Comparing Scenario and Semi-structured Interviews in Inclusive Education Research: Perspectives of Trainee Teachers on Addressing Children with Special Educational Needs

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Abstract

The aim of this study is to investigate and evaluate the efficacy of scenario interviews compared to semi-structured interviews as a substitute data-gathering technique in inclusive education research. The scenario interview technique allows researchers to explore the complex and context-dependent nature of inclusive teaching practices. This study was designed using a phenomenological approach, and 17 trainee teachers volunteered to participate. Further, a semi-structured interview and inclusive education scenarios have been used. In this research, the analyses of the scenario interview and semi-structured interview data show that there are differences between each other, even though the researcher asked similar questions in both techniques. Furthermore, the scenario interview provided more meaningful, detailed, and precise data to reach the research purpose. In these two data collection techniques, the participants talked about very general topics in the semi-structured interview, and it was not much possible to reach many details that will give us an idea about what the participants know and how they would deal with it. On the other hand, each participant expressed their own ideas according to each scenario and demonstrated their understanding of how to address and overcome the student's problem in special education. Therefore, the scenario interview data collection technique can be utilized in educational studies to gain insights into participants' perspectives, decision-making processes, interpretations of behaviour towards themselves or an organization, by using real or hypothetical events on specific topics.

Keywords: Inclusive Education, Scenario Interview, Semi-structured Interview, Trainee Teacher, Special Education

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Introduction

In the last three decades, Inclusive education has evolved into a critical research and study area in the field of education. As researchers dig further into the complexities and dynamics of inclusive education, it becomes obvious that good research methodologies are required to reflect the diverse character and a clear understanding of inclusive practice.

Interviews have shown to be useful methods for gaining insights, experience, and viewpoints from diverse stakeholders in the inclusive education ecosystem, among various research approaches employed. Open-ended interviews have traditionally been frequently employed because they allow for spontaneous comments that give insight into personal experiences and ideas. Semi-structured interviews provide a flexible framework that combines prepared questions with the ability to expound on participants' replies (Kvale and Brinkmann, 2009). This method enables academics to investigate difficult issues while preserving uniformity across interviews. However, as the area develops, a need for different methods has emerged to enhance the depth and specificity of the data acquired.

As an alternative method, Scenario interviews provide participants with hypothetical events linked to inclusive education, allowing them to give in-depth thoughts, responses, and potential solutions in a controlled context. Hence, it allows the researcher to reveal actual information, particularly regarding how participants' perceptions influence their practices through potential actions or situations that they might encounter in their classrooms and how they would respond in such situations.

The purpose of this article is to present scenario interviews as an alternative data collection method in inclusive education studies and compare semi-structured interviews and scenario interviews; both were utilised in our research which aims to explore the perspectives of trainee teachers on inclusive education.

Throughout this article, we will examine the unique characteristics of the scenario interview approach and analyse its advantages and disadvantages for inclusive education work. We will examine how this technique helps us understand the perceptions of many stakeholders in inclusive education settings, such as students, parents, teachers, and administrators. We also investigate the consequences of employing this methodology in our study design, data analysis, and developing practical suggestions for inclusive education research. This paper also aims to give insights into researchers' and practitioners' methodological choices in inclusive education studies by comparing semi-structured and scenario interviews. Researchers may better connect study aims with the most suitable interview style by knowing the strengths and drawbacks of each strategy. This allows them to optimise the richness and relevance of the data acquired. Finally, this aims to enhance inclusive education research by encouraging the application of alternative data collection methods.

Scenario Interview

Scenario techniques have various applications in various fields, from military planning to programme designs (Ramirez et al., 2015; Brose et al., 2013; Millet, 2003). However, the definition and function of scenarios differ between fields (Ramirez et al., 2015). In this study, scenarios are defined as explanatory narratives that provide possible alternatives to events or events that may occur in the future (Brose et al., 2013; Fahey & Randall, 1997). Researchers use scenarios as data collection tools to understand how participants might react when they encounter similar situations in the future. This technique allows researchers to uncover participants' perceptions of particular issues and their beliefs, attitudes, and values. By interpreting the scenarios participants complete, researchers can gain insights into their reflections on the explored issue. Additionally, exploring these reflections can explain how participants' perceptions and experiences directly influence their future actions (Millet, 2003; Brose et al., 2013; Fahey & Randall, 1997).

