# Systematic review of BSE English action researches: Basis for the development research agenda and framework

Pasahol, Alma M.

Ilocos Sur Polytechnic State College, Philippines (alma.martinez29@gmail.com)

Azarias, Ranec A. 🔀

Ilocos Sur Polytechnic State College, Philippines (ranecaz@gmail.com)

Received: 10 September 2024 Revised: 16 September 2024

Accepted: 30 September 2024 Available Online: 30 September 2024 DOI: 10.5861/ijrse.2024.24119



ISSN: 2243-7703 Online ISSN: 2243-7711

OPEN ACCESS

#### Abstract

This study aimed to analyze the Bachelor of Secondary Education major in English's action researches. It specifically sought to determine the research topics, problems, approaches, methods, designs, strategies and salient findings of the BSE action researches; to identify research gaps for future research endeavors; and to suggest research agenda for the BSE English program. It utilized systematic literature review as its research design and a repertory grid as its research instrument. Findings reveal that the research topics of the reviewed action researches mainly focused on pronunciation and speaking skills, reading comprehension, vocabulary skills, semantic skills, morphological ability, inferencing skills, sentence construction ability, oral reading fluency, and S-V Agreements skills. These studies consistently used one group pretest and posttest design, employed traditional and novel instructional strategies for interventions and constantly determined the level of language skills of the respondents, significant difference of pretest and post test score and the effectiveness of the chosen teaching strategies. It is recommended that future researchers may try other language skills to be studied through other approaches like qualitative approach, mixed method, and experimental method.

Keywords: systematic literature review, action research, research gaps, research agenda, research framework

# Systematic review of BSE English action researches: Basis for the development research agenda and framework

#### 1. Introduction

Research is an inevitable output to every pre-service teacher. It is one of the academic requirements among teacher education learners before achieving their degree diploma. This gauges their capability of resolving classroom problems and issues by implementing interventions or pedagogical strategies by conducting researches. In fact, one of the characteristics of Education 4.0 is the employment of research-based tasks and outputs among learners. Learners especially pre-service teachers rely on research process when they diagnose a learning problem among their learners. They test the effectiveness and impact of these implemented interventions through action research and other research designs.

Additionally, Hine (2013) stated that following entry into the workforce, there are limited opportunities for new graduate teachers to engage in critically reflective activities about their educative practice. In an increasingly complex and challenging profession, the need for teachers, administrators and school systems to become involved in professional development activities is ever present. Undertaking a unit in action research methodology provides those professionals working in the education system with a systematic, reflective approach to address areas of need within their respective domains.

Furthermore, action research is an attractive option for teacher researchers, school administrative staff, and other stakeholders in the teaching and learning environment to consider. Within education, the main goal of action research is to determine ways to enhance the lives of children (Mills, 2011). Notably, there is unlimited scope for teachers wishing to develop 'customised' action research projects of their own, as topics for investigation are as multifarious, as the daily vignettes evidenced in the teaching profession. To conclude, universities must include action research as a core unit in teacher preparation degree programs — either at the undergraduate or postgraduate level, as the action research sequence holds significant value to improving practice within classrooms, schools, and communities (Hine 2013). Undeniably, action research plays an important role in the preparation and professional development of teachers and pre-service teachers (Holter & Frabutt, 2012; Perrett, 2003). Specifically, action research initiatives are used within teacher education programs on national and international levels; namely, in Australia and in the United States.

Clearly, action research also facilitates teacher empowerment as a corollary to the professional growth opportunities offered to educators (Johnson, 2012). Thus, the proponents were encouraged to study on common approaches, problems, methodology and format of action researches conducted by Bachelor of Secondary Education learners who are specializing in English. This study hoped to provide salient inputs and implications for practice among action research advisers and implementers in education programs. After all, providing teachers with the necessary skills, knowledge, and focus to engage in meaningful inquiry about their professional practice will enhance this practice, and effect positive changes concerning the educative goals of the learning community.

# 2. Methodology

**Research Design** - This study employed systematic review of literature in achieving the research objectives. A systematic literature review (SLR) identifies, selects and critically appraises research in order to answer a clearly formulated question (Dewey & Drahota, 2016). It is a clear and reproducible procedure consisting of a series of phases that help researchers in defining the goal of research and planning the way in which articles are retrieved and reported (Ardito *et al.*, 2015).

