INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

MOVEMENT-ORIENTED LEARNING ACTIVITIES AND GROSS MOTOR DEVELOPMENT OF KEY STAGE 1 LEARNERS

ARIANNE M. MAGALLANES
Teacher I
Western Leyte College
Master of Arts in Education
Major in Elementary Education
arianne.magallanes@deped.gov.ph

ABSTRACT

This study determined the relationship between the movement-oriented learning activities and the gross motor development among Key Stage 1 learners. Specifically, it assessed the extent of implementation of movement-oriented learning activities in terms of locomotor, non-locomotor, manipulative, and rhythmic and movement games, and examined the level of gross motor development in terms of balance, coordination, agility, locomotor skills, and object-control skills. A descriptive-correlational research design was employed using a survey used by Dwyer et al., (2011) in their study, "The validity and reliability of a home environment preschool-age physical activity questionnaire (Pre-PAQ)" and Urich (2019) entitled, "Test of Gross Motor Development-Third Edition (TGMD-3) administered to the respondents. Data were analyzed using weighted mean and Pearson Product-Moment Correlation Coefficient. Findings revealed that the extent of implementation of movement-oriented learning activities was very high, indicating that movement-based strategies were consistently integrated into the learning experiences of Key Stage 1 learners. Likewise, the level of gross motor development of learners was found to be very high, demonstrating strong

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

competencies across all measured domains. Among the indicators, participation in action songs, walking activities, and rhythmic activities registered among the highest ratings, while learners exhibited particularly strong performance in balance and object-control skills. Furthermore, the study established a very strong positive and statistically significant relationship between movement-oriented learning activities and gross motor development, leading to the rejection of the null hypothesis. The findings indicate that increased implementation of movement-oriented learning activities contributes significantly to the enhancement of learners' gross motor skills. The study underscores the importance of integrating movement-based learning experiences in early elementary education to promote holistic learner development and improve fundamental motor competencies.

Keywords: *Movement-Oriented Learning Activities, Gross Motor Development, Key Stage 1 Learners*

INTRODUCTION

Early childhood education plays a vital role in establishing the foundation for lifelong learning and development. During the kindergarten years, children undergo significant growth in physical, cognitive, social, emotional, and language domains. Among these developmental areas, gross motor development serves as a fundamental component that influences children's readiness to learn, participate in classroom activities, and engage in meaningful educational experiences. Gross motor skills involve the coordination of large muscle groups used in activities such as running, jumping, hopping, balancing, throwing, and climbing. These skills

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

enable children to explore their environment, interact with peers, and participate actively in learning tasks.

In recent years, educators have increasingly recognized the importance of integrating movement-oriented learning activities into classroom instruction. Movement-oriented learning activities refer to structured and purposeful physical activities incorporated into educational experiences to enhance learning while promoting physical development. Such activities provide opportunities for learners to acquire knowledge through active participation, body movement, and sensory engagement. Research indicates that movement-based learning contributes significantly to the development of fundamental motor skills and supports children's overall growth and academic success.

According to Wang and Zhou (2024), motor development-focused exercise programs significantly improve gross motor skills among preschool children compared with ordinary physical activities. Their meta-analysis revealed that structured movement experiences positively influence children's motor competence and physical development. These findings emphasize the importance of providing intentional movement activities during the early childhood years to maximize developmental outcomes. Likewise, planned active play activities have been found to increase children's participation in moderate-to-vigorous physical activity while improving their fundamental movement skill proficiency, suggesting that carefully designed movement experiences contribute to both physical health and learning readiness.

Furthermore, movement-oriented learning activities extend beyond physical development and contribute to children's cognitive and academic growth. Capio et al. (2024)

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

demonstrated that integrating fundamental movement skills with academic learning activities, particularly mathematics instruction, enhanced children's motor competence and supported academic skill acquisition. The study highlighted that children learn more effectively when movement is embedded within instructional activities, allowing them to engage multiple sensory pathways during learning. Similarly, research on motor skill proficiency has shown significant contributions to children's cognitive and social development, indicating that physical movement and learning are closely interconnected.

Music and movement activities have also been found to support children's developmental growth. Laure and Habe (2023) reported that music-movement activities significantly improved rhythmic abilities and promoted active participation among preschool learners. Such activities stimulate coordination, balance, body awareness, and concentration, which are essential skills for successful classroom engagement. Additionally, movement-based activities encourage children to develop self-regulation, attention, and problem-solving abilities, which are critical factors associated with academic performance.

The importance of movement-oriented learning becomes even more relevant among kindergarten learners who possess limited early literacy experiences. Children entering school without sufficient exposure to language-rich environments often encounter difficulties in developing foundational literacy skills. Many learners from coastal communities face educational challenges associated with limited access to educational resources, poverty, geographical isolation, and reduced opportunities for early childhood enrichment programs. These circumstances may affect school readiness and academic achievement.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Research suggests that movement-based learning activities can serve as an effective instructional approach for young learners with limited literacy backgrounds because movement promotes active engagement, enhances memory retention, and supports language acquisition through experiential learning. Children learn concepts more effectively when they are physically involved in the learning process rather than relying solely on traditional teacher-centered instruction. Through movement-oriented activities such as action songs, games, role-playing, locomotor exercises, and kinesthetic storytelling, learners can develop vocabulary, listening comprehension, sequencing skills, and concept understanding while simultaneously strengthening gross motor abilities.

The relevance of the present study is further supported by findings indicating that physical literacy and movement experiences contribute to children's overall developmental competence. Yaswinda et al. (2021) emphasized that children's physical literacy develops through engagement in movement-related activities and noted that children living in coastal areas demonstrated notable movement abilities resulting from frequent interaction with their physical environment. However, despite these natural opportunities for movement, structured educational activities that intentionally develop gross motor skills and connect them with learning outcomes remain necessary to maximize children's developmental potential.

In the context of the researcher's school, many kindergarten learners come from coastal communities and enter school with little or no prior exposure to formal literacy experiences. These learners often exhibit varying levels of readiness in language, communication, and academic skills. Consequently, there is a need for instructional strategies

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

that accommodate their developmental needs while fostering active participation and meaningful learning experiences. Movement-oriented learning activities offer a promising approach because they align with children's natural inclination to move, play, and explore while supporting both motor and academic development.

