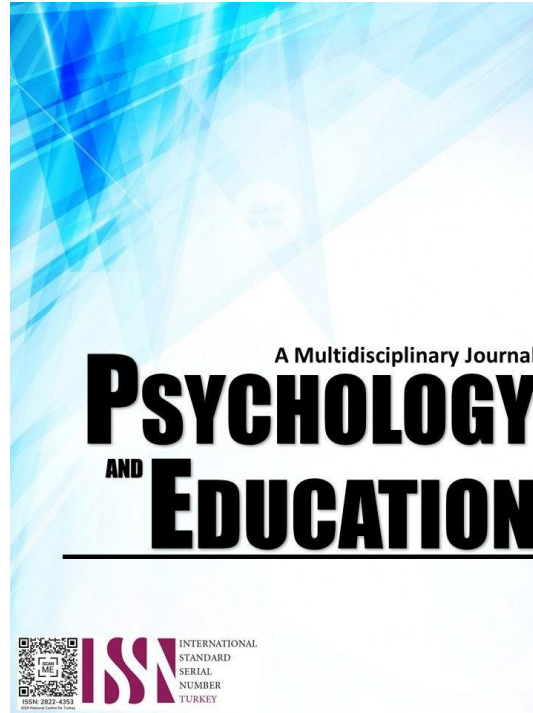


# DESIGNING INSTRUCTIONAL MATERIALS TO ENHANCE GROWTH AND DEVELOPMENT IN CHILDREN WITH DEVELOPMENTAL AND BEHAVIORAL DISORDERS



**PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL**

Volume: 56

Issue 1

Pages: 111-117

Document ID: 2026PEMJ5443

DOI: 10.70838/pemj.560107

Manuscript Accepted: 04-07-2026

## Designing Instructional Materials to Enhance Growth and Development in Children with Developmental and Behavioral Disorders

Claudine Pearl M. Icao,\* Lyne D. Guerrero, Kysel Jika May G. Bagus, Elvie C. Buncad, Merla P. Alagdon, Hazel Jade N. Huliganga, Jerome A. Parreñas, Lolito G. Estrera, RheaMarie V. Cerbo

For affiliations and correspondence, see the last page.

### Abstract

This study examined the role of instructional materials in enhancing the growth and development of children with developmental and behavioral disorders in inclusive classroom settings. Using a descriptive–correlational research design, the study involved 30 teachers and 30 learners from selected public elementary schools in Sarangani Province. Data were gathered through a validated researcher-made questionnaire and an observation checklist, and analyzed using descriptive statistics and Pearson Product–Moment Correlation. Findings revealed that instructional materials were implemented at a very high level, with an overall mean of 4.32 across key design principles, including clarity ( $M = 4.30$ ), visual support ( $M = 4.45$ ), multisensory engagement ( $M = 4.25$ ), developmental appropriateness ( $M = 4.40$ ), and flexibility ( $M = 4.20$ ). In terms of types of materials, visual aids ( $M = 4.50$ ) and manipulatives ( $M = 4.35$ ) were the most frequently used, followed by environmental supports ( $M = 4.40$ ) and digital resources ( $M = 4.20$ ). Developmental outcomes were also rated very high, particularly in cognitive development ( $M = 4.30$ ), social development ( $M = 4.25$ ), emotional development ( $M = 4.20$ ), and behavioral development ( $M = 4.22$ ). Indicators such as improved attention ( $M = 4.35$ ), better understanding ( $M = 4.40$ ), communication skills ( $M = 4.30$ ), and task completion ( $M = 4.30$ ) further highlighted the effectiveness of instructional materials. Correlation analysis showed moderate positive relationships between instructional materials and developmental domains, specifically cognitive ( $r = 0.65$ ), behavioral ( $r = 0.62$ ), social ( $r = 0.60$ ), and emotional development ( $r = 0.58$ ). These findings indicate that while instructional materials significantly contribute to learners' development, other factors also influence outcomes. The study concludes that well-designed instructional materials are essential in promoting holistic development and recommends continuous improvement, teacher training, and further research to strengthen inclusive educational practices.

