PANTAO
(International Journal of the Humanities and Social Sciences)
Volume 5, Issue 4
ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

Regular teachers' knowledge of disability categories and instructional modification practice

Catherine M. Dominise*
Cebu Technological University-Main Campus, Cebu City, Philippines

ABSTRACT

This study assessed the regular teachers' knowledge of disability categories and instructional modification practices employed at Adventist Elementary School–Cebu Inc., Cebu City Division, during the School Year 2025–2026 as the basis for a proposed Action Plan to enhance inclusive teaching practices for diverse learners. A descriptive-correlational research design was employed in the study. The research was conducted at Adventist Elementary School–Cebu Inc., an institution implementing inclusive education for learners with diverse educational needs. Purposive sampling was used to select the teacher-respondents who met the established inclusion criteria. Data were collected from 50 teacher-respondents using a structured survey questionnaire. Frequency count, percentage, weighted mean, standard deviation, and Pearson Product-Moment Correlation Coefficient were utilized to analyze the data. The findings revealed that the respondents were predominantly female, represented varied age groups, possessed moderate teaching experience, and were mostly Teacher I to Teacher III, with many pursuing graduate studies. Teachers demonstrated a moderate level of knowledge of disability categories, showing stronger understanding of general disability types than complex conditions and instructional applications. They likewise demonstrated moderate instructional modification practices, particularly in lesson adaptation and assessment adjustments, while differentiated instruction and collaborative practices were less consistently implemented. Correlation analysis revealed no significant relationship between teachers' knowledge of disability categories and their instructional modification practices. The study concluded that knowledge alone did not directly translate into consistent implementation of inclusive instructional practices. An Action Plan was recommended to strengthen teachers' competencies through targeted professional development, mentoring, and collaborative support for inclusive education.

Keywords: Inclusive Education, teachers' knowledge on disability categories, instructional modification practices, action plan, Adventist Elementary School–Cebu Inc.

Date Submitted: September 22, 2026
Date Accepted: September 28, 2026
Date Published: October 16, 2026

*Corresponding author / Email: kianna.mancia@gmairl.com
DOI: http://doi.org/10.69651/PIJHSS05041643

Recommended citation:
Dominise, C. M. (2026). Regular teachers' knowledge of disability categories and instructional modification practice. Pantao (International Journal of the Humanities and Social Sciences) 5 (4), 1003-1024. http://doi.org/10.69651/PIJHSS05041643

INTRODUCTION

Inclusive education has become a global educational priority that promotes equitable learning opportunities for all students regardless of disability, learning needs, or behavioral differences. Schools worldwide are increasingly expected to provide learning environments where students with diverse abilities can participate meaningfully alongside their peers. As inclusive education continues to expand, teachers are expected to possess sufficient knowledge of disability categories and the competence to implement appropriate instructional modifications that address individual learning needs while maintaining curriculum standards. These competencies are essential in ensuring that learners with disabilities receive quality education within general education classrooms.

International literature consistently recognizes teacher competence as one of the strongest determinants of successful inclusive education. The professional identity development of special education teacher candidates significantly influences their preparedness to teach learners with diverse educational needs. Their findings suggest that teachers who possess greater confidence and stronger professional competence are more capable of implementing effective inclusive instructional practices. Although students with disabilities may be physically included in Finnish primary schools, inadequate teacher competence often limits students' perceptions of genuine inclusion and meaningful participation in classroom learning. Likewise, teachers' knowledge and implementation of transition skills for students with autism significantly affect the effectiveness of individualized educational support, emphasizing the importance of specialized instructional strategies in inclusive settings.

Similar concerns have been reported across different regions. Norwegian mainstream teachers' professional knowledge greatly influences their capacity to implement inclusive teaching practices effectively. Their study highlighted that insufficient knowledge often results in inconsistent instructional accommodations that may hinder learners' academic progress. Likewise, teachers' perceptions of students with disabilities are frequently influenced by stereotypes and preconceived beliefs. These perceptions affect teachers' expectations, classroom interactions, instructional decisions, and ultimately the academic and social outcomes of learners with disabilities. Collectively, these regional studies demonstrate that teacher knowledge extends beyond awareness of inclusive education policies; it must also translate into effective instructional modifications that respond to learners' diverse educational needs.

The Philippine educational system has likewise strengthened its commitment to inclusive education through national policies and reforms. However, implementing inclusive education remains a challenge in many schools due to limitations in teacher preparation, professional development opportunities, and instructional resources. While many Filipino teachers demonstrate awareness of inclusive education principles and policies, they continue to experience difficulties in applying these principles within actual classroom instruction. Similarly, many general education teachers encounter challenges in correctly identifying disability categories and selecting appropriate instructional modifications that effectively address learners' individual needs. These findings suggest that although policy awareness exists, translating such knowledge into classroom practice remains a significant concern among regular teachers.

These national concerns are likewise evident in the local educational setting of Adventist Elementary School–Cebu Inc. As a private elementary school committed to providing quality and inclusive education, the school accommodates learners with varying educational needs, including students diagnosed with Autism Spectrum Disorder, Intellectual Disability, learning disabilities, speech and language difficulties, and other developmental conditions. Consequently, regular classroom teachers are expected to address a wide range of

ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

learner characteristics while simultaneously delivering grade-level competencies to the entire class.

In daily classroom instruction, teachers frequently encounter situations that require immediate instructional adjustments. For example, while conducting a whole-class lesson, a teacher may need to simplify learning activities for a learner with an intellectual disability, provide visual supports for a learner with autism, or modify assessment tasks for students who require differentiated instruction. At the same time, the teacher must continue facilitating learning for the rest of the class without disrupting instructional flow. In many instances, these instructional decisions rely heavily on the teacher's understanding of disability categories and the selection of appropriate instructional modifications.

However, observations within the school suggest that teachers experience varying levels of confidence and preparedness in responding to these diverse learning needs. Some teachers rely primarily on general classroom strategies rather than evidence-based instructional modifications because they are uncertain about the specific characteristics of different disability categories or the most appropriate accommodations to employ. As a result, instructional modifications may not always correspond to learners' actual educational needs, potentially affecting student participation, engagement, classroom behavior, and academic performance. These classroom realities mirror the challenges that many Filipino teachers continue to experience difficulty implementing effective inclusive instructional practices despite their awareness of inclusive education policies.

Given these circumstances, there is a pressing need to investigate whether regular teachers' knowledge of disability categories influences the instructional modifications they implement in inclusive classrooms. Understanding this relationship is particularly important because effective instructional modification depends largely on teachers' ability to recognize learners' unique characteristics and respond using appropriate teaching strategies. Without sufficient knowledge, teachers may unintentionally provide accommodations that are either insufficient or inappropriate, limiting learners' opportunities to participate fully and achieve desired learning outcomes. Furthermore, identifying existing strengths and areas requiring improvement will provide school administrators and education leaders with empirical evidence for designing targeted professional development programs that enhance inclusive teaching practices.

Despite the growing body of literature on inclusive education, empirical studies examining the relationship between regular teachers' knowledge of disability categories and their instructional modification practices remain limited, particularly within Cebu schools, including Adventist Elementary School–Cebu Inc. Most existing studies have focused primarily on teachers' attitudes, perceptions, or general awareness of inclusive education, with limited attention given to how teachers translate their knowledge of disability categories into actual classroom instructional practices. This gap highlights the need for localized evidence that reflects the realities experienced by regular teachers implementing inclusive education in elementary school settings.

Specifically, this study aims to determine the level of regular teachers' knowledge of disability categories, assess the extent of instructional modification practices they employ in inclusive classrooms, and examine the significant relationship between these two variables. The findings of the study will serve as the basis for a proposed action plan that will strengthen teachers' competencies in implementing appropriate instructional modifications, thereby contributing to more effective, equitable, and inclusive learning experiences for all learners at Adventist Elementary School–Cebu Inc.