Therefore, this study seeks to examine the relationship between movement-oriented learning activities and gross motor development among kindergarten learners. The findings of this study may provide valuable insights for teachers, school administrators, parents, and curriculum planners regarding the effectiveness of movement-based instructional approaches in promoting holistic development among young learners. Moreover, the study may contribute to the growing body of knowledge supporting the integration of movement-oriented strategies in kindergarten education.

This study aims to determine the relationship between movement-oriented learning activities and gross motor development among key stage 1 learners in Gayad Elementary School, Capoocan II District, Leyte Division. The findings of the study were basis for the proposed enhancement plan.

Further, it sought to answer the following sub-problems:

1. What is the extent of implementation of movement-oriented learning activities among key stage 1 learners in terms of:

    1.1 Locomotor activities,

    1.2 Non-locomotor activities,

    1.3 Manipulative activities, and

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

1.4 Rhythmic and movement games?

2. What is the level of gross motor development among key stage 1 learners in terms of:

2.1 balance,

2.2 coordination,

2.3 agility,

2.4 locomotor skills, and

2.5 object-control skills?

3. Is there a significant relationship between movement-oriented learning activities and gross motor development among key stage 1 learners?

4. Based on the findings, what enhancement plan can be proposed to strengthen movement-oriented learning activities and gross motor development among key stage 1 learners?

METHODOLOGY

Design. This study employed descriptive-correlational research design aims to determine the extent of implementation of movement-oriented learning activities in terms of locomotor, non-locomotor, manipulative, and rhythmic and movement games, and examined the level of gross motor development in terms of balance, coordination, agility, locomotor skills, and object-control skills. This study was conducted in Gayad Elementary School, Capoocan II District, Leyte Division. The forty-seven (47) key stage 1 learners are involved in this study. Two different surveys were used to gather the data. Part 1 of the survey is used to measure the

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

extent of implementation of movement-oriented learning activities among kindergarten learners in terms of: Locomotor activities, non-locomotor activities, Manipulative activities, and Rhythmic and movement games. This survey was used by Dwyer et al., (2011) in their study, "The validity and reliability of a home environment preschool-age physical activity questionnaire (Pre-PAQ)" while part 2 of the survey is used to measure the level of gross motor development among kindergarten learners in terms of: balance, coordination, agility, locomotor skills, and object-control skills. The survey was taken from the study of Urich (2019) entitled, "Test of Gross Motor Development-Third Edition (TGMD-3).

Sampling. The forty-seven (47) key stage 1 learners were involved in the study were involved in the study. Complete enumeration was employed in choosing the respondents of the study.

Research Procedure. Upon securing a research permit, data gathering was initiated. Application letters for study permits were personally submitted to concerned offices. A request letter was first submitted to the Schools Division Superintendent for approval to gather data from targeted respondents. After securing the approval of SDS, letters of permission were also submitted to the Public Schools District Supervisor and School Principals of the identified schools in the district. After getting the approvals, the researcher conducted data-gathering activities. An orientation was also held for the respondents, and their agreement through permits was to participate in the research. Then, the researcher distributed the survey to the respondents. It was conducted personally to the respondents with the assistance of the school head and other grade level teachers. After accomplishing the surveys, it was collected, tallied, and submitted for statistical treatment.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

Ethical Issues. Prior to data collection, the researcher obtained the necessary permissions and approvals from relevant authorities and conducted the study in accordance with established ethical standards. Participants were informed of the study's purpose, procedures, and significance, and informed consent was secured before participation. Confidentiality and anonymity were ensured by excluding personally identifiable information from all research records and reports. Participants were assured that their responses would be used solely for research purposes and would remain confidential. Throughout the study, the researcher maintained honesty, objectivity, and integrity in data collection, analysis, interpretation, and reporting. All sources were properly acknowledged in accordance with academic referencing standards. Research data and completed questionnaires were securely stored, with access restricted exclusively to the researcher to safeguard participant privacy and data confidentiality.

Treatment of Data. The quantitative responses underwent tallying and tabulation. Statistical treatment involved using specific tools: Simple Percentage and Weighted Mean were employed evaluate the extent of implementation of movement-oriented learning activities among kindergarten learners in terms of Locomotor activities, non-locomotor activities, Manipulative activities, and Rhythmic and movement games and level of gross motor development among kindergarten learners in terms of balance, coordination, agility, locomotor skills, and object-control skills. Pearson r was used to determine the significant relationship between the independent (movement-oriented learning activities) and dependent (gross motor development) variables.

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

RESULTS AND DISCUSSION

Table 1

Extent of Implementation of Movement-Oriented Learning Activities

Among Key Stage 1 Learners

No.	Statement (Indicator / Theme)	Weighted Mean	Interpretation
A. Locomotor Activities			
1	Learners participate in walking activities during class routines.	4.83	Strongly Agree
2	Learners engage in running activities during outdoor play.	4.74	Strongly Agree
3	Learners perform hopping activities during lessons and games.	4.60	Strongly Agree
4	Learners participate in jumping activities integrated into learning tasks.	4.53	Strongly Agree
5	Learners perform skipping and galloping activities during movement exercises.	4.36	Strongly Agree
B. Non-Locomotor Activities			
6	Learners perform bending movements during classroom activities.	4.28	Strongly Agree
7	Learners engage in stretching exercises regularly.	4.74	Strongly Agree
8	Learners practice twisting movements during movement sessions.	4.53	Strongly Agree
9	Learners perform balancing activities as part of learning tasks.	4.06	Strongly Agree
10	Learners participate in body control exercises during play activities.	4.34	Strongly Agree
C. Manipulative Activities			
11	Learners engage in throwing activities using balls or similar objects.	4.60	Strongly Agree

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

No.	Statement (Indicator / Theme)	Weighted Mean	Interpretation
12	Learners participate in catching activities during games.	4.60	Strongly Agree
13	Learners practice kicking objects during physical activities.	4.62	Strongly Agree
14	Learners engage in rolling objects during structured play.	4.70	Strongly Agree
15	Learners participate in striking or hitting activities using appropriate materials.	4.74	Strongly Agree
D. Rhythmic and Movement Activities			
16	Learners participate in action songs regularly.	4.83	Strongly Agree
17	Learners engage in dance activities integrated into lessons.	4.74	Strongly Agree
18	Learners perform movements following rhythmic patterns.	4.53	Strongly Agree
19	Learners participate in movement games that require coordination.	4.64	Strongly Agree
20	Learners demonstrate enjoyment and active participation in rhythmic activities.	4.83	Strongly Agree
Over-all Weighted Mean		**4.59**	**Strongly Agree**