Scenario interviews use short narratives or stories that relate to specific research questions (Ralph, 2011). These scenarios usually depict real or likely-to-happen events (Marquard & Brennan, 2009; Ralph, 2011; Sims, 2011). Researchers collect data by asking questions related to the scenario. This enables researchers to analyse the reactions and responses of individuals with varying experiences and perspectives in the same scenario (Piper, 2019; Carroll, 2000).

Scenarios can be created using either an inductive or deductive approach (Alatiq, 2020). In the inductive approach, scenarios are developed by considering the research aims, questions, and data collection area. For example, if the study focuses on trainee teachers' practices in the initial teacher training program, a scenario in a classroom environment can be created. Alternatively, scenarios can be developed using a deductive approach, drawing on real stories or stories created by others or scenarios used in previous studies. The researcher can tailor the questions based on the participants, research aims, and the structure of the stories. In educational research, the scenario interview approach has various benefits. The scenarios offered in the scenario interview are based on real-life occurrences that teachers may face in their classrooms. So, this method enables researchers to investigate teachers' reactions to real problems in their teaching practice. On the other hand, semi-structured interviews may not provide participants with particular and relevant scenarios to reply to, which may restrict the depth and complexity of the data acquired. Scenario interviews are also more structured compared to semi-structured interviews. The questions are intended to elicit precise answers in response to the scenario provided, allowing for a more systematic and controlled data-gathering approach. On the other hand, semi-structured interviews are more open-ended, and participants can answer questions in their own manner, which may result in less consistency in the data obtained.

Scenario interviews have been used in various studies across different disciplines as a tool for data collection. These studies demonstrate the usefulness of scenario interviews in obtaining detailed and rich data. For instance, Edwards (2014) utilised scenario interviews and semi-structured interviews to examine the professional identities, principles, mindsets, and understanding of 15 Australian childcare programme students. Edwards stated that scenario interviews offered a new perspective to understand the participants' perception of the subject matter. In addition, the scenario interviews were used to supplement the semi-structured interviews, revealing how participants perceived the events.

Brownlee and colleagues (2010) interviewed 47 students in children's services to investigate their attitudes, beliefs, knowledge, relationships with peers, and learning approaches. This method was effective in obtaining detailed and subjective data. According to Brownlee et al. (2010), using scenarios as part of the interview process enabled participants to express their personal experiences and thoughts more freely, leading to more in-depth explanations.

Dunn (2017) utilised scenario interviews in combination with observation and self-authorship recall techniques to explore early childhood educators' experiences and understanding in detail. Similarly, Stockero et al. (2020) selected scenario interviews to explore teachers' mathematical thinking of students and to examine the "description of the event", "why she/he described it as such", "describing her/his assumptions" and "reasons for teachers' responses to students' contextual perspectives". In another study, Alatiq (2019) applied scenario interviews to examine the attitudes of teachers in female schools in Saudi Arabia using the theory of resistance to change. In this research, the scenario technique provided rich data, multiple perspectives, and an opportunity to analyse participants' attitudes in depth.

Piper (2019) used scenario interviews along with questionnaires, Skype interviews, and public documents to reveal nonfiction reading teaching techniques and pedagogical content knowledge among upper elementary teachers.

In Sims' (2011) study, a scenario interview was used to examine school principals' decision-making processes and identify similarities and differences among them. This technique aimed to investigate school principals' decisions in real-life situations when there is no pressure or stress and to determine how they make decisions while keeping the budget in mind.

Ennis and Chen (2012) conducted a study involving children and used scenario interviews to collect data. By drawing on familiar events, this technique aimed to engage children's interest and encourage them to provide detailed responses.

The research conducted by Ralph (2011) has similarities with the current study in terms of participants. Ralph investigated the interests and attitudes of trainee teachers in the physics teaching department using short scenarios. The aim of this technique was to reveal how the participants' views and perspectives were shaped in real-life scenarios. In addition to these studies, this technique has

been used in various fields, such as medicine (Marquard & Brennan, 2009; Holden et al., 2020) and business (Bradfield et al., 2005) to observe reactions to possible scenarios.

The main purpose of the above studies is to learn the behaviours, understanding and attitudes of the participants in the future or when faced with a possible situation. When the participants are not under any stress or pressure, it is predetermined how they will react to these possible situations. Real-life scenarios often lead to more meaningful, deep and valid responses than superficial questions such as "what would you do in a difficult situation". This is because participants may not always be able to think in detail about the solutions to a general question. As a result, the ability of such scenarios to elicit meaningful and detailed responses has found significant use in a wide range of disciplines, from the military to hospitals, schools and other critical organizations.

