

Effectiveness of the SAMR Model for Enhancing Literature Instruction in Junior High School

Cindy Carmela B. De Castro*, Aimee M. Guia

Batangas State University-Pablo Borbon Campus, Batangas City, Philippines

*Corresponding Author Email: cindydecastro281930@gmail.com

Date received: April 1, 2025

Date revised: May 2, 2025

Date accepted: May 31, 2025

Originality: 96%

Grammarly Score: 99%

Similarity: 4%

Recommended citation:

De Castro, C. C., & Guia, A. (2025). Effectiveness of the SAMR model for enhancing literature instruction in junior high school. *Journal of Interdisciplinary Perspectives*, 3(6), 518–531. <https://doi.org/10.69569/jip.2025.211>

Abstract. This study explored how English teachers in private junior high schools in Batangas City applied the SAMR model in teaching literature. A descriptive research design, combining qualitative and quantitative methods, was employed to gather data from 60 English teachers during the School Year 2023–2024. Data were collected using a researcher-made questionnaire that captured teachers' experiences, perceptions, and instructional practices. The findings revealed diverse teaching experiences, mainly in terms of years and grade levels, with most teachers holding bachelor's degrees and attending moderate seminars. While the SAMR model was moderately applied across its Substitution, Augmentation, Modification, and Redefinition levels, teachers who attended six or more seminars showed higher usage of the Redefinition level. No significant differences were found in SAMR usage based on years of teaching experience or highest educational attainment. The study emphasized the importance of accessible technology, collaborative tools, and purposeful integration in teaching literature, while identifying barriers such as limited resources and time constraints. These findings underscore the SAMR model's potential to revolutionize literature instruction when challenges are addressed, highlighting the need for targeted guidelines to help teachers effectively integrate educational technologies.

Keywords: 21st-century skills; Barriers to integration; Professional development; SAMR model; Technology Integration.

1.0 Introduction

The rapid evolution of Information and Communication Technology (ICT) in the 21st century has significantly influenced numerous fields, with education being one of the most impacted. As ICT becomes an integral part of teaching practices, educators must acquire the competencies to effectively utilize these tools within and beyond the classroom to achieve educational goals (Setyaningsih, 2020). A vital component of this integration involves enhancing crucial student skills—communication, collaboration, critical thinking, and creativity—necessary to navigate the vast resources available online (Aprinaldi et al., 2018; Tunjera & Chigona, 2019).

Various frameworks have been proposed to guide ICT integration in education. While Mishra and Koehler's (2006) TPACK framework emphasizes the interplay between technological, pedagogical, and content knowledge, critics like Harris and Hofer (2011) argue that its complexity limits practical application. Conversely, Puentedura's (2013) SAMR model offers a more structured approach by categorizing ICT use into substitution, augmentation, modification, and redefinition. Although the SAMR model holds potential for transformative educational practices, many educators remain confined to the substitution level, where technology replaces traditional tools without enhancing pedagogy.

The SAMR model, as detailed by Hamilton et al. (2016), serves as a framework to integrate technology into instruction to improve student engagement and motivation. It underscores the importance of utilizing technology to create meaningful, authentic learning experiences that address students' diverse needs and interests (Puentedura, 2014). Educators can transform their teaching approaches by progressing through the SAMR stages, fostering active participation, digital literacy, and improved learning outcomes (Hamilton et al., 2016; Savignano, 2017; Harapnuik & Thibodeaux, 2017). The goal is to use the model to develop critical skills such as collaboration, creativity, and communication, which are essential for success in the 21st century (Pfaffe, 2017). In addition to ICT, literature plays a crucial role in education by fostering students' comprehensive development. It enhances critical thinking, empathy, cultural awareness, and social-emotional abilities, helping learners connect with diverse viewpoints and historical contexts. Literature is especially valuable in English language teaching (ELT) as it provides authentic materials that aid language acquisition, boost creativity, and deepen appreciation for complex concepts (Kaowiwattanakull, 2021).