Sources - All the accessible and retrievable Bachelor of Secondary Education major in English research

abstracts from 2018 to 2024 at the Ilocos Sur Polytechnic State College Main served as the corpora of this study. There were exactly fifteen (15) action researches reviewed in this study. All abstracts during the said years were included to provide an eidetic portrait of the action researches in the college. Notably, researches covering school years 2020-2022 were not included because these used other research types.

**Research Instrument** - This study used a repertory grid to gather data needed in the study. The grid contained variables that were geared towards achieving the objectives of the study. This helped the researchers in determining the research topics, problems, approaches, methods, designs, strategies and salient findings of the BSE action researches. Finally, it also helped in identifying the research gaps for future research endeavors as bases for suggesting research agenda for the Bachelor of Secondary Education program in terms of conducting action research.

Data Gathering Procedure - Upon approval of the study, the researchers asked permission from the concerned authorities to have access on the action researches conducted from 2018- 2024 by English major learners in the College of Teacher Education. These included the Dean of the College of Teacher Education and Librarian of the ISPSC Main Library. Then, the research abstracts were grouped according to their year of completion. After the classification, the researchers used a repertory grid to seek answers to the research questions employing systematic review of literature. Consequently, upon accomplishment of the repertory grid, the researchers analyzed the gathered data from the corpora utilized in the study in which the results of the analyses served as inputs in the formulation of research agenda and framework for BSE English of mentioned campus.

Analysis of Data - This study used thematic analysis as its mode in scrutinizing the research corpora. It classified the research abstracts into year of implementation and described the various characteristics of each research conducted based on the objectives. The objectives of the study served as the a priori codes that guided in the researchers during the analysis. Notably, the researchers followed the steps articulated by the Braun & Clarke (2006) with the help of the repertory grid. Accordingly, in doing the analysis the researchers become familiar with the data, generate initial codes, search for themes, review themes, define themes, and write the findings.

## 3. Result and Discussion

3.1 Research Topics, Problems, Approaches, Methods, Designs, Strategies and Salient Findings of the BSE Action Researches

Research Topic. The research topics of the reviewed BSE English action researchers are merely focused on language skills, either macro or micro. These include pronunciation and speaking skills (e.g. Arquero *et al.*, 2024; Lilan *et al.*, 2023; Dang-alan *et al.*, 2023; Rapada *et al.*, 2019), reading comprehension (e.g. Berras *et al.*, 2019; Valdez *et al.*, 2024), vocabulary skills (e.g. Hadloc *et al.*, 2018; Aranaydo *et al.*, 2024), semantic skills (e.g. Marquez *et al.*, 2019), morphological ability (e.g. Figuerres *et al.*, 2019), inferencing skills (e.g. Dado *et al.*, 2023), sentence construction ability (e.g. Batao-ey *et al.*, 2024; Gapatan *et al.*, 2019), oral reading fluency (e.g. Gumba *et al.*, 2023) and S-V Agreements skills (e.g. Rodriguez *et al.*, 2024). These research topics were identified language skills that affect the learning of learners on the English language.

The research findings highlight a predominant focus on language skills, both macro (like pronunciation and speaking) and micro (such as vocabulary and sentence construction), among BSE English action researchers. This concentration suggests that these educators are prioritizing foundational linguistic competencies that are directly tied to learners' overall English language proficiency. By addressing specific areas such as reading comprehension, vocabulary acquisition, and grammatical accuracy, the researchers aim to enhance learners' ability to effectively communicate and understand the language. However, the narrow focus on language skills might imply a gap in addressing broader educational issues, such as cultural context, critical thinking, and interdisciplinary integration, which are also crucial for holistic language development. Therefore, while the emphasis on these skills is essential for improving linguistic capabilities, there is a need for a more diversified approach in research topics to address

the multifaceted nature of language learning in a comprehensive manner.

