



## AN ANALYSIS OF THE OPINIONS OF SPECIAL EDUCATION EXPERTS PROVIDING WEB-BASED SUPPORTIVE EDUCATION SERVICES ON ASSESSING STUDENT PERFORMANCE IN THE PREPARATION OF INDIVIDUALIZED EDUCATION PROGRAMS (IEPS) FOR STUDENTS WITH SPECIAL NEEDS

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### Abstract:

The primary objective of this study is to examine teachers' perspectives on the challenges encountered in determining the educational performance of students with special needs in web-based support education services, as well as the impact of disadvantaged conditions observed in educational diagnosis and placement processes on educational performance. This qualitative study collected data through structured interview forms. A total of 42 volunteer teachers who implemented web-based education applications participated in the study. Findings indicate that teachers face certain difficulties in educational diagnosis, placement, and assessment processes, as well as in determining the educational performance of students with special needs during web-based support education. Teachers suggested that these challenges could be mitigated if students actively participated in lessons and if their parents collaborated closely with teachers, thereby ensuring a more effective performance evaluation process. Furthermore, teachers working with students with special needs stated that they did not find it appropriate to use the exact same assessment tools as in face-to-face education for measuring student performance in web-based support education. Instead, they recommended the use of digital tools. Additionally, teachers highlighted that product portfolios and assessments based on verbal expressions were also functional as measurement tools. Another significant finding of the study is the importance of identifying disadvantaged conditions that may affect students' educational performance and providing solutions when deciding whether a student with special needs should be placed in a special or general education school during web-based support education.

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## 1. Introduction

Individualization in education is recognized as a fundamental approach in developing the academic and social skills of students with special needs. The Individualized Education Program (IEP) is a plan developed to determine educational goals tailored to the individual needs of students with special needs and to ensure the achievement of these goals. It is a special education program designed based on the curriculum followed by individuals with special needs compared to normally developing individuals, incorporating developmental characteristics, educational needs, and support education services to achieve targeted goals (MEB OEHY, 2018). The potential of IEPs to contribute to the individual development of students necessitates that teachers adopt various strategies in preparing these programs. However, the challenges of this process become even more apparent in web-based support education environments.

In recent years, the impact of technology on education has increased with the widespread adoption of web-based support education applications. Various studies have revealed that while these applications offer new opportunities for students with special needs to achieve their individual learning goals, they also introduce significant challenges in performance evaluation and IEP preparation (Aslan, 2021; Kaya & Demir, 2023). Among these challenges, the inability to adequately monitor students' interactions on digital platforms and variations in parental involvement rates are prominent (Gökçe, 2022). It has been particularly emphasized that effective collaboration between parents and teachers positively influences IEP processes (Anadolu Turkish Education Foundation, 2023).

Web-based support education environments require teachers to develop their digital skills and integrate these skills into the teaching process. However, the competence of teachers in effectively utilizing digital tools and adapting them to meet students' individual needs is of great importance (Yılmaz, 2023). The literature highlights that assessment and evaluation processes on digital platforms are effective in tracking the individual development of students with special needs (Ergün & Çelik, 2022). For example, the analysis of student portfolios and oral performance-based assessments have been identified as techniques that allow for a multidimensional perspective on educational development (Aslan, 2021).

The COVID-19 pandemic has further highlighted the challenges associated with web-based applications in assessing the performance of students with special needs. During this period, teachers were observed to have struggled to conduct IEP processes despite the limitations of digital environments. Studies on the pandemic period emphasize that active parental participation in web-based applications and the effective use of digital materials play a decisive role in achieving IEP goals (Yılmaz *et al.*, 2022;

Anadolu Turkish Education Foundation, 2023). Digital materials and platforms that support student-teacher interactions are particularly crucial for achieving individualized education objectives (Gürbüz & Türkan, 2021).

Web-based instruction allows students to receive education in two ways: synchronous and asynchronous learning. In synchronous education, teaching and learning occur simultaneously. Teachers and students interact in real-time via live lessons, voice conferences, video conferences, and chat rooms. In asynchronous education, teaching and learning do not occur at the same time. Teachers and students communicate at different times and locations, resulting in delayed communication. Forums and email groups are among the tools used for communication in asynchronous education. This type of education requires students to take a more active role in regulating their own learning (Brown, 1998).