While traditional methods of teaching literature hold their importance, advancements in technology encourage educators to explore innovative approaches for a more engaging learning experience. Conventional methods often face challenges like passive learning, limited relevance to real-world applications, and a focus on memorization that hinders student involvement. These techniques, relying heavily on textbooks, lectures, and static materials, can lead to monotonous learning environments, despite occasional use of visual aids such as maps, charts, and images. Transforming these approaches with technology has the potential to address these limitations effectively. Banerjee (2024) highlights how technology-integrated learning revolutionizes the learning process by utilizing digital tools. Interactive presentations, multimedia resources, virtual field trips, and educational applications create immersive and dynamic learning experiences. Moreover, digital archives, online databases, and virtual museums provide access to extensive historical data, empowering students to explore primary sources and conduct independent research. Collaborative platforms foster teamwork, critical thinking, and analytical skills, making the learning environment more engaging and inclusive. By blending traditional methods with technological innovations, educators can create more effective and enriching educational experiences.

The advent of the Common Core Standards, which emphasizes technology and integrates digital tools, and the SAMR Model have become a school priority (Cristen, 2019). Technology positively impacts student learning by promoting engagement, often leading to better information retention. As technology continues to evolve globally, it remains highly relevant to students' lives. Technology-enabled hands-on learning opportunities can be integrated into various subjects, including mathematics, science, reading, and social studies, providing collaborative environments where students can learn from one another. These factors collectively enhance student motivation and academic achievement. The SAMR Model (Substitution, Augmentation, Modification, and Redefinition) enhances literature teaching by enabling educators to integrate technology in ways that transform learning. It allows teachers to evaluate their use of technology, redesign lesson plans, and create activities that foster more profound understanding and engagement. By adopting the SAMR Model, educators can develop interactive and collaborative projects, link literature to real-world contexts, and address diverse learning needs. This model also supports digital literacy development, encouraging creativity and innovation in literary analysis.

This study, conducted by a junior high school literature teacher, suggests that focusing on students' needs and creating enjoyable learning experiences can benefit literature instruction. Utilizing the SAMR Model to assess and implement technology can help teachers seamlessly integrate digital tools into the curriculum. This approach encourages deeper engagement, enhances critical thinking, and significantly improves the educational experience. Thus, this study assessed the use of the SAMR model in teaching literature in junior high school.

2.0 Methodology

2.1 Research Design

This study employed a descriptive research design to explore using the SAMR Model in teaching Literature in Junior High School. According to Siedlecki (2020), descriptive research involves gathering information about prevailing conditions or situations to describe individuals, events, or environments in real-life educational contexts. This method focuses on studying the characteristics of populations, identifying existing problems within a unit, or comparing variations in practices across institutions. In this study, descriptive analysis included both qualitative and quantitative data. Qualitative methods provided an in-depth understanding of participants'

experiences and perceptions, while quantitative methods facilitated numerical data collection and statistical analysis. Together, these approaches offered a comprehensive insight into the impact of the SAMR Model on teaching Literature in Junior High Schools.

2.2 Research Participants

The study included 60 English teachers from private junior high schools in Batangas. Inclusion criteria required participants to be employed in schools with valid operating permits. For qualitative data, the researcher obtained written permission from school principals through formal letters endorsed by the research adviser and approved by the Dean of the College of Teacher Education.

2.3 Research Instrument

The main instruments for data collection were a researcher-made questionnaire and a semi-structured interview. The questionnaire was carefully developed to ensure content validity, clarity, and alignment with the study’s objectives. The interview was a supplementary tool to validate and enrich the quantitative findings.

2.4 Data Gathering Procedure

The researcher followed a systematic procedure for data collection. First, permission was secured from private schools with an operating permit. Next, the researcher coordinated with school heads in Batangas City to identify eligible participants. Formal letters endorsed by the research adviser and approved by the Dean were then sent to principals to obtain approval. Once consent was granted, the survey and interview were conducted.