The research focus on macro and micro language skills in BSE English action research, including areas like pronunciation, reading comprehension, vocabulary, and speaking skills, aligns with broader educational trends observed in various studies. These topics are crucial in English language learning as they address the foundational aspects that directly influence learners' language proficiency. Sespene *et al.* (2021) showed that speaking skills, which encompass both pronunciation and oral fluency, are critical for effective communication in English. Additionally, a bibliometric analysis of studies from 2010 to 2021 conducted by Wang *et al.* (2022) revealed that improving English-speaking abilities remains a significant focus due to its dynamic and context-dependent nature, making it challenging yet essential for learners in TESOL, EFL, and ESL contexts. Additionally, the emphasis on micro skills like vocabulary acquisition and sentence construction reflects a broader understanding that these elements are integral to overall language comprehension and usage. Studies have indicated that language learning strategies targeting these micro skills can significantly enhance learners' performance, especially in distance learning environments where direct interaction is limited.

Research Problems Approaches, Methods, Designs, Strategies. The research problems were limited to the determining the level to language skills identified in each of the conducted study, the significant differences between the pre-test and posttest of the study before and after the implementation of the intervention and the effectiveness of the chosen strategies in enhancing and improving the learning difficulties of the respondents (e.g. Aranaydo *et al.*, 2024; Arquero *et al.*, 2024; Gumba *et al.*, 2023; Berras *et al.*, 2019; Hadloc *et al.*, 2018).

This implies that while these studies contribute valuable insights into the effectiveness of language interventions, they might benefit from a broader perspective that considers a wider range of factors influencing language acquisition. This could include more qualitative approaches that explore learner experiences, as well as longitudinal studies that assess the sustainability of improvements over time. This would provide a more comprehensive understanding of how different factors interact to affect language learning outcomes.

Undeniably, almost all of the conducted researches which were reviewed by the researchers used quantitative approach employing One Group Pretest and Posttest design (e.g. Garabilez *et al.*, 2024; Dang-alan *et al.*, 2023; Marquez *et al.*, 2019; Figuerres *et al.*, 2019; Hadloc *et al.*, 2018). Noticeably, the reviewed action researches involved more than one implementer of the intervention being tested in studies that had multiple authors. All utilized a teacher made test which underwent reliability and validity testing (e.g. Rodriguez *et al.*, 2024; Arquero *et al.*, 2024; Dado *et al.*, 2023; Gumba *et al.*, 2023; Lilan *et al.*, 2023). Marzano (2011) emphasized the importance of pre- and post-assessments in determining the impact of instructional strategies on learner learning. Marzano's research indicated that pre-tests are essential for understanding learners' initial skill levels, while post-tests measure the gains made after an intervention; thereby providing a clear picture of its effectiveness.

Furthermore, Slavin (2008) supported the use of pre- and post-test comparisons as a method for assessing educational interventions. Slavin argued that this approach is crucial for establishing causality in educational research, as it allows researchers to attribute observed changes in learner performance directly to the implemented intervention. Clearly, the reliance on the One Group Pretest and Posttest design suggests a strong focus on measuring the immediate impact of educational interventions within a controlled group. This design allows researchers to gauge the effectiveness of specific teaching strategies by comparing learner performance before and after the intervention. However, it is also limited by the absence of a control group, which means that the observed changes in learner performance cannot be conclusively attributed solely to the intervention. Notably, Creswell and Creswell (2017) highlighted that the One Group Pretest and Posttest design is frequently employed in educational research to measure the effectiveness of an intervention by comparing outcomes before and after the implementation. This design is particularly useful when researchers aim to establish a causal relationship between the intervention and the observed outcomes, although it has limitations due to the absence of a control group

Additionally, the consistent use of teacher-made tests that underwent validity and reliability testing highlights a commitment to ensuring the accuracy and credibility of the assessment tools. This practice enhances the

trustworthiness of the findings and provides a solid foundation for making informed decisions based on the data. The emphasis on reliability and validity testing of teacher-made assessments is supported by research from Nitko and Brookhart (2011), who argued that for any test to be considered a reliable measure of learner learning, it must demonstrate both reliability (consistent results) and validity (accurate measurement of the intended content). This ensures that the data collected are both credible and useful for making informed educational decisions. Conversely, the use of teacher-made tests might also reflect a limitation in accessing or utilizing standardized assessment tools, which are often designed to provide more generalizable results across different contexts.

