



OPEN ACCESS

# Studies in Technology and Education

Volume 5, Issue 3, 2026 | <https://www.azalpub.com/index.php/ste>

## RESEARCH ARTICLE

### MATHEMATICS LEARNING EXPERIENCES AND PROBLEM- SOLVING ENGAGEMENT AMONG JUNIOR HIGH SCHOOL LEARNERS IN A RURAL PHILIPPINE SECONDARY SCHOOL CONTEXT: INSIGHTS FROM ABUYO NATIONAL HIGH SCHOOL

**Joyce B. Abellara , Dr. Alma Gonzales**

Northeastern College, Santiago City, Philippines  
Abuyo National High School

#### Article Info

*Received: 2-7-2026*

*Accepted: 4-9-2026*

*Published: 6-1 -2026*

#### Abstract

Mathematics learning experiences and problem-solving engagement significantly influence learners' conceptual understanding, critical thinking, participation, and academic confidence in secondary education. This study explored the mathematics learning experiences and problem-solving engagement among Junior High School learners at Abuyo National High School, a rural secondary school in Nueva Vizcaya, Philippines. Anchored on Constructivist Learning Theory and Experiential Learning Theory, the study employed a descriptive qualitative research design to examine learners' classroom experiences, participation, instructional interactions, and engagement in mathematical problem-solving activities. Participants included selected Junior High School learners and mathematics teachers of Abuyo National High School. Data were gathered through semi-structured interviews, focus group discussions, classroom observations, and document analysis. Braun and Clarke's (2006) thematic analysis approach was utilized in analyzing the gathered data. Findings revealed that collaborative learning activities, contextualized mathematics instruction, supportive teacher facilitation, and interactive problem-solving tasks significantly contribute to learners' engagement and conceptual understanding in mathematics. Learners demonstrated greater participation and confidence when mathematics lessons were connected to real-life experiences and practical applications. The findings further revealed that positive teacher-learner relationships and learner-centered instructional approaches strengthen learners' motivation and willingness to participate in mathematical discussions and problem-solving activities. However, challenges such as mathematics anxiety, limited conceptual understanding, fear of making mistakes, insufficient instructional resources, and varying learner abilities negatively affected participation and engagement. The study concludes that meaningful mathematics learning experiences and supportive instructional environments significantly contribute to learners' problem-solving engagement and mathematical understanding in rural secondary school contexts. Strengthening contextualized instruction, collaborative problem-solving activities, and learner-centered pedagogical approaches is recommended to improve mathematics engagement and learning experiences among Junior High School learners.

**Keywords:** mathematics learning, problem-solving engagement, learner experiences, mathematics education, qualitative research, rural education, secondary education

\*Corresponding author: [joyce.abellara@deped.gov.ph](mailto:joyce.abellara@deped.gov.ph) / [almag0400@gmail.com](mailto:almag0400@gmail.com)

## INTRODUCTION

Mathematics education plays a vital role in developing learners' critical thinking, analytical reasoning, problem-solving abilities, and decision-making skills necessary for academic achievement and real-life applications. Through mathematics learning, learners develop logical reasoning, conceptual understanding, and the ability to analyze situations systematically. Mathematics also serves as a foundational discipline that supports learning in science, technology, engineering, and various practical fields.

In secondary education, mathematics learning experiences significantly influence learners' participation, academic confidence, motivation, and engagement in problem-solving activities. Positive classroom experiences and meaningful instructional practices help learners develop confidence and appreciation for mathematics, while negative experiences may contribute to mathematics anxiety, low participation, and reduced motivation.

Mathematics learning experiences refer to learners' interactions with instructional activities, classroom discussions, problem-solving tasks, teacher facilitation, and collaborative learning experiences that influence mathematical understanding and classroom participation. Meaningful mathematics learning occurs when learners actively engage in problem-solving activities, collaborative discussions, and contextualized learning experiences that connect mathematical concepts to real-life situations.

