opinions of undergraduate students, it was understood that it was difficult to prepare materials according to the types of disability. With the pandemic, the inadequacy of the technological infrastructure and the lack of knowledge and equipment in reflecting instructional technologies to the field have come to light, as expressed in the study of Karasu et al. (2014). Although many studies have been carried out within the scope of the research to eliminate these deficiencies, measures to ensure continuity are needed. In particular, it is important to organize the instructional technologies and material design course with the content that traditional materials specific to all disability groups within the scope of special education can be prepared. On the other hand, the inclusion of the objectives of preparing materials using instructional technologies and realizing the lesson in accordance with the material in the course content will contribute to the relative elimination of the problems expressed.

Conclusion

As a result, it was understood that the participants had different opinions about the new special education teaching program. While special education teachers and undergraduate students are generally dissatisfied with the new program, faculty members and ministry officials think that this program is inevitable. However, many problems were encountered after the new special education teaching program. Among these problems are the inclusion of important courses as electives in the catalog, the high number of students, the small number of schools to conduct teaching practice courses, and the short duration of practice course hours. In addition, the sub-field chosen by the undergraduate students and the classes in which the practicum will take

place do not match. Especially for undergraduate students who prefer to specialize in the sub-field of gifted education, there are unsolvable problems in student-school placements. There is a widespread belief that the elective and compulsory courses in the content of the new program should be revised. The inclusion of courses such as concept teaching and error-free teaching methods within the scope of elective courses is thought to affect the teaching skills of undergraduate students in the implementation process. As a result of the research, needs were also identified besides the problems that emerged after the merged program. It was seen that there was a need for a directive to determine the rules and boundaries of the teaching practice course. In addition to the directive, it was understood that the faculty members conducting the teaching practice course needed a common evaluation form, effective communication, and cooperation. All these problems and requirements were tried to be solved to the extent permitted by the regulations, the teaching practice course guide was prepared, the rotation process was carried out, and commissions were established to ensure the systematic operation of the new program. With the pandemic, the research evolved into developing the theoretical infrastructure of undergraduate students and transforming their theoretical knowledge into practice. In this context, webinars were organized in areas such as concept teaching, error-free teaching methods, social skills teaching, instructional technologies, and material design sessions were held. It was also aimed to transfer the gains obtained from all these sessions to the ongoing teaching practice process in the real practice environment of EBA. In the sessions held in EBA, it was tried to increase the technological knowledge level of the classroom teacher as well as the undergraduate student. In the light of the data obtained within the scope of the research, the decisions taken, the results arising from the decisions, and the actions taken were monitored and evaluated. At this stage, it was concluded that the feedback was quite positive and contributed to the development of the teaching practice process after the new special education teaching program.

Implications

- The duration of the undergraduate program can be increased to five years, with three years of theory and two years of practice, so that undergraduate students can practice teaching in many sub-fields of special education.
- Similar to examples abroad (e.g., China), students who complete their bachelor's degree can complete the teaching practice process in sub-fields through a master's degree.
- In the special education teaching course catalog, concept teaching, and error-free teaching methods courses are included in elective courses. For undergraduate students who prefer to specialize in the sub-fields of education of the mentally retarded and autism spectrum disorder education, it may be suggested that concept teaching and errorless teaching method courses should be compulsory.
- For undergraduate students who choose the sub-field of education of the gifted, BILSEMs can be included among the institutions where teaching practice is carried out.
- For undergraduate students who choose the sub-field of education of gifted students, general education classes with gifted students can be included in schools where

teaching practice is carried out. Classes in these schools can be considered special subclasses.

- In order for the new special education program to be implemented in a functional way, it may be recommended to increase the number of faculty members in universities with a distribution that includes experts from each sub-field.

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Statement of Responsibility

Yunus Yılmaz; methodology, data collection, analysis, summary introduction, findings and conclusion. Hasan Gürgür; methodology, analysis, checking and editing the whole report.

Conflicts of Interest

There are no situations that may cause financial, commercial, or legal conflicts of interest.

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