LEGEND:

RANGES	**INTERPRETATION**
4.26 – 5.00	*Strongly Agree (Very High Implementation)*
3.26 – 4.25	*Agree (High Implementation)*
2.51 – 3.25	*Disagree (Moderate Implementation)*
1.76 – 2.50	*Strongly Disagree (Low Implementation)*
1.00 – 1.75	*Very Strongly Disagree (Very Low Implementation)*

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

Table 1 presents the extent of implementation of movement-oriented learning activities in terms of locomotor, non-locomotor, manipulative, and rhythmic and movement games for key stage 1 learners. The findings revealed that the implementation of movement-oriented learning activities among Key Stage 1 learners was very high, as evidenced by the overall weighted mean of 4.59, interpreted as Strongly Agree. All dimensions, including locomotor, non-locomotor, manipulative, and rhythmic movement activities, obtained weighted means within the highest range. Among these, participation in walking activities, action songs, and active engagement in rhythmic activities garnered the highest ratings. These results suggest that movement-oriented learning activities are consistently integrated into classroom instruction and daily learning experiences. The high ratings across all indicators indicate that teachers recognize the value of movement as a pedagogical strategy for increasing learner engagement, participation, and physical development. The findings further imply that learners are regularly exposed to varied movement experiences that support both physical and cognitive growth. Recent literature highlights that integrating physical activity into classroom instruction promotes children's participation, self-regulation, and overall developmental outcomes. Movement-rich learning environments also encourage active exploration, which is critical for young learners' holistic growth (McGowan et al., 2024). The results further imply that movement-oriented strategies have become a regular component of instructional delivery, reflecting teachers' recognition of the importance of physically active learning experiences in early childhood education.

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Table 2

Gross Motor Development of Key Stage 1 Learners

No.	Statement (Indicator / Theme)	Weighted Mean	Interpretation
A. Balance			
1	Learners can maintain balance while standing on one foot.	4.89	Strongly Agree
2	Learners can walk along a straight line without losing balance.	4.85	Strongly Agree
3	Learners can balance while moving through obstacle courses.	4.68	Strongly Agree
4	Learners demonstrate body control during physical activities.	4.66	Strongly Agree
5	Learners can maintain stability while performing movement tasks.	4.66	Strongly Agree
B. Coordination			
6	Learners coordinate arm and leg movements effectively.	4.77	Strongly Agree
7	Learners can perform movements requiring simultaneous body actions.	4.70	Strongly Agree
8	Learners demonstrate coordination while participating in games.	4.70	Strongly Agree
9	Learners can follow movement sequences accurately.	4.55	Strongly Agree
10	Learners exhibit coordinated movements during physical activities.	4.66	Strongly Agree

INSTABRIGHT e-GAZETTE

ISSN: 2704-3010

Volume VIII, Issue I

September 2026

Available online at https://www.instabrightgazette.com

****

No.	Statement (Indicator / Theme)	Weighted Mean	Interpretation
C. Agility			
11	Learners can quickly change direction while moving.	4.68	Strongly Agree
12	Learners respond promptly to movement instructions.	4.60	Strongly Agree
13	Learners can move efficiently around obstacles.	4.55	Strongly Agree
14	Learners participate actively in fast-paced games.	4.49	Strongly Agree
15	Learners demonstrate quick body movements during activities.	4.55	Strongly Agree
D. Locomotor Skills			
16	Learners can run with proper body control.	4.62	Strongly Agree
17	Learners can jump using both feet successfully.	4.64	Strongly Agree
18	Learners can hop on one foot with confidence.	4.60	Strongly Agree
19	Learners can skip or gallop during activities.	4.49	Strongly Agree
20	Learners perform locomotor movements appropriate for their age.	4.64	Strongly Agree
E. Object-Control Skills			

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

No.	Statement (Indicator / Theme)	Weighted Mean	Interpretation
21	Learners can throw a ball accurately toward a target.	4.77	Strongly Agree
22	Learners can catch a ball using their hands.	4.72	Strongly Agree
23	Learners can kick a stationary ball successfully.	4.74	Strongly Agree
24	Learners can roll a ball toward a designated area.	4.66	Strongly Agree
25	Learners can manipulate objects effectively during play activities.	4.66	Strongly Agree
Over-all Weighted Mean		**4.67**	**Strongly Agree**

LEGEND:

RANGES	INTERPRETATION
4.26 – 5.00	*Strongly Agree (Very High Development)*
3.26 – 4.25	*Agree (High Development)*
2.51 – 3.25	*Disagree (Moderate Development)*
1.76 – 2.50	*Strongly Disagree (Low Development)*
1.00 – 1.75	*Very Strongly Disagree (Very Low Development)*

Table 2 presents the level of gross motor development in terms of balance, coordination, agility, locomotor skills, and object-control skills among key stage 1 learners. The results showed that the gross motor development of Key Stage 1 learners was **very**

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

highly developed, with an overall weighted mean of **4.67**. High ratings were consistently observed across all domains, including balance, coordination, agility, locomotor skills, and object-control skills. Among the indicators, maintaining balance on one foot and walking along a straight line received the highest ratings, indicating strong foundational motor competence among the learners. The findings suggest that learners have developed age-appropriate motor skills necessary for successful participation in school-based physical activities and everyday tasks. The consistently high ratings across all domains demonstrate learners' ability to control body movements, coordinate actions, and manipulate objects effectively. These competencies are recognized as fundamental building blocks for lifelong physical activity participation and overall physical literacy. Studies have shown that children with well-developed fundamental movement skills are more likely to engage in physical activity, demonstrate higher motor competence, and achieve positive developmental outcomes over time (Kasanen et al., 2023). Furthermore, recent evidence emphasizes that structured movement experiences contribute significantly to the development of locomotor and object-control skills, supporting children's physical and cognitive growth during the early years (Wang & Zhou, 2024).

