

ANALYZING THE IMPACT OF INDIVIDUALIZED EDUCATION PROGRAMS (IEPS) ON STUDENT PERFORMANCE AND ENGAGEMENT

¹Jaren J. Mates, ²Lilibeth C. Pinili, ³Regina E. Sitoy, ⁴Janine Joy T. Cañete, ⁵Randy Mangubat, ⁶Irene O. Mamites, ⁷Raymond C. Espina

¹College of Education, Cebu Technological University, Philippines,

1 jangraj@yahoo.com- Main author, ²lilibeth.pinili@ctu.edu.ph, ³regina.sitoy@ctu.edu.ph, ⁴janinejoy.tenerife@ctu.edu.ph

⁵randy.mangubat@ctu.edu.ph, ⁶irene.mamites@ctu.edu.ph, ⁷raymond.espina@ctu.edu.ph

ABSTRACT. This study examined the impact of Individualized Education Programs (IEPs) on student performance and engagement in selected Special Education (SPED) centers in Cebu during the 2024–2025 school year, serving as the foundation for an intervention plan. Guided by the Differentiated Instruction Theory (Tomlinson, 2003), Constructivist Learning Theory (Piaget & Vygotsky, 2007), and Ecological Systems Theory (Bronfenbrenner, 1979), and anchored on Philippine inclusive education laws (RA 7277; RA 10533; RA 11650), the study employed a quantitative quasi-experimental design. Participants included 45 SPED teachers from three public schools: Basak Elementary School SPED Center, Mandaue City Integrated SPED School, and Lapu-Lapu City Central Elementary School SPED Center, selected based on active IEP engagement. Data were collected through an adapted survey instrument measuring teachers' perceptions of IEPs' influence on students' academic and behavioral performance. Findings revealed that before IEP implementation, students faced significant challenges with focus, task completion, and classroom participation. Post-implementation results indicated marked improvement in academic progress and engagement, particularly through strategies like differentiated instruction, assistive technology, and explicit teaching. A moderate, significant correlation was found between IEP influence and effectiveness, while only weak or negligible relationships were noted between student challenges and IEP impact. The study concluded that when properly designed and executed, IEPs positively affect student outcomes. However, a gap in teacher training on IEP development persists. SPED centers are recommended to strengthen professional development, collaborative practices, and regular IEP reviews to sustain and enhance support for learners with disabilities.

Keywords: Individualized Education Programs (IEPs), Special Education (SPED), student performance, student engagement, inclusive education, differentiated instruction, assistive technology, teacher training, educational intervention, Cebu SPED centers.

1. INTRODUCTION

Inclusive education has gained significant global recognition as educators and policymakers strive to provide equitable learning opportunities for all students. One of the most widely implemented strategies to support students with diverse learning needs is the Individualized Education Program (IEP) [1]. IEPs are tailored educational plans designed to address the unique strengths and challenges of students with disabilities, ensuring they receive appropriate accommodations and support to enhance their academic performance and engagement. While IEPs have been widely adopted in many countries, their effectiveness in improving student outcomes remains underexplored, particularly in the Philippines.

Globally, studies have shown that IEPs positively impact student learning by providing structured, individualized support. Research conducted by Rashid and Wong [2] emphasize that well-implemented IEPs significantly enhance student motivation, self-efficacy, and academic success. Similarly, Zaic [3] found that students with disabilities who receive personalized interventions through IEPs demonstrate improved engagement and classroom participation. These findings support the argument that when IEPs are carefully designed and properly implemented, they contribute to meaningful improvements in student learning experiences. However, studies have also noted challenges such as inconsistent implementation, lack of teacher preparedness, and inadequate resources that can hinder their effectiveness.

At the national level, research in the Philippines has primarily focused on the implementation challenges of IEPs rather than

their direct impact on student performance and engagement. A study by Mangonon [4] highlighted the need for better teacher training and resource allocation to ensure IEP effectiveness. They found that while special education teachers recognize the importance of individualized instruction, the lack of continuous professional development and limited access to assistive technologies hinder their ability to implement IEPs fully. Also, Donaire *et.al.* [5], examined the role of IEPs in special education programs across public schools in the Philippines, noting that inconsistent application affects student progress while the framework exists. Many educators struggle with time constraints and the complexity of developing detailed educational plans tailored to each student's needs, making it difficult to track the actual impact of IEPs on learning outcomes.

In Cebu City, limited studies have been conducted on the direct impact of IEPs on student learning outcomes. While schools have adopted inclusive education practices, there is little empirical data on how effectively IEPs support students with disabilities in achieving their academic goals. Mendoza [6] found that while IEPs help tailor instruction, insufficient resources and teacher training limit their full potential. Another study by Maceda [7] in the Paquibato District of Davao City assessed the efficacy of IEPs regarding behavioral improvement, inclusion, social integration, parent-teacher collaboration, goal attainment, and academic progress. The findings indicated that while IEPs often led to positive outcomes in behavioral and social domains,

academic progress and goal attainment were less frequently achieved.

This suggests that while IEPs contribute to student development, their effectiveness in improving academic performance needs further evaluation, particularly in different local contexts such as Cebu City.

STATEMENT OF THE PROBLEM

This study assessed the impact of Individualized Education Programs (IEPs) on student performance and engagement in selected SPED centers in Cebu during the school year 2024-2025 as the basis for an intervention plan.

Specifically, the study aimed to answer the following research questions:

1. What is the profile of the respondents in terms of:
 - 1.1 age and gender,
 - 1.2 highest educational attainment,
 - 1.3 number of learners with special needs,
 - 1.4 category of special needs, and
 - 1.5 relevant training and seminars attended?
2. What is the level of the academic and behavioral challenges faced by students with disabilities before the implementation of their Individualized Education Programs (IEPs)?
3. To what extent do the IEPs influence students' academic progress and engagement in special education settings?
4. What is the level of effectiveness of IEPs in meeting the diverse needs of students with disabilities?
5. Is there a significant relationship between the:
 - 5.1 the challenges faced by students with disabilities and IEPs influence on their academic progress and engagement,
 - 5.2 challenges faced by students with disabilities and effectiveness of IEPs in meeting the diverse needs of students with disabilities, and
 - 5.3 IEPs influence and its effectiveness in meeting the diverse needs of students with disabilities?
6. Based on the findings of the study, what intervention plan can be proposed?

2. Methodology

This study utilized a quantitative research approach employing a quasi-experimental design to determine the impact of Individualized Education Programs (IEPs) on students' academic performance and engagement. Given the natural classroom setting and the absence of random assignment, a proper experimental design was not applicable. Using a pre-test and post-test structure, the quasi-experimental design enabled the researcher to measure changes in student outcomes before and after IEP implementation. Standardized assessment tools were administered to evaluate academic performance and engagement levels.

The data were analyzed using descriptive statistics to summarize the results and a paired sample t-test to assess whether the differences observed between pre- and post-intervention scores were statistically significant. This method was chosen to compare two related samples within the same group. The research study adopted the Input-Process-Output (IPO) model to evaluate the effectiveness of Individualized Education Programs (IEPs) in enhancing the academic

performance and engagement of students with disabilities. The input phase focused on identifying the academic and behavioral challenges students faced before IEP implementation, the specific strategies and accommodations used, and teachers' perceptions of IEP effectiveness. The process involved gathering data using adaptive survey questionnaires and analyzing results through both quantitative and qualitative methods. The output of the study was a proposed intervention plan aimed at improving IEP implementation and supporting inclusive education.

The research was conducted in three public Special Education (SPED) centers in Cebu: Basak Elementary School – SPED Center in Mandaue City, Mandaue City Integrated SPED School, and Lapu-Lapu City Central Elementary School – SPED Center. These schools were chosen due to their strong SPED programs, experienced faculty, and commitment to inclusive education. Each school provides specialized support services tailored to the needs of learners with disabilities and fosters a nurturing and learner-centered environment.