Statement of the problem

This study assessed regular teachers' knowledge of disability categories and the instructional modification practices they employed at Adventist Elementary School–Cebu Inc. in Cebu City Division during the School Year 2025–2026 as a basis for a proposed action plan to enhance teaching strategies for diverse learners.

Specifically, this study sought to answer the following questions:

1. What is the demographic profile of the teacher respondents in terms of age, gender, educational attainment, years of teaching experience, and teaching position?
2. What is the level of regular teachers' knowledge of disability categories?
3. What is the extent of instructional modification practices employed by regular teachers?
4. Is there a significant relationship between regular teachers' knowledge of disability categories and their instructional modification practices?
5. Based on the findings of the study, what action plan can be proposed to improve regular teachers' knowledge of disability categories and strengthen their instructional modification practices?

METHODOLOGY

This part of the study presented the research methods and procedures used to assess regular teachers' knowledge of disability categories and their instructional modification practices at Adventist Elementary School–Cebu Inc. It began by describing the research design and the study framework using the input-process-output (IPO) model, followed by a description of the inclusive classroom settings where the study was conducted. It also detailed the respondents, the instruments used for data collection, and the procedures followed in gathering the data, and it further explained the statistical techniques employed for data analysis. Ethical considerations, including confidentiality, informed consent, voluntary participation, and the protection of participants' rights, were emphasized to ensure that the study was conducted with rigor and integrity.

This study employed a descriptive-correlational research design to examine regular teachers' knowledge of disability categories and the extent of their instructional modification practices at Adventist Elementary School–Cebu Inc. during the School Year 2025–2026. The descriptive component profiled teachers in terms of gender, age, educational attainment, and years of teaching experience, while also describing how they applied instructional modifications to support diverse learners in inclusive classrooms. This approach provided a clear understanding of teachers' backgrounds and their current practices in addressing the learning needs of students with disabilities within the school. The correlational component investigated whether a significant relationship existed between teachers' knowledge of disability categories and their instructional modification practices. This design was suitable because it allowed the researcher to describe existing teaching practices while analyzing how teachers' knowledge influenced the implementation of inclusive strategies. As Creswell and Creswell (2022) noted, descriptive-correlational research effectively captured the current status of a phenomenon while examining potential relationships between variables. In the context of Adventist Elementary School–Cebu Inc., this design provided evidence on how teachers' understanding of disability categories informed their instructional adaptations, offering insights to guide strategies and interventions that enhanced inclusive education in the school.

The flow of the study followed the input-process-output model. The input consisted of the key variables and factors that formed the foundation for examining inclusive education practices among regular teachers at Perrelos Elementary School. The primary input included the demographic profile of teachers, such as age, gender, educational attainment, years of

ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

teaching experience, and teaching position. Examining these characteristics provided essential context for understanding how teachers' personal and professional backgrounds may have influenced their knowledge of disability categories and the extent to which they applied instructional modifications to support diverse learners in inclusive elementary classrooms. The study also focused on the level of regular teachers' knowledge of disability categories, which reflected their understanding of the different types of disabilities, defining characteristics, learning challenges, and appropriate educational strategies. This variable was essential because teachers' comprehension of student needs directly informed how they planned and delivered instruction. Closely related was the extent of instructional modification practices employed by regular teachers, which measured how frequently and effectively teachers adapted lessons, assessments, and classroom management to accommodate learners with diverse abilities. Finally, the study examined the significant relationship between teachers' knowledge of disability categories and their instructional modification practices, which was the core of the research problem. By analyzing this relationship, the study sought to determine whether greater knowledge of disabilities corresponded to more effective or extensive use of instructional adaptations, thereby providing insights for designing targeted interventions, professional development, and strategies to enhance inclusive education outcomes.The process followed a systematic approach guided by a descriptive-correlational research design, which allowed for both profiling teachers and analyzing the relationship between their knowledge of disability categories and instructional modification practices. The first step involved the submission of the transmittal letter to the school principal and relevant authorities to secure permission for conducting the research in the selected school. This ensured that the study was conducted with the approval and cooperation of the school administrators, adhering to ethical standards. Once approval was obtained, the questionnaires were distributed to the selected teachers. The questionnaires were designed to gather information on teachers' demographic profiles, level of knowledge of disability categories, and the extent of their instructional modification practices. After participants completed the instruments, the data were collected, ensuring that responses were secured confidentially and systematically. Following data collection, data processing involved organizing, coding, and preparing the responses for analysis, which ensured that the information was accurate and ready for statistical examination. Finally, the statistical treatment, analysis, and interpretation of data were conducted to describe teachers' demographic profiles, levels of knowledge, and instructional practices, as well as to determine the presence and significance of relationships between knowledge of disability categories and instructional modification practices. The findings from these analyses provided evidence-based insights to guide recommendations and interventions for enhancing inclusive education. The output of the study was the proposed Action Plan designed to enhance teaching strategies for diverse learners in inclusive classrooms. Based on the findings regarding teachers' knowledge of disability categories and their instructional modification practices, the Action Plan provided practical recommendations and strategies for improving inclusive education.

The environment of this study was Adventist Elementary School–Cebu Inc., a private elementary school located at 400 Tres de Abril St., San Nicolas, Cebu City. The school provided foundational education within an inclusive learning environment where learners with diverse abilities and educational needs were accommodated through regular classroom instruction. Its facilities, instructional resources, and administrative support enabled teachers to implement instructional modifications and differentiated teaching strategies, making it an appropriate setting for examining teachers' knowledge of disability categories and their instructional modification practices. The school was committed to ensuring that all learners, regardless of their abilities or learning needs, had access to quality education. Its curriculum

integrated inclusive teaching approaches that accommodated students with diverse academic, behavioral, and social needs, allowing teachers to address learner differences while maintaining curriculum standards. This inclusive educational environment aligned with the growing emphasis on equitable education, making the school a suitable venue for investigating inclusive teaching practices. The school also offered regular classroom programs where teachers worked closely with students exhibiting a wide range of abilities and learning styles. In these classrooms, educators were expected to apply differentiated instructional methods, adapt lessons, utilize varied teaching strategies, and provide individualized support whenever necessary.

The respondents of this study consisted of 34 regular teachers from Adventist Elementary School–Cebu Inc., selected through purposive sampling. This sampling technique ensured that only teachers who met the set inclusion criteria and were directly engaged in inclusive classroom practices were selected for the study. It allowed the researcher to specifically target educators who were actively implementing instructional modifications for learners with diverse abilities. The distribution of respondents by grade level, presented as frequency (f) and percentage (%), was as follows: Grade 1 had 7 respondents, or 14.00%; Grade 2 had 9 respondents, or 18.00%; Grade 3 had 8 respondents, or 16.00%; Grade 4 had 10 respondents, or 20.00%; Grade 5 had 8 respondents, or 16.00%; and Grade 6 had 8 respondents, or 16.00%, for a total of 50 respondents, or 100.00%. The inclusion criteria required that teachers regularly handled classes of students with varying learning needs, possessed working knowledge of disability categories, and applied inclusive education strategies in actual classroom settings. Participants were required to have at least one year of teaching experience in classrooms where learners with disabilities are present. These requirements ensured that respondents could provide relevant and experience-based insights regarding both knowledge and instructional practices. Teachers who did not handle learners with disabilities, had minimal exposure to inclusive education practices, or were not involved in instructional modification activities were excluded from the study, which helped maintain the accuracy and relevance of the data gathered. At Adventist Elementary School–Cebu Inc., the selected 34 teachers were those who routinely adapted lessons, employed differentiated strategies, and supported learners with diverse educational needs. Their experiences were essential in understanding how knowledge of disability categories translates into instructional modification practices in actual classroom contexts.

