

Instructional Materials Alignment and Pupil Engagement Among Grade 6 Learners

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ABSTRACT

This quantitative study examined the alignment of instructional materials and its relationship with pupil engagement among Grade 6 learners at Barbo Elementary School. It aimed to determine the level of instructional material alignment, the level of pupil engagement, and the significance of the relationship between these variables. A descriptive-correlational research design was employed, involving 31 Grade 6 students selected through total enumeration sampling. Data were collected using a researcher-made validated questionnaire and analyzed using mean and Pearson's r correlation. The findings revealed a high level of instructional material alignment across all indicators, indicating strong support for the teaching and learning process. Pupil engagement was also found to be high in the behavioral, emotional, and cognitive domains. Furthermore, the results showed a low but statistically significant positive correlation between instructional material alignment and pupil engagement. These findings suggest that well-aligned instructional materials contribute to enhanced pupil engagement in the classroom.

INTRODUCTION

Instructional materials play a vital role in supporting effective teaching and learning. When aligned with curriculum standards and learning objectives, these materials help learners understand lessons more clearly, remain focused, and actively participate in classroom activities. Research has shown that curriculum-aligned instructional materials contribute to improved learning outcomes, particularly when supported by effective teaching practices (EdReports, 2024).

Across Asia, educational reforms have emphasized strengthening the alignment among curriculum, instruction, and assessment. Countries such as Japan, South Korea, Malaysia, Indonesia, and Thailand have implemented curriculum review and content auditing initiatives to improve instructional quality. Despite these efforts, challenges such as limited resources, inadequate teacher training, and contextual adaptation continue to affect the effectiveness of instructional materials and student engagement (UNESCO & SEAMEO, 2023).

In the Philippines, the Department of Education promotes the alignment of instructional materials with the K-12 and MATATAG curricula. However, many public schools continue to rely on teacher-made materials and self-learning modules due to delays in textbook distribution (EDCOM II, 2024). While these resources demonstrate teacher innovation, concerns remain regarding their consistency with intended learning competencies. Well-aligned instructional materials are believed to enhance learner engagement by making lessons more meaningful, understandable, and relevant (Aquino & Gurat, 2023).

Given the importance of engagement in learners' academic success, this study examines the relationship between instructional materials alignment and pupil engagement among Grade 6 learners at Barbo Elementary School. The findings are expected to provide insights for improving instructional resource development, teacher practices, and curriculum implementation.

THEORETICAL REVIEW

Previous literature consistently emphasizes that instructional materials play a crucial role in promoting meaningful learning and learner engagement. Studies indicate that instructional materials are most effective when they are aligned with curriculum standards, learning objectives, and learners' developmental needs (Smithwhite, 2024; Rivet Education, 2024). Well-aligned materials help learners understand concepts more easily, reduce cognitive overload, and encourage active participation in classroom activities. Conversely, misaligned materials may lead to confusion, boredom, and decreased engagement (Steiner, 2024; Van Geel et al., 2025).

Theoretical and empirical studies further highlight that learner engagement involves behavioral, emotional, and cognitive dimensions. According to Engagement Theory, students become more engaged when learning experiences are meaningful, relevant, and connected to their interests and real-life contexts (Rachmad, 2022). Research also shows that instructional materials that are culturally responsive, differentiated, and appropriate to learners' abilities can enhance motivation and participation (Fernandez, 2020; Cempron, 2021).

Several studies found a positive relationship between the quality and alignment of instructional materials and student engagement. Digital, contextualized, and outcomes-based instructional materials were shown to improve learners' motivation, participation, and academic performance (Romarate et al., 2023; Gubaton, 2024; Pagutayao & Paglinawan, 2024). However, challenges such as inadequate teacher training, resource limitations, and mismatches between instructional content and learner needs may reduce the effectiveness of instructional materials (Miremba, 2025; Dhakal, 2020).

Despite extensive research on instructional materials and teaching practices, limited studies have specifically examined how instructional material alignment influences pupil engagement in elementary school settings. This gap highlights the need for further investigation, particularly among Grade 6 learners, to better understand how alignment contributes to meaningful classroom engagement.