Scenario Interview in Inclusive Education

Inclusive education aims for every student to access quality education and participate fully in all aspects of school life without discrimination, marginalisation, or exclusion. To achieve this goal, inclusive education requires practitioners committed to it and applying this idea in their activities. (Florian, 2008; Krischler & Cate, 2019). This situation makes it imperative for the researcher to understand practitioners' perceptions to predict their practices in inclusive education settings. In the case of this study, if we consider teachers' perceptions as they are one of the most critical practitioners for the success of inclusive education, revealing actual information, particularly regarding how their perceptions influence their practices through potential actions or situations that they might encounter in an inclusive classroom and how would they respond in such situations is essential for the researcher. Teacher training can provide teacher candidates with the values, knowledge, and skills necessary to promote inclusive education. This makes teacher training essential for the success of inclusive education. Therefore, teacher training programmes should be assessed through research to determine whether existing education programs adequately equip teacher candidates with the necessary skills or need improvement.

The selection of information-gathering methods greatly influences the validity, reliability, and credibility of study findings. Thus, to make sure that the research fulfils its original objective, it is essential to collect accurate and trustworthy data from relevant sources. Since inclusive education is complex, data must be collected from participants with varying experiences, knowledge, and perspectives. Therefore, not every qualitative data collection technique may be suitable. For example, students have different instructional needs in a class, and teachers may not always disclose their needs with stereotypical open-ended questions, a structured or semi-structured interview may not always be the best data collection technique for gathering data from teachers. The scenario interview technique, however, allows researchers to explore the complex and context-dependent nature of inclusive teaching practices. Teachers' responses to the scenarios can reveal their beliefs, values, and assumptions about disability, diversity, and equity, as well as their practical knowledge of teaching and learning. Moreover, by comparing the responses of different teachers, researchers can identify common challenges and areas of need in teacher training and support. For example, if a teacher is asked a general question like "What would you do if you had an inclusive education student in your class?" The response to this question may not be as detailed and likely to include vague explanations such as "making instructional adaptations, redesigning the classroom, would sit this student with their hardworking peers, or student would sit the front seats" etc. However, the utilisation of a scenario as in the example below,

> Ever since Brenda started in algebra, she has exhibited problems with her attitude. Previously a hardworking, sincere student, she becomes angry and frustrated whenever she is confronted with an algebra problem. "This is stupid!" Brenda exclaims. "Why should I have to learn this? What difference does it make? I hate algebra!" She does not seem to want to make the attempt to learn. Her ninth-grade teacher, Ms. Moon, is considering placing her in a remedial math class (Mastriopieri and Scruggs, 2010).

allow the researcher to ask more reflective questions such as why does Brenda single out algebra when other subjects also pose difficulties? Do you think improving Brenda's skills, or improving her attitude, is of greater importance? Based on your answer to question 2, what strategies would you

recommend to Ms. Moon? (Mastriopieri and Scruggs, 2010). Accordingly, these questions can elicit more specific responses related to the scenario presented and provide more systematic and controlled data.

This study aimed to answer the following research question; How does the scenario interview technique differ comparing the semi-structured interview revealing the trainee teachers` possible practices and attitudes in inclusive education classes?

Methodology

This research was designed with a phenomenological approach in order to obtain information about the events, phenomena, or situations that may be experienced in the future and how they will behave in the face of these situations (Hatch, 2002). Scenario interview falls into the category of a phenomenological study, aiming to examine the experiences of the trainee teachers about the phenomenon that is also experienced or that will be encountered in the future.

This study used qualitative research to collect in-depth and detailed data from trainee teachers (Denzin & Lincoln, 2011). In this study, the analysis and discussion of the data are explained with an interpretative phenomenological analysis. For this reason, it aims to show how trainee teachers` data apply inclusive education in the teaching practice programme and how they can be explained using the scenario interview technique. In addition, the differences and similarities between the semi-structured and scenario interviews are discussed.

Participants

Data for this study were collected between January and March 2021. The participants of this study consist of trainee teachers of the teaching practice course who continue the primary education programme in Türkiye. Although six universities from Türkiye were invited to participate in the research, three universities accepted participation due to the difficulties and pressures brought by COVID-19.

Table 1.
Participants` and Primary Education Departments` Pseudonyms

Department	Participants					
CEDAR	Yadigar	Fatma	Hülya	Kazım	İhsan	Münir
OAK	Pınar	Melek	Hale	Seda	Şener	Tomris
PINE	Eda	Adile	Duygu	Sevtap	Çolpan	

Therefore, 17 participants from these three universities were interviewed with scenarios and semi-structured interviews.