Problem-solving engagement, on the other hand, refers to learners' behavioral, emotional, and cognitive participation in mathematical reasoning and problem-solving activities. Learners become more engaged when instructional practices encourage collaboration, critical thinking, exploration, and meaningful application of mathematical concepts.

Within the Philippine educational context, the Department of Education emphasizes learner-centered and contextualized instructional practices under the K–12 curriculum to strengthen conceptual understanding and meaningful learning in mathematics education. Teachers are encouraged to integrate collaborative learning, contextualized instruction, and problem-solving approaches to improve learner engagement and mathematical competence.

In rural educational settings such as Abuyo National High School in Nueva Vizcaya, mathematics teachers continuously implement adaptive instructional strategies and learner-centered approaches to improve learners' participation and engagement despite instructional and environmental challenges. However, learners continue to encounter difficulties related to mathematical comprehension, problem-solving confidence, classroom participation, and instructional resource limitations.

Several studies emphasized that contextualized and collaborative mathematics instruction positively influences learner engagement and conceptual understanding. Boaler (2021) explained that learner-centered and collaborative mathematics instruction strengthens participation, confidence, and problem-solving competence. Similarly, Schoenfeld (2019) argued that meaningful mathematics learning occurs when learners actively engage in reasoning, reflection, and contextualized problem-solving experiences.

Although mathematics engagement has been widely explored in educational research, there remains limited qualitative research examining learners' mathematics learning experiences and problem-solving engagement within rural Philippine secondary school contexts. Thus, this study aimed to explore mathematics learning experiences and problem-solving engagement among Junior High School learners at Abuyo National High School.

## THEORETICAL FRAMEWORK

**This study was anchored on Constructivist Learning Theory by Vygotsky (1978) and Experiential Learning Theory by Kolb (2019).**

Constructivist Learning Theory posits that learners actively construct mathematical understanding through interaction, collaboration, reflection, and meaningful learning experiences. Mathematical learning becomes more effective when instructional activities are participatory, learner-centered, and connected to prior knowledge and social interaction.

Experiential Learning Theory explains that meaningful learning occurs through concrete experiences, active participation, reflection, and practical application. Learners develop stronger mathematical understanding when they actively engage in problem-solving activities and real-life applications of mathematical concepts.

These theories provided the framework for understanding how mathematics learning experiences influence learners' problem-solving engagement and classroom participation.

## **OBJECTIVES OF THE STUDY**

This study aimed to explore mathematics learning experiences and problem-solving engagement among Junior High School learners at Abuyo National High School. Specifically, it sought to examine learners' mathematics learning experiences and classroom participation and identify instructional practices that contribute to learners' engagement in mathematical problem-solving activities. The study further aimed to explore how learners demonstrate behavioral, emotional, and cognitive engagement during mathematics instruction. Additionally, it intended to identify the challenges encountered by learners and teachers in mathematics learning and problem-solving engagement. Finally, the study aimed to derive insights from the participants' experiences that may serve as basis for strengthening mathematics instruction and learner engagement in rural secondary school contexts.

## **METHODOLOGY**

This study employed a descriptive qualitative research design to explore mathematics learning experiences and problem-solving engagement among Junior High School learners at Abuyo National High School. The qualitative approach enabled the researcher to gather rich and contextualized descriptions regarding classroom participation, mathematical engagement, instructional interactions, and learners' experiences in problem-solving activities. Through qualitative inquiry, the study captured the lived classroom experiences of learners and teachers and examined how instructional practices influence mathematical understanding and engagement.

The study was conducted at Abuyo National High School located in Alfonso Castañeda, Nueva Vizcaya, Philippines. The school operates under the supervision of the Department of Education and serves learners from rural and geographically diverse communities.

The participants of the study included selected Junior High School learners and mathematics teachers. Purposive sampling was utilized to select participants who possessed direct experiences and active involvement in mathematics instruction and classroom learning activities. The selected learners represented varying participation levels, mathematics performance, and engagement experiences.

The study utilized semi-structured interview guides, focus group discussion guides, classroom observation notes, and document analysis checklists as qualitative research instruments. Interview questions focused on classroom experiences, problem-solving activities, instructional practices, learner participation, engagement behaviors, and challenges encountered during mathematics instruction.