Meanwhile, the strategies used for intervention are advance organizers (Marquez et al., 2019), word segmentation (Figuerres et al., 2019), contrast drill (Rapada et al., 2019), textual analysis (Berras et al., 2019), word association (Hadloc et al., 2018), substitution tables (Gapatan et al., 2019), mimicry strategy (Dang-alan et al., 2023), downloaded audio scripts (Dado et al., 2023), speak, repeat and seek strategy (Lilan et al., 2023), word intersect (Gumba et al., 2023), Kotobee author (Valdez et al., 2024), Mathematical equations (Rodriguez et al., 2024), sound clone strategy (Arquero et al., 2024), V-word maze (Aranaydo et al., 2024 and word tiles (Garabilez et al., 2024). These strategies were adapted and devised by the researchers to improve and enhance the learning difficulties of their respondents. The use of diverse intervention strategies such as advance organizers, word segmentation, contrast drills, and various other techniques by the researchers indicates a tailored approach to addressing the specific learning difficulties of their respondents. These strategies, many of which are rooted in well-established educational theories and practices, reflect a comprehensive attempt to improve language learning outcomes through targeted interventions.

The adaptation and development of these strategies by the researchers highlight a commitment to innovation and responsiveness to the unique needs of their learners. For instance, the use of advance organizers is supported by Ausubel's theory of meaningful learning, which posits that new information is better understood when learners have an overarching framework in which to integrate it (Ausubel, 1968). This suggests that the researchers are not only applying established techniques but also customizing them to maximize their effectiveness in their specific educational contexts. Interestingly, the inclusion of technology-based strategies like Kotobee Author and downloaded audio scripts further implies an effort to integrate modern tools into language learning. This aligns with current trends in educational technology, where digital resources are increasingly used to enhance engagement and provide varied learning experiences (Mayer, 2009). These tools likely helped in making learning more interactive and accessible, catering to different learning styles and preferences.

Finally, the heterogeneous mix of strategies—from traditional approaches like textual analysis and word association to more innovative ones like mimicry strategy and word tiles—indicate recognition that language learning is a complex process that benefits from a multifaceted approach. This approach is consistent with research suggesting that the integration of multiple instructional strategies can lead to more robust learning outcomes (Tomlinson, 2001). Hence, the use of other varied interventions to improve the teaching and learning process merit further investigations among action researchers.

Salient Findings. In this study, salient findings pertain to the discoveries or results of the study with their respective foci or research topics. These highlight the results from the data and themes gathered from the systematic review of the corpora. The salient findings of these action researchers show that the level of the identified language skills is underperforming during the pre-test and progressed to excellent level during the posttest. The respondents posted improvement from their pretest scores to posttest. They also claimed that the strategies used for intervention improved the learning problems of the learners as reflected on the gain ratios obtained by their respondents.

Notably, these findings on learners' language skills progressed from underperforming levels in the pre-test to excellent levels in the post-test, and that the intervention strategies effectively addressed learning problems, have significant implications for educational practice and research. In fact, the extensive improvement in learner performance from pre-test to post-test suggests that the interventions were successful in enhancing the specific

language skills targeted by the action researchers. This aligns with educational research that emphasizes the importance of targeted interventions in addressing specific learning deficiencies. Hattie (2009) concluded that interventions that are carefully aligned with the learners' needs and implemented with fidelity can lead to significant improvements in learner outcomes, as evidenced by the positive changes observed in this study.

The researchers' claim that the strategies used effectively improved learning problems, as reflected in the gain ratios, is further corroborated by studies on instructional effectiveness. Slavin (2008) emphasizes that welldesigned and contextually appropriate instructional strategies can yield measurable gains in learner learning, particularly when these strategies are evidence-based and systematically applied. The use of gain ratios as a metric to evaluate improvement also aligns with best practices in educational assessment, where quantifiable measures of progress provide a clear indication of the intervention's impact. Clearly, the shift from underperformance to excellence underscores the potential of educational interventions to address learning gaps. This is consistent with the findings of Marzano (2011), who suggested that differentiated instruction and the use of varied teaching strategies can significantly enhance learners' academic performance, particularly in areas where they previously struggled. The success of the interventions in this context highlights the importance of adapting teaching methods to the specific needs of learners, a principle supported by differentiated instruction theories.