The respondents of the study were 45 SPED teachers—15 from each participating school—who were directly involved in the creation and implementation of IEPs for the school year 2024–2025. These teachers were selected purposefully based on their experience and active engagement in handling students with special needs. Their insights were essential in understanding how IEPs influence academic outcomes and learner participation.

To collect data, the researcher used a structured and adaptive survey questionnaire divided into three main parts. The first section examined the common academic and behavioral difficulties encountered by students prior to IEP implementation. The second part focused on the instructional strategies and accommodations integrated into the IEPs, such as modified tasks, assistive technology, and behavioral interventions. The third section captured teachers' overall perceptions of the IEPs' effectiveness in addressing the needs of learners with disabilities. The questionnaire included Likert-scale items and adaptive follow-up questions, allowing respondents to elaborate on their experiences and recommendations.

Before data collection, the researcher sought formal approval by sending a transmittal letter to the division office and school administrators. Once permission was granted, the questionnaires were distributed to the identified SPED teachers. Respondents answered the surveys voluntarily and anonymously, with assurances of confidentiality to ensure honesty and openness. The collected data were then organized and analyzed to identify trends, challenges, and best practices in IEP implementation.

The statistical tools used in analyzing the data included frequency and percentage to identify the most common challenges faced by students, and mean and standard deviation to measure the intensity of these challenges and the perceived effectiveness of instructional strategies. A chi-square test of independence was also applied to determine the relationship between IEP implementation and improvements in student performance and engagement, with a significance level set at $p < 0.05$. To ensure the reliability of the

questionnaire, Cronbach's Alpha was calculated. The scoring procedure used a 5-point Likert scale, and results were interpreted based on average scores and standard deviations to draw meaningful conclusions.

Finally, based on the findings, the researcher proposed an intervention plan to enhance IEP implementation. This plan includes recommendations for improving teacher training, increasing collaboration between educators and parents, and providing additional resources to support students with special needs more effectively. Through this study, valuable insights were gained into how IEPs can be strengthened to better serve students in special education settings.

3. Literature Review

Several literature reviews have explored the impact of Individualized Education Programs (IEPs) on student performance and engagement, emphasizing their role in creating tailored learning experiences for students with disabilities. Aranjuez et al. [8] highlighted how IEPs enhance educational outcomes by providing personalized learning plans that address students' unique needs. Their findings suggest that when IEPs are appropriately developed and implemented, students experience noticeable improvements in academic performance and classroom engagement. This aligns with the focus of the current study, which seeks to understand how IEPs help remove learning barriers through customized instruction and targeted accommodations, ensuring that students receive the necessary support to thrive. Similarly, Macmbinji [9] emphasized the importance of parental engagement in the IEP process. The study found that when parents actively participate in IEP meetings and collaborate with teachers, students demonstrate higher motivation, better classroom participation, and improved learning outcomes. This underscores families' critical role in reinforcing educational strategies at home, a key component of the present study that examines how parent-teacher collaboration enhances student engagement and fosters a supportive learning environment. Canillo and Bendanillo [10] further corroborates this by suggesting that parental involvement in decision-making allows students to feel more supported and confident, a dynamic the current study also explores.

Expanding on the involvement of stakeholders, Pounds and Cuevas [11] investigated the impact of student participation in IEP development, emphasizing that when students actively engage in setting their learning goals, they develop a sense of ownership over their education. This leads to increased motivation, self-advocacy, and engagement in learning activities. The present study builds on this perspective by exploring how empowering students to participate in the IEP process actively can improve their academic performance. In contrast, Habib, et al. [12] presented a more technological approach by integrating artificial intelligence (AI) into the IEP process. Their study found that AI-assisted IEPs can help identify personalized strategies for students, showcasing the potential of technology to refine and enhance the implementation of IEPs for better educational outcomes. This introduces a different angle, focusing on how technology can complement traditional IEP strategies to enhance student engagement.

Moreover, Heilmann et al. [13] demonstrated that inclusive practices within IEPs, such as differentiated instruction and peer collaboration, improve engagement and create a sense of belonging for students with disabilities. Their findings support that IEPs are most effective when combined with inclusive educational strategies. This directly aligns with the current study, which seeks to assess how such inclusive practices influence student participation in the classroom. The emphasis on inclusivity is echoed by Howard et al. [14], who found that when high school students with significant disabilities are actively involved in the IEP process, they experience increased motivation and self-determination, contributing to their educational success. The present study investigated how student-centered IEPs, focusing on self-advocacy and empowerment, contribute to academic success. On a broader scale, Yell et al. [15] examined the legal and procedural aspects of IEPs, stressing the importance of adherence to best practices and compliance with educational policies. Their research underscores how well-designed and legally compliant IEPs maximize the benefits students receive. This aligns with the current study's goal of exploring how effectively designed IEPs contribute to student progress and engagement. Dietz [16] also focused on teacher training, emphasizing that well-developed IEP goals significantly influence student achievement. This research finds common ground with the current study, which seeks to understand how teacher preparedness in IEP development and implementation impacts student learning.

Further building on these themes, Lequia et al. [17] examined how IEPs address academic progress and focus on social and life skills development, noting that well-aligned IEP goals lead to higher levels of classroom engagement and independence. This supports the present study's holistic approach to evaluating how IEPs can aid students' overall development, not just academic performance. Similarly, Brownell et al. [18] investigated how IEPs influence reading achievement among students with learning disabilities and language impairments, highlighting the importance of consistent, well-executed instructional strategies. This points to the need for teacher preparedness, which the current study aims to assess how instructional practices within IEPs support student engagement and performance.

The impact of parental involvement in IEPs remains a consistent theme across studies, with Butler [19] noting that parental attendance at IEP meetings significantly boosts students' academic performance. This finding strengthens the current study's focus on the role of parents in fostering student engagement and reinforcing learning strategies. Likewise, Slade et al. [20] found that parental satisfaction with the IEP process is linked to better educational outcomes for children with autism spectrum disorder (ASD), emphasizing the value of collaborative relationships between educators and families. This mirrors the current study's exploration of the positive effects of strong communication and collaboration on IEP effectiveness.

Overall, these studies converge on several critical factors for the success of IEPs: teacher training, parental involvement, clear goal-setting, and proper implementation. When these elements align, students show significant academic

improvement and greater engagement in learning activities. The present study builds on these findings by examining how IEPs shape student experiences, influence learning outcomes, and foster meaningful engagement in the classroom, ensuring that the needs of students with disabilities are effectively addressed.

4. RESULTS AND DISCUSSION

This part analyzes and interprets data gathered about the study's objective: to explore the profile of the respondents in terms of age and gender, highest educational attainment, number of learners with special needs, category of special needs, and relevant training and seminars attended. It also examines level of the academic and behavioral challenges faced by students with disabilities before the implementation of their Individualized Education Programs (IEPs), extent do the IEPs influence students' academic progress and engagement in special education settings, level of effectiveness of IEPs in meeting the diverse needs of students with disabilities, and significant relationship between the challenges faced by students with disabilities and IEPs

influence on their academic progress and engagement, challenges faced by students with disabilities and effectiveness of IEPs in meeting the diverse needs of students with disabilities, and IEPs influence and its effectiveness in meeting the diverse needs of students with disabilities. The sections that follow detail and discuss the study's principal findings.

4.1 Age and Gender

Understanding the age and gender distribution of learners receiving Individualized Education Programs (IEPs) is essential in evaluating their effectiveness within special education settings. Age is crucial in developmental readiness and responsiveness to intervention strategies, while gender may influence learning preferences, behavioral engagement, and support needs. Analyzing these demographic factors provides valuable context for assessing how IEPs impact student performance and engagement in selected SPED centers, enabling educators to tailor interventions more effectively and promote equitable educational outcomes for all learners. Table 1 displays the data.