Web-based support education applications emphasize that the tools and approaches used to assess student performance should differ from those used in face-to-face education environments. For example, instead of standardized tests used in traditional education, tools that align with the capabilities of digital environments are recommended. These studies emphasize the need for a comprehensive evaluation of students' individual performance from multiple perspectives (Demir & Ağca, 2022). The effective use of digital technologies in education allows teachers to make IEP goals more transparent and measurable, thereby contributing to a clearer tracking of educational outcomes.

Web-based education offers new opportunities for implementing student-centered approaches in individualized learning processes. This model provides a flexible learning environment for both teachers and students, eliminating time and space limitations (Celik & Aksu, 2023). Web-based platforms enable the presentation of materials suitable for different learning styles, the customization of content according to individual learning speeds, and the multi-dimensional support of the teaching process (Ozdemir & Karaca, 2023). For students with special needs, these platforms offer advantages such as personalized instructional materials, interactive applications to support learning, and continuous monitoring of the learning process (Karataş, 2022).

Additionally, digital environments provide opportunities such as virtual group activities that help students with special needs develop social skills. However, it is crucial for teachers to enhance their digital skills and use platform tools in alignment with pedagogical objectives (Eren & Yılmaz, 2023). In this regard, web-based education applications have significant potential in achieving individualized education objectives. Assessment in special education can be broadly defined as the process of collecting information to make informed decisions about an individual. Additionally, the educational assessment process is part of an interdisciplinary evaluation aimed at understanding the learning difficulties of students suspected of having disabilities (Strickland & Turnbull, 1990). The stages involved in this general framework vary depending on the purposes of the assessment, the tools and methods used, and the

location and personnel conducting the evaluation. This interdisciplinary team typically includes a guidance counselor, classroom teacher, and special education teacher. Depending on the child's needs, other specialists, such as speech and language therapists, child psychologists, physical therapists, and medical doctors, may also be involved (Çuhadar, 2017). The overall goal of the educational assessment process is to collect various types of information to support legal decisions and determine the special services to be provided to the child.

To prepare an Individualized Education Program (IEP) for a special needs student, whether in a special education or mainstream classroom, it is first necessary to determine the student's current performance level (Kargin, 2007). By assessing the student's existing performance level, the goal is to identify what the student can and cannot do—in other words, their strengths and weaknesses (Avcıoğlu, 2011; Can, 2015). Each member of the educational diagnosis and assessment team should possess an evaluation report detailing the student's current performance in their respective area of expertise to develop an effective IEP (Fiscus & Mandell, 2002; Can, 2015). When reporting a student's performance level, the following principles should be adhered to:

- a) The performance level should be based on assessment data.
- b) It should reflect both what the student can and cannot do.
- c) It should be expressed in a measurable and observable manner.
- d) The statement of performance level should allow for the formulation of both short-term and long-term goals.
- e) The performance level should reflect the student's present situation.
- f) The student's specific conditions should also be noted in the performance level report (Kargin, 2012; Çolak, 2013).

In addition to these considerations, the use of digital tools in web-based applications for reporting the performance level of students receiving IEP support has emerged as an innovation in the assessment process.

Challenges have been observed in determining the educational performance of special needs students through web-based methods, particularly in the context of educational diagnosis and placement processes. These difficulties have been influenced by both pandemic-related conditions and environmental factors, leading to some adverse effects on educational performance. In this context, gathering insights from teachers working with special needs students and identifying potential solutions can be beneficial in addressing and even preventing these challenges. Additionally, given the changing educational paradigms following the pandemic, it is believed that providing guidance to teachers on educational diagnosis, placement, assessment processes, and performance level determination will be valuable.

Based on these considerations, this study seeks to answer the following research questions:

- 1) What are the effects of the challenges encountered in determining the educational performance of special needs students and the disadvantages observed in the educational diagnosis and placement processes in web-based support education services?
- 2) What are teachers' perspectives and proposed solutions regarding the effects of the challenges encountered in determining the educational performance of special needs students and the disadvantages observed in the educational diagnosis and placement processes in web-based support education services?