**Keywords:** *instructional materials, developmental disorders, behavioral disorders, differentiated instruction, inclusive education*

### Introduction

Developmental and behavioral disorders present significant challenges that affect children's ability to learn, communicate, interact socially, and regulate emotions. These conditions, which include Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, learning disabilities, and emotional-behavioral disorders, often hinder a child's full participation in formal education. As a result, children with these disorders may struggle to keep pace with their peers in both academic and social domains. When appropriate interventions are not provided, these challenges can lead to delays in cognitive, emotional, and social development, ultimately influencing long-term academic success and overall well-being (WHO, 2020; APA, 2013). This underscores the urgent need for targeted educational strategies that address the diverse needs of these learners.

One critical approach to addressing these challenges is the use of well-designed instructional materials. Instructional materials serve as essential tools in delivering structured, engaging, and accessible learning experiences. Unlike conventional teaching resources, materials tailored for children with developmental and behavioral disorders are designed to accommodate individual differences, promote motivation, and encourage active participation. Research indicates that multisensory materials, visual supports, hands-on activities, and technology-based tools can significantly enhance learning outcomes by helping children acquire new skills, develop independence, and exhibit more positive behaviors (Browder & Spooner, 2011). These materials play a vital role in bridging gaps in understanding and engagement.

Despite their importance, educators often encounter challenges in designing and implementing effective instructional materials for learners with developmental and behavioral disorders. These challenges may stem from limited training, insufficient knowledge, and a lack of resources specific to special education needs. Consequently, there is a growing need for research that explores evidence-based approaches to the development of instructional materials. Understanding how child-specific characteristics interact with instructional design is essential in creating meaningful learning experiences. The integration of theoretical frameworks, such as Vygotsky's Zone of Proximal Development (ZPD), provides valuable insights into how guided learning and appropriate materials can support children's cognitive, social, and emotional growth. This study aims to examine how instructional materials can be effectively utilized to promote development among children with developmental and behavioral disorders.

Existing literature highlights the critical role of instructional materials in supporting learners with diverse needs. Studies emphasize that structured, engaging, and differentiated instruction enhances learning outcomes by addressing individual abilities. Graham and Harris (2021) demonstrated that scaffolded instruction improves literacy development by providing systematic guidance that helps

learners gradually build skills. Similarly, Alvarez and Reid (2022) found that combining behavioral support strategies with academic instruction leads to improvements in both classroom behavior and academic performance. Furthermore, Bailey and Kelly (2023) emphasized the importance of teacher beliefs and instructional flexibility in fostering inclusive learning environments. These findings suggest that instructional materials are not merely supplementary tools but integral components of effective teaching for learners with developmental and behavioral disorders.

Instructional materials encompass a wide range of resources used to facilitate learning and improve comprehension. These include visual aids, manipulatives, digital technologies, and printed materials that cater to various learning styles. For children with developmental and behavioral disorders, these materials must be intentionally designed to ensure clarity, engagement, and accessibility. Effective materials simplify complex concepts and present information in ways that are easier to process, thereby reducing cognitive overload. When properly utilized, instructional materials can transform abstract ideas into concrete learning experiences, making education more meaningful and inclusive.

Multisensory instructional materials are particularly effective for learners with special needs, as they engage multiple senses simultaneously. Browder and Spooner (2011) emphasized that incorporating visual, auditory, and kinesthetic elements enhances understanding and retention. These materials not only improve comprehension but also increase student engagement and participation. Additionally, structured and predictable materials can help reduce anxiety and disruptive behaviors by providing a consistent learning environment. Adaptability is another crucial feature of effective instructional materials, as it allows educators to modify content, pacing, and delivery based on individual learner needs. This flexibility ensures that all students, regardless of their abilities, have equitable opportunities to succeed.

Developmental and behavioral disorders significantly impact various aspects of a child's functioning, including attention, memory, communication, and emotional regulation. Children with conditions such as ASD, ADHD, and learning disabilities often face difficulties in following instructions, maintaining focus, and interacting with peers. According to the World Health Organization (2020), early and consistent intervention is essential to prevent delays in development. The American Psychiatric Association (2013) further noted that without appropriate support, these challenges can negatively affect academic achievement and overall quality of life. In educational settings, this necessitates the use of specialized strategies and materials that accommodate the unique needs of these learners and promote their active participation.