This study utilized an adapted survey questionnaire as the primary research instrument to gather data on regular teachers' knowledge of disability categories and their instructional modification practices at Adventist Elementary School–Cebu Inc. The instrument consisted of three parts. Part I gathered the respondents' demographic profile, including age, gender, educational attainment, length of service in teaching, and teaching position, which provided essential background information for describing the teacher-respondents. Part II measured the level of regular teachers' knowledge of disability categories in inclusive education and included ten statements assessing their understanding of various disability types, their defining characteristics, learning needs, and appropriate instructional responses in inclusive classrooms. Respondents rated each statement using a four-point Likert scale ranging from 4 (Strongly Agree) to 1 (Strongly Disagree). This section was adapted from Thomas and Uthaman (2023), who developed an instrument on teachers' knowledge and attitudes toward inclusive education of learners with disabilities. Part III assessed the extent of instructional modification practices employed by regular teachers and also consisted of ten indicators focusing on lesson modification, instructional delivery, assessment adjustments, use of alternative materials, individualized tasks, classroom accessibility, collaboration with special education personnel, homework modification, differentiated instruction, and reflective practice. It likewise used a four-point Likert scale and was adapted from established inclusive education practice

ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

frameworks aligned with Lozano et al. (2022), particularly the Concerns about Inclusive Education Scale (CIES).

The data gathering procedure followed three stages, namely the preliminary, data gathering, and post-data gathering procedures, to ensure a systematic and ethical research process. Approval was secured from Adventist Elementary School–Cebu Inc., and data were collected using a survey questionnaire administered to teacher-respondents under conditions of strict confidentiality and voluntary participation. In the preliminary stage, the researcher secured formal approval from the principal and school authorities of Adventist Elementary School–Cebu Inc. through a transmittal letter. Once permission was granted, coordination with designated school representatives followed to identify teacher-respondents who were actively involved in teaching learners in inclusive classroom settings. The purpose, objectives, and significance of the study were clearly explained, emphasizing that participation was voluntary and that all responses would remain strictly confidential. Each participant signed an informed consent form to confirm their understanding of the study and their willingness to participate without any effect on their professional standing. In the data gathering stage, the primary data collection tool was a printed, adapted survey questionnaire consisting of three parts: the respondents' demographic profile, their level of knowledge of disability categories, and the extent of instructional modification practices. The researcher personally administered the questionnaires, provided clear instructions, and addressed any questions raised by the respondents. To avoid disrupting regular classroom instruction and school activities, the respondents completed the survey during their free periods or non-teaching hours, ensuring the accuracy, completeness, and reliability of the data collected. In the post data gathering stage, after the retrieval of the completed questionnaires, all responses were reviewed for completeness and consistency. Valid responses were organized, coded, and prepared for statistical analysis to address the research objectives. Throughout the entire process, ethical principles such as confidentiality, voluntary participation, and informed consent were strictly observed to protect the rights, privacy, and welfare of all respondents. This systematic approach ensured the integrity and credibility of the study and provided reliable insights into teachers' knowledge of disability categories and their instructional modification practices in the inclusive classrooms of Adventist Elementary School–Cebu Inc.

In conducting this study on teachers' knowledge of disability categories and their instructional modification practices in inclusive classrooms, strict ethical principles were observed to protect the rights, well-being, and confidentiality of all participants. With respect to informed consent, all teacher-respondents from the selected schools in Cebu were fully informed about the purpose, objectives, and scope of the study prior to participation. Clear instructions on completing the adapted survey questionnaires and the estimated time required were provided. Each participant was asked to sign an informed consent form, confirming their voluntary participation and understanding that they could withdraw at any time without penalty or impact on their professional standing. With respect to confidentiality and anonymity, personal information and responses were treated with strict confidentiality. Identifying details such as names did not appear in any report or publication, and all data were coded to ensure anonymity. Access to the raw data was limited to the researcher and authorized personnel involved in data analysis, and the data were securely stored both physically and digitally. Participation was entirely voluntary, as teachers were not coerced or pressured, and refusal to participate had no effect on their teaching duties, professional evaluations, or relationship with school administration. The study also adhered to the principles of beneficence and non-maleficence by providing insights that helped improve inclusive classroom practices and supported teachers in implementing effective instructional modifications for diverse learners.

Finally, formal approval was obtained from the principals and school authorities of the selected schools before data collection, and coordination with designated school representatives ensured that the study was conducted in accordance with school policies, promoting transparency, respect, and cooperation throughout the research process.

The data collected from the teacher-respondents at Adventist Elementary School–Cebu Inc. were analyzed using appropriate statistical techniques to ensure accurate and meaningful interpretation. Descriptive statistics were first employed to summarize the teachers' demographic profiles, their level of knowledge of disability categories, and the extent of instructional modification practices. These results provided a foundation for understanding the characteristics and current practices of teachers in inclusive classrooms and served as a basis for developing an Action Plan to enhance teaching strategies for diverse learners. Frequency counts and percentages were used to summarize the demographic profile of the teacher-respondents, including age, gender, educational attainment, years of teaching experience, and teaching position. This descriptive analysis provided a clear picture of the participants' backgrounds, contextualizing their knowledge and instructional practices within the inclusive classroom environment of the school. The weighted mean was applied to determine the level of teachers' knowledge of disability categories and the extent to which they implemented instructional modification practices. This measure allowed the researcher to quantify responses across all indicators, highlighting areas of strength, areas needing improvement, and the consistency of teachers' inclusive practices. Standard deviation was calculated to examine the variability of responses. This analysis showed how consistent or divergent teachers' knowledge and instructional practices were, helping to identify specific areas where additional support, mentoring, or professional development might be needed to enhance their effectiveness in managing inclusive classrooms. The Pearson Product-Moment Correlation Coefficient was used to determine the relationship between teachers' knowledge of disability categories and their instructional modification practices. This inferential statistic revealed both the strength and direction of the relationship, providing insights into how teachers' understanding of disabilities influenced their ability to implement effective inclusive teaching strategies within Adventist Elementary School–Cebu Inc.

The questionnaire utilized a four-point Likert scale to measure the respondents' level of agreement with each statement, with responses ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). This scaling method encouraged respondents to express a definite opinion by eliminating a neutral option. Higher scores indicated greater teacher knowledge of disability categories and a higher extent of instructional modification practices implemented to support learners in inclusive classrooms. For the scoring of teachers' knowledge of disability categories, a numerical rating of 1 corresponded to the scale 3.26–4.00, described as Strongly Agree, and interpreted as highly knowledgeable and confident in addressing students' needs. A numerical rating of 2 corresponded to the scale 2.51–3.25, described as Agree, and interpreted as generally knowledgeable with some gaps. A numerical rating of 3 corresponded to the scale 1.76–2.50, described as Disagree, and interpreted as limited knowledge, struggles with instructional strategies. A numerical rating of 4 corresponded to the scale 1.00–1.75, described as Strongly Disagree, and interpreted as lacks knowledge and ability to support learners effectively. For the scoring of instructional modification practices, a numerical rating of 4 corresponded to the scale 3.26–4.00, described as Strongly Agree, and interpreted as frequently applies effective instructional modifications. A numerical rating of 3 corresponded to the scale 2.51–3.25, described as Agree, and interpreted as generally, applies modifications but inconsistently. A numerical rating of 2 corresponded to the scale 1.76–2.50, described as Disagree, and interpreted as rarely applies instructional modifications. A numerical rating of 1 corresponded to the scale 1.00–1.75, described as Strongly Disagree, and interpreted as does not apply modifications effectively.

PANTAO
(International Journal of the Humanities and Social Sciences)
Volume 5, Issue 4
ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

RESULTS AND DISCUSSION

This section presents, analyzes, and interprets the data gathered from 34 regular teachers of Adventist Elementary School-Cebu Inc., who were selected through purposive sampling. The study used a descriptive-correlational research design, and data were collected with an adapted survey questionnaire. The questionnaire covered the respondents' demographic profile, their level of knowledge of disability categories, and the extent of their instructional modification practices. The data were treated with frequency counts, percentages, weighted means, standard deviations, and the Pearson Product-Moment Correlation Coefficient. The discussion is grounded in the data gathered, and the results are interpreted in direct relation to the objectives of the study. These objectives were to profile the respondents, determine their level of knowledge of disability categories and the extent of their instructional modification practices, and test the relationship between the two variables.