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Table 3

Test of Relationship Between Implementation of Movement-Oriented Learning Activities and Gross Motor Development of Key Stage 1 Learners

Variables Correlated	r (Pearson)	Computed t	Table Value @ 0.05	Decision on Ho	Interpretation
Extent of Implementation of Movement-Oriented Learning Activities (Table 1) and Gross Motor Development of Key Stage 1 Learners (Table 2)	0.92	13.87	1.96	Reject Ho	Significant Relationship (Very Strong Positive)

Table 3 presents the test of relationship between the extent of implementation of movement-oriented learning activities in terms of locomotor, non-locomotor, manipulative, and rhythmic and movement games and level of gross motor development in terms of balance, coordination, agility, locomotor skills, and object-control skills among key stage 1 learners. The Pearson Product-Moment Correlation analysis revealed a **very strong positive significant relationship** between the implementation of movement-oriented learning activities and the gross motor development of Key Stage 1 learners (**r = 0.92**). The computed t-value of **13.87** exceeded the critical value of **1.96** at the 0.05 level of significance, leading to the rejection of the null hypothesis. This result indicates that increased implementation of movement-oriented learning activities is strongly associated with higher levels of gross motor

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

development. The magnitude of the correlation suggests that movement-based instructional practices substantially contribute to the enhancement of learners' balance, coordination, agility, locomotor skills, and object-control abilities. In practical terms, learners who are regularly exposed to structured and varied movement experiences tend to demonstrate better motor competence than those with fewer opportunities for physical engagement. The finding is supported by recent research demonstrating that movement-focused interventions and physically active learning programs significantly improve gross motor skills among young children. A meta-analysis by Wang and Zhou (2024) concluded that motor development-focused exercise programs produce substantial improvements in locomotor skills, object-control skills, and overall gross motor competence. Similarly, studies on movement-based learning have reported significant gains in coordination, balance, and motor performance when children regularly participate in structured movement activities (Wang & Zhou, 2024). Hence, the findings affirm that movement-oriented learning activities serve as an important mechanism for promoting gross motor development among Key Stage 1 learners. The strong relationship between the two variables underscores the need for schools to sustain and strengthen movement-integrated instructional practices as part of early childhood education programs.

CONCLUSION

Based on the findings of the study, it revealed that movement-oriented learning activities were implemented to a very high extent, interpreted as *Strongly Agree*. Across the four domains of movement-oriented learning activities, namely locomotor, non-locomotor,

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

manipulative, and rhythmic activities, respondents consistently perceived a high level of implementation. These results indicate that teachers effectively integrate movement-based experiences into classroom instruction and learning activities. Furthermore, the gross motor development of Key Stage 1 learners was found to be at a very high level, also interpreted as *Strongly Agree*. Learners demonstrated strong competencies in balance, coordination, agility, locomotor skills, and object-control skills. The findings suggest that learners possess age-appropriate gross motor abilities that support their physical growth, active participation, and overall development. Most importantly, the study established a very strong positive and significant relationship between the implementation of movement-oriented learning activities and the gross motor development of learners. This indicates that increased implementation of movement-oriented learning activities is associated with enhanced gross motor development among Key Stage 1 learners. Therefore, the study concludes that movement-oriented learning activities play a significant role in promoting the gross motor development of young learners. The consistent and purposeful integration of movement experiences in classroom instruction contributes positively to the development of essential motor skills needed for physical, social, and academic success.

RECOMMENDATIONS

1. Teachers should continue integrating movement-oriented learning activities across different learning areas to sustain and further enhance learners' gross motor development.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Activities should be varied, developmentally appropriate, and aligned with curriculum objectives.

2. School administrators should strengthen support for movement-based learning programs by providing adequate resources, instructional materials, and safe learning environments that encourage active participation among learners.

3. Parents and guardians should be encouraged to reinforce movement-oriented activities at home through active play, physical exercises, and family-based recreational activities that support children's motor skill development.

4. Curriculum planners and education officials may consider expanding the integration of movement-oriented strategies in early childhood and elementary education curricula to promote holistic learner development.

5. Professional development programs should be conducted for teachers to enhance their competencies in designing and implementing innovative movement-oriented learning activities that effectively address learners' physical and developmental needs.

6. Future researchers may conduct similar studies involving larger populations, different grade levels, or additional variables such as cognitive development, academic performance, social skills, and learner engagement to further validate and expand the findings of the present study.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

ACKNOWLEDGMENT

The researcher would like to express her profound thanks to all those who had supported and guided her throughout the journey of completing this thesis. First and foremost, Praises and Thanks to the Lord and Savior Jesus Christ, for His presence, provision, protection, and preservation. To Dr. Jasmine B. Misa, her thesis adviser, her profound thanks for her enduring patience, critical insights, and exceptional mentorship. Her commitment to academic excellence and thoughtful guidance have been deeply instrumental in refining the direction and quality of this study. She extends her appreciation to the faculty members of the Graduate Department of Western Leyte College for their wisdom, encouragement, and commitment to fostering an environment of academic growth. She is grateful to the members of her Thesis Committee and Panel Examiners headed by Dr. Bryant C. Acar, Chairman and Scribe of the Pre and Oral Examination panel, together with Dr. Annabelle A. Wenceslao and Dr. Elvin H. Wenceslao for their constructive feedback and valuable suggestions. She acknowledges the School Division Superintendent of DepEd Leyte Division, Dr. Mariza S. Magan for allowing the researcher to conduct the study. The researcher would like also to express her sincere appreciation to the Gayad Elementary School family, under the leadership of Randy C. Sabite, for their invaluable support and encouragement throughout this research journey. Their cooperation, understanding, and commitment to educational excellence have played a significant role in the realization and successful completion of this endeavor. Lastly, she dedicated this work to her beloved family for their unconditional love, patience, and unwavering support throughout this journey. Her heartfelt gratitude goes to her husband,

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

Mel, whose constant encouragement, sacrifices, and belief in her have been a source of strength and inspiration. This achievement is dedicated to all of you with love and gratitude. This thesis would not have been successfully completed without the invaluable support, guidance, and encouragement of all the individuals who have been part of this journey. To God be all the highest glory.