This study is anchored in the theoretical perspectives of Urie Bronfenbrenner and Lev Vygotsky, both of whom emphasize the importance of environmental and social factors in learning. Bronfenbrenner's Ecological Systems Theory highlights how different environmental layers, particularly the microsystem, influence a child's development. Instructional materials, as part of the immediate learning environment, directly shape educational experiences. Meanwhile, Vygotsky's Sociocultural Theory underscores the role of social interaction and guided learning, particularly through the concept of the Zone of Proximal Development. Instructional materials function as mediating tools that support learners in progressing from what they can do independently to what they can achieve with assistance. Previous research supports these frameworks by demonstrating that well-designed materials, combined with supportive teaching practices, lead to improved outcomes for children with developmental and behavioral disorders. These insights reinforce the importance of developing instructional materials that are responsive, inclusive, and grounded in both theory and practice.

## Research Questions

This study aimed to answer the following questions:

1. What are the common developmental and behavioral disorders that affect children's learning and growth?
2. What principles should guide the design of instructional materials for children with developmental and behavioral disorders?
3. Which types of instructional materials are most effective in promoting cognitive, social, emotional, and behavioral development?
4. How can educators and therapists implement instructional materials to maximize engagement, learning, and overall development in children with developmental and behavioral disorders?

## Methodology

### Research Design

This study adopted a descriptive–correlational research design to investigate the association between instructional materials and the growth and development of children with developmental and behavioral disorders. This design is appropriate for examining naturally occurring relationships without manipulating variables, thereby preserving the ecological validity of classroom contexts (Gravetter et al., 2009). Specifically, the approach enabled a systematic description of existing instructional practices and an empirical assessment of how variations in instructional materials relate to learners' cognitive, behavioral, and social outcomes. By integrating descriptive and correlational components, the design provided both a comprehensive profile of instructional material use and a statistical basis for determining the strength and direction of relationships among variables.

## Respondents

The study was conducted in selected public elementary schools in Sarangani Province, Philippines, chosen for their inclusion of learners with developmental and behavioral disorders. The participants comprised two groups: 30 teachers and 30 learners formally identified with developmental and behavioral conditions. Teachers were selected through purposive sampling based on their direct experience in handling learners with special needs, ensuring that respondents possessed relevant pedagogical exposure. Learners were identified using school records and diagnostic classifications, ensuring that inclusion criteria were consistently applied. This sampling strategy ensured that the data reflected authentic instructional practices and learner characteristics within inclusive educational settings.

## Instrumentation

Data were collected using two primary instruments: a researcher-developed questionnaire and an observation checklist. The questionnaire measured the perceived effectiveness of instructional materials across key domains, including learner engagement, adaptability of materials, and support for cognitive and behavioral development. The observation checklist, on the other hand, provided an objective measure of learners' classroom behaviors, such as participation, responsiveness, and observable behavioral changes during instructional activities. Both instruments were grounded in existing literature on special education and instructional design to ensure content relevance. To establish content validity, the instruments were evaluated by three experts in special education, and revisions were made based on their recommendations.

To ensure methodological rigor consistent with Scopus-indexed standards, the instruments underwent pilot testing prior to full-scale data collection. The pilot test involved a small group of respondents with similar characteristics to the study sample. Reliability analysis was conducted to assess internal consistency, with acceptable reliability coefficients achieved for all measured constructs. Content validity was established through expert review, while face validity was confirmed through feedback from pilot participants. These procedures ensured that the instruments were both reliable and appropriate for measuring the constructs under investigation.

## Procedure

Prior to data collection, formal approval was obtained from school administrators and relevant educational authorities. Ethical clearance procedures were strictly followed, including the distribution and signing of informed consent forms by teachers and parents or guardians of participating learners. The researcher personally administered the questionnaires to the teachers to ensure clarity of instructions and completeness of responses. Classroom observations were conducted concurrently during the implementation of instructional materials, allowing for real-time documentation of learner behaviors. Data collection spanned approximately two to three weeks to capture consistent instructional patterns and minimize temporal bias.

## Data Analysis

Data analysis was performed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequency counts, percentages, and means, were used to summarize the characteristics of the respondents and the overall patterns in instructional material use. To examine the relationship between instructional materials and learners' developmental outcomes, the Pearson Product-Moment Correlation coefficient ( $r$ ) was employed. This statistical test was selected due to its suitability for measuring the strength and direction of linear relationships between continuous variables. Assumptions of normality and linearity were assessed prior to analysis to ensure the validity of the results.