Demographic profile of the respondents

In terms of age and gender, the largest proportion of the 34 respondents belonged to the 33-42 age group, with 13 respondents or 38.24%. Of these, 10 or 29.41% were female and 3 or 8.82% were male. The 43-52 and 23-32 age groups each had 9 respondents or 26.47%. In each group, 6 or 17.65% were female and 3 or 8.82% were male. The smallest group was those above 52 years, with 3 respondents or 8.82%, all of whom were female (3 or 8.82%) and none male (0 or 0.00%). Overall, 25 respondents or 73.53% were female and 9 or 26.47% were male. These results imply that the teaching workforce was largely composed of mid-career teachers who had accumulated sufficient classroom experience while remaining actively engaged in instruction. The small proportion of older teachers may indicate turnover due to retirement or reassignment to administrative functions, and the female majority reflects the continuing trend in basic education. From the perspective of Piaget's Cognitive Development Theory, most respondents were likely within the formal operational stage, where abstract reasoning and systematic problem-solving are fully developed. These competencies are essential in planning instructional modifications for diverse learners. In relation to Vygotsky's Zone of Proximal Development, the variation in age and experience supports professional collaboration, in which more experienced teachers scaffold less experienced colleagues in differentiated instruction and inclusive strategies. The Universal Design for Learning framework of Meyer, Rose, and Gordon (2014) emphasizes flexible approaches that accommodate learner variability. The predominance of mid-career teachers suggests a workforce likely capable of providing multiple means of representation, engagement, and expression. Hall et al. (2022) likewise stressed the clear identification and interpretation of disability and functional difficulties in educational contexts. They noted that a consistent understanding of learner differences enables teachers to make informed decisions, provide timely interventions, and create responsive learning experiences. The profile therefore suggests that the teachers were positioned to strengthen their competencies in recognizing learner diversity and applying appropriate instructional modifications, and that continued experience and further academic development may better equip them for inclusive practice.

With respect to highest educational attainment, 14 respondents or 41.18% were bachelor's degree holders. The master's graduates and those with master's units were equally represented, with 10 respondents or 29.41% each, for a total of 34 or 100.00%. A significant proportion of the respondents had therefore pursued graduate studies. This reflects a strong

inclination toward professional development, since many had advanced beyond the minimum academic requirements for teaching. Teachers with graduate-level preparation are expected to possess stronger pedagogical knowledge and a firmer foundation in instructional planning and assessment. In light of Piaget's theory, higher educational attainment supports abstract thinking, analysis, and reflective judgment, which are needed in designing modifications for learners with diverse needs. Following Vygotsky's Zone of Proximal Development, differences in attainment create opportunities for collaborative learning, since teachers with higher qualifications may serve as mentors or resource persons who guide colleagues in research-based and inclusive practices. The presence of teachers with master's units and master's degrees also suggests potential readiness to apply the UDL principles of Meyer, Rose, and Gordon. This finding is supported by Konuk Er et al. (2023), who found that teachers' knowledge and understanding of learner difficulties were influenced by variables such as professional preparation and training. Their study reported that higher levels of knowledge were associated with better identification and support of learners with learning difficulties.

As to years of teaching experience, the largest group had 11-15 years of experience, with 12 respondents or 35.29%. This was followed by the 6-10 and 1-5 year groups, each with 8 respondents or 23.53%. Respondents with 16 years and above and those with less than one year of experience each numbered 3 or 8.82%, which made them the smallest groups, for a total of 34 or 100.00%. Most respondents therefore had moderate to long teaching experience. This indicates sufficient classroom exposure and instructional competence, together with a balanced mix of novice, developing, and highly experienced teachers. Such a mix maintains instructional stability while allowing for professional growth and mentoring. According to Piaget's Cognitive Development Theory, experienced teachers are more likely to show reflective thinking, problem-solving, and adaptive instructional skills. From the standpoint of Vygotsky's Zone of Proximal Development, the variation in experience creates opportunities for scaffolding through mentoring, collaborative planning, and the sharing of modification strategies. Under the UDL framework, teachers with longer experience have likely encountered a wider range of learner needs, which enables more effective differentiated instruction. Ginevra et al. (2022) support this interpretation. They emphasized that teachers' attitudes toward learners with disabilities were influenced by the information and exposure they received about students' profiles, and that greater exposure and understanding contributed to more positive attitudes and more responsive instructional practices.

Regarding teaching position, 14 respondents or 41.18% were Teacher III. They were followed by 8 Teacher I respondents or 23.53%, 7 Teacher II respondents or 20.59%, and 5 Master Teachers or 14.71%, for a total of 34 or 100.00%. Most respondents therefore occupied intermediate ranks, and a considerable number had advanced beyond entry-level positions. This suggests accumulated experience and professional growth. The presence of Master Teachers also indicates instructional leaders who can guide colleagues in inclusive practice. Through the lens of Piaget's theory, teachers in higher positions are likely to have more developed reflective and analytical skills, which enable informed modification decisions. In terms of Vygotsky's Zone of Proximal Development, Master Teachers and Teacher III respondents can scaffold lower-ranked colleagues through mentoring, coaching, and the sharing of strategies. The UDL framework suggests that teachers in higher positions are more likely to have broader exposure to professional development and leadership experiences. These experiences, together with participation in curriculum planning, instructional supervision, and school-based decision-making, deepen their understanding of inclusive education and prepare them to model effective modifications. Neca et al. (2022) support this view. They emphasized that professional experience, leadership roles, and exposure to inclusive practices contribute to more responsive

teaching approaches and stronger support systems, and that these experiences build teachers' confidence in adapting classroom practices to learners' varying abilities.

Level of the respondents' knowledge of disability categories

The level of the respondents' knowledge of disability categories yielded an aggregate mean of 3.22 with an aggregate standard deviation of 0.50, verbally described as "Moderately Knowledgeable." The respondents therefore possessed an adequate understanding of disability categories, although their knowledge was not yet extensive or highly advanced. The scale used was 4.21-5.00 Highly Knowledgeable, 3.41-4.20 Knowledgeable, 2.61-3.40 Moderately Knowledgeable, 1.81-2.60 Less Knowledgeable, and 1.00-1.80 Not Knowledgeable. The highest weighted mean, 3.44 with a standard deviation of 0.56, was obtained by the indicator "I know how different disability categories affect a student's learning needs," which was described as "Knowledgeable." This result indicates that the respondents generally understood that learners with different disabilities require varied approaches, accommodations, and support systems. The indicator "I can match instructional support strategies to specific disability categories" followed with a weighted mean of 3.41 and a standard deviation of 0.66, also described as "Knowledgeable." This suggests competence in connecting learner needs with appropriate interventions and modifications. The remaining indicators were all described as "Moderately Knowledgeable." These were "I know the legal and educational definitions of disability categories used in schools" (3.29, SD 0.46); "I understand the defining characteristics of students with intellectual disabilities" (3.24, SD 0.50); "I can distinguish between physical, sensory, and cognitive disabilities" (3.21, SD 0.48); "I am familiar with the learning challenges associated with emotional and behavioral disorders" (3.18, SD 0.39); "I can describe appropriate classroom expectations for each disability category" (3.15, SD 0.36); and "I am confident in explaining the educational needs of students with autism spectrum disorder" (3.12, SD 0.33). The remaining two indicators were "I can identify each major disability category recognized in inclusive education" (3.09, SD 0.71) and "I understand how multiple disability categories can co-occur in one student," which had the lowest weighted mean of 3.06 and a standard deviation of 0.60. The lowest means imply some difficulty with complex learner conditions involving overlapping disabilities. They also show that the respondents still need deeper familiarity with the classification of disability categories commonly encountered in inclusive classrooms. The findings suggest that the respondents had developed foundational knowledge through classroom exposure and professional experience. However, the moderate level may reflect limited specialized training, insufficient exposure to complex learner cases, or a lack of continuous professional development focused on inclusive education. In relation to Piaget's Cognitive Development Theory, the respondents were capable of logical and reflective reasoning about learner diversity. Their moderate knowledge indicates practical understanding gained from teaching experience, while advanced concepts such as co-occurring disabilities require further professional learning. From the perspective of Vygotsky's Zone of Proximal Development, mentoring, co-teaching, seminars, and collaboration with special education teachers and school professionals can scaffold areas where knowledge gaps exist. The UDL framework of Meyer, Rose, and Gordon underscores the recognition of learner variability. The moderate level suggests that the respondents could recognize diverse needs and implement some supports, but that continuous professional development is needed to apply flexible strategies consistently across disability categories. Sivrikaya et al. (2023) support these findings. They emphasized that teachers' competencies in disability content knowledge significantly influenced their effectiveness in addressing learners' needs, and that a general