#### 3.2 Identified Research Gaps

The studies mainly focused on evaluating the effectiveness of the instructional strategies using one-group pretest-posttest design, a quantitative approach and specific measures on the level of language skills, the significant difference between pretest and posttest scores and the average gain ratio. Undeniably, these researches may present several potential gaps. First, the reliance on one group pretest-posttest design with more than one implementer of the strategy or intervention being tested limits the ability to attribute observed changes in language skills, solely to the instructional intervention, as this design lacks a control group for comparison. This makes it difficult to rule out other factors that could have influenced the outcomes, such as maturation, external influences or test-retest effects. Likewise, conducting studies for a longer period of time are imperative given the duration of the implementation of the strategies or interventions in the reviewed studies.

Second, the exclusive focus on quantitative measures may overlook qualitative insights such as learners' attitudes, perceptions and the contextual factors that might mediate the effectiveness of the instructional strategies. Moreover, while these studies measure the effectiveness of specific strategies, they may not explore the underlying mechanisms through which these strategies influence language learning, leaving a gap in understanding how and why these interventions work. Third, another significant gap is the lack of generalizability; if the studies were conducted in specific contexts with particular populations, the findings might not be applicable to broader or more diverse education settings. Likewise, selection of respondents or subjects needs to be reviewed following the accepted ways of doing such procedure in the implementation of the action research.

Succinctly, studies that use other research approaches like qualitative and mixed method are needed in terms of conducting action research. Other specific areas of English language, applied linguistics, or structure of English merit further investigation for English language major students. Ways of managing or controlling intervening variables warrant more reliable results among future action researches. Finally, valid and reliable instructional materials developed through action research are needed amidst problems on instructional materials among educational institutions.

#### 3.3 Suggested Research Agenda and Framework for the BSE English Program

The potential research agenda for the Bachelor of Secondary Education- English could be built by addressing the limitations of previous studies while advancing the understanding of instructional strategies in secondary education. Possible research agenda can be exploring comparative effectiveness, integrating qualitative and mixed methods approaches, exploring longitudinal impacts, developing adaptive instructional frameworks, and exploring contextual and cultural relevance.

On exploring comparative effectiveness, this approach would address the limitation of the one group pretest-posttest design, providing clearer evidence on the causal impact of instructional strategies on language skill development. This may aim to compare the effectiveness of the different instructional strategies using more robust experimental designs, such as randomized controlled trials or quasi-experimental designs with control groups that should be implemented for a longer period of time.

On integrating qualitative and mixed methods approaches, while quantitative data can show the effectiveness of an intervention, qualitative data can provide insights into learners' experiences, perceptions and contextual factors that influence learning. This could lead to a more comprehensive understanding of how instructional strategies work. The commonly used research design by the reviewed studies appeared to be saturated. Additionally, other research designs like comparative analysis and mixed methods may be employed to compare instructional strategies and to integrate quantitative assessments to capture a holistic picture of the intervention's effectiveness. Meanwhile, longitudinal impacts may examine the long-term effects of instructional strategies on language skill development beyond the immediate posttest. Understanding whether gains in language skills are sustained over time can inform the lasting impact of these strategies and their role in the broader educational trajectory of learners. Notably, future studies should not be conducted in just a week or days only.

On the other hand, developing adaptive instructional frameworks could tailor interventions based on individual learner needs and learning styles. This approach could address the variability in learner responses to instructional strategies. Thus, this could potentially increase the effectiveness of interventions for diverse learner populations. On exploring contextual and cultural relevance, this line of research would enhance the generalizability of findings and ensure that instructional strategies are culturally relevant and applicable to diverse learner populations. In fact, integrating culture in language teaching remains underexplored in the field of language instruction.

In the light of the above-mentioned agenda, the research framework of the college could be structured with theoretical foundation, research design, intervention development, assessment and evaluation and contextual application. Grounded in educational theories such as constructivism, socio-cultural theory and differentiated instruction, the framework of the college could provide a basis for understanding how instructional strategies impact language learning. Moreover, intervention development could integrate adaptive models and culturally responsive pedagogy in the framework. Adaptive models can be based on real time assessment data, allowing a personalized learning experience for each learner while culturally responsive pedagogy can ensure that interventions resonate with learners' backgrounds and experiences.