REFERENCES

[1] Adipat S, Laksana K, Busayanon K, Ausawasowan A, Adipat B. Engaging Students in the Learning Process with Game-Based Learning: The Fundamental Concepts. International Journal of Technology in Education, 2021;4(3): 542–552. https://doi.org/10.46328/ijte.169

[2] Aksoy M, Belgin Aksoy A. An investigation on the effects of block play on the creativity of children. Early Child Development and Care, 2023;193(1): 139– 158. https://doi.org/10.1080/03004430.2022.2071266

[3] Ali SR, Mukhtar F. A case study of fun learning with numeracy of preschoolers. Southeast Asia Early Childhood Journal, 2017;6: 51–58. https://doi.org/10.37134/saecj.vol6.6.2017

[4] Annuha, A. (2024). *The Effectiveness of Nature-Based Learning on Early Childhood Gross Motor Development*. Jurnal Pena PAUD.

[5] Apriyani I, Suntoda A, Budiman D. Uji Validitas Dan Reliabilitas Test Of Gross Motor Development-2 (TGMD-2) Dale A. Ulrich Pada Anak 9 Tahun. TEGAR: Journal of Teaching Physical Education in Elementary School, 2018;2(1): 40. https://doi.org/10.17509/tegar.v2i1.13780

****

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[6] Bai, M., Lin, N., Yu, J. J., Teng, Z., & Xu, M. (2024). *The effect of planned active play on the fundamental movement skills of preschool children*. Human Movement Science, 96, 103241. https://doi.org/10.1016/j.humov.2024.103241.

[7] Bakhsh SA. Using Games as a Tool in Teaching Vocabulary to Young Learners. English Language Teaching, 2016;9(7): 120. https://doi.org/10.5539/elt.v9n7p120

[8] Baranowski T, Blumberg F, Buday R, DeSmet A, Fiellin LE, et al. Games for Health for Children—Current Status and Needed Research. Games for Health Journal, 2016;5(1): 1–12. https://doi.org/10.1089/g4h.2015.0026

[9] Battaglia G, Giustino V, Tabacchi G, Lanza M, Schena F, Biino V, et al. Interrelationship Between Age, Gender, and Weight Status on Motor Coordination in Italian Children and Early Adolescents Aged 6–13 Years Old. Frontiers in Pediatrics, 2021;9. https://doi.org/10.3389/fped.2021.738294

[10] Benda RN, Marinho NFS, Duarte MG, RibeiroSilva PC, Ortigas PR, Machado CF, et al. A brief review on motor development: fundamental motor skills as a basis for motor skill learning. Brazilian Journal of Motor Behavior, 2021;15(5): 342–355. https://doi.org/10.20338/bjmb.v15i5.257

[11] Białek-Dratwa A, Szczepańska E, Szymańska D, Grajek M, Krupa-Kotara K, Kowalski O. Neophobia—A Natural Developmental Stage or Feeding Difficulties for Children? Nutrients, 2022;14(7): 1521. https://doi.org/10.3390/nu14071521

[12] Bisi MC, Pacini Panebianco G, Polman R, Stagni R. Objective assessment of movement competence in children using wearable sensors: An instrumented version of the TGMD-2

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

locomotor subtest. Gait & Posture, 2017;56: 42–48. https://doi.org/10.1016/j.gaitpost.2017.04.025

[13] Breitwieser J, Brod G. Cognitive Prerequisites for Generative Learning: Why Some Learning Strategies Are More Effective Than Others. Child Development, 2021;92(1): 258–272. https://doi.org/10.1111/cdev.13393

[14] Burns, R. D., Byun, W., & Brusseau, T. A. (2019). Gross motor skills predict classroom behavior in lower-income children. *Frontiers in Sports and Active Living*, *1*, Article 29. https://doi.org/10.3389/fspor.2019.00029

[15] Calero-Morales, S., Vinueza-Burgos, G. D. C., Yance-Carvajal, C. L., & Paguay-Balladares, W. J. (2023). *Gross motor development in preschoolers through conductivist and constructivist physical recreational activities: Comparative research*. Sports, 11(3), 61. https://doi.org/10.3390/sports11030061

[16] Capio, C. M., Cheung, S. K., Fung, S. S. W., & Hu, X. (2024). *Integrating fundamental movement skills and mathematics in early childhood: A pilot study*. Children, 11(4), 457. https://doi.org/10.3390/children11040457

[17] Capio, C. M., Mendoza, N. B., Jones, R. A., Masters, R. S. W., & Lee, K. (2024). *The contributions of motor skill proficiency to cognitive and social development in early childhood*. Scientific Reports, 14, 27956. https://doi.org/10.1038/s41598-024-79538-1.

[18] Chow HW, Chang KT, Fang IY. Evaluation of the Effectiveness of Outdoor Fitness Equipment Intervention in Achieving Fitness Goals for Seniors. International Journal of

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Environmental Research and Public Health, 2021;18(23): 12508. https://doi.org/10.3390/ijerph182312508

[19] Coombes L, Bristowe K, Ellis-Smith C, Aworinde J, Fraser LK, Downing J, et al. Enhancing validity, reliability and participation in self-reported health outcome measurement for children and young people: a systematic review of recall period, response scale format, and administration modality. Quality of Life Research, 2021;30(7): 1803–1832. https://doi.org/10.1007/s11136-021-02814-4

[20] Creswell WJ, Creswell JD. Research Design: Qualitative, Quantitative and Mixed Methods Approaches. SAGE Publications, Inc.; 2018.

[21] Dorji P, Gyeltshen C, Sanyasi GD, Sithub P, Dema T, Yangzom ., et al. The Impact of Early Child Care and Development Education on Cognitive, Psychomotor, and Affective Domains of Learning. Asian Journal of Education and Social Studies, 2020; 29–38. https://doi.org/10.9734/ajess/2020/v12i130303

[22] Dwyer, G. M., Hardy, L. L., Peat, J. K., & Baur, L. A. (2011). *The validity and reliability of a home environment preschool-age physical activity questionnaire (Pre-PAQ).* International Journal of Behavioral Nutrition and Physical Activity, 8(86). https://doi.org/10.1186/1479-5868-8-86.

