

7E's-Based Thematic and Integrative Inquiry-Based Lesson Plans in Filipino Language Short Story Instruction: A Literature Review

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Abstract—This study titled "7E's-Based Thematic and Integrative Inquiry-Based Lesson Plans on Student Engagement and Learning Outcomes in Filipino Language Short Story" explores the application of the 7E instructional model in enhancing student engagement and learning outcomes in the context of Filipino literature. The research is grounded in constructivist learning theory, which emphasizes the importance of social interaction and collaborative learning in the educational process. This approach not only fosters critical thinking and problem-solving skills but also enhances students' appreciation of literature. Overall, the findings suggest that the 7E model can be a versatile and effective pedagogical tool across various educational levels and subjects, ultimately leading to improved academic performance and a deeper understanding of literary works among students.

Keywords— 7E's-Based Thematic and Integrative Lesson Plan, student engagement, reading comprehension, Filipino Short Story, Phil-IRI.

I. INTRODUCTION

This study presents a thorough review of the related literature and studies that support the present focus of this study both from foreign and local papers in relation to the variables being studied. In recent years, inquiry-based learning approaches have become increasingly popular in educational settings, aiming to boost student engagement and enhance learning outcomes. The 7E model of instruction, which includes "Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend," has surfaced as a key framework for fostering active learning and student-centered teaching. Research indicates that this method encourages critical thinking skills by engaging students in active participation and deeper conceptual exploration.

The 7Es model changes the role of the teacher from the knowledge provider to a facilitator, guiding the student in discovering and applying the knowledge. Teachers create a learning environment that fosters curiosity and collaborative problem-solving, so students can construct knowledge actively. This makes the shift encourage students to take more ownership of their learning processes, which is one of the main factors in developing critical thinking skills (Gyampoh et al., 2023; Rahman & Chavhan, 2022). In the experimental study by Gyampoh et al. (2023), the 7Es model will help learners develop their conceptual understanding and apply knowledge to new contexts.

Despite its established efficacy globally, there remains a notable gap in research specifically addressing the application of the 7E model within the context of Filipino language instruction, particularly in the realm of short story analysis. Although many studies have indicated positive effects when applying critical thinking to teaching literary works in different ways, further research is necessary to develop practical approaches that solve problems of students' passive learning and low interest in literature classes (Le, 2023). This gap highlights the need for targeted studies that explore how the 7E model can be effectively adapted and implemented in Filipino classrooms to enhance students' analytical skills and appreciation of literature.

In the Philippines few research was conducted integrating 7Es framework in teaching especially Science related concepts and found significant improvement on students' engagement and performance. Research such as of Antonio and Prudente (2023), show that the students who were taught by structured inquiry developed more autonomy and better problem-solving abilities than the ones taught traditionally. Similarly, Arroco (2021), performed guided inquiry lessons in Physics that used 7E's framework which allow students to make connections between concepts learned to real-life and meaningful learning experiences that they have acquired.

In addition, Alegario (2018), found that the 7E learning cycle bettered performance and motivation with traditional teaching approaches in Mathematics, Grade 10, while de Mesa (2021), in the modified version for Pre-Calculus, for students in a STEM track showed improvement in reasoning for mathematical competency. The lessons, after series of validation processes for curricular alignment, ensured effectiveness in teaching towards mastery and engagement. The model's student-centered approach proved more effective than textbook-based instruction. This approach could similarly be applied to the Filipino subject, where a more interactive, student-focused method might enhance both comprehension and student engagement in language learning.

With few studies on the integration of 7Es framework in teaching, there is a need to establish how this framework contributes to the engagement foster better academic performance in literature classes such as teaching Filipino short stories among Junior High School students. This research study tries to investigate the impact of 7Es-based

thematic and integrative inquiry-based lesson plans on student engagement and learning outcomes in Filipino language-based short stories. The exploration of the interconnection between innovative pedagogy and culturally relevant content, therefore, shall add value to literature education and beyond. Such an approach can better enable the students to overcome academic as well as real-life problems by critical and creative thinking.