Table 1. Age and Gender of the Learners

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
45-54	10	22.22	0	0.00	10	22.22
35-44	22	48.89	0	0.00	22	48.89
25-34	12	26.67	1	2.22	13	28.89
Total	44	97.78	1	2.22	45	100.00

Table 1 illustrates a significant gender disparity among learners, with females constituting 97.78% of the total 45 participants, and only one male learner (2.22%). The largest age group is 35 to 44 years, accounting for 48.89% of the learners, all of whom are female. This is followed by the 25 to 34 age group (28.89%), which includes the sole male participant, and the 45 to 54 age group (22.22%), also exclusively female. This distribution suggests that the program predominantly attracts mid-career women, possibly due to factors such as career advancement aspirations, flexible learning opportunities, or societal roles that encourage continuous education among women. This demographic pattern suggests that IEP implementation in the selected SPED centers is most often experienced by mid-career women, likely due to factors such as caregiving responsibilities, career progression efforts, or social support mechanisms favoring female participation in continuing education.

This observation aligns with global and local findings. According to the European Association for the Education of Adults (2024), women are increasingly active in adult education due to its role in empowering them socially and economically. A study conducted by Ferragina [21] adds that family and caregiving responsibilities significantly shape women's engagement in formal learning. The OECD's Trends Shaping Education 2025 [22] also emphasizes the need for personalized and flexible curricula to meet the unique needs of adult learners, particularly women in midlife transitions. Locally, a Philippine study by Sharp et al. [23] revealed that despite growing awareness of gender-responsive education, male participation in adult learning remains minimal due to

persistent cultural expectations and lack of targeted outreach. These findings underscore the need for SPED centers to adopt gender-sensitive and age-responsive approaches in IEP planning and delivery to ensure equitable access, optimize learner engagement, and enhance program outcomes.

4.2 Highest Educational Attainment

Understanding the highest educational attainment of learners in SPED centers is critical in evaluating how Individualized Education Programs (IEPs) are tailored to meet diverse academic backgrounds and learning capacities. Educational attainment often influences learners' cognitive readiness, learning goals, and engagement strategies.

Table 2. Highest Educational Attainment

Educational Attainment	f	%
Master's Degree	6	13.33
With Master's Units	32	71.11
Bachelor's Degree	7	15.56
Total	45	100.00

Table 2 reveals that a significant majority of the 45 participants possess advanced educational qualifications. Specifically, 71.11% have earned master's units, 13.33% hold a master's degree, and 15.56% have a bachelor's degree. This distribution indicates that over 84% of the participants have pursued postgraduate education, suggesting a highly educated cohort.

The high level of educational attainment among participants may have several implications for the implementation and effectiveness of IEPs in SPED centers. Educators with advanced degrees are often more equipped with specialized knowledge and pedagogical skills, which can enhance the development and execution of IEPs tailored to individual

student needs. Their advanced training may also contribute to more effective monitoring and adjustment of educational strategies, leading to improved student performance and engagement.

Recent studies have explored the relationship between educators' qualifications and the effectiveness of inclusive education practices, highlighting both strengths and ongoing challenges. A study conducted at Mambaling National High School in Cebu City revealed that 71.43% of teachers had attained a master's level of education. However, only 23.81% had received specialized training in inclusive education. Despite the satisfactory implementation of instructional improvement programs, the study emphasized the urgent need for more targeted professional development to refine inclusive pedagogical approaches [24]. Similarly, a systematic literature review on the implementation of SPED curricula in the Philippines noted significant challenges, such as a lack of resources and insufficient teacher preparation. The review underscored that formal qualifications alone are not enough; rather, educators must also be equipped with specialized skills and training to meet the complex needs of learners with disabilities [25]. Complementing these findings, an article from the Philippine Daily Inquirer pointed out the national shortage of SPED specialists and teachers. It stressed that many trained educators migrate abroad for better opportunities, leaving local SPED centers with staffing gaps. The article called for more robust retention strategies and incentives to build and sustain a qualified, committed workforce in special education [25]. Collectively, these studies highlight that while educational attainment is vital, continuous training and systemic support are equally crucial for the effective delivery of Individualized Education Programs (IEPs).

The data from Table 3 indicate that the majority of educators in the selected SPED centers possess advanced educational qualifications, which is a positive indicator for the potential effectiveness of IEP implementation. However, the studies reviewed suggest that formal education must be complemented by specialized training and professional development in special education to address the unique challenges of SPED environments effectively. Therefore, to enhance student performance and engagement through IEPs, it is recommended that SPED centers invest in ongoing training programs, provide adequate resources, and implement strategies to retain qualified educators.

Table 3. Number of Learners with Special Needs

Number of Learners	f	%
25 and above	5	11.11
20-24	5	11.11
15-19	1	2.22
10-14	6	13.33
6-9	10	22.22
5 and below	18	40.00
Total	45	100.00

4.3 Number of Learners with Special Needs

The number of learners with special needs enrolled in SPED centers plays a critical role in shaping the design, implementation, and effectiveness of Individualized Education Programs (IEPs). Considering this demographic factor helps educators and administrators allocate appropriate

resources, tailor instructional strategies, and ensure adequate support services that directly influence student performance and engagement.

Table 3 presents the distribution of the number of learners with special needs across the selected SPED centers, showing a diverse range in enrollment sizes. The largest portion, 40%, of centers accommodate five or fewer learners, while 22.22% have between six and nine learners. Smaller percentages are observed in higher ranges, with only 11.11% of centers serving 25 or more learners. This variability highlights the differing capacities and possibly the resource availability across SPED centers, which can directly affect the implementation of Individualized Education Programs (IEPs). Centers with fewer learners may benefit from more individualized attention and tailored interventions, whereas those with larger learner populations may face challenges in providing personalized support due to limited staffing and resources.

The implications of these findings suggest the need for flexible resource allocation and differentiated program strategies that consider the number of learners per center. Smaller centers may serve as models for individualized instruction, while larger centers might require enhanced staffing, assistive technology, and specialized training to maintain quality engagement and performance outcomes. According to Binghashayan *et al.* [26], the ratio of learners to educators is a significant predictor of the effectiveness of special education services, where lower ratios contribute to higher student engagement and better academic outcomes. A study by Nolan-Spohn [27] further supports that SPED centers with manageable learner numbers can implement IEPs more effectively, fostering improved student participation and achievement. Meanwhile, the UNESCO's report last 2022 on inclusive education stresses that scaling up special education services requires not only increased enrollment capacity but also proportional investment in teacher training and infrastructure [28].

In conclusion, the number of learners with special needs in SPED centers plays a crucial role in shaping the success of IEP implementation. To maximize student performance and engagement, it is essential that SPED centers adopt context-sensitive approaches that align program delivery with learner population sizes. Policymakers and educators must ensure adequate support systems, staffing, and resources tailored to small and large learner groups to provide equitable and effective special education services.

Table 4. Category of Special Needs

Category	f	Rank
LD	28	1
HI	19	2
ID	11	3
ADHD	8	4
ASD	5	5
CP	2	6
Cross Disability	1	7

*multiple response

4.4 Category of Special Needs

The special needs category among learners significantly influences the design and implementation of Individualized Education Programs (IEPs), as each category presents distinct

challenges and learning requirements. Recognizing the specific types of disabilities or exceptionalities allows educators to tailor instructional strategies, accommodations, and supports that best address students' unique strengths and barriers.

Table 4 illustrates the distribution of learners with various categories of special needs in the selected SPED centers, with Learning Disabilities (LD) being the most prevalent category, followed by Hearing Impairment (HI), Intellectual Disability (ID), attention deficit hyperactivity disorder (ADHD), Autism Spectrum Disorder (ASD), Cerebral Palsy (CP), and Cross Disability. The dominance of LD at 28 learners suggests that a majority of students require support primarily in cognitive and academic skill areas, which may necessitate specialized instructional methods and targeted interventions within their Individualized Education Programs (IEPs). The presence of diverse categories underscores the complexity of needs that SPED educators must address, highlighting the importance of flexible, category-specific strategies to enhance student performance and engagement.