Finally, assessment and evaluation should be incorporation to the framework of college in conducting action research. Use of combined short term and long-term assessments may measure immediate learning outcomes and sustained impacts over time as well as the combination of cognitive measures (e.g proficiency tests) and effective measure (learner motivation, engagement) may evaluate the effectiveness of the strategies. Last, contextual application may test the framework in diverse educational settings, including urban, rural, and multicultural classrooms, to assess its applicability and effectiveness across different contexts.

# 4. Conclusion

The reviewed research topics conducted by BSE English action researchers mainly focused on various language skills, emphasizing both macro and micro aspects. These topics included essential areas such as pronunciation, speaking skills, reading comprehension, vocabulary, semantics, morphology, inferencing, sentence construction, oral reading fluency, and subject-verb agreement skills. These identified areas reflect the critical aspects of language learning that directly impact learners' proficiency in English. The researchers concentrated on assessing the current levels of these language skills among learners, identifying significant differences between pre-test and post-test results, and evaluating the effectiveness of various strategies in addressing the learners'

learning difficulties.

The majority of the reviewed studies employed a quantitative approach, specifically using a One Group Pretest-Posttest design. This methodological choice indicates a consistent focus on measuring the direct impact of interventions on learners' language skills. The use of teacher-made tests, which underwent rigorous reliability and validity testing, ensured that the assessments were both accurate and reflective of the learners' abilities. The interventions applied were diverse and creative, ranging from advanced organizers and word segmentation to contrast drills, textual analysis, and modern technological tools like Kotobee author and word tiles. These strategies were carefully selected and adapted by the researchers to target the specific learning challenges faced by their learners.

The research underscores the importance of targeted, strategic interventions in addressing language learning difficulties and enhancing learners' proficiency in English. The success of these studies demonstrates the potential of well-designed action research to bring about meaningful improvements in educational outcomes. The reviewed studies predominantly focused on evaluating the effectiveness of instructional strategies using a one-group pretest-posttest design, a quantitative approach, and specific metrics such as the level of language skills, the significant difference between pretest and posttest scores, and the average gain ratio. The research agenda and framework aim to produce evidence based instructional strategies that are effective, adaptable, and culturally relevant, ultimately enhancing the quality of secondary education and improving learner outcomes in language skills. This could contribute significantly to teacher education programs by providing future educators with a robust set of tools and approaches for fostering language development in diverse classroom environments.

Finally, the findings of the study accentuate the vital role of the identified research gaps and future directions for studies for teachers and administrators as these help guide future educational practices and policy decisions. Identifying research gaps typically necessitates collaboration among teachers, administrators, and researchers. Collaboration can result in more complete solutions and a common commitment to tackling educational difficulties. Both teachers and administrators gain from making decisions based on current research and data, which results in more successful and impactful educational practices and policies. Recognizing and addressing research gaps fosters a culture of continuous learning and improvement, which is critical for adapting to new challenges and advancing educational practices, particularly when supervising and advising students on the conceptualization and implementation of research projects as part of their graduation requirements. By identifying and addressing research gaps, teachers and administrators can enhance their practices, improve educational outcomes, and contribute to the ongoing development of effective and innovative educational strategies.

#### 4.1 Recommendation

Future researchers may also focus on specific skills that are essential for English language proficiency and learning. The utilization of a repertory grid will be of great help in determining the gaps on unexplored and underexplored research topics, problems, approaches, methods, designs, strategies and salient findings of the BSE action researches. On research gaps of the reviewed studies, future research could address gaps by employing more robust experimental design, incorporating qualitative approached, exploring the mechanisms of instructional strategies and considering diverse contexts and population. Future researchers may employ suggested research agenda and framework for the future action researches to be conducted. These research agenda and framework may bring new perspectives, theories and findings that will be a big contributor to the development of English proficiency and learning among respondents of the impending studies.

## 5. References

Aranaydo, J., Cabico, R., Hailar, H. (2024). Using v-maze strategy in improving the vocabulary skills of grade 7 learners. An undergraduate action research.