The main purpose of the study was to explore the status of 7Es-based Thematic and Integrative Inquiry-Based lesson plans in Filipino language short story instruction and their impact on student engagement and learning outcomes.

II. LITERATURE REVIEW

The 7E instructional model builds on the traditional 5E learning cycle

In order to provide a wider lens and contextual base for the study, this section will provide the foreign literature related to the research. The foreign literature provides comparability and highlights what the overall social trends are doing on a global level to inform and corroborate the reasons for the study.

The 7E instructional model builds on the traditional 5E learning cycle to create a more robust framework for boosting student engagement and promoting inquiry-based learning. This model includes the stages of Engage, Explore, Explain, Elaborate, Evaluate, Extend, and Exchange, and it has been proven to enhance conceptual understanding while encouraging critical thinking. The 7E Learning Cycle Model, conceptualized by Bybee et al. (2006), constitutes an inquiry-oriented pedagogical framework that prioritizes active engagement and the construction of knowledge through seven distinct phases: Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend.

Bybee et al. (2006) assert that the model's organizational structure offers a systematic methodology for teaching and learning, thereby ensuring that students are actively engaged at each phase of the instructional process. The model's focus on student-centric learning is notably effective in enhancing engagement, as it empowers learners to assume responsibility for their educational journey. This pedagogical strategy is congruent with empirical findings from research on constructivist learning theory, which posits that students achieve optimal learning outcomes when they are actively involved in their educational experiences (Piaget, 1973).

The Engage phase, as delineated by Bybee et al. (2006), occupies a crucial position in stimulating students' interest and activating their prior knowledge. Bell et al. (2013) contend that this phase fosters an environment conducive to motivating students to investigate new concepts, thereby increasing the likelihood of their engagement with the instructional material. When learners are able to forge connections between their existing knowledge and forthcoming content, they are more predisposed to invest effort in the lesson. This phase has been recognized as instrumental in igniting curiosity, which is fundamental for sustained retention and learning (Bransford et al., 2000).

The Explore phase represents another vital element of the 7E model, as it facilitates students' participation in hands-on, inquiry-driven activities. Toth and Nadelson (2017) assert that

this phase cultivates critical thinking and problem-solving abilities by urging students to test hypotheses and investigate scientific principles within authentic contexts. Research conducted by Roberts and Bybee (2014) further corroborates this assertion, indicating that exploration permits students to independently uncover insights, thereby enriching their comprehension of the subject matter. By offering avenues for direct engagement with content, this phase undergirds experiential learning, which has been empirically demonstrated to enhance both engagement and conceptual understanding (Kolb, 1984).

In the Explain phase, students are afforded the opportunity to articulate and refine their comprehension through discourse and elucidation. As noted by Bybee et al. (2006), this phase enables students to consolidate their understanding and rectify any misconceptions. According to Bell et al. (2013), this phase is particularly efficacious in facilitating connections between students' hands-on experiences from the Explore phase and theoretical constructs. The process of articulating their learning not only bolsters students' communication skills but also, as evidenced by research conducted by Sato et al. (2017), indicates that when students elucidate concepts to their peers, they frequently deepen their own grasp of the material.

The Elaborate phase enhances learning by prompting students to apply their newly acquired knowledge across various contexts, thereby reinforcing the significance of their educational experiences. Bell et al. (2013) assert that this phase encourages students to engage in critical thinking regarding the applicability of their learning to real-world challenges. By broadening their understanding, students are able to establish connections between classroom instruction and life beyond the educational environment. Toth and Nadelson (2017) emphasize that the Elaborate phase fosters deeper learning and assists students in recognizing the broader implications of their educational endeavors.