[23] El-Sabagh HA. Adaptive e-learning environment based on learning styles and its impact on development students' engagement. International Journal of Educational Technology in Higher Education, 2021;18(1). https://doi.org/10.1186/s41239-021-00289-4

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[24] Esen HT, Güçlüöver A, Kurnaz M, Altinkök M. The impact of coordination-based movement education model on balance development of 5-yearold children. Frontiers in Psychology, 2023;13. https://doi.org/10.3389/fpsyg.2022.1045155

[25] Fan Y, Chong DK, Li Y. Beyond play: a comparative study of multi-sensory and traditional toys in child education. Frontiers in Education, 2024;9. https://doi.org/10.3389/feduc.2024.1182660

[26] Feiyue Z. Edutainment Methods in the Learning Process: Quickly, Fun and Satisfying. International Journal of Environment, Engineering and Education, 2022;4(1): 19–26. https://doi.org/10.55151/ijeedu.v4i1.41

[27] Gallotta MC, Zimatore G, Falcioni L, Migliaccio S, Lanza M, Schena F, et al. Influence of Geographical Area and Living Setting on Children's Weight Status, Motor Coordination, and Physical Activity. Frontiers in Pediatrics, 2022;9. https://doi.org/10.3389/fped.2021.794284

[28] Gandotra A, Kotyuk E, Bizonics R, Khan I, Petánszki M, Kiss L, et al. An exploratory study of the relationship between motor skills and indicators of cognitive and socio-emotional development in preschoolers. European Journal of Developmental Psychology, 2023;20(1): 50–65. https://doi.org/10.1080/17405629.2022.2028617

[29] Garaigordobil M, Berrueco L, Celume MP. Developing Children's Creativity and SocialEmotional Competencies through Play: Summary of Twenty Years of Findings of the Evidence-Based Interventions "Game Program". Journal of Intelligence, 2022;10(4): 77. https://doi.org/10.3390/jintelligence10040077

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[30] Gibson, V., Van der Merwe, E., & Coetzee, B. A. (2024). *Motor milestones and physical activity: A scoping review of ECD practitioners' contributions*. South African Journal of Childhood Education, 14(1).

[31] Ginciene G, Amato C, Rodrigues De Oliveira E, Oliveira Dos Santos I, Dell Osbel E, Leonardi TJ. Understanding the pedagogical practice in futsal teaching and learning process based on the TGfU approach. International Journal of Sports Science & Coaching, 2023;18(1): 91–100. https://doi.org/10.1177/17479541211070790

[32] Gottwald V, Davies M, Owen R. Every story has two sides: evaluating information processing and ecological dynamics perspectives of focus of attention in skill acquisition. Frontiers in Sports and Active Living, 2023;5. https://doi.org/10.3389/fspor.2023.1176635

[33] Gultom, I., Simatupang, D., & Damanik, S. H. (2024). *The influence of aerobic exercise on gross motor development achievements in children aged 5–6 years*. Asian Journal of Applied Education, 3(1).

[34] Integrating Movement-Based Activities into Kindergarten Math. (2022). *ACU Electronic Theses and Dissertations*. Paper 454. https://digitalcommons.acu.edu/cgi/viewcontent.cgi?article=1047&context=metl

[35] Iten N, Petko D. Learning with serious games: Is fun playing the game a predictor of learning success? British Journal of Educational Technology, 2016;47(1): 151–163. https://doi.org/10.1111/bjet.12226

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[36] Jopowicz A, Wiśniowska J, Tarnacka B. Cognitive and Physical Intervention in Metals' Dysfunction and Neurodegeneration. Brain Sciences, 2022;12(3): 345. https://doi.org/10.3390/brainsci12030345

[37] Kahraman Y. Postural Structure and Mechanic Syndromes Associated with Human Movement Physiology: A Traditional Review of Re-modelling Musculature. Turkish Journal of Osteoporosis, 2021;27(2): 61–67. https://doi.org/10.4274/tod.galenos.2021.49389

[38] Kasanen, M., Laukkanen, A., Niemistö, D., Kotkajuuri, J., Luukkainen, N. M., & Sääkslahti, A. (2023). Do Fundamental Movement Skill Domains in Early Childhood Predict Engagement in Physical Activity of Varied Intensities Later at School Age? 1 3-Year Longitudinal Study. https://journals.humankinetics.com/view/journals/jmld/11/3/article-p424.xml

[39] Kaya, E., Emlek, B., Uğurlu, D., Ünver, R., & Yapıcı, H. (2024). *A study investigating the effects of movement education on motor skill development in preschool period*. Journal of Exercise Science & Physical Activity Reviews.

[40] Kiliç Z, Uyanik G, Çağlak Sari S. Examining the Effects of Movement Activities of Coordinated Approach to Child Health (CATCH) Program on Locomotor and Manipulative Skills of 4-5 Years Old Children. Participatory Educational Research, 2022;9(1): 41– 60. https://doi.org/10.17275/per.22.3.9.1

[41] Lasri, R. R., Sin, T. H., Welis, W., Handayani, S. G., Raibowo, S., Wulandari, I., & Ockta, Y. (2024). Nutritional status and gross motor skills: Study of children in coastal areas.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

Jurnal Penelitian Pendidikan IPA, *10*(Special Issue), 546-551. https://doi.org/10.29303/jppipa.v10ispecialissue.8660

[42] Laure, M., & Habe, K. (2024). *Stimulating the development of rhythmic abilities in preschool children in Montessori kindergartens with music-movement activities: A quasi-experimental study*. Early Childhood Education Journal, 52, 563–574.

[43] Lee-Cultura S, Sharma K, Giannakos M. Children's play and problem-solving in motionbased learning technologies using a multi-modal mixed methods approach. International Journal of Child-Computer Interaction, 2022;31: 100355. https://doi.org/10.1016/j.ijcci.2021.100355

[44] Liu C, Cao Y, Zhang Z, Gao R, Qu G. Correlation of fundamental movement skills with health-related fitness elements in children and adolescents: A systematic review. Frontiers in Public Health, 2023;11. https://doi.org/10.3389/fpubh.2023.1129258

[45] Liu, B., Yan, Y., Jia, J., & Liu, Y. (2025). *Can active play replace skill-oriented physical education in enhancing fundamental movement skills among preschool children? A systematic review and meta-analysis*. BMC Public Health, 25, 1399.