## 2. Method

This study aims to examine teachers' perspectives on the challenges faced in determining the educational performance of students with special needs in web-based support education services, as well as the impact of disadvantages observed in educational diagnosis and placement processes on educational performance. To achieve this objective, a qualitative research approach using the case study design was employed. Qualitative research involves methods such as observation, interviews, and document analysis to collect qualitative data, allowing the realistic and holistic presentation of perceptions and events in their natural environment (Yıldırım & Şimşek, 2013; Merriam & Bierema, 2013). Case studies enable researchers to conduct an in-depth examination of a phenomenon or event beyond their control (Yıldırım & Şimşek, 2013). To select the most suitable case, researchers must first determine the relevant criteria and then select a case that meets these criteria (Thomas, 2021). In line with the study's objective, teachers who prepared IEPs in web-based applications were selected as participants.

### 2.1. Study Group

A criterion sampling strategy, which is part of purposeful sampling strategies, was used to determine the study group. Criterion sampling involves including all cases that meet predetermined criteria to obtain the best data sources for the research purpose (Patton, 2014; Campbell *et al.*, 2020). In this context, the study aimed to collect data from teachers who determine student performance while preparing IEPs in web-based applications. The criteria for selecting the sample were "having an inclusive student and providing web-based support education." Detailed information about the sample group formed based on these criteria is presented in Table 1.

**Table 1:** General Information of the Study Group

Category	Attribute	%
Gender	Female	82,9
	Male	17,1
Age	32-36	20
	37-41	40
	42 and above	40
Branch	Primary School Teacher	40
	Information Technology Teacher	25
	Preschool Teacher	15
	Science Teacher	10
	History Teacher	10
Professional Experience	6-10 years	5,7
	11-15 years	22,9
	16-20 years	34,3
	21 years and above	37,1

## 2.2. Data Collection Instruments

In this study, a semi-structured interview form, which is one of the qualitative data collection techniques, was utilized. The interview technique is employed to reveal the perspectives and meaning-making processes of the participants, allowing the researcher to understand the world from their viewpoint (Cemaloğlu, 2012, p.152).

In line with the research objectives, a literature review was first conducted by the researchers to generate a pool of questions. Following the creation of this question pool, the prepared interview form was sent to three experts in the field of special education to assess its relevance to the research purpose. Based on expert evaluations, necessary revisions were made, and a pilot interview was conducted with five teachers. In light of the participants' feedback and suggestions regarding the interview form, final adjustments were made to its structure and content. The finalized version of the interview form was then sent back to the experts for approval. Upon receiving their confirmation, the data collection process commenced.

## 2.3. Data Collection Process

Considering the prevailing conditions during the research period, interviews were conducted with the participants via teleconference. Additionally, it was stated that the real names of the teachers would remain confidential and that they would not be addressed by name throughout the process. To minimize any potential negative effects on the participants, each teacher was assigned a unique numerical code during the interviews. Each interview consisted of 10 questions and lasted approximately 35 to 45 minutes. A total of 42 teachers were interviewed via telephone, and their responses were recorded by the researcher.

## 2.4. Data Analysis

The collected data were analyzed using content analysis. Content analysis involves grouping similar data under specific concepts and themes, organizing them in a manner comprehensible to the reader, and interpreting the results (Yıldırım & Şimşek, 2013). In this study, the responses of the teachers were analyzed separately by the researchers. The results were then categorized under specific themes, and percentages were calculated. Afterward, the researchers finalized the tables collaboratively. In addition to the categories and percentages presented in the tables, direct quotations from the participants were included. To ensure anonymity, participants were coded as Ö<sub>(1)</sub>, Ö<sub>(2)</sub>, Ö<sub>(3)</sub>, etc.

To enhance the reliability of the study, an independent expert was asked to analyze the data alongside the researchers. A formula was applied to test the consistency between the researchers' analysis and the independent expert's evaluation, revealing a 94% agreement. According to Miles and Huberman (1994), an agreement rate of at least 80% is necessary to ensure internal consistency. In this context, the results demonstrated a high level of consistency between the researchers' analyses and the independent expert's findings.

## 3. Findings

The findings obtained during the research process are presented in tables below:

**Table 2:** Availability of necessary materials and resources for assessing all developmental domains of students with special needs in web-based supportive educational services

Categories	%	Participant Statements
Partially	70	"I partially provide the necessary resources using Web 2.0 tools that I create during web-based sessions." (Ö <sub>(12)</sub> )
No	20	"Since all tools are designed for individual assessment, I do not have any materials available." (Ö <sub>(40)</sub> )
Yes	10	"I try to create resources using tools brought from school and online platforms." (Ö <sub>(5)</sub> )

As seen in Table 2, regarding the availability of necessary materials and resources for assessing all developmental domains of students with special needs in web-based supportive educational services, 70% of participants emphasized that they attempt to provide the required materials and resources. They stated that educational digital tools used in web-based sessions could contribute to the process by facilitating student assessments.