Prior to data gathering, permission was secured from school administrators and ethical considerations including informed consent, confidentiality, anonymity, and voluntary participation were strictly observed throughout the study. Data were gathered through interviews, focus group discussions, classroom observations, and document analysis. All interviews and discussions were audio-recorded with participants' consent and transcribed verbatim for analysis.

The gathered data were analyzed using Braun and Clarke's (2006) thematic analysis approach. Significant statements and recurring patterns were identified, coded, categorized, and organized into themes representing mathematics learning experiences and problem-solving engagement. Trustworthiness was established through triangulation, member checking, audit trails, and thick description to ensure credibility and dependability of the findings.

## RESULTS AND DEISCUSSION

### **Theme 1: Collaborative and Interactive Mathematics Activities Strengthen Learner Engagement**

The findings revealed that collaborative and interactive mathematics activities significantly contribute to learners' participation and engagement in mathematical problem-solving activities. Participants consistently emphasized that group discussions, peer-assisted learning, collaborative problem-solving, and interactive classroom activities help them understand mathematical concepts more effectively and increase their confidence in solving problems.

One learner participant stated:

"Mas naiintindihan ko ang math kapag nagtutulungan kami sa pagsagot."

Another learner shared:

"Kapag may group activities, mas hindi ako natatakot magkamali."

Similarly, another participant explained:

"Mas interesting ang lesson kapag interactive at may sharing of ideas."

These responses indicate that collaborative learning environments positively influence learners' behavioral and emotional engagement during mathematics instruction. Learners become more active and participative when classroom activities encourage communication, peer interaction, and collaborative reasoning.

Teachers also emphasized that collaborative problem-solving activities improve learners' confidence and classroom participation.

One teacher participant stated:

"Mas nagiging active ang learners kapag collaborative ang activities."

Another participant explained:

"Kapag nagtutulungan sila, mas naiintindihan nila ang process ng pagsagot."

The findings suggest that collaborative and learner-centered instructional practices strengthen learners' mathematical understanding and participation in problem-solving activities. Learners become more willing to explore mathematical solutions when instructional environments promote interaction and cooperative learning. The findings support Boaler (2021), who emphasized that collaborative mathematics instruction improves learner participation, confidence, and conceptual understanding. Similarly, Johnson and Johnson (2020) argued that collaborative learning environments strengthen learners' communication skills, engagement, and academic participation.

The findings further align with Vygotsky's (1978) Constructivist Learning Theory, which posits that mathematical understanding develops through interaction, collaboration, and socially meaningful learning experiences.

Classroom observations further revealed that learners demonstrated higher levels of attentiveness, participation, and engagement during collaborative problem-solving tasks and peer discussions.

One learner participant shared:

"Mas masaya ang math kapag may interaction at teamwork."

This finding highlights the importance of collaborative and interactive learning activities in strengthening mathematics engagement and classroom participation among Junior High School learners.

### **Theme 2: Contextualized Mathematics Instruction Promotes Meaningful Problem-Solving Experiences**

The study further revealed that contextualized mathematics instruction significantly strengthens learners' engagement and understanding of mathematical concepts. Participants emphasized that learners become more interested and motivated when mathematics lessons are connected to real-life situations, practical applications, and community experiences.

One learner participant stated:

"Mas naiintindihan ko ang math kapag may examples na ginagamit sa totoong buhay."

Another learner shared:

"Kapag practical ang examples, mas madaling maintindihan ang problem."

Similarly, another participant explained:

"Mas interesting ang math kapag related sa araw-araw naming experiences."

These responses indicate that contextualized mathematics instruction positively influences learners' cognitive engagement and conceptual understanding during problem-solving activities. Learners become more capable of analyzing and solving mathematical problems when instructional examples are meaningful and relatable to their experiences.

Teachers also emphasized the importance of integrating practical applications and contextualized examples in mathematics instruction.