The Evaluate phase is a chance for students and teachers to think about understanding and improvements for the upcoming learning needs. It is important to recognize this phase as part of overall understanding and practice to determine if the students have acquired the significant aspects of the lesson (Bybee et al., 2006). Evaluate may include formal assessments such as quizzes or examinations or informal evaluations such as peer assessment, student reflection and discussion, and lastly whole-group discussion. Another goal for Assess is for the student to begin to self-reflect on their learning and make goals for improvement (Sato et al., 2017). In this way, evaluation assists students in building their metacognitive skills to assist them with lifelong learning (Tinapay et al., 2023).

The 7E model has become quite popular for enhancing student engagement.

In case you did not know, Bybee et al. (2006) and Toth and Nadelson (2017) identified that students engaged in dense inquiry are much more engaged than when instruction occurs in traditional teacher-centered ways. According to Bell et al. (2013) the structure of the 7E model involved active, hands-on learning which encourages students to be engaged by being

active in learning. They pointed out that focus on engagement has a positive link to motivation, which can positively impact learning (Deci & Ryan, 2000).

Additionally, the 7E model has proven to be effective in terms of learning outcomes (Bell et al., 2013). The 7E model has proven effective for enhancing student learning outcomes (Bell et al., 2013). They note that students taught in the 7E model performed better on assessments that require students to measure their conceptual understanding and critical thinking skills. Toth and Nadelson (2017) found students in inquiry-based classrooms evaluate more in high retention and transfer applications. Bybee et al. (2006) identified that the 7E model allowed for iterative learning of concepts for students when engaging the key ideas holistically in multiple phases.

The Extend phase of the 5E model promotes the student to apply new learning to new or broader situations to encourage transfer of that's learning outside or beyond the classroom context. All students will have different experiences to then bring to their learning and research by Roberts and Bybee (2014) suggests this phase is vital in helping students recognize the longer-term importance of what they are learning. This occurs because, by connecting to other aspects of students' lives or knowledge, they are better able to comprehend their learning in a deeper manner. In the Extend phase, Toth and Nadelson (2017) highlight that this part of the 5E model enables students to continue getting excited about the subject matter, generating more motivation for them to explore beyond their current topic and also addressing the material again in future scenarios.

The 7E model's emphasis on inquiry and exploration has evolved into instruction that facilitates new 21st century skills such as critical thinking, collaborative group work, and problem solving. Roberts and Bybee (2014) explain that the 7E model supports skills that are vital to success in today's globalized world. Bell et al. (2013) clarify that when students are foreseen as taking part in learning experiences, they develop content knowledge and skills for transferable use when confronted with complex, real world problems. Also, Sato et al. (2017) found that when students frequently use the 7E model, they develop better collaboration skills for future use, as the model consistently promotes group work and opportunities for student to discuss with peers.

Bybee (2014) describes how using digital tools throughout the cycle, such as simulations or digital interactive platforms, can enhance students' learning experiences at all phases. For instance, an example could be for students to use digital tools in the Explore phase where they can conduct a simulated experiment or do research that takes too long to conduct or is possible in a traditional classroom. According to Toth and Nadelson (2017), these types of technologies make learning vibrant and improved opportunities for deeper and personalized experience.

The idea of thematic inquiry is further supported by McLean et al., who suggest that children's literature can act as a gateway for scientific exploration in early childhood education (McLean et al., 2015). This viewpoint underscores the potential for incorporating thematic inquiry within the 7E model, as literature can spark curiosity and exploration across

different subjects. By using literature as a thematic starting point, educators can utilize the 7E model to boost student engagement and inquiry.

The 7E model is built on constructivist principles, which effectively connect what learners already know with new information.

Rahman and Chavhan (2022) indicate that this model facilitates scaffolding by allowing students to actively build knowledge through guided discovery and reflection. This approach is in line with worldwide initiatives to adopt inquiry-based and student-centered teaching methods that cater to various educational settings.