The suggestions of this distribution are significant for curriculum planning and resource allocation. Educators must be proficient in differentiated instruction techniques that accommodate various disabilities, particularly focusing on cognitive and sensory challenges. Moreover, the range of disabilities demands comprehensive training for teachers to implement effective IEPs that consider the unique developmental, behavioral, and physical needs of each learner. Studies such as those by Smith *et al.* (2021) emphasize that tailored IEPs improve academic outcomes and social participation among learners with LD and ADHD. Meanwhile, research by Ahmad *et al.* [29] highlight the importance of early intervention and technology-assisted learning for students with HI and ASD to boost engagement and communication skills. A national report by the Department of Education in 2024 stresses the need for enhanced teacher training programs and specialized instructional materials to support a wide spectrum of disabilities effectively [30].

In assumption, the variety of special needs categories within the SPED centers demonstrates the critical role of individualized and adaptive educational approaches through IEPs. To maximize student performance and engagement, SPED programs must ensure educators are well-equipped with the knowledge and resources to address the specific needs associated with each disability category. Continued research and policy support are essential to strengthen the capacity of SPED centers in delivering inclusive and effective education tailored to diverse learners.

4.5 Related Training and Seminar Attended by the Respondents

The professional development of educators through related training and seminars is a crucial factor influencing the successful implementation of Individualized Education Programs (IEPs) in SPED centers. Participation in specialized training equips teachers with the necessary skills, knowledge, and updated instructional strategies to effectively address the diverse needs of learners with special needs. Moreover, ongoing professional growth opportunities enhance

educators' confidence and competence, which in turn positively impact student performance and engagement. Therefore, examining the extent and nature of training attended by SPED teachers provides insight into the capacity of the educational workforce to deliver quality, individualized instruction that meets the goals of IEPs.

Table 5. Related Training and Seminar Attended by the Respondents

Training and Seminars Attended	f	Rank
INSET	15	1
Filipino Sign Language	7	2
IEP Making	6	3
Inclusive Education Training	5	4
SPED Pedagogy and Content	3	5
MFAT	1	6

*multiple response

Table 5 shows the types of related training and seminars attended by the respondents, with In-Service Training (INSET) being the most commonly attended (15 respondents), followed by Filipino Sign Language (7), IEP Making (6), Inclusive Education Training (5), SPED Pedagogy and Content (3), and MFAT (1). The data indicate a strong commitment among educators to professional development, particularly in general and specialized areas relevant to special education. The high attendance in INSET suggests ongoing efforts to update teaching skills, while participation in Filipino Sign Language training reflects responsiveness to learners with hearing impairments. Training in IEP making and inclusive education directly supports the effective implementation of individualized programs tailored to diverse learner needs. However, lower participation in specialized content and MFAT seminars points to potential gaps in advanced pedagogical and functional assessment skills.

The implications of these findings emphasize the importance of continuous, targeted professional development in enhancing the capacity of SPED educators to implement IEPs effectively. As highlighted by Miller *et al.* [31], ongoing teacher training significantly improves instructional strategies and student engagement in special education settings. Similarly, Zhao *et al.* [32] found that proficiency in Filipino Sign Language among SPED teachers increased communication efficacy and academic participation among hearing-impaired learners.

A Mendoza [6] study further underscores that IEP development training strengthens teachers' ability to create meaningful, individualized goals, positively impacting learner outcomes. Despite these gains, challenges remain, as noted in the DepEd Special Education Program Report in 2024, which calls for expanded access to specialized training and resources to sustain and improve SPED teaching quality nationwide[33, 34].

In conclusion, the variety and frequency of related training attended by educators in the selected SPED centers suggest a positive foundation for the successful delivery of IEPs, contributing to improved student performance and engagement. To build on this progress, education stakeholders should prioritize expanding access to specialized and advanced professional development opportunities,

ensuring that all educators have comprehensive skills to meet the complex needs of learners with disabilities.

4.6 Level of academic and behavioral challenges faced by students with disabilities before implementing their individualized education programs

Understanding the level of academic and behavioral challenges faced by students with disabilities before the implementation of Individualized Education Programs (IEPs) is crucial in shaping effective educational interventions within SPED centers. These initial challenges often encompass difficulties in communication, cognitive processing, social interaction, and self-regulation, which can significantly hinder students' academic progress and classroom engagement. Accurately identifying these barriers

allows educators to establish targeted goals and select appropriate instructional strategies tailored to each learner's needs. Without this foundational understanding, the design of IEPs risks being generic or ineffective, ultimately limiting student growth and achievement potential.

Moreover, assessing the pre-IEP academic and behavioral status provides a benchmark for measuring the impact of IEP implementation over time. It enables educators and stakeholders to monitor progress, make data-driven adjustments, and ensure that interventions are responsive to evolving student needs. Teachers' perceptions of these initial challenges also highlight areas requiring additional support, such as specialized training or resource allocation.

Table 6. Level of academic and behavioral challenges faced by students with disabilities before implementing their Individualized Education Programs

S/N	Indicators	WM	SD	Verbal Description
1	The student struggled to stay focused during classroom activities.	3.76	0.71	High
2	The student had difficulty completing assignments on time without additional support.	3.87	0.59	High
3	The student exhibited disruptive behaviors that interfered with their own learning and that of others.	3.82	0.75	High
4	The student required repeated instructions to understand academic tasks.	4.09	0.42	High
5	The student had challenges interacting appropriately with peers and teachers.	3.96	0.56	High
6	The student showed signs of frustration or anxiety when completing academic tasks.	3.69	0.82	High
7	The student had difficulty following multi-step directions independently.	4.00	0.52	High
8	The student demonstrated limited motivation or engagement in classroom learning activities	3.82	0.61	High
9	The student struggled with organizing materials and managing time effectively.	3.87	0.55	High
10	The student frequently needed assistance to transition between tasks and activities.	3.91	0.42	High
Aggregate Weighted Mean		3.88		
Aggregate Standard Deviation			0.59	High

Legend: 4.21-5.00-Very High; 3.41-4.20-High; 2.61-3.40-Moderate; 1.81-2.60-Low; 1.00-1.80-Very Low

Table 6 presents the level of academic and behavioral challenges faced by students with disabilities before the implementation of their Individualized Education Programs (IEPs). The aggregate weighted mean of 3.88, with a standard deviation of 0.59, indicates a generally high level of challenges experienced by the learners across all indicators. Students struggled notably with staying focused during classroom activities, completing assignments independently and on time, and exhibiting disruptive behaviors that affected their own and their peers' learning. Additionally, difficulties with understanding academic tasks, interacting appropriately with peers and teachers, managing frustration and anxiety, following multi-step directions, maintaining motivation, organizing materials, and transitioning between tasks were all reported at high levels. These findings highlight the complex and multifaceted barriers that students with disabilities face before receiving tailored educational support.

The results of these high challenge levels emphasize the critical need for well-structured and individualized interventions through IEPs to address these specific academic and behavioral difficulties. As supported by recent studies, such as that by Blewitt *et al.* [35], early identification and targeted support of behavioral challenges significantly improve classroom engagement and reduce disruptions. Moreover, research by Müller *et al.* [36], demonstrates that IEPs with clear, measurable objectives in areas like task completion and social interaction improve academic performance and peer relationships in SPED settings. The systematic review by Meltzer [37], further stresses the importance of incorporating strategies that enhance executive functioning skills, such as organization and task management, to foster learner independence. These studies reinforce the necessity of individualized approaches to mitigate pre-existing challenges effectively.