understanding must be complemented by continued training and specialization. A basic level of knowledge alone is insufficient for inclusive classrooms, where instructional decisions must be tailored to individual learning profiles. Continuous professional learning deepens understanding of disability characteristics, appropriate interventions, and evidence-based strategies that promote meaningful participation and learning.

Extent of instructional modification practices

The extent of the respondents' instructional modification practices registered an aggregate mean of 3.19 with an aggregate standard deviation of 0.42, verbally described as "Moderately Practiced." The respondents therefore implemented instructional modifications to a moderate extent in addressing the needs of learners with disabilities. The scale used was 4.21-5.00 Highly Practiced, 3.41-4.20 Practiced, 2.61-3.40 Moderately Practiced, 1.81-2.60 Less Practiced, and 1.00-1.80 Not Practiced. All ten indicators were described as "Moderately Practiced." The highest weighted mean, 3.32 with a standard deviation of 0.47, was obtained by "I modify lesson content to suit the learning needs of students with disabilities." This suggests that the respondents commonly adjusted lesson content to accommodate learner diversity and improve the accessibility of instruction. The indicator "I adapt classroom seating and routines to increase accessibility for students with disabilities" followed with a weighted mean of 3.26 and a standard deviation of 0.45, which indicates recognition of the importance of an accessible and supportive classroom environment. Three indicators each obtained a weighted mean of 3.24. These were "I alter the way I present instructions (e.g., visuals, simplified language) for students who struggle with the general curriculum" (SD 0.50), "I adjust assessment formats (e.g., oral responses, extended time) for students with disabilities" (SD 0.43), and "I modify homework or practice assignments for students with identified learning needs" (SD 0.43). The other indicators were "I use alternative learning materials to support students with different disability needs" (3.21, SD 0.41), "I provide individualized task modifications during class activities" (3.18, SD 0.39), and "I reflect on and revise my instructional modifications based on student progress" (3.15, SD 0.36). The lowest weighted means were 3.06 (SD 0.34) for "I consult with special education personnel when planning instructional changes" and 3.03 (SD 0.39) for "I use differentiated instruction strategies regularly in mixed-ability classrooms." These imply that differentiated instruction was not consistently implemented and that collaboration with special education professionals was not consistently practiced. The findings suggest that the respondents were already applying modifications, but not at an extensive or highly consistent level. Large class sizes, limited instructional resources, insufficient training, and limited access to special education support services may explain this pattern. Teachers may understand the importance of modifications yet struggle to implement them consistently because of practical classroom constraints and varying learner needs. Viewed through Piaget's Cognitive Development Theory, the respondents applied reflective thinking and problem-solving in adapting instruction, although continuous professional growth remains necessary to strengthen their decision-making. According to Vygotsky's Zone of Proximal Development, mentoring, co-teaching, collaborative lesson planning, and interaction with special education personnel can provide scaffolding and technical guidance. Under the UDL framework, the respondents were beginning to apply inclusive principles through adaptations of content, environment, and assessment. However, stronger implementation of differentiated instruction and collaborative planning is needed to fully support diverse learners. Cerero et al. (2023) emphasized that teachers' competencies in adapting instructional approaches and using appropriate strategies play an important role in supporting learners with disabilities. They stressed the need to strengthen these competencies to ensure effective and inclusive teaching. Similarly, Porter et

ISSN 3028-0877 | e-ISSN 3155-6043 | DOI 10.69651/2022PIJHSS

al. (2022) found that educators' knowledge across different levels of instructional support significantly influenced the effectiveness of classroom interventions. They reported that teachers with stronger instructional knowledge were more capable of implementing appropriate accommodations and differentiated instruction. The extent of modification practices therefore bears directly on the quality of inclusive education. When teachers effectively modify instruction, learners with disabilities are more likely to participate actively, access learning opportunities, and achieve better educational outcomes.

Test of relationship between knowledge of disability categories and instructional modification practices

The Pearson Product-Moment Correlation Coefficient was used to determine whether a significant relationship existed between the respondents' knowledge of disability categories and their instructional modification practices. The computed r-value was 0.072, interpreted as a "Negligible Positive" correlation. The computed p-value was 0.687, which is higher than the 0.05 level of significance (two-tailed). Since the p-value exceeded the level of significance, the decision was to not reject the null hypothesis, and the result was Not Significant. The study therefore concluded that there was no significant relationship between the two variables. Although a negligible positive relationship existed, it was too weak to establish statistical significance. The respondents' level of knowledge of disability categories thus did not significantly influence the extent of their instructional modification practices in inclusive classrooms. This suggests that factors other than knowledge may shape teachers' practices. These may include the availability of instructional resources, administrative support, class size, access to training programs, teaching experience, collaboration with special education personnel, and actual classroom conditions. Even teachers with moderate knowledge may be constrained by practical limitations and institutional challenges that hinder consistent application. The findings contradicted Porter et al. (2022), who found that educators' instructional knowledge significantly influenced the effectiveness of classroom interventions and support strategies, with stronger knowledge contributing to more effective practices and accommodations. They also differed from Almalky and Alwahbi (2023), who found that teachers' understanding and perceptions of inclusive education were associated with their implementation of inclusive approaches, with better understanding linked to stronger engagement in classroom adaptations and learner support. However, the findings may be partially supported by Göransson et al. (2022), who emphasized that inclusive practices are influenced not only by teacher competence but also by broader institutional and structural conditions. Their study suggested that even knowledgeable teachers may struggle to implement inclusive practices when support systems, collaboration, and educational structures are limited. Aro et al. (2022) further emphasized that learners with disabilities exhibit diverse behavioral and emotional needs depending on disability type, gender, and context. This indicates that modification practices require contextual responsiveness, practical teaching experience, and continuous professional support in addition to theoretical knowledge, which may explain why knowledge alone did not significantly predict the respondents' practices. The differences between the present findings and earlier studies may stem from variations in school context, teacher preparation, institutional support, and the availability of inclusive education resources. In this study, the respondents may have possessed moderate knowledge but lacked the opportunities, training, or support systems needed to apply instructional modifications consistently.

Synthesis of the findings

Taken together, the data from the 34 respondents show a workforce of mid-career, mostly female teachers, with 25 or 73.53% female and 9 or 26.47% male. Most had pursued graduate studies, held intermediate teaching ranks, and had moderate to long teaching experience. The respondents were "Moderately Knowledgeable" of disability categories (aggregate mean 3.22, aggregate standard deviation 0.50) and "Moderately Practiced" in instructional modifications (aggregate mean 3.19, aggregate standard deviation 0.42). The Pearson r of 0.072 with a p-value of 0.687 at the 0.05 level of significance showed no significant relationship between the two variables, and the null hypothesis was not rejected. These results address the objectives of the study by describing the teachers' profile, levels of knowledge, and extent of practice, and by clarifying that knowledge alone does not account for how consistently teachers modify instruction. The study contributes to the inclusive education literature by showing that institutional support, collaboration with special education personnel, training, and classroom conditions deserve attention alongside teacher knowledge. These findings provide the empirical basis for the proposed Action Plan, which is presented in the next chapter and is designed to strengthen teachers' knowledge and instructional modification practices in inclusive classrooms.