## Ethical Considerations

The study adhered to established ethical standards in educational research. Informed consent was obtained from all teacher participants and from the parents or guardians of the learners. Participation was strictly voluntary, and respondents were informed of their right to withdraw from the study at any stage without penalty. Confidentiality and anonymity were maintained through the use of coded identifiers, and no personally identifiable information was disclosed in any part of the research process. All collected data were securely stored and used exclusively for academic and research purposes.

## Results

This section presents the analysis, interpretation, and discussion of data gathered from the respondents. The results are organized based on the research questions, focusing on the design of instructional materials and their influence on the growth and development of children with developmental and behavioral disorders.

### *Profile of the Respondents*

Table 1. *Distribution of Respondents According to Years of Experience*

<i>Years of Experience</i>	<i>Frequency</i>	<i>Percentage</i>
1–3 years	10	25%
4–7 years	15	37.5%
8–10 years	8	20%

10+ years	7	17.5%
Total	40	100%

The majority of respondents (37.5%) had 4–7 years of experience, indicating that most participants had sufficient exposure to handling children with developmental and behavioral disorders.

### *Level of Design of Instructional Materials*

Table 2. *Level of Design Principles of Instructional Materials*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Simplicity and Clarity	4.30	Very High
Use of Visual Supports	4.45	Very High
Multi-sensory Engagement	4.25	Very High
Developmental Appropriateness	4.40	Very High
Flexibility and Adaptability	4.20	Very High
Overall Mean	4.32	Very High

The overall mean of 4.32 indicates that the design principles of instructional materials were highly observed. This suggests that educators are effectively incorporating essential design elements.

### *Types of Instructional Materials Used*

Table 3. *Types of Instructional Materials*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Visual Aids	4.50	Very High
Manipulatives	4.35	Very High
Printed Materials	4.10	High
Digital Resources	4.20	Very High
Environmental Supports	4.40	Very High
Overall Mean	4.31	Very High

Visual aids received the highest mean (4.50), indicating that they are the most commonly used and effective instructional materials among respondents.

### *Growth and Development Outcomes*

Table 4. *Cognitive Development*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Improved Attention	4.35	Very High
Better Understanding	4.40	Very High
Memory Retention	4.25	Very High
Problem-Solving Skills	4.20	Very High
Overall Mean	4.30	Very High

The results indicated a very high level of cognitive development, particularly in attention, comprehension, and memory retention. This suggests that instructional materials are effective in helping children process and understand information. The high rating for improved attention is significant, as children with developmental and behavioral disorders often struggle with focus. The use of engaging materials likely helps sustain attention and reduce distractions.

The findings also show that materials support conceptual understanding and problem-solving, indicating that learning is not limited to memorization but extends to higher-order thinking skills. This aligns with educational theories that emphasize meaningful learning through interaction and experience.

Table 5. *Social Development*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Peer Interaction	4.20	Very High
Communication Skill	4.30	Very High
Cooperation	4.25	Very High
Overall Mean	4.25	Very High

The findings revealed that instructional materials contributed positively to social development, including communication, interaction, and cooperation. This suggests that materials are not only used for academic purposes but also facilitate social learning. Materials that encourage group activities, role-playing, and communication help children develop interpersonal skills. This is especially important for children with autism or social difficulties, as structured interactions can improve their ability to relate with others. The results support the idea that learning is a social process, as proposed by Vygotsky, where interaction with others enhances development.

Table 6. *Emotional Development*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Reduced Frustration	4.15	High
Increased Confidence	4.25	Very High
Emotional Regulation	4.20	Very High
Overall Mean	4.20	Very High

The study found that instructional materials had a positive effect on emotional development, particularly in increasing confidence and supporting emotional regulation. The slightly lower mean for reduced frustration compared to other indicators suggests that while materials are helpful, some children may still experience challenges during learning tasks. This highlights the need for continuous adaptation and individualized support. The improvement in self-confidence indicates that when children successfully engage with instructional materials, they feel a sense of achievement, which motivates further learning.

Table 7. *Behavioral Development*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Reduced Disruptive Behavior	4.10	High
Improved Task Completion	4.30	Very High
Increased Independence	4.25	Very High
Overall Mean	4.22	Very High

The results showed that instructional materials contributed to positive behavioral outcomes, including increased task completion, independence, and reduced disruptive behavior. The high rating for task completion suggests that structured materials help children stay focused and finish activities. This is particularly important for children with ADHD or behavioral disorders who may struggle with persistence. The improvement in independence indicates that materials are effective in promoting self-directed learning. This aligns with the goal of special education to develop autonomy and functional skills.