**Table 3:** Challenges in Assessing the Educational Performance of Students  
with Special Needs in Web-Based Supportive Educational Services

Categories	%	Participant Statements
Class Participation	36	<i>"I struggle to assess my student's educational performance because they do not attend classes regularly."</i> (Ö <sub>(9)</sub> )
Lack of Monitoring	31	<i>"It is a problem not being able to fully track students' work and progress."</i> (Ö <sub>(35)</sub> )
Inadequate Physical Environment	19	<i>"The physical environment is insufficient. Families constantly intervene, so accurate data cannot be obtained."</i> (Ö <sub>(28)</sub> )
Lack of Expert Support	14	<i>"Guidance counselors are very passive in remote interventions. Unfortunately, we cannot reach them or receive any help."</i> (Ö <sub>(1)</sub> )

In Table 3, regarding the challenges encountered in determining the educational performance of special needs students in support education services, 36% of participants emphasized that students exhibited a lack of participation in lessons. Additionally, 31% of participants stated that they faced difficulties in tracking students' progress, noting that they struggled to assess whether students were making progress due to the inability to reach them. Moreover, they highlighted that the physical environment was insufficient for ensuring students' ease of movement and that specialist support was not adequately accessible to students.

**Table 4:** The Impact of the Student's Diagnosis on  
Their Educational Performance in Web-Based Applications

Categories	%	Participant Statements
Negative Impact on Performance	80	<i>"One-on-one attention is necessary, but it is hardly possible. We have made no progress at all."</i> (Ö <sub>(8)</sub> )
Positive Impact on Performance	20	<i>"I have developed new methods and materials for my students. While thinking about how to be beneficial for them, I also contributed to my own development."</i> (Ö <sub>(31)</sub> )

As shown in Table 4, the majority of participants (80%) stated that the student's diagnosis had a negative impact on their educational performance in web-based support services. Teachers emphasized that the lack of individualized attention and challenges in effectively utilizing technology contributed to this negative effect. Conversely, 20% of the participants reported a positive impact, stating that the online setting encouraged them to develop new methods and materials, which in turn enhanced both their students' and their own professional growth.



**Table 5:** Disadvantaged Situations Affecting the Educational Performance of Special Needs Students in Web-Based Support Services When Deciding on Placement in Special or General Education Schools

Categories	%	Participant Statements
Kendini ifade etme	40	<i>"Due to difficulties in maintaining attention for long periods and lack of parental involvement, students struggle to express themselves." (Ö<sub>(41)</sub>)</i>
Hazırbulunuşluk	32	<i>"It would be much better if they were directed to special education. However, a diagnosis is not made until the second term of the first grade. Based on my professional experience, I made this decision. Readiness should be observed and evaluated over time." (Ö<sub>(23)</sub>)</i>
Performans gözlemi	28	<i>"Parents play a role in assessing performance, but their bias makes it difficult to obtain an accurate measure. They often present tasks their children cannot perform as completed." (Ö<sub>(29)</sub>)</i>

As shown in Table 5, when making placement decisions regarding special or general education schools for students with special needs in web-based support services, several disadvantaged factors were identified. 40% of participants highlighted that students struggle with self-expression due to attention difficulties and insufficient parental involvement, which leads to disengagement in lessons. 32% pointed out that delayed diagnosis and assessment of readiness affect proper placement decisions, suggesting that students should be observed longer before determining their placement. Additionally, 28% emphasized that parental bias in performance observation hinders accurate assessment, as families sometimes present an unrealistic portrayal of their child's abilities.