[46] Loebach J, Sanches M, Jaffe J, Elton-Marshall T. Paving the Way for Outdoor Play: Examining Socio-Environmental Barriers to Community-Based Outdoor Play. International Journal of Environmental Research and Public Health, 2021;18(7): 3617. https://doi.org/10.3390/ijerph18073617

[47] Magistro D, Cooper SB, Carlevaro F, Marchetti I, Magno F, Bardaglio G, et al. Two years of physically active mathematics lessons enhance cognitive function and gross motor

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

skills in primary school children. Psychology of Sport and Exercise, 2022;63: 102254. https://doi.org/10.1016/j.psychsport.2022.102254

[48] Mason L, Ronconi A, Scrimin S, Pazzaglia F. Short-Term Exposure to Nature and Benefits for Students' Cognitive Performance: a Review. Educational Psychology Review, 2022;34(2): 609–647. https://doi.org/10.1007/s10648-021-09631-8

[49] Masrun, Okilanda A, Khairuddin, Utama J, Putra AR. Learning of gross motor skills based on fun games: a study of coordination development in 5–6-year-old children. Pedagogy of Physical Culture and Sports, 2025;29(4):233–242. https://doi.org/10.15561/26649837.2025.0401

[50] Mavilidi MF, Ruiter M, Schmidt M, Okely AD, Loyens S, Chandler P, et al. A Narrative Review of School-Based Physical Activity for Enhancing Cognition and Learning: The Importance of Relevancy and Integration. Frontiers in Psychology, 2018;9. https://doi.org/10.3389/fpsyg.2018.02079

[51] McGowan, A. & Chandler, M., (2024). Infusing Physical Activity into Early Childhood Classrooms: Guidance for Best Practices. https://eric.ed.gov/?q=physical+development+in+early+childhood&id=EJ1449086

[52] Merino-Campos C. Emotions in motion: A literature review of emotional experiences in physical education through video game practices. Social Sciences & Humanities Open, 2025;11: 101415. https://doi.org/10.1016/j.ssaho.2025.101415

[53] Mokhtar N, Xuan LZ, Lokman HF, Mat NHC. Theory, Literature Review, and Fun Learning Method Effectiveness in Teaching and Learning. International journal of social

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

science and education research studies, 2023;03(08). https://doi.org/10.55677/ijssers/v03i8y2023-30

[54] Moreira M, Cordovil R, Lopes F, Da Silva BMS, Veiga G. The Relationship between the Quality of Kindergartens' Outdoor Physical Environment and Preschoolers' Social Functioning. Education Sciences, 2022;12(10): 661. https://doi.org/10.3390/educsci12100661

[55] Müller A, Bába ÉB, Židek P, Lengyel A, Lakó JH, Laoues-Czimbalmos N, et al. The Experiences of Motor Skill Development in Children with Autism Spectrum Disorder (ASD) Reflected through Parental Responses. Children, 2024;11(10): 1238. https://doi.org/10.3390/children11101238

[56] Navarro SB, Zervas P, Gesa RF, Sampson DG. Developing teachers' competences for designing inclusive learning experiences. J Educ Techno Soc. 2016;19(1):17–27.

[57] Newell KM, Rovegno I. Teaching Children's Motor Skills for Team Games Through Guided Discovery: How Constraints Enhance Learning. Frontiers in Psychology, 2021;12. https://doi.org/10.3389/fpsyg.2021.724848

[58] Ngampradit, W., & Prachanban, S. (2024). *Effects of integrated physical education activities using learning on fundamental movement of preschool children*. Journal of Faculty of Physical Education.

[59] Nielsen-Rodríguez A, Romance R, DobadoCastañeda JC. Teaching Methodologies and School Organization in Early Childhood Education and Its Association with Physical Activity. International Journal of Environmental Research and Public Health, 2021;18(7): 3836. https://doi.org/10.3390/ijerph18073836

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[60] Nobre, F. S. S., Valentini, N. C., & Rusidill, M. E. (2020). *Reliability of the Test of Gross Motor Development: A systematic review.* Frontiers in Psychology, 11, 1607.

[61] Ozturk, M., et al. (2026). Effects of indoor and outdoor play on children's gross motor development: Implications for early childhood instructional design. *Mediterranean Journal of Social & Behavioral Research*, *10*(1), 1-12. https://www.mjosbr.com/download/effects-of-indoor-and-outdoor-play-on-childrens-gross-motor-development-implications-for-early-17559.pdf

[62] Park J, Jeong J. Dribble Accuracy and Arm Coordination Pattern According to Motor Expertise and Tempo. International Journal of Environmental Research and Public Health, 2023;20(10): 5788. https://doi.org/10.3390/ijerph20105788

[63] Pereira S, Bustamante A, Santos C, Hedeker D, Tani G, Garganta R, et al. Biological and environmental influences on motor coordination in Peruvian children and adolescents. Scientific Reports, 2021;11(1). https://doi.org/10.1038/s41598-021-95075-7

[64] Phillips, S. M., Summerbell, C., Hesketh, K. R., Saxena, S., & Hillier-Brown, F. C. (2023). *Co-design and content validity of the movement measurement in the early years (MoveMEY) tool for assessing movement behaviour of pre-school aged children.* International Journal of Behavioral Nutrition and Physical Activity, 20(95). https://doi.org/10.1186/s12966-023-01486-2.

[65] Popovska Nalevska G, Kuzmanovska M. Teaching methods as a factor of students'learning motivation. Education (Chula Vista), 2020;2(3–4):40–50.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[66] Pujari V. Moving to Improve Mental Health - The Role of Exercise in Cognitive Function: A Narrative Review. Journal of Pharmacy and Bioallied Sciences, 2024;16(Suppl 1): S26–S30. https://doi.org/10.4103/jpbs.jpbs_614_23

[67] Putra, A., et al. (2024). *Development of an outdoor play-based learning model to train gross motor skills in early childhood*. Kinestetik: Jurnal Ilmiah Pendidikan Jasmani, 8(2).

[68] Rahman, L. (2025). Physical fitness and physical activity can help academic achievement and increase cognitive development in students. *International Journal of Psychiatry Sciences*, *10*(4), 1-4.