One teacher participant stated:

"Mas nagiging meaningful ang math kapag connected sa real-life situations."

Another participant explained:

"Kapag contextualized ang lesson, mas nakikita ng learners ang importance ng math."

The findings suggest that contextualized mathematics instruction promotes meaningful learning experiences and strengthens learners' appreciation of mathematical concepts and problem-solving processes.

The findings support Schoenfeld (2019), who emphasized that meaningful mathematics learning occurs when learners engage in contextualized reasoning and authentic problem-solving experiences. Similarly, Gay (2018) argued that contextualized instruction strengthens learner engagement and meaningful participation by connecting lessons to learners' lived experiences.

The findings further align with Experiential Learning Theory, which explains that learning becomes more effective when learners actively connect concepts to practical experiences and meaningful situations (Kolb, 2019).

Participants further revealed that contextualized instruction helps reduce learners' confusion and anxiety during mathematics activities.

One learner participant stated:

"Mas madali kong masolve ang problem kapag familiar ang situation."

This finding highlights the importance of contextualized and meaningful mathematics instruction in strengthening learners' engagement and problem-solving competence.

### **Theme 3: Supportive Teacher Facilitation Encourages Mathematical Confidence and Participation**

The findings revealed that supportive teacher facilitation significantly contributes to learners' confidence, classroom participation, and engagement in mathematics learning. Participants consistently described effective mathematics teachers as patient, approachable, encouraging, and willing to provide guidance and clarification during problem-solving activities.

One learner participant stated:

"Mas ginaganahan akong sumali kapag supportive si teacher."

Another learner explained:

"Kapag hindi ko maintindihan, tinutulungan ako ni teacher hanggang matuto ako."

Similarly, another participant shared:

"Hindi ako natatakot sumagot kapag understanding ang teacher."

These responses indicate that positive teacher-learner relationships positively influence learners' emotional engagement and confidence during mathematics instruction. Learners become more willing to participate in discussions and problem-solving activities when teachers create supportive and non-threatening classroom environments.

Teachers also emphasized the importance of patience, encouragement, and instructional guidance in helping learners overcome mathematical difficulties.

One teacher participant stated:

"Kailangan talaga ng patience at encouragement sa pagtuturo ng math."

Another participant explained:

"Kapag supportive ang environment, mas nagiging confident ang learners."

The findings suggest that supportive instructional relationships significantly contribute to learners' mathematical confidence and classroom participation. Positive teacher facilitation helps reduce fear, hesitation, and anxiety among learners during mathematics activities.

The findings align with Fredricks et al. (2019), who argued that emotional engagement increases when learners

feel supported, respected, and encouraged within classroom settings. Similarly, Pianta et al. (2021) emphasized that positive teacher-learner relationships significantly influence learners' participation, motivation, and classroom confidence.

The findings further revealed that supportive classroom environments encourage learners to ask questions and participate in mathematical discussions.

One learner participant shared:

"Mas comfortable akong magtanong kapag approachable si teacher."

This finding highlights the importance of supportive teacher facilitation in strengthening learners' mathematical confidence and engagement in rural secondary school classrooms.

#### **Theme 4: Mathematics Anxiety, Conceptual Difficulties, and Resource Limitations Affect Problem-Solving Engagement**

Despite positive learning experiences, the findings revealed that learners and teachers encounter several challenges affecting mathematics learning and problem-solving engagement. Participants identified mathematics anxiety, fear of making mistakes, difficulty understanding abstract concepts, insufficient instructional resources, and varying learner abilities as major barriers to classroom participation and mathematical understanding.

One learner participant stated:

"Nahihirapan ako minsan sa math kasi natatakot akong magkamali."

Another learner explained:

"May mga lessons na sobrang hirap intindihin kaya nawawalan ako ng confidence."

Similarly, another participant shared:

"Minsan hindi ako makasabay kapag mabilis ang discussion."

These responses indicate that emotional and cognitive barriers negatively influence learners' participation and engagement during mathematics instruction. Learners who experience fear, confusion, and low confidence become less willing to participate in problem-solving activities and classroom discussions.