2.5 Ethical Considerations

The researcher followed a systematic procedure for data collection. First, permission was secured from private schools with operating permits for SY 2023–2024. Next, the researcher coordinated with school heads in Batangas City to identify eligible participants. Formal letters endorsed by the research adviser and approved by the Dean were then sent to principals to obtain approval. Once consent was granted, the survey and interview were conducted.

3.0 Results and Discussion

3.1 Profile of the Teachers

Table 1 indicates that the respondents' years of experience are evenly distributed: 20 are beginners (0-3 years), 21 are transitioning (4-5 years), and 19 are experienced (more than 5 years). Most teachers in the initiation and transition stages are more likely to adopt new technologies like the SAMR model. While experienced teachers may need more time to adjust, their background enables them to mentor peers and support effective implementation of technology-based teaching methods.

Table 1. Respondents’ Years of Experience

Categories	Frequency	Percentage
Beginning (0-3 years)	20	33.30
Transitioning (4-5 years)	21	35.00
Experienced (more than 5 years)	19	31.70
Total	60	100

The distribution of the teacher-respondents’ highest educational attainment in Table 2 shows that 36 hold a bachelor's degree, and 24 have a master's degree, indicating that most have achieved undergraduate qualifications. Master's degree holders are likely better equipped with advanced pedagogical skills and research-based strategies, making them more effective in implementing frameworks like SAMR. Meanwhile, although professionally capable, bachelor’s degree holders may need additional support to adapt to modern educational technologies and strategies.

Table 2. Respondents’ Highest Educational Attainment

Categories	Frequency	Percent
Bachelors’ Degree	36	60.00
Masters’ Degree	24	40.00
Total	60	100

Table 3 depicts the number of trainings and seminars attended by the teacher-respondents, which varies from a

few to several. Between 1 and 5 workshops were participated in by 31 teachers. However, 29 teachers attended seminars numbering six or more. It is nearly a tie. Most of the teachers have experienced some form of professional development, but the frequency and depth differ among them. Teachers with 6 or more seminar hours have been trained to infuse many new teaching strategies and educational technologies. Such training gives them confidence to apply the SAMR model and other digital tools in their classrooms, making them apt coaches to less-trained colleagues. Teachers who attended 1-5 seminars still develop their skills in effective technology integration. These teachers require more training in the practical application of the SAMR model to enhance their self-confidence and competence in using technology for teaching.

Table 3. *Respondents' Number of Trainings and Seminars Attended*

Categories	Frequency	Percent
1-5 Seminars	31	51.70
6 Seminars and more	29	48.30
Total	60	100

3.2 Extent of Teachers' Use of the SAMR Model in Teaching Literature

Below is the extent to which teachers use the SAMR Model (Substitution, Augmentation, Modification, and Redefinition) in teaching literature.

Substitution

At the substitution level found in Table 4, the teachers have displayed an average technology use in place of the old ways in teaching literature, as it has a generally weighted mean of 3.17. The items that garnered the highest scores were the online quizzes or assessments, which scored a WM of 3.38, and the integration of educational apps, with a score of 3.33. This signifies that testing was evident among the different frequencies in the use of digital tools. A mid-score item deals with creating and collaborating to distribute information digitally through applications like Padlet or Google Slides. WM = 3.25. It represents a medium acceptance rate for collaborative digital tools. The lowest rated was the storyboard apps. WM = 2.90. At least on some of the applications, integration was less thorough.

Table 4. *Extent of Utilization of the SAMR Model in Teaching Literature relative to Substitution*

Indicators	Mean	SD	Interpretation
1. I incorporate online quizzes or assessments, substituting the traditional paper-based tests.	3.38	0.55	Moderate Extent
2. I integrate educational apps for literature classes.	3.33	0.60	Moderate Extent
3. I instruct students to type and submit their work electronically instead of handwritten assignments.	3.28	0.61	Moderate Extent
4. I create and share information digitally using platforms like Padlet or Google Slides.	3.25	0.70	Moderate Extent
5. I replace physical copies of novels, stories, poems and other literary piece with digital versions, allowing students to read and annotate on e-readers or tablets.	3.20	0.77	Moderate Extent
6. Instead of physical book reports, I ask students to create digital presentations or blogs to share their analyses and interpretations of literary works.	3.18	0.67	Moderate Extent
7. In literature analysis, I use digital annotations tools or apps instead of traditional highlighting and margin notes.	3.03	0.61	Moderate Extent
8. I use online discussion forums or chat platforms to facilitate class discussions about literature.	2.95	0.62	Moderate Extent
9. I use Storyboard that, an app for making storyboards in literature.	2.90	0.91	Moderate Extent
Overall	3.17	0.38	Moderate Extent