METHODOLOGY

This study employed a quantitative descriptive-correlational research design to examine the relationship between instructional material alignment and pupil engagement among Grade 6 learners at Barbo Elementary School, Guiuan, Eastern Samar. The respondents consisted of 31 Grade 6 pupils selected through total enumeration sampling, wherein all enrolled and regularly attending pupils were included in the study. Data were collected using a researcher-made, expert-validated questionnaire composed of two sections: instructional material alignment (focusing on lesson objective alignment, clarity, relevance, and usefulness of materials) and pupil engagement (covering behavioral, emotional, and cognitive dimensions adapted from Fredricks et al., 2004). A 5-point Likert scale ranging from Strongly Disagree to Strongly Agree was utilized, with items simplified to suit the reading level of Grade 6 learners. Data collection was conducted face-to-face in the classroom after securing approval from school authorities, informed parental consent, and pupil assent. Ethical principles of confidentiality, anonymity, and voluntary participation were strictly observed. The collected data were encoded and analyzed using Microsoft Excel. Descriptive statistics, particularly mean scores, were used to determine the levels of instructional material alignment and pupil engagement, while the Pearson Product-Moment Correlation Coefficient (Pearson's r) was employed to examine the relationship between the two variables at a 0.05 level of significance.

RESULTS AND DISCUSSION

Alignment of Instructional Materials

The succeeding tables present the level of alignment of the instructional materials used in Grade 6 with the intended learning objectives, content and curriculum standards, and assessment and learning activities. Each aspect was rated by the respondents according to their level of agreement using the provided scale. The results are shown in the following tables.

Table 1. Level of Alignment of Instructional Materials in Terms of Learning Objectives

Alignment of Instructional Materials	Mean	Description	Interpretation
Alignment with Learning Objectives			
1. The instructional materials used in class clearly show what I am expected to learn.	4.71	Strongly Agree	Highly Aligned
2. The activities and examples in our materials help me understand the lesson objectives.	4.35	Strongly Agree	Highly Aligned
3. The topics and lessons in the materials what the teacher discusses.	4.06	Agree	Aligned
4. The materials guide me toward achieving the learning goals of each lesson.	4.42	Strongly Agree	Highly Aligned
Grand Mean	4.39	Strongly Agree	Highly Aligned

Based on Table 1, the alignment of instructional materials in terms learning of objectives was found to be highly aligned, except for the part with how the topics and lessons in the materials match what the teacher discusses, which gained a mean of 4.06, interpreted as aligned. In general, the instructional materials used among Grade 6 learners of Barbo Elementary School often match the intended learning objectives, as shown by the overall mean of 4.39, which falls under highly aligned in this indicator.

Table 2. Level of Alignment of Instructional Materials with Content and Curriculum Standards

Alignment of Instructional Materials	Mean	Description	Interpretation
Alignment with Content and Curriculum Standards			
1. The lessons in our materials follow what is taught in our grade level.	4.23	Strongly Agree	Highly Aligned
2. The content in the materials supports the competencies listed in our subject.	4.35	Strongly Agree	Highly Aligned
3. The information and examples in the materials are relevant to what we study in class.	4.39	Strongly Agree	Highly Aligned
4. The materials are accurate and appropriate for my level of understanding.	4.35	Strongly Agree	Highly Aligned

Grand Mean	4.33	Strongly Agree	Highly Aligned
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As shown in Table 2, the alignment of instructional materials with content and curriculum standards consistently fared highly aligned in all items under this indicator. The item with the highest mean is the item that says “The materials are accurate and appropriate for their level of understanding”, while the lowest mean is on how “The content in the materials supports the competencies listed in their subject”. Although this item received the lowest score, it still falls within the “highly aligned” range, indicating that there are no major issues in this aspect. This suggests that the instructional materials consistently meet curriculum standards and effectively contribute to achieving the intended learning outcomes.

Table 3. Level of Alignment of Instructional Materials with Assessment and Learning Activities

Alignment of Instructional Materials Alignment with Assessment and Learning Activities	Mean	Description	Interpretation
1. The exercises and activities in our materials help me prepare for quizzes and tests.	4.55	Strongly Agree	Highly Aligned
2. The performance tasks or projects match what is being taught in the lessons.	4.19	Agree	Aligned
3. The questions and tasks in the materials help me think and apply what I learned.	4.29	Strongly Agree	Highly Aligned
4. The materials help me review and assess my own learning progress.	4.06	Agree	Aligned
Grand Mean	4.27	Strongly Agree	Highly Aligned

Table 3 presents the extent of alignment of instructional materials with assessment and learning activities. The results indicate that two items were rated as aligned. This suggests that, while the instructional materials generally support the assessments and learning activities provided to pupils, certain aspects may still require improvement to strengthen the connection between instruction, practice, and evaluation. Overall, the computed mean of 4.27 indicated that the instructional materials used among Grade 6 learners at Barbo Elementary School are highly aligned with assessment and learning activities. This level of alignment supports the assessment of the effectiveness of the teaching and learning process.