Data Instruments and Data Collection

In this study, a semi-structured interview (Please *see* Supplementary Material – appendix 1) and inclusive education scenarios (Please *see* Supplementary Material – appendix 2) have been used. In the semi-structured interviews, trainee teachers were asked how to overcome barriers to students with special needs in their classrooms, the teaching techniques they use during the sessions, design the classroom, and adapt the teaching materials and examples of these teaching approaches. In order to investigate how trainees, reflect their knowledge, attitude, and their partnership in practice, these interview questions were created.

The questions prepared for these two interview techniques were meticulously formulated by considering consistency and integrity. The scenario interviews were inspired by four different scenarios in Mastriopieri and Scruggs' (2011) study, covering topics such as Attention Deficit Hyperactivity Disorder, Parent Education, Improving Attention and Memory, Reading Comprehension and Spelling. The semi-structured interview questions were prepared in a way to complement each other in line with these scenarios, and both semi-structured interviews and scenario interviews were conducted consecutively. Thus, the same questions asked in different ways were intended to better reflect their perspectives and the research aim.

In addition, valuable feedback was received from the experts of the Ethics Committee of the University of Reading in the United Kingdom during the preparation of the questions. This committee not only ethically assesses the effects of the research on the psychological and physical health of both the participants and the researchers, but also assesses whether the data collection tools serve the purpose of the research. After getting ethical approval and experts' opinions from the committee, a pilot study with two trainee teachers was conducted to verify the appropriateness of the questions. Feedback from the participants confirmed that the questions were appropriate for the research purpose. Therefore, these two pilot studies were also included in the main study.

These two data collection tools, the semi-structured interview, and the scenario interview, were evaluated to reach the same focal point in the research. Factors taken into account during this evaluation included the purpose of the research and phenomenological approach, content appropriateness, depth of data collection tools and data triangulation. This research primarily aims to understand and explore trainers' experiences and perspectives on educating children with special needs in inclusive education. For this purpose, both the scenario interview and the semi-structured interview were created to get information about how the trainers would work with these children with special needs, how they perceive the challenges and how they would respond to these challenges. In this way, it was possible to obtain responses to both interview techniques on topics such as overcoming barriers and challenges related to children with special needs in inclusive education, alternative teaching strategies, classroom, and material design. Since the sensitive and complex nature of these issues required in-depth information from the participants, it was evaluated whether both techniques were used and whether the data obtained from these techniques reached the depth, richness, and targeted focus. In addition, questioning the explanations about working with children with special needs with two different data collection techniques increased the validity and reliability of the data. Thus, the aim of the study was achieved in terms of using these two data collection techniques by asking the same questions in different ways and collecting sufficient and appropriate data.

Lastly, in cases where the participants' answers did not give an idea about the problem and how to deal with it, the researcher repeated the same question in other forms. The data collected from the participants took between 20 and 30 minutes. Due to the obligations brought by COVID-19, face-to-face meetings could not be held. Instead, scenarios were uploaded to the Online Survey and emailed to these participants at the beginning of the online interview. The answers given by the participants were both voice-recorded, and the points that the researcher considered necessary during the interview were noted.

Ethics

Ethical approval of this study was received from the Ethics Committee of the University of Reading Institute of Education in November 2020. All study processes were completed by considering all ethical rules (BERA, 2018). Participants were reassured that their names and institutions would remain anonymous before data collection, and their written and verbal consent was obtained before the study. In addition, pseudonyms have been given to the participant names and institutions (Please *see* Table 1).

Data Analysis

The data analysis of this study was carried out with the data obtained from both semi-structured interviews and scenario interviews. Two researchers analysed the data independently, aiming to reduce bias and increase reliability. During the coding and interpretation of similar themes and topics, comparisons were made between the two researchers and minor disagreements were discussed and consensus was reached. The researchers compared the findings of both interview data and ensured methodological consistency. The responses to similar issues regarding the trainees' experiences and potential practices in meeting the needs of students with special needs education in both interviews were categorized using thematic analysis, enabling comparison. However, while presenting the findings, similar data were not specifically discussed under the themes. The data obtained from similar questions were mainly focused on a comparison, such as this is how it was answered in the semi-structured interview, while the scenario focused on this issue in this way. In addition, cross-referencing ensured that responses obtained from the same participant with different data collection

techniques were accurately matched and analysed, thus increasing consistency. To assess coding agreement, inter-rater reliability measures were used between researchers to confirm the reliability of the analysis (Cohen et al., 2011). The study-maintained credibility by accurately reflecting participants' perspectives and demonstrated the transferability and dependability of its findings across different settings. To maintain confidentiality, participants, and universities were given pseudonyms during the presentation of results. These rigorous procedures collectively supported the robustness and credibility of the data analysis process (Denzin & Lincoln, 2011).