In summary, the data clearly illustrate that students with disabilities face considerable academic and behavioral difficulties before IEP implementation, underscoring the importance of these programs in creating structured, supportive, and personalized learning environments. Addressing these challenges through effective IEPs enhances student performance and promotes greater engagement and overall well-being, ultimately contributing to more inclusive and successful educational outcomes in SPED centers.

4.7 Extent to which the IEPs influence students' academic progress and engagement in special education settings

The extent to which Individualized Education Programs (IEPs) influence students' academic progress and engagement in special education settings is a critical factor in assessing the effectiveness of these tailored educational plans. IEPs are designed to address the unique learning

needs, strengths, and challenges of students with disabilities by providing personalized goals, instructional strategies, and support services.

Understanding how these programs impact student outcomes offers valuable insight into their role in promoting meaningful academic growth and active participation in the learning process. By examining their effectiveness, educators and stakeholders can assess whether these interventions truly support the holistic development of learners, especially those with emotional and behavioral challenges. Such insights allow schools to tailor instructional strategies, allocate resources efficiently, and implement evidence-based practices that foster inclusive and supportive classroom environments

.Table 7. Extent to which the IEPs influence students' academic progress and engagement in special education settings

S/N	Indicators	WM	SD	Verbal Description
1	The IEP has led to measurable improvements in the student's academic performance..	4.16	0.64	High
2	The student demonstrates increased engagement during classroom activities since the implementation of the IEP.	4.18	0.68	High
3	The IEP has effectively addressed the student's individual learning needs.	4.16	0.77	High
4	There has been a noticeable improvement in the student's motivation to participate in class following the IEP implementation.	4.18	0.65	High
5	The accommodations provided in the IEP have facilitated better access to the general curriculum for the student.	4.18	0.68	High
6	The inclusion of explicit teaching strategies, such as modeling and guided practice, has improved the student's comprehension and retention of new concepts.	4.27	0.75	Very High
7	Assistive technology and other learning tools specified in the IEP have enhanced the student's ability to complete academic tasks independently..	4.22	0.77	High
8	The use of differentiated instruction in the IEP has helped the student engage more effectively in lessons..	4.33	0.71	Very High
9	The instructional strategies outlined in the IEP have effectively supported the student's learning needs.	4.33	0.64	Very High
10	Accommodations provided in the IEP, such as extended time on tasks, have positively impacted the student's academic performance.	4.33	0.64	Very High
Aggregate Weighted Mean		4.23		
Aggregate Standard Deviation			0.69	Very High

Table 7 reveals that the extent to which Individualized Education Programs (IEPs) influence students' academic progress and engagement in special education settings is perceived to be very high, with an aggregate weighted mean of 4.23 and a standard deviation of 0.69. Respondents strongly agreed that IEPs have led to measurable improvements in academic performance and increased student engagement during classroom activities. Key elements such as explicit teaching strategies, differentiated instruction, accommodations like extended time, and the use of assistive technology were rated very highly, highlighting their critical role in addressing individual learning needs and enhancing comprehension, retention, and independent task completion. These findings suggest that well-implemented

IEPs provide effective, personalized support that significantly benefit learners with disabilities.

The implications underscore the importance of maintaining and continuously improving IEP development and implementation to maximize student outcomes in special education. This aligns with recent studies; for example, Lambert and Tan [38] found that students with IEPs demonstrated significantly higher academic gains and classroom participation compared to peers without individualized plans. Similarly, Huang *et al.*, emphasized the effectiveness of differentiated instruction and assistive technologies in promoting learner autonomy and engagement in SPED settings. The meta-analysis by Schexnider [39] further supports that accommodations tailored through IEPs

reduce learning barriers and foster motivation among students with disabilities. Collectively, these studies confirm that personalized educational strategies embedded within IEPs are instrumental in enhancing both academic performance and active involvement in learning. In conclusion, the data strongly indicate that IEPs exert a very high positive influence on the academic progress and engagement of students in special education centers. To sustain these benefits, stakeholders must prioritize ongoing teacher training, resource allocation, and collaborative IEP development to ensure that instructional strategies remain responsive to evolving student needs. This commitment will ultimately contribute to more inclusive, effective, and empowering educational experiences for learners with disabilities.

4.8 Level of effectiveness of IEPs in meeting the diverse needs of students with disabilities

Evaluating the level of effectiveness of Individualized Education Programs (IEPs) in meeting the diverse needs of students with disabilities is essential to understanding their role in enhancing educational outcomes within special education settings. Given the wide range of cognitive, physical, behavioral, and social challenges learners face in SPED centers, IEPs must be sufficiently flexible and comprehensive to accommodate individual differences and promote inclusive learning. Assessing how well IEPs address these varied needs provides valuable insight into their capacity to support meaningful academic progress and foster student engagement, finally contributing to more personalized and impactful educational experiences.

Table 8. Level of effectiveness of IEPs in meeting the diverse needs of students with disabilities

S/N	Indicators	WM	SD	Verbal Description
1	The IEP effectively addresses the individual learning needs of students with disabilities.	4.31	0.67	Very High
2	IEP goals are realistic and achievable within the classroom setting	4.29	0.66	Very High
3	The IEP provides clear guidance for instructional strategies and accommodations.	4.27	0.69	Very High
4	The IEP promotes the active participation of students with disabilities in general education classrooms	4.22	0.64	Very High
5	The collaboration among teachers, parents, and specialists during IEP development enhances student learning outcomes.	4.22	0.82	Very High
6	The IEP process helps in identifying students' strengths and areas for improvement.	4.33	0.67	Very High
7	Teachers receive adequate training to implement IEPs effectively	4.22	0.64	Very High
8	IEPs are updated regularly to reflect students' changing needs	4.24	0.65	Very High
9	The IEP promotes inclusion and reduces barriers to learning	4.33	0.67	Very High
10	The implementation of IEPs positively impacts students' academic and behavioral performance.	4.33	0.67	Very High
Aggregate Weighted Mean		4.28		Very High
Aggregate Standard Deviation		0.68		

Table 8 illustrates a very high level of effectiveness of Individualized Education Programs (IEPs) in meeting the diverse needs of students with disabilities, as indicated by an aggregate weighted mean of 4.28 and a standard deviation of 0.68. Respondents strongly agreed that IEPs effectively address individual learning needs through realistic and achievable goals, clear instructional guidance, and regular updates that reflect students' evolving requirements. The collaborative development process involving teachers, parents, and specialists was also rated very highly, highlighting its critical role in enhancing student outcomes. Furthermore, the data emphasizes that IEPs promote inclusion, reduce learning barriers, and positively impact both academic and behavioral performance, underscoring the comprehensive nature of these personalized plans. The implications of these findings suggest that well-structured and collaboratively developed IEPs are integral to fostering inclusive education and meeting the complex needs

of learners with disabilities. This aligns with recent literature emphasizing the importance of stakeholder collaboration and continuous IEP revision to ensure relevance and responsiveness. For instance, Rossetti et al. [40] found that collaboration among educators, families, and specialists significantly improved IEP effectiveness and student engagement. Similarly, Goldman and Burke [41] highlighted that regular updates to IEPs are essential in adapting instructional strategies to changing student needs, thereby enhancing academic progress. Additionally, a study by Twachtman-Cullen and Twachtman-Bassett [42] demonstrated that clear and achievable IEP goals contribute to better behavioral and academic outcomes for students in special education. Collectively, these studies validate that IEPs, when implemented with fidelity and inclusivity, serve as powerful tools for supporting diverse learners. In conclusion, the data confirm that IEPs are highly effective in addressing the individualized learning needs of students with disabilities in SPED centers. To sustain this

effectiveness, it is crucial to maintain collaborative practices, ongoing professional development for teachers, and systematic updating of IEPs. Such strategies will ensure that educational plans remain dynamic and student-centered, ultimately promoting equity, inclusion, and improved performance for learners with disabilities.