Table 4. Summary of the Level of Alignment of Instructional Materials

Aspects of Alignment	Mean	Description	Interpretation
1. Alignment with Learning Objectives	4.39	Strongly Agree	Highly Aligned
2. Alignment with Content and Curriculum Standards	4.33	Strongly Agree	Highly Aligned
3. Alignment with Assessment and Learning Activities	4.27	Strongly Agree	Highly Aligned
Grand Mean	4.33	Strongly Agree	Highly Aligned

As presented in Table 4, the overall extent of alignment of instructional materials used among Grade 6 learners at Barbo Elementary School was found to be highly aligned, with the overall mean of 4.33. This suggests that the instruction is consistently aligned with the intended learning objectives, curriculum standards, and assessment tasks. Such alignment indicates that teachers are effectively using instructional materials that support organized and coherent teaching while reinforcing expected learning outcomes. It also implies that classroom materials are well integrated into instruction, ensuring consistency among what is taught, practiced, and assessed.

Level of Pupil Engagement

This study examined the level of pupil engagement among Grade 6 learners at Barbo Elementary School in terms of behavioral, emotional, and cognitive engagement, as presented in the succeeding tables.

Table 5. Level of Pupil Engagement in terms of Behavioral Engagement

Pupil Engagement	Mean	Description	Interpretation
Behavioral Engagement			
1. I listen attentively when lessons are being discussed using the instructional materials.	4.42	Strongly Agree	Highly Aligned
2. I participate actively in class activities related to the materials.	4.39	Strongly Agree	Highly Aligned

3. I finish all my tasks and exercises found in the instructional materials	4.45	Strongly Agree	Highly Aligned
4. I pay attention and avoid distractions when we use the materials in class.	4.00	Agree	Aligned
Mean	4.31	Strongly Agree	Highly Engaged

The results shown in Table 5 reveal that pupil engagement in terms of behavioral engagement is generally high, with an overall mean of 4.32. This indicates that learners consistently exhibit behaviors associated with active participation in classroom activities. The findings suggest that when instructional materials are properly aligned with learning objectives, they help maintain pupils' attention and interest, encouraging greater involvement in learning tasks. As a result, such alignment fosters a highly engaged classroom environment.

Table 6. Level of Pupil Engagement in terms of Emotional Engagement

Pupil Engagement	Mean	Description	Interpretation
Emotional Engagement			
1. I enjoy using the instructional materials during class activities.	4.32	Strongly Agree	Highly Engaged
2. I feel excited to learn new lessons using the materials.	4.29	Strongly Agree	Highly Engaged
2. I feel confident answering or performing tasks based on the materials.	4.13	Agree	Engaged
3. I feel that the instructional materials make learning more interesting.	4.29	Strongly Agree	Highly Engaged
Grand Mean	4.26	Strongly Agree	Highly Engaged

As reflected in Table 6, the level of pupil engagement in terms of emotional engagement obtained a total mean of 4.30, interpreted as highly engaged. This means that learners consistently show positive feelings toward their learning experiences, particularly when instructional materials are aligned with lessons. This emotional connection suggests that pupils find enjoyment and satisfaction in classroom activities, allowing them to stay motivated and responsive throughout the learning process.

Table 7. Level of Pupil Engagement in terms of Cognitive Engagement

Pupil Engagement	Mean	Description	Interpretation
Cognitive Engagement			
1. I try to find ways to understand difficult parts of the materials.	4.16	Agree	Engaged
2. I think deeply about the lessons presented in the materials.	4.45	Strongly Agree	Highly Engaged
3. I connect what I learn from the materials to real-life situations.	4.03	Agree	Engaged
4. I review the materials even outside class to understand the lessons better.	4.45	Strongly Agree	Highly Engaged
Grand Mean	4.27	Strongly Agree	Highly Engaged

As shown in Table 7, the level of pupil engagement in terms of cognitive engagement has an overall mean of 4.20, described as “often” and interpreted as “engaged”. This indicates that learners consistently exhibit positive emotions toward their learning experiences, especially when instructional materials are well aligned with the lessons. This emotional connection suggests that pupils experience enjoyment and satisfaction during classroom activities, which helps them remain motivated and actively engaged throughout the learning process.