The study highlights that teachers frequently substitute traditional tools with digital platforms like Padlet and Google Slides, improving efficiency but not fundamentally transforming instruction. While digital annotation tools and online discussion forums make literature engagement more interactive, their moderate adoption suggests reluctance or systemic barriers to deeper integration. The SAMR model indicates that technology substitution is widely embraced, yet progress beyond this level remains limited. As De Morais Bicalho et al. (2022) noted, while substitution enhances productivity, educators must critically reflect on whether these changes enrich learning experiences or merely digitize existing tasks. Drugova et al. (2021) also emphasize that advancing into higher SAMR levels, where technology transforms and redefines tasks, significantly increases student engagement and learning outcomes. To support this shift, additional professional development and institutional support could encourage educators to explore Augmentation, Modification, and Redefinition, allowing technology to replace and enhance and transform literature instruction.

Augmentation

The data collected on the level of augmentation of the SAMR model in Table 5 indicated that teachers moderately applied it for the use of technology to enhance improvement, with a mean rating of 3.17. This therefore suggests that while improvement and augmentation using technology by teachers occur, potential still exists in the utilization of technology more integrally to make the learning even richer. The highest-rated practice in this category is multimedia presentation with tools such as PPT, Prezi, or Canva (WM = 3.55 or interpreted as to a great extent). It suggests that teachers appreciate that multimedia features can make the presentation more interesting and informative for the students. This might be through images, videos, and animations, which facilitate a literature presentation in ways that can capture the students' attention and explain thick themes or concepts.

Table 5. *Extent of Utilization of the SAMR Model in Teaching Literature relative to Augmentation*

Indicators	Mean	SD	Interpretation
1. I give more informative and engaging oral presentations accompanied by PPT, Prezi, Canva or similar applications containing multimedia elements.	3.55	0.64	Great Extent
2. I use supplemented video that clarifies a particularly hard-to-explain concepts.	3.38	0.69	Moderate Extent
3. I encourage students to collaborate on analyzing and annotating a digital version of a novel using real-time collaborative tools like Google Docs.	3.37	0.66	Moderate Extent
4. I integrate online forums or discussion boards where students not only discuss literature but also share relevant multimedia content related to the themes and motifs of the works being studied.	3.27	0.66	Moderate Extent
5. I use an EdTech program that gamifies curriculum content for student engagement and allows students to track progress in an accessible way.	3.17	0.76	Moderate Extent
6. I encourage students to use multimedia tools to create interactive timelines, character maps, or concept maps to visually represent the structure and elements of literary works.	3.10	0.83	Moderate Extent
7. In vocabulary exercises, I use interactive language learning apps that provide instant feedback and adaptive challenges based on individual progress.	2.93	0.75	Moderate Extent
8. I utilize virtual reality (VR) or augmented reality (AR) applications to immerse students in settings related to the literature being studied, providing a more experiential learning experience.	2.88	0.80	Moderate Extent
9. I facilitate online literature circles using platforms like Google Meet or Zoom, where students discuss assigned readings in small groups.	2.88	0.84	Moderate Extent
Overall	3.17	0.41	Moderate Extent

Other practices include, for instance, using supplemented video support for complex topics (WM = 3.38) and having students work in small groups to produce digital texts on Google Docs (WM = 3.37). These supports extend traditional literary analysis by allowing for real-time collaboration and supplementing learning with multimedia, but do not change the essential nature of the tasks. Another area in which teachers are starting to use technology to engage their students is through using the EdTech programs that transform the curriculum into a game format, such as "LiteratureQuest" (WM = 3.17). In this sense, gamification motivates these students because it turns reading and analysis into more interactive activities, though still moderately applied.