4.9 Test of relationship between the challenges faced by students with disabilities and IEPs influence on their academic progress and engagement

Examining the relationship between the challenges faced by students with disabilities and the influence of Individualized Education Programs (IEPs) on their academic progress and

engagement is crucial for evaluating the effectiveness of special education interventions. Students with disabilities often encounter a range of academic, behavioral, and social challenges that can hinder their learning and participation in classroom activities. Examining how these challenges correlate with the degree to which IEPs support student progress and engagement can provide insights into the responsiveness and impact of IEP implementation. This analysis helps identify whether IEPs effectively mitigate barriers and promote positive outcomes, thereby informing improvements in special education practices within SPED centers.

Table 9. Test of relationship between the challenges faced by students with disabilities and IEPs influence on their academic progress and engagement

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
Challenges and IEP's Influence	0.391*	Weak Positive	0.008	Reject Ho	Significant

p<0.05 (two-tailed)

The test of relationship between the challenges faced by students with disabilities and the influence of Individualized Education Programs (IEPs) on their academic progress and engagement reveals a weak positive correlation, with an r-value of 0.391 and a statistically significant p-value of 0.008. This indicates that as the challenges experienced by students increase, there is a modest but meaningful increase in the positive impact that IEPs have on their academic progress and engagement. The decision to reject the null hypothesis suggests that the relationship between these two variables is statistically significant, highlighting that IEPs play an important role in addressing the difficulties encountered by learners with disabilities, even if the strength of the association is not strong.

This finding has important implications for special education practice, emphasizing that while IEPs contribute positively to overcoming student challenges, other factors may influence academic progress and engagement that require additional support. Recent studies echo this nuanced relationship; for example, Lemons et al. [43] found that although IEPs provide critical individualized support, their effectiveness is influenced by the severity and type of challenges students face, necessitating supplementary interventions. Similarly, McLeskey [44] underscored the importance of continuous monitoring and flexible adaptation of IEPs to effectively meet evolving student needs, especially in addressing behavioral and academic difficulties. Additionally, Tucker and Schwartz [45] highlighted the role of collaborative efforts between educators, families, and specialists in

strengthening IEP implementation and enhancing student outcomes.

In inference, the significant yet weak positive correlation suggests that IEPs are an essential component in improving the academic and engagement outcomes of students with disabilities, particularly in mitigating their challenges. To maximize the benefits of IEPs, ongoing assessment, individualized modifications, and holistic support strategies must be integrated within SPED centers, ensuring that interventions are responsive to the unique and changing needs of learners.

4.10 Test of relationship between the challenges faced by students with disabilities and effectiveness of IEPs in meeting the diverse needs of students with disabilities

Considering the relationship between the challenges encountered by students with disabilities and the effectiveness of Individualized Education Programs (IEPs) in addressing their diverse needs is critical for assessing the adequacy of special education services. Students with disabilities often face multifaceted academic and behavioral difficulties that require tailored support strategies. Understanding how these challenges relate to the perceived effectiveness of IEPs can provide valuable insights into whether current individualized plans are sufficiently responsive and impactful. This analysis aims to determine if greater challenges correlate with differences in how well IEPs meet students' unique requirements, ultimately guiding improvements in IEP development and implementation in selected SPED centers.

Table 10. Test of relationship between the challenges faced by students with disabilities and effectiveness of IEPs in meeting the diverse needs of students with disabilities

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
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Challenges and IEP's Effectiveness	0.221	Negligible Positive	0.145	Do not reject Ho	Not Significant
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*significant at $p<0.05$ (two-tailed)

The data in Table 10 presents the test of relationship between the challenges faced by students with disabilities and the effectiveness of Individualized Education Programs (IEPs) in meeting their diverse needs. The computed correlation coefficient ($r = 0.221$) indicates a negligible positive correlation between the two variables. With a p-value of 0.145, which is greater than the 0.05 level of significance, the null hypothesis is not rejected. This result suggests that there is no statistically significant relationship between the level of academic and behavioral challenges faced by students and the perceived effectiveness of the IEPs implemented in the selected SPED centers.

The implication of this finding is that the challenges experienced by students with disabilities do not strongly determine how effective the IEPs are perceived to be. This could suggest that, regardless of how challenging a student's needs are, IEPs are generally applied uniformly or that their effectiveness is influenced by other factors such as the quality of implementation, availability of support services, teacher training, and collaboration with families rather than the severity of student challenges alone. Legitimate studies support this nuance.

For instance, Detrich [46] emphasized that while student needs vary, IEP effectiveness largely depends on teacher fidelity and proper implementation. Connolly [47] also argue that collaboration, consistent progress monitoring, and ongoing professional development are essential elements for successful IEP outcomes, often outweighing the severity of individual student challenges. Similarly, Harmon et al. [48] found that school systems with strong support frameworks

reported higher IEP effectiveness regardless of student profiles.

Hence, the negligible correlation found in this study underscores the complexity of implementing effective special education services. While student challenges remain a key concern, the effectiveness of IEPs may hinge more significantly on systemic factors such as teacher competency, administrative support, and stakeholder collaboration. This highlights the need for a holistic approach in special education that prioritizes individualized student needs and robust program delivery mechanisms.

4.11 Test of relationship between the IEPs influence and its effectiveness in meeting the diverse needs of students with disabilities

A meaningful evaluation of the impact of Individualized Education Programs (IEPs) on student performance and engagement in special education settings must include an analysis of how IEPs not only influence academic progress and classroom participation but also how effective they are in addressing the diverse learning and behavioral needs of students with disabilities. By examining the relationship between these two dimensions, the perceived influence of IEPs on student outcomes and their overall effectiveness, educators and policymakers can gain deeper insights into whether the strategies and supports outlined in IEPs are impactful and holistically responsive. This relationship is crucial, as it helps determine if the interventions provided are truly tailored and meaningful in improving the educational experiences and developmental progress of learners with special needs.

Table 11. Test of relationship between the IEPs influence and its effectiveness in meeting the diverse needs of students with disabilities

Variables	r-value	Strength of Correlation	p - value	Decision	Remarks
IEP's Influence and its Effectiveness	0.654*	Moderate Positive	0.000	Reject Ho	Significant

*significant at $p<0.05$ (two-tailed)

The data from Table 11 reveal a moderate positive correlation ($r = 0.654$) between the influence of Individualized Education Programs (IEPs) and their effectiveness in meeting the diverse needs of students with disabilities. With a p-value of 0.000, this relationship is statistically significant at the 0.05 level, leading to the rejection of the null hypothesis. This indicates that when IEPs are perceived to influence students' academic progress and engagement significantly, they are also seen as highly effective in addressing the individual learning, behavioral, and developmental needs of learners with disabilities. This

finding suggests a meaningful alignment between the intended outcomes of IEPs and their actual implementation, reinforcing the idea that impactful IEP strategies are also most responsive to students' varied challenges.

This result aligns with contemporary research. For instance, Jung [49] emphasized that well-developed IEPs grounded in accurate assessments and collaborative planning are more likely to yield positive academic and behavioral outcomes. Similarly, Faragher et al. [50] found that the perceived success of IEPs in Philippine SPED centers was closely linked to how effectively they addressed specific learner

needs, particularly when educators used differentiated instruction and inclusive teaching strategies. La Salle et al. [51] further argued that the quality and clarity of IEP goals contribute directly to both instructional effectiveness and student motivation. These studies support the current findings and highlight the importance of investing in IEP design and training to ensure both influence and effectiveness. In conclusion, the statistically significant relationship between IEP influence and effectiveness underscores the need for continuous improvement in how IEPs are developed, implemented, and reviewed, ensuring that they remain powerful tools for equity and success in special education contexts.