The 7E learning model is a student-centered teaching approach where the teacher acts as a facilitator, guiding students in completing their tasks. This environment encourages students to think critically and logically, enhancing their higher-order thinking skills, which are essential for improving their learning outcomes. Sharma (2022) confirmed that the 7E learning model is a more effective teaching strategy compared to traditional methods, particularly in fostering a positive attitude towards science. As a result, teachers can implement the 7E instructional model in their courses to create an effective student-centered learning environment in the classroom (Tirol, 2022).

Additionally, the 7E model has been proven to boost academic achievement across various subjects. Kahyaoğlu's indicates that students taught with the 7E model performed better than those in traditional learning environments, underscoring the model's effectiveness in promoting academic success (KAHYAOĞLU, 2021). Shaheen et al. also affirm that the 7E instructional model has a positive effect on students' performance in biology, indicating that the structured phases of the model encourage deeper learning (Shaheen et al., 2015). This is further supported by Demelash, who found that a simulation-integrated 7E strategy significantly increased student engagement and success in chemistry (Demelash, 2024).

The 7E instructional model has been shown to significantly boost student engagement across various educational settings

In order to embed the study into the locality this section examines the Philippine literature related to the research topic at hand. These references reveal local trends, dilemmas and perspectives that grant a more nuanced understand of the topic at a national level.

The 7E instructional model has been shown to significantly boost student engagement across various educational settings, including literature classes. This model encourages active learning and empowers students to take charge of their educational journey, which is especially advantageous in subjects that demand critical thinking and interpretive skills, like literature. Research suggests that the 7E model creates a more engaging learning environment. For example, Gonzaga-Leong-On's study points out that using inquiry-based learning through the 7E model fosters a cohesive and engaging classroom atmosphere, which students view positively (Gonzaga-Leong-On, 2020). This is supported

by findings from Shaheen et al., who highlight that structured instructional models like the 7E approach can enhance student achievement and engagement in subjects such as biology, indicating that similar advantages could apply to literature classes (Shaheen et al., 2015).

Han's research further supports this, revealing that applying the 7E approach in a postgraduate biology course resulted in notable improvements in both academic performance and scientific process skills (Han, 2024). The model's versatility is clear in its use across various educational levels and subjects. For instance, Iqbal's thorough analysis shows that the 7E model improves academic performance and cognitive skills in different educational environments (Iqbal, 2024). The organized phases of the 7E model enable students to actively engage in their learning, thereby increasing their interest in the subject matter (Tirol, 2023).

Additionally, the 7E model's focus on exploration and elaboration can be particularly beneficial in literature classes, where students gain from discussing and interpreting texts together. While the reference to Clements' research (Botev & Lera, 2021) does not directly support the idea that interactive platforms boost student engagement in literature, the overall concept of integrating technology and interactive elements into the 7E framework remains relevant. By incorporating these tools, educators can create a more dynamic and engaging learning experience that resonates with students (Tinapay & Tirol et al., 2021).

The role of storytelling and narrative techniques in engaging students is highlighted by Hisey et al., who discovered that interactive storytelling can effectively capture students' attention and encourage them to engage more deeply with the material (Hisey et al., 2022). This implies that incorporating storytelling elements into the 7E model could improve student engagement in literature classes, making the learning experience more relatable and enjoyable.

Furthermore, the significance of social interaction in boosting student engagement is reinforced by research from Zainuddin et al., which shows that collaborative tools can promote discussions and interactions among students, thus elevating their engagement levels (Zainuddin et al., 2020). This is especially pertinent in literature classes, where conversations about themes, characters, and narratives can enrich students' understanding and appreciation of texts. In summary, the 7E instructional model provides a strong framework for enhancing student engagement in literature classes.

A key feature of the 7E model is its capacity to support thematic inquiry.

This section provides relevant studies coming from the foreign and national sources which can help elaborate the focus of the study and their variables.

This component highlights suitable foreign studies that offer empirical data and theoretical viewpoints from outside the local context. These works establish an internationally based framework for better understanding the research problem, and provide useful comparisons with local results.