CONCLUSION

This study assessed the knowledge of disability categories and the instructional modification practices of regular teachers at Adventist Elementary School–Cebu Inc., Cebu City Division, during the School Year 2025–2026, as a basis for a proposed Action Plan to enhance teaching strategies for diverse learners. The teacher-respondents were examined in terms of their demographic profile, including age, gender, highest educational attainment, years of teaching experience, and teaching position. The study also determined the level of their knowledge of disability categories, as reflected in their understanding of various disability types and the corresponding learning needs in inclusive classroom settings, and the extent of their instructional modification practices in lesson adaptation, instructional delivery, assessment modification, and classroom support strategies. It further investigated whether a significant relationship existed between the two variables. Data were gathered through structured survey questionnaires and analyzed using frequency, percentage, weighted mean, and standard deviation to describe the respondents' profile and the extent of the variables, while Pearson's correlation coefficient was used to test the relationship between knowledge of disability categories and instructional modification practices. This relationship served as the empirical basis for the development of the Action Plan aimed at strengthening inclusive teaching practices in the school.

The findings showed that the respondents had varied demographic profiles. They were distributed across younger, middle-aged, and older age groups, and the teaching force was predominantly female. Most had either completed or were pursuing graduate studies, while the rest held bachelor's degrees. Their teaching experience ranged from relatively new teachers to those with longer years of service, with a considerable number having moderate experience. Most occupied mid-level teaching roles, followed by entry-level teachers, while a smaller proportion held higher positions such as master teacher. Taken together, these results indicate a teaching force with diverse backgrounds and a generally strong orientation toward professional advancement, which forms the context within which their knowledge and practices were examined.

With respect to knowledge of disability categories, the respondents were generally moderately knowledgeable. They demonstrated better understanding in recognizing how

different disabilities affect learners' needs and in matching appropriate instructional support strategies, while lower ratings were observed in areas requiring a more complex understanding of disability conditions. In a similar pattern, the respondents reported that they moderately practiced instructional modifications, including modifying lesson content, adjusting instructional delivery, adapting assessments, and using alternative learning materials. Lower levels of practice were observed in differentiated instruction and in collaboration with special education personnel. These results suggest that the teachers possessed a workable foundation for inclusive teaching but had not yet fully developed the deeper conceptual understanding and the more sophisticated and collaborative practices that inclusive classrooms demand.

Notably, the test of relationship revealed no significant relationship between the respondents' knowledge of disability categories and their instructional modification practices. Based on the findings, the study therefore concluded that the respondents had varied demographic profiles, were generally moderately knowledgeable about disability categories, and moderately practiced instructional modifications in inclusive classrooms. The absence of a significant relationship implies that greater knowledge of disability categories does not automatically translate into stronger instructional modification practices, and that other factors, such as training in applying knowledge, institutional support, and collaboration with special education personnel, may shape how teachers adapt their instruction.

In light of these conclusions, it is recommended that the proposed Action Plan be implemented to strengthen teachers' competencies in differentiated instruction, disability management, and the effective implementation of instructional modifications in inclusive classrooms. The Action Plan should incorporate targeted professional development, mentoring, collaborative planning with special education personnel, and classroom-based training to enhance the consistent application of inclusive teaching strategies. Through continuous monitoring and professional support, the Action Plan may contribute to improving teachers' instructional practices and the overall quality of inclusive education at Adventist Elementary School–Cebu Inc.

REFERENCES

Allan, J. (2019). Productive pedagogies and the challenges of inclusion. British Journal of Special Education, 30(4), 175–181. https://www.researchgate.net/publication/229865493_Productive_pedagogies_and_the_challenge_of_inclusion

Anderson, L., & Horney, M. A. (2018). Supported eText: Assistive technology through text transformations. Reading Research Quarterly, 42(1), 153–160. https://www.researchgate.net/publication/230853115_Supported_eText_Assistive_technology_through_text_transformations

Arends, R. I. (2019). Learning to teach: International edition (3rd ed.). McGraw-Hill. https://hasanahummi.files.wordpress.com/2017/04/connect-learn-succeed-richard-arends-learning-to-teach-mcgraw-hill-2012.pdf

Aykut, C., Emecen, D. D., Dayi, E., & Karasu, N. (2019). Teaching chained tasks to students with intellectual disabilities by using video prompting in small group instruction. Educational Sciences: Theory & Practice, 14(3), 1082–1087. https://files.eric.ed.gov/fulltext/EJ1034096.pdf

Ashby, C. (2019). The trouble with normal: The struggle for meaningful access for middle school students with developmental disability labels. Disability & Society, 25(3), 345–358.

Bambang, S. (2019). Metode Pengembangan Fisik. Pusat Penerbit Universitas Terbuka. https://pustaka.ut.ac.id/lib/pgtk2302-metode-pengembangan-fisik/

Barnett, E., Van Beurden, P. J., Morgan, L. O., Brooks, J. R., & Beard, J. R. (2019). Childhood motor skill proficiency as a predictor of adolescent physical activity. Journal of Adolescent Health, 44, 252-259. https://pubmed.ncbi.nlm.nih.gov/19237111/

Blair, K. C., Fox, L., & Lentini, R. (2019). Use of positive behavior support to address the challenging behavior of young children within a community early childhood program. Topics in Early Childhood Special Education, 30(2), 68-79. https://www.researchgate.net/publication/249834188_Use_of_Positive_Behavior_Support_to_Address_the_Challenging_Behavior_of_Young_Children_Within_a_Community_Early_Childhood_Program

Bloomberg, L. D., & Volpe, M. (2019). Completing your qualitative dissertation: A roadmap from beginning to end. Sage. https://www.scirp.org/(S(351jmbntvnsjt1aadkozje))/reference/referencespapers.aspx?referenceid=2699430

Brown, J. R., & Dunn, J. (2020). Talk with your mother or sibling? Developmental changes in early family conversations about feelings. Child Development, 63(2), 336-349. https://pubmed.ncbi.nlm.nih.gov/1611938/

Burgess, K. (2018). All about learning disabilities. https://bit.ly/32jwWOh

Chai, Z., Vail, C. O., & Ayres, K. M. (2020). Using iPad applications to promote early literacy development in young children with disabilities. The Journal of Special Education, 48(4), 268–278. On latent learning, Gestalt and information processing theories, 9, 23-32. https://bit.ly/3tACwoS

Charlesworth, R. (2019). Understanding child development (4th ed.). Delmar Publishers. https://journals.sagepub.com/doi/10.1177/2158244014538431

Chigeza, P., & Halbert, K. (2019). Navigating e-learning and blended learning for pre-service teachers: Redesigning for engagement, access and efficiency. Australian Journal of Teacher Education, 39(11), 133–146. https://doi.org/10.14221/ajte.204v39n11.8

Committee to Evaluate the Supplemental Security Income Disability Program for Children with Mental Disorders, Board on the Health of Select Populations, Board on Children, Youth, and Families, Institute of Medicine, Division of Behavioral and Social Sciences and Education, & The National Academies of Sciences, Engineering, and Medicine. (2018). Clinical characteristics of intellectual disabilities. In T. F. Boat & J. T. Wu (Eds.), Mental disorders and disabilities among low-income children (Chapter 9). National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK332877/

Davis, A. S. (2018). Children with Down syndrome: Implications for assessment and intervention in the school. School Psychology Quarterly, 23(2), 271-28. https://www.researchgate.net/publication/232516854_Children_With_Down_Syndrome_Implications_for_Assessment_and_Intervention_in_the_School