Arquero, J., Cacayan, J.C, Cardenas, J.R., Hernandez, C.L. (2024). Employing soundclone strategy in enhancing

- the pronunciation skills along schwa sounds of Grade 9 learners. An undergraduate action research.
- Batao-ey, D.M., Garabilez, J., Velasco Jr, R., Wagennan, A. (2024). Employing word-tiles strategy in enhancing the sentence skills of grade 7 learners. An undergraduate action research.
- Berras, A.M., Dusalin, S. Danase, K. (2019). Improving the literary comprehension skills of the Grade 10 Emerald students of Candon National High School through textual analysis. An undergraduate action research.
- Ausubel, D. P. (1968). Educational Psychology: A Cognitive View. Holt, Rinehart & Winston.
- Cacho, J. & Cacho, A. (2015). Errors in test construction committed by instructors and professors: Basis for instructional enhancement program on test construction, https://library.iated.org/view/CACHO2015ERR
- Calderon, J.F. & Gonzales, E. C. (2015). Methods of research and thesis writing. National Book Store, Inc.
- Camosun College (2023). Assessment: Test construction, https://camosun.libguides.com/c.php?g=711496&p=5070735
- Carnegie Mellon University (2023). Creating exams, https://www.cmu.edu/teaching/assessment/assesslearning/creatingexams.html
- Center for Innovation in Teaching and Learning or CITL. (2017). Improving your test questions, http://www.citlillinois.edu. Improving%20Your%20Test%20Questions.html
- Choudhurg, A. (2023). Top 4 steps for constructing a test, https://www.yourarticlelibrary.com/education/test/top-4-steps-for-constructing-a-test/64781
- Clarke, V. & Braun, V. (2013) Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. The Psychologist, 26(2), 120-123.
- Colhen, A.S. & Wollack, J.S. (2005). Handbook on test development: Helpful tips for creating reliable and valid classroom test. Testing & Evaluation Services University of Wisconsin-Madison. p.4-5.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches (5<sup>th</sup> ed.). SAGE Publications.
- Cristobal, J. (2022). Test construction principles violated in selected summative tests in English. American Journal of Arts and Human Science (AJAHS), 1 (2), 33-39. DOI: https://doi.org/10.54536/ajahs.v1i2.317
- Dado, L.J., Habon, B., Malong, M. Paddil, R., Sanchez, L.F. (2023). Improving the inferencing skills of the Grade 12 HUMSS of Teodoro Hernaez National High School through downloaded audio scripts. An undergraduate action research.
- Dang-alan, E., Mangibat, K.M., Joaquin, G., Quinones, L.A. (2023). Improving the speaking skill of the GAS 11 B Students in Candon City High School through Mimicry strategy. An undergraduate action research.
- Devine, M. & Yaghlian, N. (2017). Test construction manual. Construction of objective tests, https://www.cte.cornell.edu/documents/Test%20Construction%20Manual.pdf
- Figuerres, J., Molina, R.M., Rodriguez, T. (2019). Enhancing the morphological ability of the Grade 7 Ilang-Ilang students of Candon National High School through word segmentation. An undergraduate action research.
- Fives, H. & DiDonato-Barnes, N. (2013). Classroom test construction: The power of a table of specifications. Practical Assessment, Research & Evaluation, 18 (4), 1-7.
- Franzen, M.D. (2011). Test construction. Encyclopedia of Clinical Neuropsychology, pp. 2489-2490.
- Frey,B.B., Petersen, S., Edwards, L., Pedtrotti, J.T., & Peyton, V. V. (2005). Item-writing rules: Collective wisdom. Teaching and Teacher Education, 21 (4): 357-364.
- Gapatan, C.M. et al. (2019). Enhancing the sentence construction ability along sentence patters of the Grade 9 Cypress students of Candon National High School through substitution tables. An undergraduate action research.
- Garin, D. (2004). Introduction to Research. Benguet State University
- Gumba, J., Dominno, R., Marcos, F., Basbas, H.G. (2023). Improving the oral reading fluency of Grade 10 Carnelian of CNHS through word stress intersect. An undergraduate action research.
- Hadloc, M., Roldan, R., Udan, F. (2018). Improving the vocabulary skills of Grade 10 Turing Students of