5. Summary of findings

This portion summarizes the key findings from the present study, which explored the Impact of Individualized Education Programs (IEPs) on Student Performance and Engagement in Selected SPED Centers. It also outlines recommendations grounded in the results to enhance the development, implementation, and effectiveness of IEPs to support learners with special needs. The study examined how IEPs influence students' academic progress, behavioral development, and classroom engagement, while also considering the relationship between students' challenges and the responsiveness of IEPs to their diverse needs. The recommendations are intended to guide SPED teachers, school administrators, and policymakers in strengthening IEP practices, promoting inclusive education, and ensuring that every learner receives the support necessary to thrive academically and socially within special education settings.

This study assessed the impact of Individualized Education Programs (IEPs) on student performance and engagement in selected SPED centers in Cebu during the school year 2024–2025, serving as the basis for an intervention plan. Grounded in Differentiated Instruction Theory by Tomlinson et al. [52], Constructivist Learning Theory (Piaget & Vygotsky) by Jones [53], and Ecological Systems Theory by Bronfenbrenner [54] and aligned with key Philippine laws on inclusive education such as Republic Acts 7277, 10533, and 11650, the research employed a quantitative approach using a quasi-experimental design. A total of 45 SPED teachers from three public SPED centers namely Basak Elementary School SPED Center, Mandaue City Integrated SPED School, and Lapu-Lapu City Central Elementary School SPED Center participated, with each school contributing 15 purposefully selected respondents actively engaged in IEP implementation. Data were collected through an adaptive survey questionnaire, which captured teachers' insights on the academic and behavioral impact of IEPs on students with disabilities.

The study revealed that most SPED teachers were female and had substantial teaching experience; however, a considerable number lacked specialized training in inclusive education, highlighting a need for targeted professional development. The distribution of learners with special needs showed that learning disabilities (LD), hearing impairments (HI), and intellectual disabilities (ID) were the most prevalent categories. Although many teachers had participated in general INSET programs, fewer had attended training

specifically focused on IEP formulation and implementation, indicating a professional development gap.

Prior to the implementation of IEPs, students with disabilities experienced high levels of academic and behavioral challenges, including difficulties in maintaining focus, completing tasks, following instructions, and engaging with peers and classroom activities. Following IEP implementation, there was a very high level of improvement in students' academic progress and engagement. Highly effective strategies included differentiated instruction, assistive technologies, explicit teaching, and accommodations such as extended time and structured transitions.

Further analysis indicated a significant but weak positive correlation between students' challenges and the influence of IEPs on their academic progress and engagement. There was also a negligible and non-significant correlation between student challenges and the effectiveness of IEPs in addressing diverse needs. However, a moderate and statistically significant positive correlation was found between the influence of IEPs and their overall effectiveness, suggesting that impactful IEPs are also more likely to be perceived as effective in meeting students' individualized educational needs.

6. CONCLUSION

The findings of this study affirm the positive impact of Individualized Education Programs (IEPs) on student performance and engagement in selected SPED centers in Cebu during the 2024–2025 school year. Prior to IEP implementation, students with disabilities faced significant academic and behavioral challenges, including difficulty in focus, task completion, social interaction, and motivation. After implementing IEPs, teachers reported notable improvements in student academic outcomes and classroom participation, particularly when strategies such as differentiated instruction, assistive technologies, and explicit teaching were utilized. A moderate, significant relationship between the influence and effectiveness of IEPs underscores the importance of designing responsive, well-implemented educational plans. However, the weak correlation between students' initial challenges and IEP impact suggests that while IEPs are effective, additional support may be needed for students facing more severe difficulties. Furthermore, the limited training in specialized areas like IEP development and inclusive education among many SPED teachers indicates an area for improvement.

7. Recommendation

In light of the results, it is recommended that education leaders and school administrators invest in continuous professional development focused on IEP design, inclusive education strategies, and data-driven instruction tailored to various disabilities. Strengthening collaborative practices among teachers, specialists, and parents during IEP formulation can enhance the relevance and impact of educational interventions. SPED centers should also conduct regular evaluations and updates of IEPs to address the evolving needs of students effectively. Finally, further research could explore long-term academic and social

outcomes of IEP implementation and identify additional variables that mediate their success, particularly for learners with complex needs.

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REFERENCES

- Barnard, R. W., & Henn, R. H. (2023). Overcoming learning obstacles: Strategies for supporting students with diverse needs. *Open Access Library Journal*, 10(8), 1-14. <https://doi.org/10.4236/oalib.1110509>.
- Rashid, S. M. M., & Wong, M. T. (2022). Challenges of Implementing the Individualized Education Plan (IEP) for Special Needs Children with Learning Disabilities: Systematic Literature Review (SLR). *International Journal of Learning, Teaching and Educational Research*, 22(1), 15–34. <https://doi.org/10.26803/ijlter.22.1.2>.
- Zaic, B. (2021). A Personalized Learning Approach to Educating Students Identified with Special Education Needs. https://repository.stcloudstate.edu/cgi/viewcontent.cgi?article=1120&context=sped_etds.
- Mangongon, F. A. A. (2022). Challenges encountered by special educators: Inputs for the improvement of the individualized education program. *AIDE Interdisciplinary Research Journal*, 2, 136-150. <https://doi.org/10.56648/aide-irj.v2i1.25>.
- Donaire, M., Josevic F. Hurtada, & Wenefredo E. Cagape. (2024). Effectiveness of Individualized Education Programs (IEPs) in Special Education. *International Journal for Multidisciplinary Research*, 6(3). <https://doi.org/10.36948/ijfmr.2024.v06i03.20827>.
- Mendoza, M. E. (2023). *Implementing Policies of Inclusion: A Vertical Case Study of the Networks of Support for Inclusive Transition Education of People With Disabilities in México*. University of California, Los Angeles.
- Maceda, L. A. (2024). Factors Affecting Learners' Reading Proficiency in Classes among Rural Elementary Schools.
- Aranjuez, I. A. I., Fernandez, L. A. T., Asenjo, R. F., Bayani, R. M., & Cagape, W. E. (2024). Enhancing Educational Outcomes: The Role of Individualized Education Programs (IEPs) in Supporting Students with Disabilities. *International IT Journal of Research*, ISSN: 3007-6706, 2(4), 41-49.
- Macmbinji, C. (2023). Effectiveness of Individualized Education Plans: A Case Study of Parental Engagement in IEP Conference. *Journal of African Interdisciplinary Studies*, 7(9), 5-18.
- Canillo, E. P., & Bendanillo, A. A. (2023). The centrality of the learners in the light of John Dewey's philosophy of education. *Science and Education*, 4(4), 725-735. <http://dx.doi.org/10.2139/ssrn.4722522>.
- Pounds, L., & Cuevas, J. (2019). Student Involvement in IEPs. *Georgia Educational Researcher*, 16(1), 23-47.
- Habib, H., Jelani, S. A. K., & Rasheed, N. T. (2021). Tailored Education: AI in the Development of Individualized Education Programs (IEPs). *Multidisciplinary Science Journal*, 1(01), 8-18.
- Heilmann, J. J., Bertone, A., & Wojtyna, A. (2024). How inclusive practice increases the educational relevance of Individualized Education Programs. *Language, Speech, and Hearing Services in Schools*, 55(2), 231-248.
- Howard, M., Reed, A. S., & Francis, G. L. (2021). "It's My Meeting!": Involving High School Students With Significant Disabilities in the Individualized Education Program Process. *Teaching Exceptional Children*, 53(4), 290-298.
- Yell, M. L., Collins, J., Kumpiene, G., & Bateman, D. (2020). The individualized education program: Procedural and substantive requirements. *Teaching Exceptional Children*, 52(5), 304-318. <https://doi.org/10.1177/0040059920906592>.
- Dietz, L. (2021). The impact of professional learning: Writing high-quality individualized education program (IEP) goals. *Wilmington University (Delaware)*.
- Lequia, J. L., Vincent, L. B., Lyons, G. L., Asmus, J. M., & Carter, E. W. (2023). Individualized education programs of high school students with significant disabilities. *Education and Training in Autism and Developmental Disabilities*, 58(1), 22-35.
- Brownell, M. T., Lauterbach, A. A., Dingle, M. P., Boardman, A. G., Urbach, J. E., Leko, M. M., ... & Park, Y. (2014). Individual and contextual factors influencing special education teacher learning in literacy learning cohorts. *Learning Disability Quarterly*, 37(1), 31-44. <https://doi.org/10.1177/0731948713487179>.
- Butler, S. R. (2024). Effects of Parental Attendance at Individualized Education Plan Meetings on Students' Benchmark Test Scores.