Diamond, A. (2018). Close interrelation of motor development and cognitive development and of the cerebellum and prefrontal cortex. Child Development, 71(1), 44-56. https://pubmed.ncbi.nlm.nih.gov/10836557/

Dinehart, L., & Manfra, L. (2019). Associations between low-income children's fine motor skills in preschool and academic performance in second grade. Early Education & Development, 24(2), 138-161. https://www.researchgate.net/publication/259841178_Associations_Between_LowIncome_Children's_Fine_Motor_Skills_in_Preschool_and_Academic_Performance_in_Second_Grade

Doğru, Y. S. S., Alabay, E., & Kayılı, G. (2020). Determination of word knowledge and comprehension levels in normal developing and learning disorder children. Elementary Education Online, 9(3), 828-840. https://pubmed.ncbi.nlm.nih.gov/32189724/

Dolva, A., Coster, W., & Lilja, M. (2018). Functional performance in children with Down syndrome. American Journal of Occupational Therapy, 58(6), 621-629. https://pubmed.ncbi.nlm.nih.gov/15568546/

Dykens, L. M. (2018). Children with disabilities in the context of disaster: A social vulnerability perspective. Child Development, 81(4), 1260-1270. https://bit.ly/3nqZKL8

Dykens, L. M. (2018). Children with disabilities in the context of disaster: A social vulnerability perspective. Child Development, 81(4), 1260-1270. https://bit.ly/3nqZKL8

Ericsson, M. (2018). Effects of increased physical activity on motor skills and marks in physical education: An intervention study in school years 1 through 9 in Sweden. Physical Education and Sport Pedagogy, 16(3), 313-329. https://www.researchgate.net/publication/233435314_Effects_of_increased_physical_activity_on_motor_skills_and_marks_in_physical_education_An_intervention_study_in_school_years_1_through_9_in_Sweden

Fedynich, L., Bradley, K. S., & Bradley, J. (2018). Graduate students' perceptions of online learning. Research in Higher Education Journal, 27(1), 1–13. https://files.eric.ed.gov/fulltext/EJ1056187.pdf

Friend, M. (2018). Special education: Contemporary perspectives for school professionals (2nd ed.). Pearson Education. https://www.pearsonhighered.com/assets/samplechapter/0/2/0/5/0205375243.pdf

Gaul, M. (2018). Fine motor skills and executive function both contribute to kindergarten achievement. Child Development, 83(4), 1229-1244.

Gerjets, P., Scheiter, K., & Cierniak, G. (2019). The scientific value of cognitive load theory: A research agenda based on the structuralist view of theories. Educational Psychology Review, 21(1), 43-54. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3399936/

Gosalia, P. (n.d.). The importance of age-appropriate education. The Swaddle. https://theswaddle.com/importance-age-appropriate-education/

Gwynne, K., & Blick, B. (2019). Motor performance checklist for 5-year-olds: A tool for identifying children at risk of developmental co-ordination disorder. Journal of Paediatrics and Child Health, 40, 369–373. https://pubmed.ncbi.nlm.nih.gov/15228565/

Hartman, E., Houwen, S., Scherder, E., & Visscher, C. (2018). On the relationship between motor performance and executive functioning in children with intellectual disabilities. Journal of Intellectual Disability Research, 54(5), 468-477. https://bit.ly/3E6Mpyr

Hania, D. A., & Windiarti, R. (2018). 3D puzzle: As a fine motor skill therapy media for children with autistic syndrome. Indonesian Journal of Early Childhood Education Studies (IJECES), 5(1). https://atif.sobiad.com/index.jsp?modul=makale%20detay&Alan=sosyal&Id=AWvlR5xzyZgeuuwfSLyw

Harris, P. L. (2019). Trusting what you're told: How children learn from others. Belknap Press/Harvard University Press. https://sites.lsa.umich.edu/warneken/wp-content/uploads/sites/504/2018/03/Trusting-what-youre-told-how-children-learn-from-others.pdf

Hartman, E., Houwen, S., Scherder, E., & Visscher, C. (2020). On the relationship between motor performance and executive functioning in children with intellectual disabilities. Journal of Intellectual Disability Research, 54(5), 468-477. https://pubmed.ncbi.nlm.nih.gov/20537052

Heinerichs, S., Pazzaglia, G., & Gilboy, M. B. (2019). Using flipped classroom components in blended courses to maximize student learning, 11(1), 54–57. https://pubmed.ncbi.nlm.nih.gov/20537052/

Irawan, R. D. (2016). Terapi Okupasi (Occupational Theraphy) untuk Anak Berkebutuhan Khusus (Down Syndrome) (Studi Kasus Pada Anak Usia 5–6 Tahun di Balai Pengembangan Pendidikan Khusus Semarang). BELIA: Early Childhood Education Papers, 5(1). https://journal.unnes.ac.id/sju/index.php/belia/article/view/10859

Islamiyah, D., & Widyana, R. (2020). Terapi Okupasi Menyulam Untuk Meningkatkan Kemampuan Motorik Halus Pada Siswa Tunagrahita Ringan Di Slb Yapenas Yogyakarta. Insight: Jurnal Ilmiah. http://ejurnal.mercubuana-yogya.ac.id/index.php/psikologi/article/view/685

Johnson, H., Bigby, C., Iacono, T., Douglas, J., Katthagen, S., & Bould, E. (2018). Increasing day service staff capacity to facilitate positive relationships with people with severe intellectual disability: Evaluation of a new intervention using multiple baseline design. Journal of Intellectual & Developmental Disability, 42(4), 391-02. https://www.researchgate.net/publication/309444324_Increasing_day_service_staff_capacity

_to_facilitate_positive_relationships_with_people_with_severe_intellectual_disability_Evaluation_of_a_new_intervention_using_multiple_baseline_design

Khan, N. A. (2019). The relation of childhood physical activity and aerobic fitness to brain function and cognition: A review. Pediatric Exercise Science, 26(2), 138–146. https://pubmed.ncbi.nlm.nih.gov/24722921/

Kauffman, M. (2019). Exceptional learners: Introduction to special education (10th ed.). Pearson Education. https://www.pearson.com/en-us/subject-catalog/p/exceptional-learners-an-introduction-to-special-education/P200000001189?view=educator

Kim, H., Duran, C. A., Cameron, C. E., & Grissmer, D. (2018). Developmental relations among motor and cognitive processes and mathematics skills. Child Development, 89(2), 476–94. https://pubmed.ncbi.nlm.nih.gov/28181219/

Kirk, S., Gallagher, J. J., Coleman, M. R., & Anastasiow, N. J. (2021). Educating exceptional children (What's new in education). Wadsworth Publishing Group. https://fpg.unc.edu/publications/educating-exceptional-children-11th-ed

Kirschner, P. (2019). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential and inquiry-based teaching. Educational Psychologist, 41(2), 75-86. https://www.tandfonline.com/doi/abs/10.1207/s15326985ep4102_1

Kurniawati, G. (2017). The use of iPads® to promote leisure activities for adults with Autism Spectrum Disorder (ASD) and Intellectual Disability (ID). Temple University. https://bit.ly/3b89l3I

Lander, N., Morgan, P. J., Salmon, J. O., & Barnett, L. M. (2019). Improving early adolescent girls' motor skill: A cluster randomized controlled trial. Medicine & Science in Sports & Exercise, 49(12), 2498-2505. https://doi.org/10.1249/MSS.0000000000001382

Lestari, I. P. (2017). Presentation methods of children's work as an effort to develop speaking skills of 5-6 years in ABA Kindergarten 03 BOJA. BELIA: Early Childhood Education Papers, 6(2), 131-136. file:///C:/Users/PC1/Downloads/28535-Article%20Text-64129-2-10-20190131%20(2).pdf

LeDoux, J. E., & Brown, R. (2017). A higher-order theory of emotional consciousness. Proceedings of the National Academy of Sciences of the United States of America, 114, 201619316. https://doi.org/10.1073/pnas.1619316114

Logan, S. W., Webster, E. K., Getchell, N., Pfieffer, K. A., & Robinson, L. E. (2018). Relationship between fundamental motor skill competence and physical activity during childhood and adolescence: A systematic review. Kinesiology Review, 4(4), 416-426. 283685210_Relationship_Between_Fundamental_Motor_Skill_Competence_and_Physical_Activity_During_Childhood_and_Adolescence_A_Systematic_Review

Logan, S. W., Ross, S. M., Chee, K., Stodden, D. F., & Robinson, L. E. (2018). Fundamental motor skills: A systematic review of terminology. Journal of Sports Sciences, 36, 781–796. https://bit.ly/3qIz4YR

Lubans, D. R., Morgan, P. J., Cliff, D. P., Barnett, L. M., & Okely, A. D. (2019). Fundamental movement skills in children and adolescents: Review of associated health benefits. Sports Medicine, 40(12), 1019-35. https://pubmed.ncbi.nlm.nih.gov/21058749/

Lozano, C. S., Wüthrich, S., Büchi, J. S., & Sharma, U. (2022). The concerns about inclusive education scale: Dimensionality, factor structure, and development of a short-form version (CIES-SF). International Journal of Educational Research, 111, 1019.