**Table 6:** Preventive Measures for Disadvantaged Situations Affecting the Educational Performance of Special Needs Students in Web-Based Support Services When Deciding on Placement in Special or General Education Schools

Categories	%	Participant Statements
Conducting Face-to-Face Assessments (Mobile Teams)	48	<i>"If possible, a mobile professional team should be established to conduct face-to-face assessments." (Ö<sub>(13)</sub>)</i>
Establishing a Material Infrastructure	36	<i>"The material infrastructure should be prepared in advance, and parental support should be sought during remote diagnosis." (Ö<sub>(39)</sub>)</i>
Ensuring Parental Support	16	<i>"Family-school cooperation must be ensured. As a school counselor, I can provide guidance, but the class teacher should maintain strong communication. Additionally, the Ministry should implement robust educational policies to ensure that the future of special needs children is not left solely to parental discretion." (Ö<sub>(8)</sub>)</i>

As shown in Table 6, participants proposed several preventive measures to address disadvantaged situations when making placement decisions for special needs students in web-based support services. 48% of participants emphasized the need for mobile special education teams to conduct face-to-face performance assessments, ensuring a

more accurate evaluation. 36% highlighted the importance of establishing a material infrastructure in advance to support both educators and parents in remote diagnosis processes. Additionally, 16% stressed the significance of strong family-school collaboration, suggesting that classroom teachers should maintain active communication with families, while national policies should provide structured support systems to prevent critical decisions from being entirely dependent on parental initiative.

**Table 7:** Opinions on Using the Same Assessment Tools from Regular Formal Education in Web-Based Applications for Evaluating the Performance of Students with Special Needs

Categories	%	Participant Statements
Improvement for Web-Based Applications	71	<i>"When assessment tools from formal education are used in web-based education, the same performance may not be achieved. Therefore, adaptations should be made at certain stages."</i> (Ö <sub>(11)</sub> )
Using the Same Tool	17	<i>"Of course, it should be the same. The situation is already very difficult for them, and it should not be made even harder with exams."</i> (Ö <sub>(36)</sub> )
Developing an Assessment Tool for Web-Based Applications	12	<i>"Using the same tool is neither correct nor efficient. Assessment tools suitable for web-based support education services should be developed."</i> (Ö <sub>(15)</sub> )

When Table 7 is examined, regarding the use of the same assessment tools from regular formal education in web-based applications for evaluating the performance of students with special needs, 71% of participants emphasize that existing assessment tools, which teachers are already familiar with, should be adapted for web-based applications. Since web-based support education services are a relatively new practice in the country, they believe that experience will be sufficient for making improvements. Additionally, they express concerns that developing a completely new assessment tool might disrupt the process.

**Table 8:** Recommendations for Assessment Tools in Determining the Educational Performance of Students with Special Needs in Web-Based Applications

Categories	%	Participant Statements
Educational Digital Tools	69	<i>"Web 2.0 assessment tools, games designed with Web 2.0, interactive whiteboards, simulators, and pre-designed educational digital programs."</i> (Ö <sub>(11)</sub> )
Portfolio	24	<i>"A portfolio containing students' work and activities should be created and used for evaluation."</i> (Ö <sub>(21)</sub> )
Verbal Expression-Based	7	<i>"An assessment tool containing activities suited to the student can be sent, and they can be asked to complete it, or an evaluation can be conducted solely through verbal communication."</i> (Ö <sub>(42)</sub> )

When examining Table 8, regarding recommendations for assessment tools in determining the educational performance of students with special needs in web-based applications, 69% of participants emphasize the importance of designing assessment tools with educational digital tools. They state that such tools would make performance evaluation more engaging and adaptable to different conditions. Additionally, they

highlight that portfolios containing students' work and verbal expression-based assessments can also be effective methods to support the evaluation process.

**Table 9:** Opinions on Factors Affecting the Educational  
Performance of Students with Special Needs in Web-Based Applications

Categories	%	Participant Statements
Environment	43	<i>"Education should take place at school with a teacher. At home, students were left at the mercy of their parents' level of awareness." (Ö<sub>(33)</sub>)</i>
Attention Issues	43	<i>"Attending lessons in front of a screen is more challenging for these students, and system-related issues (e.g., internet, computer) further contribute to attention problems." (Ö<sub>(19)</sub>)</i>
Lack of Interaction (Teacher, Classmates)	14	<i>"The absence of a classroom setting, lack of interaction with other students, and the inability to engage with the teacher face-to-face negatively impact students with special needs." (Ö<sub>(24)</sub>)</i>

As seen in Table 9, regarding opinions on factors affecting the educational performance of students with special needs in web-based applications, 43% of participants emphasized that students experienced a decline in their existing performance at home and were exposed to technology for prolonged periods. Additionally, they pointed out that the lack of interaction with teachers and classmates is among the factors that negatively affect these students.