Diyyab's research highlights the significance of combining the 7E model with Academic Writing Environments (AWE) to improve students' academic writing abilities, suggesting that thematic approaches can be effectively organized using this model (Diyyab, 2021). This indicates that the 7E model can be tailored to various thematic contexts, enabling educators to design cohesive learning experiences that link different subject areas.

In the realm of inquiry-based learning, Ecevit et al. performed a thematic content analysis of inquiry, argumentation, and STEM education practices, revealing trends in these fields over the past decade (Ecevit et al., 2021). Their results indicate that the 7E model can be successfully used to structure inquiry-based learning experiences that are thematic, thereby enhancing students' critical thinking and problem-solving abilities. This supports the idea that thematic inquiry can be enriched through organized frameworks like the 7E model.

Additionally, the incorporation of thematic inquiry within the 7E framework is backed by Broome et al., who examine the role of inquiry-based art education in promoting critical thinking through thematic structures (Broome et al., 2017). Their research demonstrates how thematic inquiry can be applied to analyze and assess content, which is a fundamental aspect of the 7E model. This method not only fosters engagement but also encourages students to consider multiple viewpoints and gain a deeper understanding of the subject matter.

Moreover, the research by Fan and Ye highlights the significance of thematic development in inquiry-based learning, especially in project design courses (Fan & Ye, 2022). Their results indicate that thematic inquiry can be effectively organized within the 7E model, enabling students to participate in meaningful projects that link various disciplines. This integrative strategy not only promotes collaboration but also enriches the overall learning experience.

Students' retention improved when they were taught using the 7E instructional approach.

These findings from Abdullahi et al (2021) suggest that adopting the 7E instructional method can enhance students' achievement in Biology. Additionally, the results indicate that students are able to recall what they learned after some time, which increases their chances of passing examinations.

In the context of Pakistan, Noreen et al. (2023) investigated the influence of the 7E instructional model on the scientific learning outcomes of students in Grade 8. Their research yielded compelling evidence of a distinct academic benefit for learners who were instructed utilizing the 7E methodology. The investigators posited that the inquiry-oriented framework inherent in the model facilitated a deeper comprehension and retention of concepts by motivating students to formulate inquiries, engage in experimentation, and reflect throughout the educational process.

Further contributing to the body of evidence, Iqbal et al. (2023) undertook a thorough synthesis of studies examining the implementation of the 7E model across diverse educational environments. Their evaluative analysis corroborated the

model's efficacy in fostering not only academic performance but also pivotal cognitive and emotional outcomes. In essence, students exhibited enhanced performance, accompanied by increased motivation and self-assurance in their educational endeavors.

The advantages of the 7E model extend beyond mere academic assessments or student engagement; it further cultivates essential cognitive skills.

In a study executed in Indonesia, Sari et al. (2020) implemented the 7E cycle within a biology curriculum addressing the circulatory system. The findings revealed substantial advancements in students' critical thinking abilities. The researchers credited these improvements to the model's framework, which promotes active sense-making through hands-on activities, discussions, and reflective practices—integral components necessary for the cultivation of higher-order thinking.

Moreover, the integration of technology has the potential to amplify the efficacy of the 7E model. Mekonnen et al. (2024) integrated computer animations into a science lesson based on the 7E approach and discovered that students not only demonstrated enhanced learning outcomes but also exhibited a more profound understanding of complex concepts. The incorporation of technological tools enabled learners to visualize abstract notions, thereby enriching both engagement and clarity.

Notably, the effectiveness of the 7E model is not confined to scientific or secular subjects. Nurfadhilah et al. (2024) implemented the model within the context of Islamic religious education and observed significant enhancements in student performance. This indicates that the model's framework—emphasizing exploration, explanation, and ongoing reflection—can be adapted across various disciplines while still fostering meaningful learning experiences. In the Nigerian educational landscape, Abdullahi et al. (2021) evaluated the model with secondary school biology students. The findings indicated that students exhibited considerably improved information retention when instructed through the 7E approach. The study highlighted that the experiential, student-centered phases of the model facilitate long-term retention, an essential element for academic success.