Findings

Semi-structured interview questions were generally prepared to collect data about the knowledge, skills and attitudes of the participants. Scenario interviews were also designed in accordance with the purposes of semi-structured interviews. The main purpose of the semi-structured interviews was to obtain data on the participants' level of knowledge about working with children with special needs, the teaching techniques they used, how they included these children in the classroom, the use of materials and classroom design. On the other hand, in the scenario interviews, examples of problematic and inappropriate behaviours of four students with special needs within the scope of inclusive education, such as disturbing their friends during the lesson, speaking loudly in the classroom, having problems in making friends, throwing materials on the floor, distracting, forgetting the lesson topics quickly, and getting bored in the classroom were presented. In this case, similar issues were handled in different ways in semi-structured interview and scenario interview techniques. Furthermore, the scenario interview provided more meaningful, detailed, and precise data to reach the research purpose because of having example-based questions. The participants' responses were not entirely different. Still, when asked open-ended general questions about the disability group in a semi-structured interview, the participants generally preferred to give general answers and avoided giving details. During the scenario interviews, when the participants were mainly asked about "identifying the problem" and "possible practices" in inclusive settings, they gave the following answers.

> …the child cannot focus on the lesson, and I think there is a lack of attention. I would make adaptations for this child according to the lesson's purpose. For example, I would give this child an egg in a painting class and ask him to paint it. Then I would want him to carry that egg all day long. If he could finish the day without breaking it, I would reinforce it. Generally, I would pay attention to teaching the lesson with concrete concepts rather than abstract concepts (Scenario 2-Kazım-(Cedar Department)).

> This student has a pronunciation problem. He is having trouble with language development. He is having trouble speaking. We have rhymes for this. First, we add the words he cannot say into the rhyme, start saying them in a fun way, and ask the child to accompany us. Of course, this varies from student to student, but it is related to identifying and working on problematic words (Scenario 4-Kazım).

In semi-structured interviews, Kazım said: "I first keep the student close to me. Then, I give him/her more responsibility. That student would be my co-student… For example, if I had a hyperactive student, I would look for sample practices on the internet… Then, I would design the classroom environment according to the children`s needs." Fatma-(Cedar Department) from the same institution stated in a semi-structured interview that she could give more responsibility and more manageable tasks to students with special needs, such as "wiping the board, opening the window, airing the classroom, and notifying his/her friends that the teacher is coming…" She mostly indicated that she does not have much knowledge of special education and talked about general issues rather than specific examples. Further, this data does not give many details on how they would cope with any barriers that occur in the classroom. On the other side, she gave more insights and details about her practices:

> I think the student here has a learning difficulty. Of course, first, we would meet with someone who is an expert in the field of learning difficulty and clarify the problem, and I would decide what to do under expert control. If the student cannot make some sounds, it may be a physical problem. If there is a physical disability in the student, it must be determined first… After detecting the sounds that were not produced, I would do activities for those sounds. First, I

> would find out the sounds he cannot. Then create the pictographic books for the relevant sounds and words, and teach sounds, letters, syllables, and two-syllable words using video modelling, pictures, and supportive books. (Scenario 4-Fatma).

As can be seen here, Fatma simply created a basic teaching plan compared to semi-structured interview data. Similarly, Hülya-(Cedar Department) indicated that she would search for a similar case online and include these students, such as "sitting these children at the front desks…. I would do game-based sessions predominantly with these kids…I would love to have an extra activity room for these kids." These expectations and her wishes show that she is keen to work with these students. Nevertheless, to understand how they would run the teaching sessions with a student with special needs, scenarios help Hülya to discuss broader her possible practices.

> This student also has distractions. The student cannot concentrate. The student seems to be distracted because he cannot achieve something. To eliminate this problem, I used to design game-based lessons where physical movements are predominant. If we give students abstract concepts, they may be challenging to learn. Therefore, I would teach concrete concepts. Then would prepare short poems, nursery rhymes, and short texts. I would also design these teaching sessions within the games. I would design an educational environment where they could sit on the floor and feel comfortable rather than holding their teaching sessions in classical rows (Scenario 2-Hülya).