**Table 10:** Opinions on the Effectiveness of Time, Environment, and Personnel  
Variability in the Educational Assessment Process of Students with Special Needs

Categories	%	Participant Statements
Affects Assessment	86	<i>"These children would become unsettled even when the classroom changed during physical education. Naturally, their behavior and how they are assessed will change depending on variations in time, environment, and personel." (Ö<sub>(16)</sub>)</i>
Partially Affects Assessment	9	<i>"Individuals who make the student feel comfortable can conduct accurate assessments." (Ö<sub>(3)</sub>)</i>
Does Not Affect Assessment	5	<i>"The same performance and the same results for years. Unfortunately, nothing has changed." (Ö<sub>(30)</sub>)</i>

As seen in Table 10, regarding opinions on the effectiveness of time, environment, and personnel variability in the educational assessment process of students with special needs, 86% of participants emphasized that these students are not open to changes and are unlikely to be comfortable with disruptions to their routines. They stated that this emotional response to change could impact the assessment process.

**Table 11:** Opinions on Enhancing the Educational Performance  
of Students with Special Needs in Web-Based Applications

Categories	%	Participant Statements
Effective Communication with Family	36	<i>"Stronger communication with the family is necessary, and the child should be monitored daily." (Ö<sub>(37)</sub>)</i>
Providing Technological Support	33	<i>"Interactive digital tools that provide immediate feedback must be used. Assessments should be conducted in real-time." (Ö<sub>(17)</sub>)</i>
Individual Lessons	19	<i>"If the student receives support from special education institutions, continuity must be ensured. Additionally, individual lessons with the teacher should be conducted." (Ö<sub>(26)</sub>)</i>
Ensuring Socialization	12	<i>"Activities that promote socialization should be organized." (Ö<sub>(10)</sub>)</i>

As seen in Table 11, regarding opinions on enhancing the educational performance of students with special needs in web-based applications, 36% of participants highlighted the crucial role of family involvement in the child's progress. They emphasized that proper parental guidance and collaboration with teachers positively support student performance. Additionally, they pointed out that providing technological support, offering individual lessons, and creating environments that encourage socialization are essential strategies for improving educational outcomes.

#### 4. Discussion

The research findings include teachers' perspectives on the challenges of determining the educational performance of students with special needs in web-based applications and the disadvantages observed in the educational diagnosis and placement processes that affect educational performance. A significant portion of teachers stated that they faced limitations in accessing necessary materials and resources to assess students' performance. Some teachers who believed that the available materials and resources were sufficient noted that they had acquired these through their own individual efforts. The necessity of having adequate materials and resources for the preparation of Individualized Education Programs (IEPs) has been emphasized in previous studies (Kargın, 2007; Öztürk & Eratay, 2010; Kale *et al.*, 2016; Söğüt & Deniz, 2018). Teachers are expected to adapt the physical environment of the classroom, instructional procedures, teaching time, materials, and methods according to the needs of children (Kargın, 2013). Another essential component of IEPs is the selection of instructional methods and materials that will be used to achieve the specified learning objectives (Kargın, 2007).

Regarding the challenges in assessing students' educational performance, the majority of teachers pointed to difficulties in ensuring student participation in lessons and tracking their progress. Other concerns included inadequate physical environments and insufficient expert support.

In the context of web-based applications, most teachers expressed the view that a student's diagnosis negatively affects their educational performance. They highlighted that web-based applications do not allow for sufficient interaction, leading to declines in students' educational performance. On the other hand, teachers who provided positive feedback mentioned that web-based applications enabled them to develop new teaching methods and materials to improve student performance. They also emphasized that they themselves had improved in this area to better support students.

When making placement decisions for students in special or general education settings through web-based applications, teachers generally noted potential disadvantages that could impact student performance. These included difficulties in students expressing themselves, their level of readiness, and challenges in observing their actual performance. To mitigate these disadvantages, teachers suggested that assessments should be conducted face-to-face, adequate infrastructure for instructional materials should be provided, parental support should be sought in remote diagnosis processes, and strong communication with families should be maintained. In current special education practices, for a student to qualify for special education services, it is required that their diagnosed condition negatively impacts their educational performance and that eliminating this negative impact necessitates specially designed programs, tools, and personnel support (Kargin, 2007).