### **Relationship Between Variables**

Table 8. *Correlation Between Instructional Materials and Development*

<i>Indicators</i>	<i>Mean</i>	<i>Interpretation</i>
Instructional Materials vs Cognitive Engagement	0.65	Moderate Positive
Instructional Materials vs Social Engagement	0.60	Moderate Positive
Instructional Materials vs Emotional Engagement	0.58	Moderate Positive
Instructional Materials vs Behavioral Engagement	0.62	Moderate Positive

The results show a moderate positive relationship between instructional material design and all aspects of development. This indicates that better-designed instructional materials are associated with improved developmental outcomes. The correlation analysis revealed a moderate positive relationship between instructional material design and all domains of development (cognitive, social, emotional, and behavioral). This means that as the quality of instructional materials improves, there is a corresponding improvement in children's development; however, the relationship is not strong, suggesting that other factors also influence development, such as teacher competence, classroom environment, family support, and individual differences. This finding is important because it highlights that instructional materials are significant but not the sole factor in child development. Effective teaching requires a combination of strategies and support systems.

### **Discussion**

The findings of the study demonstrate that instructional materials utilized by educators are highly aligned with established design principles, particularly in terms of clarity, visual support, multisensory engagement, and adaptability. The very high ratings across these indicators suggest that teachers are not only aware of effective instructional design practices but are also consistently implementing them in inclusive classroom settings. This supports the work of Browder and Spooner (2011), who emphasized that structured and multisensory materials significantly enhance accessibility and comprehension among learners with special needs. The results further reflect the increasing emphasis on differentiated instruction, where materials are tailored to accommodate diverse learner



profiles, thereby improving both engagement and learning outcomes.

The predominance of visual aids and manipulatives as the most effective instructional materials reinforces existing literature on sensory-based learning. Visual supports, which received the highest mean, are particularly beneficial for learners with Autism Spectrum Disorder and other developmental conditions, as they simplify abstract concepts and provide concrete representations of information. This finding aligns with Graham and Harris (2021), who highlighted that scaffolded and visually supported instruction enhances learners' ability to process and retain information. Additionally, the frequent use of environmental supports and digital resources indicates that teachers are integrating both traditional and modern approaches to instruction, reflecting a holistic and adaptive teaching strategy.

In terms of developmental outcomes, the study reveals that instructional materials significantly contribute to cognitive development, particularly in improving attention, comprehension, and memory retention. These findings are consistent with constructivist learning theories, which emphasize active engagement and meaningful interaction with learning materials. The results also corroborate Alvarez and Reid (2022), who found that integrating structured instructional strategies with behavioral supports enhances both academic performance and learner engagement. The high levels of problem-solving skills observed further suggest that instructional materials are facilitating higher-order thinking, rather than merely supporting rote learning, which is essential for long-term academic success.

The positive impact of instructional materials on social and emotional development highlights their broader role beyond academic instruction. Materials that promote interaction, communication, and cooperation contribute to the development of essential social skills, supporting Vygotsky's (1978) assertion that learning is inherently social. The observed improvements in emotional regulation and self-confidence also align with Bailey and Kelly (2023), who emphasized the importance of flexible and responsive teaching practices in fostering inclusive learning environments. However, the relatively lower rating for reduced frustration suggests that while instructional materials are effective, they must be continuously adapted to meet individual learner needs, particularly for those with more complex behavioral challenges.

Finally, the moderate positive correlations between instructional material design and all domains of development indicate that while instructional materials play a significant role, they are not the sole determinants of learner outcomes. This finding supports Bronfenbrenner's (1979) Ecological Systems Theory, which posits that child development is influenced by multiple interacting factors, including the classroom environment, teacher competence, and family support. The results suggest that instructional materials function as critical mediating tools within the learning environment, but their effectiveness is enhanced when combined with supportive teaching practices and broader ecological factors. Thus, a holistic approach to education is necessary to fully support the development of children with developmental and behavioral disorders.

## Conclusions

The study concludes that instructional materials used in inclusive classrooms are generally well-designed and effectively aligned with the developmental needs of children with developmental and behavioral disorders. The integration of multisensory, visually supported, and adaptable materials contributes significantly to learner engagement and accessibility. These findings affirm that intentional instructional design plays a central role in addressing the diverse learning needs of children and supports the delivery of inclusive and equitable education.