> Here, the child can write and do homework, but there is a problem with pronunciation. He cannot read some words. This child's mother tongue may not be Turkish. His native language may not be English, and maybe he is having difficulties reading. If he can read 15 out of 20 words, I would look at the length of those five words and whether he can pronounce the sounds used in the beginning, middle, and end. For him, I would do pronunciation exercises to make those sounds, and we would read poems and nursery rhymes together. I would support these poems with graphic cards. Picture cards and sounds, and then we would read aloud together. I always provided concrete material support while reading this (Scenario 4-Hülya).

İhsan, Münir and Yadigar from the Cedar department had similar statements in both data collection techniques. Furthermore, they stated that they did not know much about special education and discussed broader terms, such as adapting materials, designing classrooms, and giving tasks. Therefore, in the scenario interview, they indicated that discussing any specific topic in inclusive settings was hard.

Hale from Oak Department had a detailed explanation of both data collection techniques. In a semi-structured interview, she stated that she would consider each student's own performance and motivate them to learn with musical and physical activities. Further, she would create a friendly environment for all students, such as students with Turkish as an additional language and special needs and would do group teaching by integrating all. In the scenario interview, she talked about Anna's case and gave details about how she would design the classroom and the sessions and the philosophy of student-centered education:

> This student has an attention deficit problem. However, the average attention span of a 6th-grade student is 15-20 minutes. Not being able to concentrate for more than 3 minutes is not a big problem for her age. However, being unable to adapt to the class and distracting her friends can be a problem. So, what should be done in this situation? First, a classroom environment where all students can move freely is required. I can design the lessons by giving short breaks of 2-3 minutes. Every student has the right to this. I would design the rules and instructions with each student in mind. Apart from that, I can suggest some exercises for this student. In the last 5 minutes of the lesson, I have this student do different practices. In order to design a student-centered educational environment, I would organise the educational environment and materials that would appeal to the different senses and attract the student's attention rather than the classical education environment (Scenario 2-Hale).

Pınar-(Oak Department) was from the same department and stated that she should include all students in the class and would buy supportive books.

If the student were underperforming and learning hard, I would give fewer and easier assignments. I would buy books for Syrian students and involve all students in my class. I would give easier tasks and homework if the student shows lower performance. I would also contact the parents as well.

Pınar simultaneously designed by imagining the sample student and decided what she could do in the scenarios given during the interview. Although it was not a very detailed lesson plan, she avoided using general judgment.

Here, the student may be hyperactive and have problems focusing. First, I would seat Robert at the nearest table. In order to keep the student's attention high, I would give him responsibilities related to the lesson. For example, if we were in Mathematics class, I would give four teddy bears and say let's paint the bears and count them slowly. I would always keep the student busy and prevent the emergence of problem behaviour (Scenario 1-Pınar).

The student may have a literacy disorder. First, I would give the student very few words and give repeated readings and assignments to learn it fully. I would give ten words, and then I would write them slowly and show them to the student. Then I had the student read and write the words (Scenario 4-Pınar).

While Seda from Oak department offered a detailed perspective on the scenario, she gave more detailed information in the semi-structured interview than the other participants in the semi-structured interview.

First of all, I would understand what the student's problem is. Then I would learn what the student likes or dislikes. Then, I would develop a common attitude with his friends. The attitude and awareness of his family are also very important. In short, I would make the adaptations that would make the child happy.

In scenario interviews, Seda indicated that she briefly identified the problem and how to overcome this issue in detail.

I think the student here may have some kind of learning disability. If it were me, I would raise the problem first. Because the problem must be diagnosed first, I can make adaptations and instructional sessions accordingly. This student also seems to have learning difficulties. Since the student does not have a problem with reading, we must first concentrate on the words he does not know. I would choose words from simple to easy and support these words with visuals that the child knows. I used to tell stories containing 4-5 words and these images. We would read together, and I would make him realise the words. The words I would choose would be the words the child would likely encounter in daily life. Thus, for the student, the words would be evocative and would be easier to learn. By doing this, I would reduce the problem and support the student by doing peer teaching with classmates (Scenario 2-Seda).

Melek from Oak department stated in the semi-structured interview that she would make the necessary classroom and teaching adaptations for the student. Şener and Tomris had a similar statement. Melek also indicated that she would make arrangements in the friendship circle. Since this research aims to determine to what extent the trainee teacher knows the necessary instructional adaptations and how to apply them, the general open-ended statements of the trainee teacher do not fully answer the research questions.