Regarding the use of traditional assessment tools in web-based applications, the majority of teachers believed that student performance might differ in online environments, and therefore, assessment tools should be adapted accordingly. Some teachers argued that assessment tools should be used without any modifications, while others suggested that new tools specifically designed for web-based applications should be developed. Assessment tools should be flexible and adaptable to individual differences and diverse learning environments. Thus, these tools must be designed in a way that allows for customization based on student needs and conditions.

Most teachers emphasized the importance of using educational digital tools for assessing students' performance. Other opinions suggested that portfolios and verbal assessments should also be utilized. A potential reason for these differing views is the current lack of sufficient technological integration in education. Ensuring technological advancements in educational settings will significantly contribute to all stages of the learning process.

In terms of factors affecting students' educational performance, teachers highlighted the absence of formal learning environments, attention problems caused by prolonged screen exposure, and the lack of interaction with teachers and classmates as major negative influences. Since educational performance varies based on multiple factors, learning environments should be designed to impose minimal restrictions on students while maximizing their focus and engagement.

With regard to the impact of time, environment, and personnel variability on the educational assessment process, the majority of teachers believed that these three factors

influence assessment outcomes. Since ensuring uniform conditions across all educational settings is not always possible, assessments should be conducted by considering individual differences, environmental changes, and variations in timing.

In the context of enhancing students' educational performance in web-based applications, teachers offered various suggestions, including establishing effective communication with families, providing technological support, ensuring consistent participation in lessons, offering individualized instruction, and organizing activities that promote socialization. For students to achieve optimal educational performance, they must be placed in minimally disruptive environments and be provided with maximum engagement opportunities. The more favorable the conditions, the greater the improvement in students' educational performance.

## 5. Conclusion

- 1) Based on the research findings, it was determined that teachers do not have sufficient access to the necessary materials and resources to assess students' overall development (30 teachers). Additionally, teachers who reported having access to these materials and resources (4 teachers) stated that they acquired them through their own efforts. Eight teachers indicated that they did not have access to any materials or resources.
- 2) In web-based applications, difficulties in determining students' educational performance stem from inconsistent class participation, insufficient tracking of student progress, inadequate physical environments, and a lack of expert support.
- 3) The majority of teachers (80%) stated that a student's diagnosis negatively impacts their educational performance in web-based applications.
- 4) Regarding the placement of students in special or general education schools via web-based applications, teachers emphasized that students might experience difficulties expressing themselves, have low levels of readiness, and pose challenges for performance observation. To mitigate these disadvantages, it was concluded that face-to-face evaluations should be conducted, sufficient material infrastructure should be provided, and communication with families should be strengthened to ensure parental support.
- 5) It was determined that normal assessment tools used for performance evaluation should be adapted to web-based applications or that new assessment tools specifically designed for web-based applications should be developed.
- 6) Teachers suggested that educational digital tools, portfolios, and verbal assessments could be used to assess students' performance in web-based applications.
- 7) The factors affecting students' educational performance in web-based applications were identified as environmental differences, attention problems, and interaction difficulties with teachers and classmates in online lessons.

- 8) It was concluded that differences in time, environment, and personnel impact educational assessment in web-based applications.
- 9) To improve students' educational performance in web-based applications, it was determined that establishing effective communication with families, providing technological support, offering individualized lesson support, and promoting socialization are necessary.

## 6. Recommendations

- 1) This study addressed the challenges faced in determining the educational performance of students with special needs in web-based applications and the disadvantages in educational diagnosis and placement processes. Conducting a similar study in normal educational settings could help identify the factors affecting student performance under standard conditions and facilitate the development of a common solution in this area.
- 2) The findings suggest that the study could serve as a guide for teachers working with special needs students in web-based or hybrid education settings to help them assess their students' performance levels.
- 3) The research findings were derived from the participation of 42 teachers from five different subject areas. Considering the significance of subject areas, conducting further research with teachers who spend more time with students with special needs—such as special education teachers, guidance counselors, and classroom teachers—could yield
- 4) More valuable insights into the challenges faced and potential solutions.

## Conflict of Interest Statement

The authors declare no conflicts of interest.

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