Table 8. Summary of the Level of Pupil Engagement among Grade 6 learners of Barbo Elementary School

Pupil Engagement	Mean	Description	Interpretation
1. Behavioral Engagement	4.31	Strongly Agree	Highly Engaged
2. Emotional Engagement	4.26	Strongly Agree	Highly Engaged
3. Cognitive Engagement	4.27	Agree	Engaged
Grand Mean	4.28	Strongly Agree	Highly Engaged

Table 8 presents a summary of the level of engagement among Grade 6 learners of Barbo Elementary School. The data imply that the overall level of pupil engagement among Grade 6 learners obtained a total mean of 4.28 which is interpreted as highly engaged. Among the three dimensions, behavioral engagement obtained the highest mean of 4.31, this shows that Grade 6 learners actively participate and stay attentive whenever materials effectively match with lesson objectives.

Relationship Between Instructional Material Alignment and Pupil Engagement

Table 9. Relationship Between Instructional Material Alignment and Pupil Engagement among Grade 6 learners of Barbo Elementary School during the School year 2025-2026

Variable 1	Variable 2	Correlation Coefficient	Interpretation	P-value	Interpretation
Instructional Materials Alignment	Pupil Engagement	.369	Low Correlation	.040	Significant

The table above shows the relationship between instructional materials alignment and pupil engagement. This study establishes that there is a significant relationship between the two variables presented, the instructional material alignment and the pupil engagement. As reflected in the table, the study generated an index of correlation at .369 and a p-value of .040, rejecting the null hypothesis stating that there is no significant relationship between the instructional material alignment and pupil engagement.

Thus, the study implies that the more aligned the instructional materials are, the more engaged the pupils are, or the less aligned the instructional materials are, the more likely the pupils are to exhibit lower engagement in the classroom, although the relationship is not strong. Therefore, there is sufficient evidence to conclude that Instructional Materials Alignment is positively associated with Pupil Engagement among Grade 6 learners. This conclusion supports the claim of Smithwhite (2024), who pointed out that appropriate alignment of instructional materials greatly impacts the learners' performance positively. Similarly, Lattanze (2025) and Foster (2023) highlighted that aligning instructional resources with behavioral, emotional, and cognitive engagement factors enhances learner's motivation and active participation.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were drawn based on the findings revealed in this study:

1. The instructional materials used in Grade 6 manifest an overall highly aligned level across all measured indicators. Specifically, the instructional materials were found to be highly aligned in terms of learning objectives, content, curriculum standards, and assessment and learning activities. This indicates that the resources effectively support the teaching-learning process.
2. The Grade 6 pupils demonstrated a highly engaged level across all indicators. Specifically, they exhibited highly levels of behavioural, emotional, and cognitive engagement, as reflected in their active participation, strong motivation, and effective processing and application of information in classroom activities.

3. The relationship between instructional was found to have a low positive but statistically significant correlation. This indicates that although the strength of the relationship is modest, higher alignment of instructional materials across all indicators is associated with increased levels of pupils' engagement. Consequently, the null hypothesis stating that there is no significant relationship between instructional materials alignment and pupil engagement was rejected. This finding highlights the importance of well-aligned instructional resources in fostering learners' engagement.

Recommendations

Based on the conclusions drawn, the researchers present the following recommendations:

1. Grade 6 teachers and curriculum planners should ensure that instructional materials are highly aligned across all dimensions including learning objectives, content and curriculum standards, and assessment and learning activities. Instructional materials should be regularly reviewed, updated, and adapted to further enhance alignment and support effective teaching and learning.
2. Teachers should implement strategies that maintain and further improve pupil engagement behaviourally, emotionally, and cognitively. Teaching approaches should include interactive activities, formative assessments, and varied instructional methods to sustain high levels of pupil participation and motivation.
3. Further investigations with a wider scope involving instructional materials alignment, and pupil engagement should be conducted to further validate the findings of this study. Such studies may include larger samples and different contexts to strengthen the generalizability of the results.