Teachers also emphasized that instructional limitations and resource constraints affect mathematics instruction and learner participation.

One teacher participant stated:

"Challenge din minsan ang kakulangan sa instructional materials at resources."

Another participant explained:

"Iba-iba rin ang learning abilities kaya mahirap minsan i-balance ang instruction."

The findings suggest that mathematics engagement is influenced not only by instructional strategies but also by emotional factors, conceptual understanding, and institutional support systems.

The findings support OECD (2019), which highlighted that mathematics anxiety and low academic confidence significantly influence learner performance and participation. Similarly, Boaler (2021) emphasized that fear of failure and negative classroom experiences negatively affect learners' mathematical engagement and confidence.

Participants further revealed that some learners become hesitant to participate because of fear of judgment from classmates.

One learner participant stated:

"Nahihiya akong sumagot kapag baka mali ang sagot ko."

This finding implies the importance of creating emotionally supportive and inclusive mathematics classrooms that encourage participation, risk-taking, and collaborative problem-solving.

Despite these challenges, participants emphasized that supportive teachers and collaborative learning activities help improve confidence and participation in mathematics learning.

One learner participant shared:

"Kahit nahihirapan minsan, natututo pa rin kami kapag nagtutulungan."

This finding highlights the resilience of learners and the importance of supportive instructional environments in sustaining meaningful mathematics learning experiences.

## **CONCLUSION AND IMPLICATIONS**

### **Conclusion**

The study revealed that collaborative, contextualized, and learner-centered instructional practices significantly contribute to meaningful mathematics learning experiences and problem-solving engagement among Junior

High School learners at Abuyo National High School. Collaborative activities, peer-assisted learning, and interactive problem-solving tasks strengthen learners' participation, confidence, and conceptual understanding in mathematics instruction.

The findings further revealed that contextualized mathematics instruction promotes meaningful learning experiences by helping learners connect mathematical concepts to practical applications and real-life situations. Learners become more engaged and motivated when instructional examples are relatable and meaningful to their daily experiences.

The study also found that supportive teacher facilitation significantly influences learners' emotional engagement, classroom participation, and mathematical confidence. Positive teacher-learner relationships help reduce fear, hesitation, and anxiety during mathematics instruction and problem-solving activities.

However, the findings revealed that mathematics anxiety, conceptual difficulties, limited instructional resources, varying learner abilities, and fear of making mistakes continue to affect mathematics engagement and classroom participation among learners.

The study concludes that meaningful mathematics learning experiences and supportive instructional environments significantly contribute to learners' problem-solving engagement and mathematical understanding in rural secondary school contexts. Strengthening collaborative learning environments, contextualized instruction, and learner-centered pedagogical approaches is essential in improving mathematics engagement and participation among Junior High School learners.

### **Implications of the Study**

The findings of the study provide important implications for mathematics education, instructional practices, learner engagement, educational leadership, curriculum implementation, and future research. The study emphasizes the importance of collaborative, contextualized, and supportive learning environments in strengthening mathematics engagement and problem-solving competence among learners.

### **Educational Implications**

The findings imply that mathematics instruction should become more learner-centered, collaborative, contextualized, and interactive to strengthen learners' participation, conceptual understanding, and problem-solving competence. Teachers may integrate collaborative learning activities, contextualized examples, peer-assisted instruction, and meaningful problem-solving tasks to improve learner engagement and mathematical reasoning.

The study further implies that mathematics learning should emphasize meaningful application of concepts rather than rote memorization and procedural learning alone.

Additionally, the findings suggest that emotionally supportive learning environments contribute positively to learners' confidence and willingness to participate in mathematics activities.

### **Pedagogical Implications**

The findings imply that teachers play a critical role in shaping learners' mathematics experiences, confidence, and engagement. Teachers should demonstrate patience, encouragement, instructional flexibility, and learner-centered pedagogical approaches in facilitating mathematics instruction.