In addition to the academic advantages, students frequently report a heightened enjoyment of their classes when the 7E model is employed. Armbuster (2009) observed that learners expressed greater satisfaction and engagement in lessons structured around the model, noting that the varied and interactive nature of the 7E phases fostered a sense of ownership over their educational process. This emotional engagement is equally vital as the academic improvements achieved (Tirol, 2021).

The 7E instructional model improves science inquiry skills

This part features Philippine based studies that are closely related to the study. These studies provided local data and finding in context related to the many uniquely cultural, social, and institutional factors of the Philippines.

Research conducted by Lubiano and Magpantay (2021) examined senior high school students in the Philippines, investigating how the 7E instructional model improves science inquiry skills in General Chemistry. By implementing thematic and inquiry-based strategies, the model aimed to bridge learning gaps and foster a deeper comprehension of scientific concepts. The findings indicated that the various phases of the 7E model stimulated critical thinking, facilitated meaningful learning experiences, and encouraged active participation among students (Tirol et al., 2022).

The model's thorough approach to tackling all three learning domains—cognitive, affective, and psychomotor—has been recognized as a significant advantage. Research of Libata et al. (2021) shows that by combining these domains, thematic and inquiry-based instruction promotes well-rounded learning outcomes, especially in STEM areas.

Villacrusis and Beloy's research indicates that the 7E model leads to higher scores in science achievement tests, especially during the Explore, Explain, Elaborate, and Extend phases (Villacrusis & Beloy, 2021). Furthermore, Noreen's research highlights that students who learned through the 7E strategy achieved better post-test scores than their peers in control groups, demonstrating the model's effectiveness in curriculum development and classroom practices (Noreen, 2024).

Based on the study of Iqbal et al. (2024) the 7E model has shown a notable enhancement in students' cognitive and emotional outcomes when compared to conventional teaching methods. The study emphasizes the model's success in promoting active, student-centered learning and underscores the significance of elements like teacher training, classroom atmosphere, and institutional backing for its effective application. The findings are intended to assist educators and policymakers in refining teaching strategies to achieve better academic results across different subjects (Tinapay & Tirol, 2021).

Research shows that the 7E model significantly enhances students' understanding of concepts and their ability to retain knowledge.

Mekonnen's study points out that incorporating computer animations into the 7E learning cycle improves students' grasp of concepts and helps clear up misconceptions (Mekonnen, 2024). Likewise, Lubiano and Magpantay discovered that the 7E instructional model effectively tackles the difficulties students encounter when trying to understand complex scientific ideas, thereby enhancing their inquiry skills (Lubiano & Magpantay, 2021).

By encouraging active learning, fostering collaboration, and integrating technology and storytelling, educators can cultivate a more engaging and effective learning environment. The combined evidence from various studies supports the idea that the 7E model not only improves academic achievement but also significantly enhances student engagement, making it a valuable strategy in instructional planning for literature education.

The 7E instructional model builds on the traditional 5E learning cycle by adding the Extend and Exchange phases,

creating a more thorough framework for promoting deeper understanding and inquiry-based learning (Rahman & Chavhan, 2022). This constructivist approach effectively connects prior knowledge with new concepts through its organized phases: Engage, Explore, Explain, Elaborate, Evaluate, Extend, and Exchange. By focusing on active participation, scaffolding, and collaboration, the model fosters student-centered learning environments.

Research shows the versatility and effectiveness of the 7E model across different subjects.