First of all, I would make positive discrimination against disabled students. I would sit a disabled student and a hardworking student next to each other... I would arrange extra teaching sessions for these students. I would play games with these students. I would seat disabled students in the front rows. (Semi-Structured Interview–Melek).

On the other hand, when the answers given by Melek in these two data collection techniques are compared, it is seen that there is a specific plot in the scenario interview, how well the student knows the adaptations and teaching sessions over that event and what can be done.

The student can read, but there is a problem with comprehension. The student may tend to memorise the words in general. If students compete with each other in the classroom, they

may be trying to memorise. Here, I would use the student's imagination to create original stories for the child, and I would work for the student to learn by reading rather than memorising. Then I would try to improve his comprehension by asking questions such as 'why' and 'how' after each sentence. I would give simple sentences first, then gradually complicate the stories. (Scenario 2-Melek)

Participants in the Pine department stated that they could not go to practice schools due to Covid-19 and that the online teaching application was not very sufficient. Therefore, they did not go into much detail in both semi-structured and scenario interviews. Most of the Pine department's trainees (Eda, Adile, Sevtap and Çolpan) stated in the semi-structured interview that they would do peer teaching, apply game-based teaching, and organise classrooms/materials. They explained how to make these implementations based on the related scenarios. However, Pine department's participants did not go into as much detail as participants in the Oak department and Cedar department, except for Duygu-(Pine Department). In the semi-structured interview, Duygu said.

We can provide visual support or something. Other than that, I don't know; let them be more active in games and learn through games; it happens in the same way for visually impaired individuals; It would be better if they actively participate in the lesson… I would like to make these instructional adaptations being included in the classroom smoothly…would try to communicate with them… while teaching reading and writing; there are certain stages, and I would try to adjust them. (Semi-Structured Interview-Duygu)

I figured out why and I need to organise it in my head; give me some time. Sir, I think Carmen's ability to express herself is somewhat limited. Then I'll go over the text. She reads what is written there but does not understand. I would read the story to Carmen all the time and have her do the writing. Otherwise, it will remain in certain patterns and unable to learn. That's why she needs to develop herself. Firstly, she needs to experience it to express what she understands. I would do it in a diary format. So, from the beginning, I would ask how you are feeling right now. I would like her to write it so that I would start with short questions in the text. I would like her to say, "what's going on here." I would like her to write her thoughts later. (Scenario 3-Duygu).

Overall, as seen in these two data collection techniques, the participants talked about very general topics in the semi-structured interview, and it was not much possible to reach many details that will give us an idea about what the participants know and how they would deal with it. On the other hand, in the scenario interview, each participant expressed their own ideas according to each scenario and showed that they had certain ideas and how they practiced revealing and reducing/overcoming the student's problem with special education. In addition, the data related to attitude, which we could not elaborate on in the scenario interview and semi-structured interview, was an opportunity to show the participants' attitudes more clearly.

Discussion and Conclusion

The purpose of using the scenario interview was to understand the extent to which the trainee teachers' knowledge, decision-making, and implementation processes in the real plot based on the scope of inclusive education that they were likely to encounter in the future (Brose et al. 2013; Sims, 2011). In addition, another aim of this research was to reveal how the collected data differ from semi-structured interviews, which can be an alternative to the conventional qualitative data collection techniques in the field of education in certain areas. This study consisted of four possible scenarios in inclusive education classrooms. The data obtained from these scenarios allowed the research to be examined in depth. Brose et al. (2013) also obtained in-depth data and different interpretations from the participants in their studies. Alatiq (2020) also stated that she collected meaningful and rich data using scenario interviews.

In semi-structured interviews and scenario interviews, most participants stated that their knowledge of special-needs students was limited by the effect of distance education brought by the pandemic. When asked to give examples of what kind of practices to do in semi-structured interviews, the participants stated that they would mostly make classroom and instructional adaptations for students with special needs rather than discussing them through examples. In the first question of the scenario interviews;