The study also highlights the importance of contextualized and collaborative instructional practices in strengthening problem-solving engagement. Teachers may utilize practical examples, group discussions, collaborative reasoning tasks, and inquiry-based learning activities to improve learners' mathematical understanding and participation.

Furthermore, the findings imply that supportive classroom environments reduce mathematics anxiety and encourage learners to participate actively in discussions and problem-solving activities.

### **Institutional and Policy Implications**

The findings provide important implications for educational leaders and policymakers within the Department of Education regarding the strengthening of mathematics instruction and learner support systems in rural secondary schools. Educational institutions may strengthen mathematics education by providing contextualized instructional materials, learner-centered teaching resources, and professional development programs focusing on collaborative and problem-solving instructional approaches.

The study further implies the importance of strengthening school support systems that address learners' emotional needs, mathematical anxiety, and varying learning abilities.

Moreover, the findings suggest the need for sustained instructional support and classroom resources that improve mathematics participation and engagement among rural learners.

### **Social Implications**

The findings imply that meaningful mathematics learning experiences contribute significantly to learners' critical thinking, communication skills, confidence, and problem-solving competence necessary for academic success and real-life decision-making.

The study also highlights the importance of creating inclusive and supportive educational environments that encourage collaboration, respect, and active learner participation in mathematics learning.

### **Implications for Future Research**

The findings highlight the need for future studies exploring mathematics learning experiences and problem-solving engagement across different educational contexts and learner populations. Future researchers may conduct comparative studies involving urban and rural schools to examine variations in instructional practices, learner engagement, and mathematics anxiety experiences.

Longitudinal and mixed-methods studies may also be conducted to explore the long-term influence of collaborative and contextualized mathematics instruction on learners' mathematical competence and academic achievement.

Future studies may likewise investigate the role of technology integration, gamification, peer mentoring, and differentiated instruction in strengthening mathematics engagement and problem-solving competence among secondary learners.

The study emphasizes that strengthening mathematics engagement requires collaborative efforts among teachers, school leaders, educational institutions, policymakers, and learners. Contextualized instruction, collaborative learning environments, supportive teacher facilitation, and learner-centered pedagogical approaches are essential in promoting meaningful mathematics learning experiences and improving problem-solving engagement among Junior High School learners.

## **REFERENCES**

- Abana, A (2021). A Scrutiny of K-12 Strands and the Learning Program Vis-à-vis its Academic Performance. *Psychology and Education Journal*, 58 (2): 7977-7984
- Andres, A. (2019). Achievement Goals and Mathematics Achievement of the Senior High School Students. *International Journal of English and Education*, 8 (2).
- Andres, A. (2023). Establishing Quality Instrument for the Summative Assessment of Pre-Service Elementary Teachers. *JETT*, 14 (3), 9-16).
- Andres, A.D. (2022). Metacognition and Performance in Mathematical Problem-Solving Among Bachelor of Elementary (BEED) Pre-service Teachers. *Central European Management Journal*, 30 (4). 86-95.
- Antonio, A. (2021). Syntactical Scrutiny: Inaccuracies in the Lesson Planning of Non- Language Pre Service Teachers. *International Journal of Arts, Sciences and Education, Studies in Technology and Education*