FURTHER STUDY

Future researchers are encouraged to conduct similar studies with larger and more diverse samples from different schools and educational settings to further validate and expand the findings on instructional material alignment and pupil engagement.

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REFERENCES

- Abuel, L. C. (2023). Digital instructional materials in students' engagement and performance. *International Journal of Research Publications*.<https://ijrp.org/filePermission/fileDownlaod/4/57b1cd6321266c8d1f93499c5cedb3de/2>

- Amos, S., Eghan, M. P. K., & Oppong, E. (2022). The impact of instructional materials in teaching and learning of biology in the colleges of education in the Central Region of Ghana. *Open Journal of Educational Research*, 2(5), 213-221.
<https://www.scipublications.com/journal/index.php/ojer/article/view/400>
- Aquino, E. T. M., & Gurat, M. G. (2023). Satisfaction of students in the methods used in mathematics in the modern world in a new normal. *American Journal of Educational Research*, 11(3), 144-150.
<http://pubs.sciepub.com/education/11/3/7/>
- Cempron, D. N. L. (2021). An inquiry on the underlying instructional materials in social studies.
https://www.researchgate.net/publication/352755933_An_Inquiry_on_the_Underlying_Instructional_Materials_in_Social_Studies
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.) SAGE Publications.
https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf
- Department of Education Regional Office VIII. (2022). 2023-2028 Regional Education Development Plan. <https://region8.deped.gov.ph/wp-content/uploads/2022/11/RM-s2022-1329.pdf>
- Department of Education. (2016). K to 12 curriculum guide - Grade 6. <https://www.deped.gov.ph/k-to-12/about/k-to-12-basic-education-curriculum/>
- DePaul University Teaching Commons. (2025). Alignment in course design. DePaul University. <https://resources.depaul.edu/teaching-commons/teaching-guides/course-design/Pages/scaffolding-alignment.aspx>
- Dhakai, K. (2021). Teachers' perceptions toward using geography textbooks: A study in secondary schools in Nepal. *The Third Pole: Journal of Geography Education*, 21(1). <https://doi.org/10.3126/ttp.v21i01.41614>
- Dumpang, C. N., Caliwan, M. A., & Caliwas, L. J. B. (2021). Needs assessment of Grade 8 instructional materials in teaching Filipino: A phenomenology. https://www.researchgate.net/publication/349900422_Needs_Assessment_of_Grade_8_Instructional_Materials_in_Teaching_Filipino_A_Phenomenology

- EdReports. (2023). Annual report 2023. <https://cdn.edreports.org/media/2024/04/2023-edreports-annual-report.pdf>
- EdReports. (2024). Reflections on 2024 and looking to the future of EdReports. EdReports.org. <https://edreports.org/resources/article/reflections-2024-future-of-edreports>
- Education Elements. (n.d.). A comprehensive guide to high-quality instructional materials (HQIM). Education Elements. <https://www.edelements.com/comprehensive-hqim-curriculum-guide>
- Foster, S. (2023). Facilitating and assessing student engagement in the classroom. Center for Teaching & Learning, University of Colorado Boulder. <https://www.colorado.edu/center/teaching-learning/2023/01/23/facilitating-and-assessing-student-engagement-classroom>
- Fraenkel, J.R., Wallen, N.E., & Hyun, H. H. (2012). How to design and evaluate research in education (8th ed). McGraw-Hill Education. https://saochhenpheng.wordpress.com/wp-content/uploads/2017/03/kack_fraenkel_norman_wallen_hyun-how_to_design_and_evaluate_research_in_education_8th_edition_-mcgraw-hill_humanities_social_sciences_languages2011.pdf
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74 (1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Garcia, E., & Weiss, E. (2020). COVID-19 and student performance, equity, and U.S. education policy: Lessons from pre-pandemic research to inform relief, recovery, and rebuilding. Economic Policy Institute. <https://www.epi.org/publication/the-consequences-of-the-covid-19-pandemic-for-education-performance-and-equity-in-the-united-states>
- Geleta, S., & Seyoum, Y. (2024). Teachers' perceptions and practices of using instructional materials: Evidence from Haramaya Town. *East African Journal of Education Studies*, 7(2), 99–111. https://www.researchgate.net/publication/380122303_Teachers'_Perceptions_and_Practices_of_Using_Instructional_Materials_Evidence_from_Haramaya_Town
- Gubaton, M. C. T. (2024). Level of students' motivation and engagement: Basis for an enhanced intervention to promote students' learning. Universal Institute of Research and Technology. <https://uijrt.com/paper/level-students-motivation-engagement>