Supporting research from Haleem et al. (2022) emphasizes the value of interactive and collaborative tools such as Google Docs, multimedia platforms (PowerPoint, Prezi), and gamified learning environments in fostering active learning. As demonstrated by programs like LiteratureQuest, gamification motivates students by making reading and literary analysis more interactive. Bhutoria (2022) further supports this by highlighting how adaptive technologies personalize learning, offering instant feedback and tailored challenges that enhance academic performance. While interactive apps, concept maps, and timeline creators are moderately used, their further development could enhance educational efficiency. However, resource-intensive technologies like virtual and augmented reality remain underutilized, despite their potential to deepen experiential learning. This limited adoption signals the need for teacher training to maximize the benefits of these tools. Overall, integrating technology at the augmentation level facilitates personalized learning, fosters collaboration, and improves comprehension, ensuring literature instruction evolves to meet the needs of modern students.

Modification

Simply examining the lens of utilization of the SAMR Model, particularly for its modification level in Table 6, it follows that the teachers have manifested a varying level of technology. On average, a general weighted mean score of 3.09 stands out from the computation of the scores, indicative of the moderate extent of technology application in literature teaching. Among the different practices rated, multimedia resources, such as author interviews and documentaries, were the most utilized, with a weighted mean of 3.23. This means that teachers use them quite frequently because they are believed to positively impact students' comprehension of the literature. Multimedia connects students with texts more intimately and exposes them to several perspectives of

the same problem, making learning more diverse and holistic.

Table 6. *Extent of Utilization of the SAMR Model in Teaching Literature relative to Modification*

Indicators	Mean	SD	Interpretation
1. In literature analysis, students utilize multimedia author interviews, documentaries, or relevant video content to deepen their understanding and modify their perspectives on the works being studied.	3.23	0.72	Moderate Extent
2. I create an informative video presentation in place of a standard oral presentation.	3.18	0.87	Moderate Extent
3. I use a technological tool that makes an abstract concept visible in a hands-on, responsive way. For instance, suppose you're teaching a unit on symbolism in literature, and you want to help students understand the abstract concept of symbolism in a more concrete and interactive manner. You could use an AR or VR tool that allows students to overlay digital images or 3D models onto real-world objects or environments.	3.13	0.76	Moderate Extent
4. I integrate interactive simulations or role-playing activities online, allowing students to modify and explore different scenarios based on the themes of the literature.	3.13	0.81	Moderate Extent
5. Instead of individual writing assignments, students could collaborate on literary projects using online platforms such as Google Docs or Microsoft Teams. This modification promotes collaborative learning and allows students to collectively modify and refine their literary analyses, essays, or creative writing pieces in real time.	3.12	0.73	Moderate Extent
6. Instead of traditional book reports, I ask students to create interactive digital portfolios showcasing their modified interpretations, analyses, and creative responses to literature.	3.05	0.74	Moderate Extent
7. I use podcasts in summarizing a topic, which can then be accessed by other teachers as a revision resource.	2.78	0.95	Moderate Extent
Overall	3.09	0.52	Moderate Extent

On the other end, the lowest score in rating is when it comes to using podcasts to summarize what has been discussed, amounting to a weighted mean of 2.78. A lower frequency to use it may be observed, such as teachers applying different forms of technology during their instruction, but more innovative materials like podcasts appear to remain underutilized. From the results gathered, this could mean the teachers still do not enjoy the level of comfort in using new technologies and applying them within their instructional routines. Even though there is moderate acceptance and application of technology in teaching literature, the room for improvement remains huge. Teachers need to further explore more transformative practices by taking the full potential of technology into the classroom. Professional development initiatives can fill this gap that is left to date, especially on podcasting and AR/VR tools, as comfort and familiarity are presently missing from the teachers.