Magill, R. A., & Anderson, D. (2020). Motor learning concepts and applications (11th ed.). McGraw-Hill Companies. https://www.mheducation.com/highered/product/motor-learning-control-concepts-applications-magill-anderson/M9781260240702.html

Maïano, C., Hue, O., Morin, A. J. S., & Moullec, G. (2019). Prevalence of overweight and obesity among children and adolescents with intellectual disabilities: A systematic review and meta-analysis. Obesity Reviews, 17, 599–611. https://bit.ly/3tLenNF

Martin, G., & Pear, J. (2019). Behavior modification: What it is and how to do it (9th ed.). Pearson Prentice Hall. https://www.taylorfrancis.com/books/mono/10.4324/9780429020599/behavior-modification-garry-martin-joseph-pear

Martin, A. J., & Evans, P. (2018). Load reduction instruction: Exploring a framework that assesses explicit instruction through to independent learning. Teaching and Teacher Education, 73, 203–214. https://doi.org/10.1016/j.tate.2018.03.018

Matilov, N. (2020). Brak I semejstvo (pp. 194-195). Skopje. https://files.eric.ed.gov/fulltext/EJ1092391.pdf

Memisevic, H. (2018). Visual-motor integration in children with mild intellectual disability: A meta-analysis. Perceptual and Motor Skills, 125(4), 696-717. https://doi.org/10.1177/0031512518774137

National Education Center. (2018). Cognitive load theory: Research that teacher need to understand. https://education.nsw.gov.au/content/dam/mainaeducation/about-us/educational-data/cese/2017-cognitive-load-theory.pdf

Orbeta, A. (2018). Population and poverty: A review of the links, evidence and implications for the Philippines. Journal of Philippine Development, 30(2), 195-227. https://www.pids.gov.ph/publication/discussion-papers/population-and-poverty-a-review-of-the-links-evidence-and-implications-for-the-philippines

Penstate. (2021). Sibling relationship can predict education. https://www.tun.com/blog/sibling-relationships-predict-educational-success/

Reynolds, N. L. (2019). The never ending quest for quality teaching, book on trends, issues and challenges. UE Philippines. https://files.eric.ed.gov/fulltext/EJ1096028.pdf

Rivers, B. A. A., Richardson, J. T. E., & Price, L. (2019). Promoting reflection in synchronous virtual learning spaces: Tertiary distance tutors' conceptions. The International Review of Research in Open and Distributed Learning, 15(3). file:///C:/Users/PC1/Downloads/28535-Article%20Text-64129-2-10-20190131%20(2).pdf

Şimşek, Ö. (2019). Okul öncesine devam eden çocukların okuma olgunluğu düzeyine Türkçe dil etkinlik programının etkisinin incelenmesi [Unpublished master's thesis]. Gazi University. https://www.researchgate.net/publication/320594179_Examination_of_the_Relationship_between_Demographic_Characteristics_of_the_Family_and_the_Language_Development_of_Children

Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. Oxford Review of Education, 35, 293–311. https://doi.org/10.1080/03054980902934563

Sidebotham, M., Jomeen, J., & Gamble, J. (2018). Teaching evidence based practice and research through blended learning to undergraduate midwifery students from a practice based perspective. Nurse Education in Practice, 14(2), 220-224.

Lersilp, S., Putthinoi, S., & P. K. (2019). Fine motor activities program to promote fine motor skills in a case of Down's syndrome. Global Journal of Health Science, 8(12). https://pubmed.ncbi.nlm.nih.gov/24189434/

Sweller, J., van Merriënboer, J. J. G., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. Educational Psychology Review, 31, 261–292.

Olabisi, N. (2018). Attitude of teachers towards the use of instructional materials to teaching children with intellectual disabilities. https://www.academia.edu/22792553/EFFECTIVENESS_OF_INSTRUCTIONAL_MATERIALS_IN_TEACHING_CHILDREN_WITH_INTELLECTUAL_DISABILITIES_IN_SOME_SELECTED_SCHOOLS

Olaitan, S. O., & Akpan, A. E. (2018). Childhood development and family life education. League of Reseaechers in Nigeria (LRN). https://journals.sagepub.com/doi/10.1177/2158244014538431

Otuka, J. O. E. (2020l). Improvision of science materials at the basic school level [Paper presentation]. ETF/NCCE Workshop for Lecturers in College of Education, Kaduna, Nigeria. https://eric.ed.gov/?id=EJ1155451

Plass, & Kalyuga. (2019). Using load reduction instruction (LRI) to boost motivation and engagement. British Psychological Society. https://www.researchgate.net/publication/310102750_Using_Load_Reduction_Instruction_LRI_to_boost_motivation_and_engagement

Pouw, W. T. L. J., Rop, G., De Koning, B. B., & Paas, F. (2019). The cognitive basis of the split-attention effect. Journal of Experimental Psychology: General, 148, 2058–2075. https://pubmed.ncbi.nlm.nih.gov/30973250/

Riethmuller, A. M., Jones, R. A., & Okely, A. D. (2020). Efficacy of interventions to improve motor development in young children: A systematic review. Pediatrics, 124(4), e782–e792. https://pubmed.ncbi.nlm.nih.gov/19736263/

Salawu, I. O. (2018). Introduction of instructional materials. In M. Ogunsanya (Ed.), Basic processes in education. Andrian Publication Series. https://files.eric.ed.gov/fulltext/ED560670.pdf

Training, S., The, I. N., & Retarded, M. (2019). Skill training in the mentally retarded persons. https://journals.sagepub.com/doi/10.1177/002246698201600303

Thompson, H. (2018). Teaching primary English. Macmillan. https://www.worldcat.org/title/teaching-primary-english/oclc/317622781

Thomas, E., & Uthaman, S. (2023). Knowledge and attitude of primary school teachers towards inclusive education of children with disabilities.

Wambui, S. E. (2019). Effect of use of instructional materials on learner participation in science classroom in preschool in Kiine Zone Kirinyaga County Kenya [Unpublished master's dissertation]. University of Nairobi. http://erepository.uonbi.ac.ke/handle/11295/55757

Wuang, Y. P., Wang, C. C., Huang, M. H., & Su, C. Y. (2018). Profiles and cognitive predictors of motor functions among early school-age children with mild intellectual disabilities. Journal of Intellectual Disability Research, 52, 1048–1060. https://pubmed.ncbi.nlm.nih.gov/18557969/

Yuhas, J., Cordeiro, L., Tassone, F., Ballinger, E., Schneider, A., Long, J. M., et al. (2019). Brief report: Sensorimotor gating in idiopathic autism and autism associated with fragile X syndrome. Journal of Autism and Developmental Disorders, 41(2), 248-53. https://pubmed.ncbi.nlm.nih.gov/20521090/