Studies by Kahyaoglu (2021) and Shaheen et al. (2015) indicate that students who engage with this framework tend to perform better than those taught through traditional methods, particularly in science. In literature classes, the model encourages inquiry-driven learning, enhancing students' engagement, critical thinking, and interpretive skills (Gonzaga-Leong-On, 2020). The use of storytelling and social interaction further boosts the model's effectiveness, as storytelling captures student interest (Hisey et al., 2022), and collaborative tools promote meaningful peer discussions (Zainuddin et al., 2020). In thematic and integrative learning, Diyyab (2021) and Ecevit et al. (2021) point out the model's capacity to improve writing and critical thinking through structured inquiry. Fan and Ye (2022) emphasize its role in project-based learning, highlighting the importance of interdisciplinary collaboration.

In the Philippines, studies by Lubiano and Magpantay (2021) and Libata et al. (2021) demonstrate that the 7E model enhances science inquiry skills, addressing cognitive, affective, and psychomotor domains for well-rounded learning outcomes. Research by Villacrusis and Beloy (2021) further shows higher student performance during critical phases of the 7E model, while Noreen (2024) and Iqbal et al. (2024) emphasize its success in improving cognitive and emotional outcomes compared to conventional teaching methods.

Lubiano and Magpantay (2021) investigated the implementation of an augmented 7E instructional model in conjunction with interactive courseware for the pedagogical delivery of General Chemistry to Grade 12 STEM students. Their research indicated that participants exhibited markedly enhanced scientific inquiry capabilities when engaged with the organized and learner-centered components of the 7E model. The authors articulated that each distinct phase—from the elicitation of prior knowledge to the extension of learning—fostered active involvement and a profound conceptual comprehension. Consequently, learners demonstrated increased engagement and the ability to autonomously construct knowledge. This underscores the significance of integrating technology with inquiry-based pedagogical approaches within the realm of senior high school science education.

In a more recent investigation, Kilag et al. (2023) analyzed the way the 7E model facilitates conceptual comprehension and student engagement within the context of Philippine science education. They underscored those students exhibited affirmative responses to the model's exploratory and experiential activities, which permitted them to interact

meaningfully with scientific concepts. The researchers asserted that the model's efficacy could be optimized through the provision of adequately trained educators and suitable resources. Their findings imply that the model is congruent with the educational objectives delineated in the Philippines' K to 12 curriculum (Tinapay & Tirol, 2022). This study fortifies the increasing advocacy for professional development in innovative, learner-centered pedagogical methodologies.

Lisao et al. (2023) executed a systematic review pertaining to the application of the 7E Learning Cycle Model within Philippine educational settings. Their examination revealed consistent advancements in learner engagement, critical analytical skills, and scientific reasoning. The structural framework of the model was demonstrated to bolster inquiry-based learning, enabling students to construct their own understanding through a coherent sequence of experiences. They also accentuated how the 7E approach aligns seamlessly with the extant K to 12 educational frameworks, rendering it a viable option for extensive implementation. This indicates a promising potential for enhancing science education outcomes nationally through the application of the 7E model.

Lubiano and Magpantay (2021) also highlighted the complementary function of interactive courseware in amplifying the efficacy of the 7E model. Their investigation unveiled that digital tool afforded students with instantaneous feedback and interactive simulations that facilitated conceptual mastery.

The incorporation of multimedia rendered lessons more dynamic, thereby assisting in sustaining students' interest and concentration throughout the instructional cycle. The amalgamation of digital learning resources and inquiry-based methodologies encouraged learners to assume an active role in their educational journey. This synergistic relationship between pedagogy and technology is imperative for contemporary educational environments.

In another scholarly contribution, Lisao et al. (2023) underscored the necessity of aligning the 7E model with national curriculum standards, such as the K to 12 Basic Education Curriculum. They contended that such alignment not only streamlines implementation for educators but also supports enduring educational reforms aimed at cultivating 21st-century competencies.