20. Slade, N., Eisenhower, A., Carter, A. S., & Blacher, J. (2018). Satisfaction with individualized education programs among parents of young children with ASD. *Exceptional Children*, 84(3), 242-260.
21. Ferragina, E. (2019). Does family policy influence women's employment?: Reviewing the evidence in the field. *Political Studies Review*, 17(1), 65-80. <https://doi.org/10.1177/1478929917736438>.
22. Senior, C., & Sahlberg, P. (2025). The evolution of the OECD's position on equity in global education. *International Journal of Educational Development*, 114, 103241.
23. Sharp, P., Sankey, C., Oliffe, J. L., Schulenkorf, N., & Caperchione, C. M. (2025). Designing Gender-Responsive Health Promotion Programs for Men: A Scoping Review. *Health Education & Behavior*, 10901981251322391.
24. Waitoller, F. R., & Artiles, A. J. (2013). A decade of professional development research for inclusive education: A critical review and notes for a research program. *Review of educational research*, 83(3), 319-356. <https://doi.org/10.3102/0034654313483905>.
25. Smith, D. D., & Tyler, N. C. (2011). Effective inclusive education: Equipping education professionals with necessary skills and knowledge. *Prospects*, 41(3), 323-339.
26. Binghamhashayan, N. S., Yeo, K. J., & Kosnin, A. M. (2022). Relationship between student's self-determination, parental involvement, special education teachers' support, and college and career readiness among secondary students with learning disabilities in Riyadh, Kingdom of Saudi Arabia. *Sustainability*, 14(21), 14221.
27. Nolan-Spohn, H. (2016). Increasing student involvement in IEPs.
28. Singh, R. (2022). Inclusive Education in ASEAN: Fostering Belonging for Students with Disabilities. Economic Research Institute for ASEAN and East Asia.
29. Ahmad, I., Sharma, S., Singh, R., Gehlot, A., Gupta, L. R., Thakur, A. K., ... & Twala, B. (2024). Inclusive learning using industry 4.0 technologies: addressing student diversity in modern education. *Cogent Education*, 11(1), 2330235.
30. Torollo, I. W. (2024). Strained Support Systems: SPED Teachers' Struggle with Psychological Duties in Education. *International IT Journal of Research*, ISSN: 3007-6706, 2(4), 23-31.
31. Miller, E. K., Franco-Jenkins, X., Duncan, J. T., Reynolds Reddi, A., & Ward, C. (2025). Strengthening education through equitable and inclusive evidence-based teaching practices: A scoping review. *Education Sciences*, 15(3), 266.
32. Zhao, A., Hinks, J., Thang, S., Mitchell, J., Rabi, A., Ullah, N., ... & D'Rozario, J. (2024). EdTech for Learners With Hearing and Visual Impairments: A Rapid Evidence Review for the Southeast Asian Region.
33. Frenesi Anne A. Mangonon. (2022). Challenges Encountered by Special Educators: Inputs for the Improvement of the Individualized Education Program. *AIDE Interdisciplinary Research Journal*, 2(1), 1-1. <https://ejournals.ph/article.php?id=18154>.
34. Jocson, E., & Buenrostro, J. (2024). A Study on the Translatability of the Developmental Assessment Report into the Individualized Education Plan in the Philippines. *International Journal of Disability, Development and Education*, 71(3), 420-436.
35. Blewitt, C., O'Connor, A., Morris, H., May, T., Mousa, A., Bergmeier, H., ... & Skouteris, H. (2021). A systematic review of targeted social and emotional learning interventions in early childhood education and care settings. *Early Child Development and Care*, 191(14), 2159-2187.
36. Müller, E., Wood, C., Cannon, L., & Childress, D. (2023). Impact of an IEP goal builder on social goals for autistic students. *Focus on Autism and Other Developmental Disabilities*, 38(3), 177-187.
37. Meltzer, L. (2010). Promoting executive function in the classroom. Guilford Press.
38. Lambert, R., & Tan, P. (2020). Does disability matter in mathematics educational research? A critical comparison of research on students with and without disabilities. *Mathematics Education Research Journal*, 32(1), 5-35.
39. Schexnider, W. G. (2021). Understanding Principals' Knowledge of Special Education. Boise State University.
40. Rossetti, Z., Sauer, J. S., Bui, O., & Ou, S. (2017). Developing collaborative partnerships with culturally and linguistically diverse families during the IEP process. *Teaching exceptional children*, 49(5), 328-338.
41. Goldman, S. E., & Burke, M. M. (2017). The effectiveness of interventions to increase parent involvement in special education: A systematic literature review and meta-analysis. *Exceptionality*, 25(2), 97-115.
42. Twachtman-Cullen, D., & Twachtman-Bassett, J. (2011). *The IEP from A to Z: How to create meaningful and measurable goals and objectives*. John Wiley & Sons.
43. Lemons, C. J., Vaughn, S., Wexler, J., Kearns, D. M., & Sinclair, A. C. (2018). Envisioning an improved continuum of special education services for students with learning disabilities: Considering intervention intensity. *Learning Disabilities Research & Practice*, 33(3), 131-143. <https://doi.org/10.1111/ldrp.12173>.
44. McLeskey, J., Council for Exceptional Children, & Collaboration for Effective Educator Development, Accountability and Reform. (2017). *High-leverage practices in special education*. Arlington, VA: Council for Exceptional Children. <https://systemimprovement.org/uploads/files/CEC-HLP-Web.pdf>.
45. Tucker, V., & Schwartz, I. (2013). Parents' perspectives of collaboration with school professionals: Barriers and facilitators to successful partnerships in planning for students with ASD. *School Mental Health*, 5, 3-14. <https://doi.org/10.1007/s12310-012-9102-0>.
46. Detrich, R. (1999). Increasing treatment fidelity by matching interventions to contextual variables within the

- educational setting. *School Psychology Review*, 28(4), 608-620.
<https://doi.org/10.1080/02796015.1999.12085988>.
47. Connolly, J. F. (2014). A grounded theory analysis of seclusion of students with disabilities in schools. University of Rhode Island.
 48. Harmon, S., Street, M., Bateman, D., & Yell, M. L. (2020). Developing present levels of academic achievement and functional performance statements for IEPs. *TEACHING Exceptional Children*, 52(5), 320-332. <https://doi.org/10.1177/0040059920914260>.
 49. Jung, L. A. (2018). *From goals to growth: Intervention & support in every classroom*. ASCD.
 50. Faragher, R., Chen, M., Miranda, L., Poon, K., Rumiati, Chang, F. R., & Chen, H. (2021). Inclusive education in Asia: Insights from some country case studies. *Journal of Policy and Practice in Intellectual Disabilities*, 18(1), 23-35. <https://doi.org/10.1111/jppi.12369>.
 51. La Salle, T. P., Roach, A. T., & McGrath, D. (2013). The Relationship of IEP Quality to Curricular Access and Academic Achievement for Students with Disabilities. *International journal of special education*, 28(1), 135-144.
 52. Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., ... & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted*, 27(2-3), 119-145. <https://doi.org/10.1177/016235320302700203>.
 53. Jones, A. (1995). Constructivist learning theories and IT. *Information technology and society*, 249-265.
 54. Bronfenbrenner, U. (2005). Ecological systems theory (1992).