what the problem is in this scenario, some trainee teachers defined what the problem was; not being able to comprehend the meaning of words, being too active, and having too much energy. On the other hand, most trainees made statements about the students' attention deficit and hyperactivity disorder and learning difficulties in the scenarios. In these scenarios, it can be concluded that students generally tend to label students. However, the spontaneous teaching provided by the trainees for the students in each scenario was instrumental in achieving our goal of obtaining deep and meaningful data from the trainee teachers. For example, the participants stated that in scenario 4, they would determine which words Mario could not pronounce, make cumulative repetitions on those sounds, and/or gradually familiarise the student by giving monosyllabic words. This answer and similar responses from other participants helped reach the trainee teachers' intended data. However, it was not much possible to reach similar findings in semi-structured interviews due to the general responses of the participants for this study. In semi-structured interviews, chain questions can be asked for similar results due to the nature of the interview technique. Such answers can be obtained with a few follow-up questions for each question. A semi-structured interview is an effective tool, but sometimes different ways of collecting the data can give better data in a faster way. Furthermore, the researcher is responsible for deciding on a correct data collection technique, which can provide a full answer to the researched subject to the participants for content validity (Cohen et al., 2011). Collecting the most appropriate data in the shortest time and with the most valid data collection technique will increase the research's credibility, dependability, and authenticity.

Implication

The scenario interview data collection technique can be used in educational studies to learn about participants' own perspectives, decision-making processes, interpretations of behaviour, beliefs, and attitudes about themselves or an organisation, by using real events or probable future events on certain topics. Additionally, young-aged participants may feel more comfortable seeing a familiar story and events related to their life (Ennis and Chen, 2012). Therefore, the researchers can also consider using this technique for collecting data from different age groups. However, this technique is mostly focused on specific subjects, and may be inappropriate to get information about colleagues, collective behaviours or how the organisation works. Therefore, the researchers can combine this technique and other data collection techniques; interview, observation, or other qualitative and/or quantitative data collection techniques in order to make the studies more powerful and valid.

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Appendices

Appendix 1 - Semi-Structured Interview Questions

1. How would you describe your knowledge of educating children with special educational needs?
2. Could you please tell me about the approaches to you use to overcoming barriers to learning for children with special needs?
3. Can you give an example of how you temp to include a child with special educational needs within physical/online mainstream classrooms?
4. How do you adapt the materials that students feel to included?
5. What do you do to make your physical/online teaching/classroom suitable for children with special needs?

Appendix 2 – Scenario Interview Questions

Scenarios
Robert Black had so much energy that he drove everyone around him crazy including his parents; his teacher, Ms. Moore; and his classmates. When he arrived at school everything around him appeared to get caught in a whirlwind of activity: Papers flew to the floor, books were dropped, toys were broken, classmates were annoyed, and teachers threw their hands up in dismay. Robert was a nice 8-year-old boy, but he could not focus on one thing at a time. He seemed mesmerised by everything, moving from activity to activity with limitless energy. When someone spoke, he would interrupt and start talking about something that popped into his head. If he saw something that interested him, he would immediately take it in his hands. His feet, hands, and eyes seemed to be moving constantly. He seemed unable to sit still. Ms. Moore was frustrated and unsure of how to handle Robert in the class, so she called Mr. and Mrs. Black and asked them to come in for a conference. What became immediately evident at the parent conference was that Mr. and Mrs. Black were experiencing similar problems and frustrations at home with Robert-and had been since he was 2 years old. **Questions for Reflection** 1) What do you think the problem is? 2) How do you deal with this problem?
Ana is a year 6 student with average academic abilities and a positive disposition. However, she has difficulty sustaining her attention to school tasks for more than about 3 minutes at a time. When prompted, she returns to task, but within a few minutes, she is again off-task, looking out the window, playing with her pencils, or doodling on her paper. This happens during teacher presentations, on seatwork activities, and sometimes during group activities. As a consequence, her grades have been falling, especially in maths. **Questions for Reflection** 1. What do you think the problem is? 2. How do you deal with this problem?
Carmen can read the words in the stories, but when someone asks her what the story is about, she can't remember. Ms. Simpson, her year 4 teacher, always has her read orally during class and consistently gives her praise for her word reading. However, whenever Ms. Simpson says, "Now tell me what the story is about in your own words," Carmen is lost. She is beginning to dislike reading class because more and more time is being devoted to questioning about the stories rather than just reading out loud. **Questions for Reflection** 1) What do you think the problem is? 2) How do you deal with this problem?
Mario, a year 5 with learning disabilities, is included in Ms. Wills' general education class for all subjects. Ms. Wills has weekly spelling tests every Friday. On Mondays new spelling lists containing 20 words are distributed, and time is allocated throughout the week to study independently to prepare for Friday's test. But Mario is failing spelling. He tries hard to learn the words, but he can't pronounce some of the words on the list. Both he and Ms Wills are becoming frustrated with his spelling. **Questions for Reflection** 1) What do you think the problem is? 2) How do you deal with this problem?