- Jibililu, O. S. (2024). Evaluating the impact of instructional materials on social studies learning outcomes in senior high schools of the Bono East Region of Ghana. *Social Education Research*, 5(2), 380–397. <https://ojs.wiserpub.com/index.php/SER/article/view/4881>
- Kearsley, G., & Shneiderman, B. (1998). Engagement theory: A framework for technology-based teaching and learning. *Educational Technology*, 38(5), 20–23. <https://malat-webspace.royal.ca>
- Laerd Statistics. (2018). Pearson's product-moment correlation using SPSS Statistics. Lund Research Ltd. <https://statistics.laerd.com/spss-tutorials/pearsons-product-moment-correlation-using-spss-statistics.php>
- Lattanze, R. (2025). Unlocking student engagement: Strategies for meaningful learning outcomes. Xello. <https://xello.world/en/blog/student-engagement/what-is-student-engagement/>
- Lee, H., & Choi, J. (2020). Curriculum alignment after reforms: A systematic review with considerations for Queensland pre- and in-service teachers. *Australian Journal of Teacher Education*, 45(11). <https://files.eric.ed.gov/fulltext/EJ1289131.pdf>
- Li, J., & Xue, E. (2023). Dynamic interaction between student learning behaviour and learning environment: Meta-analysis of student engagement and its influencing factors. *Behavioral Sciences*, 13(1), 59. <https://doi.org/10.3390/bs13010059>
- Lichtwarck-Aschoff, A., Denessen, E., Aelterman, N., & Haerens, L. (2020). Fostering student engagement with motivating teaching: An observation study of teacher and student behaviours. *Research Papers in Education*, 36(6), 754–779. <https://doi.org/10.1080/02671522.2020.1767184>
- Medical College of Wisconsin. (2022). Cognitive load theory: A guide to applying cognitive load theory to your teaching. Office of Educational Improvement. <https://www.mcw.edu/-/media/MCW/Education/Academic-Affairs/OEI/Faculty-Quick-Guides/Cognitive-Load-Theory.pdf>
- Miremba, B. K. (2024). Role of instructional materials in students' academic performance. *Research Invention Journal of Current Research in Humanities and Social Sciences*, 3(2), 15–27. https://www.researchgate.net/publication/382004589_Role_of_Instructional_Materials_in_Students'_Academic_Performance
- Nguyen, L. T., Pham, H. H., & Le, M. T. (2021). Revisiting pupil engagement in the digital classroom. *Educational Technology & Society*, 24(2), 88–100. https://www.j-ets.net/ETS/journals/24_2/7.pdf

- Penuel, W. R., Henson, K., Buck Bracey, Z., Vick, N., & Rivet, A. (2024). Designing standards-aligned instructional materials that connect to students' interests and community priorities. *The Social Studies*, 115(2), 62–70. <https://doi.org/10.1080/00368555.2024.2390547>
- Polikoff, M. S. (2012). Instructional alignment under No Child Left Behind. *American Journal of Education*, 118(3), 341–368. <https://doi.org/10.1086/664773>
- Portana, et al. (2020). Effectiveness and acceptability of instructional materials in the enhancement of students' academic engagement. ResearchGate. https://www.researchgate.net/publication/348334247_Effectiveness_and_Acceptability_of_Instructional_Materials_in_the_Enhancement_of_Students'_Academic_Achievement
- Rachmad, Y. E. (2022). Educational engagement theory. Lüneburger Heide Buch Internationaler Verlag, Spezialausgabe 2022. <https://doi.org/10.17605/OSF.IO/KGTCX>
- Rivet Education. (2024). Why high-quality instructional materials are essential for teacher and student success: How standards-aligned, culturally responsive, and inclusive materials drive learning in every classroom. <https://riveteducation.org/why-high-quality-instructional-materials-are-essential-for-teacher-and-student-success-how-standards-aligned-culturally-responsive-and-inclusive-materials-drive-learning-in-every-classroom/>
- Romarate, M. A, Aquino, A. B., Punongbayan, J.E., Quezon, G. R., Balilla, L. A., & Ramos, N. P., (2023). Development of outcomes-based instructional materials in professional teacher education courses for a flexible set up. *Journal of Education and E-Learning Research* ,10 (1), 61-67. <https://doi.org/10.20448/jeelr.v10i1.4378>
- Sabayton, K.M.G., Alvarado, R.M.E., Bacus, J.A.,& Baluyos, G.R. (2023).Instructional materials motivation and synchronous classroom learning in relation to the students' academic performance in mathematics. *EduLine:Journal of Education and Learning Innovation*. <https://doi.org/10.35877/454RI.eduline1988>
- Saher, S., & Kashif, N. (2020). Analysis of alignment between the national curriculum of education and textbooks at the higher secondary level in Punjab-Pakistan. *Review of Economics and Development Studies*, 6 (3), 687–702. <https://doi.org/10.47067/reads.v6i3.256>
- Saunders, L., & Wong, M. A. (2020). Designing instructional materials. ABC-CLIO. <https://iopn.library.illinois.edu/pressbooks/instructioninlibraries/chapter/designing-instructional-materials/>