The 7E Learning Cycle Model enhances in-depth learning by giving students agency over their learning, making connections to the real world, and higher-order thinking and problem-solving

Studies have found that the structure of the 7E Learning Cycle Model enhances in-depth learning by giving students agency over their learning, making connections to the real world, and higher-order thinking and problem-solving (Bybee et al., 2006; Bell et al., 2013). Additionally, the learning cycle, focusing on the exploration of activities, collaboration, and time for reflection, supports the development of conceptual understandings as well as important 21st-century skills, such as communication and working as a team (Toth & Nadelson, 2017; Sato et al., 2017). The inclusion of technology within the 7E learning cycle elevates student learning by giving

students interactive platforms that extend their learning beyond the classroom and giving their learning a personalized experience (Bybee, 2014).

Research consistently highlights its effectiveness in improving student outcomes, with studies noting gains in academic performance, retention, and the development of higher-order thinking and collaboration skills (Bybee et al., 2006; Bell et al., 2013; Toth & Nadelson, 2017). The model's emphasis on real-world application and reflective learning encourages learners to connect new knowledge with prior understanding, aligning well with constructivist principles (Piaget, 1973; Rahman & Chavhan, 2022). Its adaptability across educational levels and disciplines, including science and literature, has been affirmed in both global and national contexts (Shaheen et al., 2015; Han, 2024; Gonzaga-Leong-On, 2020).

Moreover, the incorporation of digital tools and thematic elements, such as storytelling and collaborative platforms, has been shown to further enrich the learning experience and sustain student motivation (Sato et al., 2017; McLean et al., 2015; Zainuddin et al., 2020).

III. CONCLUSION

In conclusion, the 7E instructional model acts as a strong framework for instructional planning, significantly influencing students' learning outcomes by enhancing engagement, conceptual understanding, and knowledge retention. The combined evidence from various studies highlights the model's success in encouraging active learning and meeting the diverse needs of students across different educational settings.

The 7E Learning Cycle Model, consisting of the Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend, helps enhance student engagement and student learning outcomes by encouraging active inquiry-based learning. Altogether, the 7E model stands out as a robust instructional strategy that equips learners with the cognitive and interpersonal skills essential for academic success and lifelong learning. The 7E instructional model, developed as an expansion of the traditional 5E framework by Bybee and colleagues, offers a dynamic and student-centered approach to teaching that enhances engagement and fosters deeper conceptual understanding. Comprising seven interrelated phases—Engage, Explore, Explain, Elaborate, Evaluate, Extend, and Exchange—the model supports inquiry-based learning by guiding students through a structured yet flexible process that prioritizes active participation and critical thinking.

IV. RECOMMENDATIONS

This review of related literature and studies suggested that when students are motivated to explore, evaluate, and elaborate on their own ideas, they become more engaged in the learning process. This reinforces the perspective that the 7E model not only enhances academic achievement—it nurtures lifelong learning dispositions. Their findings provide robust support for the integration of inquiry-based learning across Philippine educational systems.

Based on the research findings, the following are suggested recommendations:

Increasing Teacher Support and Training.

To effectively apply the 7E teaching model, teachers need targeted support through workshops and training sessions. These sessions should focus on lesson planning, classroom strategies, and hands-on application of the 7E framework. Additionally, creating online resource-sharing platforms can help teachers access ready-made, cross-subject materials that save preparation time and encourage collaboration.

Improvements in Curriculum and Instruction

Expanding the use of the 7E model beyond Filipino short stories to other subjects can deepen student engagement and foster interdisciplinary learning. This approach encourages students to make connections across different topics, enriching their understanding. A standardized lesson format for 7E-themed instruction can also provide structure and consistency while still allowing room for creativity.

Student Engagement Strategies

Interactive learning activities such as storytelling, group discussions, and project-based tasks help keep students actively involved in lessons. These strategies promote meaningful learning experiences and encourage student collaboration. Incorporating multimedia and educational technology can further enhance the inquiry-based nature of the 7E model, appealing to various learning styles.

Further Research

Future studies should explore the long-term academic impact of using the 7E model across multiple subjects and school years. Research should also assess its effectiveness across different school settings, including varying socioeconomic and regional contexts. This will provide a clearer understanding of how adaptable and scalable the model is in diverse learning environments.

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