- Balog, P., & Gonzales, E. (2021). From Linguistic Landscapes to Teaching Resources: A Case of Some Rural Areas in the Province of Quezon. *International Journal of Arts, Sciences and Education*, 1(2), 23–44.
- Banares, A. J. (2022). Reinterpreting Sonnet 18 by William Shakespeare through Stylistic Analysis. *International Journal of Arts, Sciences and Education*, 3(July Special Issue), 189–204. <https://ijase.org/index.php/ijase/article/view/163>.
- Batang, B., Villa, F., Natividad, A., Gonzales, A., Cabansag, J., & Bangayan, O. (2025). Culturally-Informed Leadership and Management Practices in Philippine State Universities and Colleges: Navigating Institutional Excellence through Localized Governance and Academic Culture. *International Journal on Culture, History, and Religion*, 7(SI2), 751–770. <https://doi.org/10.63931/ijchr.v7iSI2.243>
- Belarga, B., Guiquing-Clemente, B., Tulawie, A., Alih, C., Caban, R., & Manois, F. R. (2025). From Page to Praxis: The Role of Regional Literature in Shaping Culturally Grounded Teaching Methods in HEIs. *International Journal on Culture, History, and Religion*, 7(SI2), 356–371. <https://doi.org/10.63931/ijchr.v7iSI2.206>
- Boaler, J. (2021). *Mathematical mindsets: Unleashing students' potential through creative mathematics, inspiring messages and innovative teaching* (2nd ed.). Jossey-Bass.
- Bonoan, K. C., Bunagan, K. A., Calangi, A. D., Chan, E. P., Corpuz, L. P., Deseo, J. M., Suarez, R. H., Sumulong, B. I., & Flores, A. R. (2021). A Comparative Study on the Knowledge, Attitude, and Practices (KAP) on the Preventive Measures Against Covid-19 of the Residents in Rural (Lobo, Batangas) and Urban (Taguig City, Metro Manila) Areas in the Philippines. *International Journal of Arts, Sciences and Education*, 1(3), 77–123. Retrieved from <https://ijase.org/index.php/ijase/article/view/35>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Buncag, R. (2022). Parent-Assisted Modular Reading Program: Its Effect on Reading Performance During the Covid-19 Pandemic of Grade 5 Pupils of Biwag Elementary School, Tallag Cabagan Isabela. *International Journal of Arts, Sciences and Education*, 3(July Special Issue), 39–50. <https://ijase.org/index.php/ijase/article/view/154>
- Caliboso, J., Bagalay, B., Santiago, M., Bayan, R., Aguinaldo, I., & Belo, J. (2025). Literary Texts as Cultural Tools: A Study on Contextualized Learning Strategies in Philippine Higher Education. *International Journal on Culture, History, and Religion*, 7(SI2), 340–355. <https://doi.org/10.63931/ijchr.v7iSI2.205>
- Camiring-Picpican, H., Flores, K., Caban, R., Mohadali, S., Galdonez, D., & Alih, C. (2025). Pedagogical Innovations Based on Philippine Cultural Practices: A Framework for Culturally Responsive Teaching in Higher Education. *International Journal on Culture, History, and Religion*, 7(SI2), 433–451. <https://doi.org/10.63931/ijchr.v7iSI2.168>
- Caranguian, C. B. (2022). Family-related Factors Influencing Success in the Licensure Examination for Teachers. *International Journal of Educational Sciences*. 38 (1-3), 62-69.
- Caranguian, C. B. (2023). Level of Parental Involvement as a Predictor of Academic Achievement and School Adjustment. *Universidad de Granada*. 14(3), 138-143.
- Casil-Batang, P. (2021). Exploring Gender Stereotypes in 21<sup>st</sup> Century Philippine Narratives. *International Journal of Arts, Sciences and Education* 2(1): 61-70
- Casil-Batang, P. (2021). Focus of Experience in 21<sup>st</sup> Century Philippine Literature: A Content Analysis. *International Journal of Arts, Sciences and Education* 2(1): 1-14
- Clemente B. & Clemente, R. (2023). Reading Comprehension Competence of First Year Social Science Students. *International Journal of Arts, Sciences and Education*. 4 (30), 165-184.
- Clemente B. G (2019). Philippine Literature as a Vehicle to Strengthen Values Education. *The Asian EFL Journal*. 24(4), 443-468.
- Decena, A. J. (2021). A Survey on the Reading Difficulties Of K-12 Learners In Selected Tagalog-Speaking Provinces: Basis for Intervention. *International Journal of Arts, Sciences and Education*, 1(2), 219–226. Retrieved from <https://ijase.org/index.php/ijase/article/view/61>
- Dela Cruz, L., Aguinaldo, I., Alzate, L. J., Camero, C., Abiado, K. R., & Gumpal, B. (2025). Fostering Intercultural Competence through Culturally Responsive Pedagogy: Practices and Perspectives in Philippine Higher Education Institutions. *International Journal on Culture, History, and Religion*, 7(SI2), 36–50. <https://doi.org/10.63931/ijchr.v7iSI2.187>