Furthermore, the results confirm that instructional materials have a substantial positive impact on cognitive, social, emotional, and behavioral development. Learners demonstrated improvements in attention, comprehension, communication, emotional regulation, and independence, indicating that instructional materials are instrumental in promoting holistic development. However, the moderate strength of the relationships suggests that these materials must be complemented by other factors such as effective teaching practices, supportive learning environments, and family involvement to maximize developmental outcomes.

Based on these conclusions, it is recommended that educators continue to design and utilize instructional materials that are developmentally appropriate, flexible, and responsive to individual learner needs. Teachers should regularly evaluate and modify their materials based on learners' progress and feedback, ensuring that instruction remains inclusive and effective. Incorporating interactive, technology-based, and contextually relevant materials may further enhance engagement and learning outcomes, particularly for learners with varying abilities and preferences.

At the institutional level, schools and educational agencies should prioritize professional development programs focused on instructional material design and inclusive teaching strategies. Providing adequate resources, including access to digital tools and specialized materials, is essential to support teachers in implementing effective instructional practices. Collaboration among educators, therapists, and curriculum developers should also be encouraged to facilitate the sharing of best practices and the continuous improvement of instructional resources.

Finally, future research should expand on the present study by including larger and more diverse samples to improve generalizability. Researchers are encouraged to explore additional variables such as teacher competence, parental involvement, and technology integration, as these factors may further influence developmental outcomes. Longitudinal studies may also be conducted to examine the sustained impact of instructional materials over time. Strengthening partnerships among schools, families, and communities, as


suggested by Epstein (2018), may provide a more comprehensive understanding of how to support the holistic development of children with developmental and behavioral disorders.

## References

- Alvarez, M., & Reid, R. (2022). Behavioral interventions and literacy outcomes: Integrating instructional and behavioral support. *Journal of Educational Psychology*.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Author.
- Bailey, A. L., & Kelly, S. (2023). Teacher beliefs and practices in inclusive literacy classrooms. *Literacy Research and Instruction*.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Browder, D. M., & Spooner, F. (2011). *Teaching students with moderate and severe disabilities*. Guilford Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2022). Effective teacher policy and practice: Balancing accountability and instructional support. *Educational Policy Review*.
- Epstein, J. L. (2018). *School, family, and community partnerships: Preparing educators and improving schools (2nd ed.)*. Routledge.
- Graham, S., & Harris, K. R. (2021). *Scaffolded instruction for struggling readers: Theory to practice*. *The Reading Teacher*.
- Gravetter, F. J., Wallnau, L. B., & Forzano, L. B. (2009). *Statistics for the behavioral sciences (8th ed.)*. Wadsworth.
- Sherrod, L. R., Torney-Purta, J., & Flanagan, C. (2009). *Participation in civic life: Civic engagement and youth development*. John Wiley & Sons.
- Tudge, J. R. H., & Hogan, D. M. (2005). An ecological approach to understanding children in context: The case of Bronfenbrenner. In J. R. H. Tudge & J. V. Jacobs (Eds.), *Handbook of developmental science, behavior, and genetics* (pp. 43–69). Sage Publications.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- World Health Organization. (2020). *Developmental disabilities*. <https://www.who.in>

## Affiliations and Corresponding Information

### **Claudine Pearl M. Icao**

Calabanit Elementary School  
Department of Education – Philippines  
 [icaoclaudinepearl@gmail.com](mailto:icaoclaudinepearl@gmail.com)

### **Lyne D. Guerrero**

Lambayong Central Elementary School  
Department of Education – Philippines

### **Kysel Jika May G. Bagus**

Gilbert Young Sr. Elementary School  
Department of Education – Philippines

### **Elvie C Buncad**

Gilbert Young Sr. Elementary School  
Department of Education – Philippines

### **Merla P. Alagdon**

Congan Integrated School  
Department of Education – Philippines

### **Hazel Jade N. Huliganga**

Holy Cross of Davao College Inc. – Philippines

### **Jerome A. Parreñas**

Malapatan Central Elementary School  
Department of Education – Philippines

### **Lolito G. Estrera**

Holy Cross of Davao College Inc. – Philippines

### **RheaMarie V. Cerbo**

Holy Cross of Davao College Inc. – Philippines