[69] Ruban A, Radovenchyk A, Semal N, Bilohur V, Chkhailo M, Dzhym V. Sports Games in the Context of Developing Children's Coordination Ability as a Component of Physical Development. Revista Romaneasca pentru Educatie Multidimensionala, 2024;16(3): 415–429. https://doi.org/10.18662/rrem/16.3/901

[70] Sääkslahti A, Niemistö D. Outdoor activities and motor development in 2–7-year-old boys and girls. Journal of Physical Education and Sport. 2021;21:463– 8. https://doi.org/10.7752/jpes.2021.s1047

[71] Stanković D, Horvatin M, Vlašić J, Pekas D, Trajković N. Motor Coordination in Children: A Comparison between Children Engaged in Multisport Activities and Swimming. Sports, 2023;11(8): 139. https://doi.org/10.3390/sports11080139

[72] Sutapa P, Pratama KW, Rosly MM, Ali SKS, Karakauki M. Improving Motor Skills in Early Childhood through Goal-Oriented Play Activity. Children, 2021;8(11): 994. https://doi.org/10.3390/children8110994

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[73] Syahputra R, Bakhtiar S, Marta IA, Putri LP. The Profile of Students' Locomotor Skills Level in Elementary School. Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan), 2021;4(2): 138. https://doi.org/10.31851/hon.v4i2.5378

[74] Szabo DA, Neagu N, Teodorescu S, Panait CM, Sopa IS. Study on the Influence of Proprioceptive Control versus Visual Control on Reaction Speed, Hand Coordination, and Lower Limb Balance in Young Students 14–15 Years Old. International Journal of Environmental Research and Public Health, 2021;18(19): 10356. https://doi.org/10.3390/ijerph181910356

[75] Tisza G, Markopoulos P. FunQ: Measuring the fun experience of a learning activity with adolescents. Current Psychology, 2023;42(3): 1936–1956. https://doi.org/10.1007/s12144-021-01484-2

[76] Tracing the Cognitive–Motor Connection: Prospective-Longitudinal Associations Between Early Parent–Toddler Literacy Activities and Subsequent Gross Motor Skills at School Entry. (2025). *Children*, *12*(11), 1431. https://doi.org/10.3390/children12111431

[77] Uhlrich SD, Falisse A, Kidziński Ł, Muccini J, Ko M, Chaudhari AS, et al. OpenCap: Human movement dynamics from smartphone videos. Marsden AL (ed.) PLOS Computational Biology, 2023;19(10): e1011462. https://doi.org/10.1371/journal.pcbi.1011462

[78] Ulrich D. Test of gross motor development 2: Examiner's manual. (2nd ed.). Austin, TX: PRO-ED; 2000.

[79] Ulrich, D. A. (2019). *Test of Gross Motor Development–Third Edition (TGMD-3).* Austin, TX: Pro-Ed.

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[80] Van Der Veer IPA, Rameckers EAA, Steenbergen B, Bastiaenen CHG, Klingels K. How do paediatric physical therapists teach motor skills to children with Developmental Coordination Disorder? An interview study. Capio CM (ed.) PLOS ONE, 2024;19(2): e0297119. https://doi.org/10.1371/journal.pone.0297119

[81] Varela, F. J., Thompson, E., & Rosch, E. (2017). *The embodied mind, revised edition: Cognitive science and human experience*. MIT Press.

[82] Wang, X., & Zhou, B. (2024). *Motor development-focused exercise training enhances gross motor skills more effectively than ordinary physical activity in healthy preschool children: An updated meta-analysis*. Frontiers in Public Health, 12. https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1414152/full

[83] Webster, E. K., Kepper, M. M., Saha, S., Beyl, R., Kracht, C. L., St. Romain, J., & Staiano, A. E. (2023). *Painted Playgrounds for Preschoolers' Physical Activity and Fundamental Motor Skill Improvement: A Randomized Controlled Pilot Trial of Effectiveness*. BMC Pediatrics, 23, 455.

[84] Weir, N., Pringle, A., & Roscoe, C. M. P. (2024). Physical literacy and physical activity in early years education: What's known, what's done, and what's needed? *Children*, *11*(11), 1355. https://doi.org/10.3390/children11111355

[85] Yaswinda, Y., Bakhtiar, S., Maulana, I., & Irsakinah, I. (2021). *Exploring Basic Movements of Early Childhood in Kindergarten*. Indonesian Journal of Early Childhood Education Studies, 10(2).

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

[86] Yıldırım G, Akamca GÖ. The effect of outdoor learning activities on the development of preschool children. South African Journal of Education, 2017;37(2): 1–10. https://doi.org/10.15700/saje.v37n2a1378

[87] Zhang, Y., et al. (2024). *The effect of planned active play on the fundamental movement skills of preschool children*. Human Movement Science, 96, 103241.

[88] Zhou Y, Wang M, Lin S, Qian C. Relationship between Children's Independent Activities and the Built Environment of Outdoor Activity Space in Residential Neighborhoods: A Case Study of Nanjing. International Journal of Environmental Research and Public Health, 2022;19(16): 9860. https://doi.org/10.3390/ijerph19169860

[89] Zhou, Y., & Tolmie, A. (2024). *Associations between gross and fine motor skills, physical activity, executive function, and academic achievement: Longitudinal findings from the UK Millennium Cohort Study*. Brain Sciences, 14(2), 121. https://doi.org/10.3390/brainsci14020121

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

****

AUTHOR'S PROFILE

MS. ARIANNE M. MAGALLANES

Arianne M. Magallanes, born on October 6, 1997, is a passionate and committed educator who is recognized for her strong sense of responsibility, passion for teaching, and commitment to fostering a positive and engaging learning environment for her learners. Her educational journey began at Talisay Elementary School and continued at Pinamopoan National High School, where she later completed her practice teaching, further strengthening her passion and commitment to the teaching profession.

In her college days in Eastern Visayas State University- Carigara Campus, Arianne was a scholar of Local Government of Capoocan. This scholarship played a vital role in enabling her to pursue higher education, providing substantial support that helped her complete her degree while shaping her character and values.

Through her active academic activities, and community engagements, she gained meaningful experiences that enriched her personal and professional growth, strengthening her resilience, leadership, and interpersonal skills. In 2018, she successfully earned her Bachelor of Secondary Education major in Fishery Technology. In the same year, she passed

****

INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VIII, Issue I
September 2026
Available online at https://www.instabrightgazette.com

the Licensure Examination for Teachers (LET), officially commencing her professional journey in the field of education.

Despite various challenges and obstacles, Arianne has remained steadfast in pursuing professional growth and development. Her strong commitment to lifelong learning inspired her to pursue a Master of Arts in Education (MAEd), majoring in Elementary Education, at Western Leyte Colleges.

As of now, Arianne serves as a dedicated Kindergarten teacher at Gayad Elementary School. Her strong commitment to education, passion for nurturing young learners, and active involvement in the community continue to inspire both her students and colleagues. Through her dedication and professionalism, she consistently demonstrates an unwavering commitment to making a positive and meaningful contribution to the field of education.