- Dela Cruz, L., Manera, A., Ramirez, E., Macato, D., Catbagan, R. J. I., & Tulawie, A. (2025). Bridging Cultures in the Classroom: Analyzing Pedagogical Approaches that Promote Intercultural Competence in Multicultural Higher Education Settings. *International Journal on Culture, History, and Religion*, 7(SI2), 242–261. <https://doi.org/10.63931/ijchr.v7iSI2.202>
- Domingo- Alejo, J. (2022). Delving The Perceived Administrator’s Personality in Basic Education Unit. *CEMJ*. 30 (4), 2052-2060.
- Domingo- Alejo, J. (2023). Exploring the Level of Morale of Teachers in Public Basic Education Unit. *Rivista Italiana di Filosofia Analitica Junior*. 14 (1), 482-496.
- Domingo-Alejo, J. ( 2024). AI Integrated Administration tool design with ML Technology for Smart Education System. 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE). 1423-1428.
- Edobane, R. (2025). Culturally Rooted Pedagogy in Technology and Livelihood Education: Assessing Curriculum Implementation in Western Visayas State Universities. *International Journal on Culture, History, and Religion*, 7(SI2), 568–586. <https://doi.org/10.63931/ijchr.v7iSI2.226>
- Eijansantos, A. M., Alieto, E. O., Emmanuel, M. S., Pasoc, M. G. O., & Bangayan-Manera, A. (2021). Interspeaker variation in the negated perfective aspect of Zamboanga Chavacano. *Linguistics and Culture Review*, 5(S3), 287-309. <https://doi.org/10.21744/lingcure.v5nS3.1528>
- Escobar, DT. (2022), Cybersecurity Knowledge of the Cagayan State University Academic Community: Basis for Cybersecurity Policy. *Journal of Positive School Psychology*. 6, (5), 4839–4850
- Eustaquio, G. L. (2024). A Deep Analysis of Implementation of Technical Strategy using AI in MBS. *2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, Greater Noida, India, 2024, pp. 1472-1478, doi: 10.1109/ICACITE60783.2024.10617117.
- Ferranco, M. (2025). Emotional Intelligence and Culturally Grounded Leadership: A Study of Small Business Owners in San Pedro, Laguna, Philippines. *International Journal on Culture, History, and Religion*, 7(SI2), 191–202. <https://doi.org/10.63931/ijchr.v7iSI2.197>
- Flores, K., Gadaza, A., Galdonez, D., Pihnuton, J., Soriano, R., & Killip, A. J. (2025). Decolonizing Pedagogy: Integrating Indigenous Knowledge and Philippine Historical Narratives in Higher Education Curricula. *International Journal on Culture, History, and Religion*, 7(1), 333–356. <https://doi.org/10.63931/ijchr.v7i1.130>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2019). School engagement: Potential of the concept and state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Frutas, M. L. (2019). The Art of Questioning and Its Relationship to Academic Performance. *The Asian EFL Journal*. 24 (4.2), 350-376.
- Frutas, M. L. (2019). Reading Comprehension and Mathematics Problem Solving Proficiency of Filipino ESL Learners: An Imperative for Bridging the Gap. *The Asian EFL Journal*. 24 (4.1), 267-280.
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.
- Johnson, D. W., & Johnson, R. T. (2020). *Joining together: Group theory and group skills* (12th ed.). Pearson Education.
- Kolb, D. A. (2019). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.
- OECD. (2019). *PISA 2018 results (Volume I): What students know and can do*. OECD Publishing. <https://doi.org/10.1787/5f07c754-en>
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2021). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving classroom interactions. *Educational Psychologist*, 56(2), 93–107. <https://doi.org/10.1080/00461520.2021.1900456>
- Schoenfeld, A. H. (2019). *Learning to think mathematically: Problem solving, metacognition, and sense making in mathematics*. Routledge.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.