- Second Congressional Commission on Education (EDCOM II). (2024). Miseducation: The failed system of Philippine education (Year One Report). <https://edcom2.gov.ph/media/2024/02/EDCOM-II-Year-One-Report-PDF-022924.pdf>
- Smithwhite, S. (2024). Why do high-quality instructional materials matter? Imagine Learning. <https://www.edsurge.com/news/2024-07-10-why-do-high-quality-instructional-materials-matter>
- Statistics How To. (2025). Total population sampling. <https://www.statisticshowto.com/total-population-sampling/>
- Steiner, D. (2024). The unrealized promise of high-quality instructional materials. State Education Standard, 24(1). <https://www.nasbe.org/the-unrealized-promise-of-high-quality-instructional-materials/>
- Subramanian, L., & Mahmoud, M. A. (2020). A systematic review on students' engagement in classroom: Indicators, challenges and computational techniques. *International Journal of Advanced Computer Science and Applications*, 11(1). <https://doi.org/10.14569/IJACSA.2020.0110113>
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285. https://onlinelibrary.wiley.com/doi/abs/10.1207/s15516709cog1202_4
- Tomei, L. (2009). Instructional materials: Definition and examples. In *Lexicon of education terms*. IGI Global. <https://doi.org/10.4018/978-1-5225-8109-3>
- UNESCO & Southeast Asian Ministers of Education Organization. (2023). Technology in education: A tool on whose terms? *Global Education Monitoring Report*. <https://www.unesco.org/gem-report/en/2023-southeast-asia>
- University of Massachusetts Amherst. (2025). Develop engaging instructional materials. IDEAS: Instructional Design, Engagement, and Support. <https://www.umass.edu/ideas/develop-engaging-instructional-materials>
- Urias, L. R. (2022). Addressing the problem of student engagement in the classroom (Master's project). Grand Valley State University. <https://scholarworks.gvsu.edu/gradprojects/225>
- Van Geel, M., Keuning, T., Meutstege, K., & de Vries, J. (2023). Adapting teaching to students' needs: What does it require from teachers? *Educational Review*. https://www.researchgate.net/publication/371935336_Adapting_Teaching_to_Students'_Needs_What_Does_It_Require_from_Teachers

- Wadmare, P., Nanda, M., Sabates, R., Sunder, N., & Wadhwa, W. (2022). Understanding the accuracy of teachers' perceptions about low-achieving learners in primary schools in rural India: An empirical analysis of alignments and misalignments. *International Journal of Educational Research Open*, 3, 100198. <https://doi.org/10.1016/j.ijedro.2022.100198>
- Wang, E. L., Prado Tuma, A., Doan, S., Henry, D., Lawrence, R. A., Woo, A., & Kaufman, J. H. (2021). Teachers' perceptions of what makes instructional materials engaging, appropriately challenging, and usable: A survey and interview study. RAND Corporation. https://www.rand.org/pubs/research_reports/RRA134-2.html
- Wang, Q., Liu, J., & Sun, L. (2022). Student perception and engagement: Exploring classroom material relevance. *International Journal of Educational Research*, 112, 101940. <https://doi.org/10.1016/j.ijer.2022.101940>