- Candon City Information Technology National High School through word association. An undergraduate action research.
- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Lilan, M.K., Gamata, A., Gacita, S., Silao, M. (2023). Enhancing the pronunciation skills of Grade 8 Durian through speak, repeat and seek strategy. An undergraduate action research.
- Lin, Y. (2002), Principles for writing multiple-choice items in vocabulary, grammar, and reading tests: A study on the test making process of an achievement test at fooyin institute of technology. Thesis. Fooyin Institute of Technology.
- Marie (2020). How to write clear test instructions (With 6 Examples), https://completeliterature.com/how-to-write-clear-test-instructions-with-5-examples/
- Marso, R. & Pigge, F. (2016). An analysis of teacher-made tests: Item types, cognitive demands, and item construction errors. Retrieved from https://doi.org/10.1016/0361-476x (91) 90027-1.
- Marzano, R. J. (2011). Classroom instruction that works: Research-based strategies for increasing learner achievement. ASCD.
- Marquez, J., Mina, A.P., Pacquing, B. (2019). Enhancing semantics skills of the Grade 10 Special Math Class students of Teodoro National High School through advance organizer. An undergraduate action research.
- Mayer, R. E. (2009). Multimedia learning (2<sup>nd</sup> ed.). Cambridge University Press.
- Montemayor, J.L. (2011). Assessment of learning 1: Compilation of principles and guidelines in test construction. Benguet State University.
- Nitko, A. J., & Brookhart, S. M. (2011). Educational assessment of learners (6th ed.). Pearson.
- Quaigrain, K. & Arhin, A.K. (2017). Using reliability and item analysis to evaluate a teacher-developed test in educational measurement and evaluation. Journal *Cogent Education*, 4 (1).
- Rapada, G., Rivera, J., Rojo, E.J. (2019). Improving the pronunciation skills along dipthongs of the grade 7 -A students of Nagtablaan National High School through contrast drill. An undergraduate action research
- Rodriguez, L.G., Martinez, C. A., Flora, J., Andalahao, J. (2024). Mathematizing english: utilizing mathematical equation in enhancing subject-verb agreement skill of Grade 8 learners. An undergraduate action research.
- Sespene, M. N. A., Oyangoren, H. R., Narnola, R. M. A., & Picardal, M. T. (2021). Macro and Micro Context Factors in English Language Learning in Modular Distance Learning. Recoletos Multidisciplinary Research Journal, 9(2), 35–52. https://doi.org/10.32871/rmrj2109.02.02
- Siddiqui, Z. (2018). Errors in the construction of multi-choice questions: an analysis. 7.
- Siri, A. and Freddano, M. (2011). The use of item analysis for the improvement of objective examinations. International Conference on Education and Educational Psychology (ICEEPSY 2011), https://ac.els-cdn.com/S1877042811026851/1-s2.0-S1877042811026851-main.pdf?\_tid=df38c134-d68c-11e7-8d47-00000aacb361&acdnat=1512128807\_2e7beee9fc1a2299850baa75a9bcb927
- Slavin, R. E. (2008). Educational Research in an Age of Accountability. Pearson Education.
- Tesheberu, A.T. (2014). Practices and challenges of test construction and administration in selected secondary schools of KolfeKeranio Sub-City in Addis Ababa, The, etd.aau.edu.et/bitstream/123456789/7786/1/6.%20Ashenafi%20Tilahun.pdf
- Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms. ASCD.
- Valdez, J., Kidangen, M.G., Espanto, L.W., Bangaoil, J.M. (2024). Kotobee author as an instructional tool in improving the reading comprehension skills of Grade 7 students. An undergraduate action research.
- Wang, J., Abdullah, R. & Leong, L.M. (2022). Studies of teaching and learning English-Speaking Skills: A review and bibliometric analysis. Frontiers in Education. https://doi.org/10.3389/feduc.2022.880990
- Xu, Y., & Liu, Y. (2009). Teacher assessment knowledge and practice: A narrative inquiry of a Chinese College EFL. TESOL Quarterly, 43, 493–513.
- Yenna, M. (2013). Principles of test construction 1, https://www.slideshare.net/ymdp08/principles-of-test-construction-1