The modification level in the SAMR model is crucial. While the average ratings for the overall span of practices suggest that teachers are beginning to accept the idea of changing a traditional activity, considering technology, there is still much scope for a much greater change. For instance, listening to podcasts for revision purposes (WM = 2.78) and using AR/VR to experience something firsthand have a very low rating. These areas point to a gap that might be filled through relevant professional development in which teachers would learn and feel comfortable applying these newer technologies. Chen et al. (2022) support this, as highlighted in their abstract, that abstract difficult-to-understand concepts can be explored through interactive simulations, augmented reality (AR), and multimedia resources. For example, where AR tools are used in visualizing symbolism in the text, video presentations may replace those oral ones instead of the traditional oral reports. These changes can prove very pedagogically facilitative as learners work on or internalize the material in ways that are impossible under more conventional methods.

Redefinition

The analysis of the SAMR Model usage level, based on teaching literature, particularly in the Redefinition stage in Table 7, shows a weighted mean score of 3.14, indicating that overall application of technology was moderately carried out. This assessment also involves students in actual problem-solving with the real world through literature, with a weighted mean of 3.40. In such a course, this method would enable the learners to solve some real-life problems by utilizing their understanding of the text in question. Through this approach, the literature is given significance by teachers but simultaneously boosts critical thinking and creativity, where real-life applications or implications emerge and are discovered.

Table 7. *Extent of utilization of the SAMR Model in Teaching Literature relative to Redefinition*

Indicators	Mean	SD	Interpretation
1. Instead of traditional written exams, I engage students in real-world problem-solving using literature, collaborating on projects that address societal issues depicted in the texts studied.	3.40	0.69	Moderate Extent
2. I record students as they deliver a presentation or practice a physical skill, then use this recording to prompt student reflection.	3.28	0.73	Moderate Extent
3. I create interactive simulations where students become characters in literary worlds, making decisions and influencing the narrative, providing a dynamic and engaging experience.	3.22	0.69	Moderate Extent
4. I ask students to create interactive, choose-your-own-adventure style digital stories inspired by the themes of the literature, redefining the concept of reader engagement and agency.	3.17	0.71	Moderate Extent
5. I let my students connect with other people around the world as part of the literary learning journey.	3.15	0.91	Moderate Extent
6. I ask students to publish their literary works online where it can be viewed by peers and the broader community.	3.13	0.79	Moderate Extent
7. I facilitate online literature symposiums where students present their literary analyses to a global audience, redefining the audience and purpose of academic discussions.	3.05	0.76	Moderate Extent
8. Instead of traditional classroom discussions, students participate in national or global literature debates using video conferencing tools, redefining the scope and audience of literary discourse.	2.70	0.86	Moderate Extent
Overall	3.14	0.51	Moderate Extent

The lowest was in the use of video conferencing tools to facilitate national or even international literature debates, with a score of 2.70 on the weighted mean scale. This indicates that whereas some teachers want to encourage more discussions than these, the practice has not been commonly implemented. The rating may mean that many instructors don't have the power or resources to apply these creative ideas effectively. As a result, students have fewer opportunities to practice critical thinking by mingling with peers from diverse parts of the world. It suggests that although teachers embrace innovative practices to teach literature, much room remains for improvement. Professional development programs focusing on technology can help them explore more transformative approaches, improving the use of video conferencing for global discussions. In doing so, there is a better engagement for students and enrichment of activities in learning, making the literature more effective and relevant, especially in today's forever-connected world.

Research backing the idea of connecting these students with peers overseas states that it significantly shifts the learning experience. For example, publishing their work online also expands the reach of valuable feedback to the students, enhancing students' engagement and investment. This is how this practice develops community and helps students to understand their ideas as a part of a larger conversation (Kelsch & Wang, 2021). Generally, at the Redefinition stage, technology may help apply literature to real life, make students think more critically about the issues prevailing in society, and creatively work on the material (Zhai et al., 2024).

3.3 Differences in the Extent of Utilization of the SAMR Model when Grouped according to Profile Variables

Findings on the gaps of the differential meaning when categorized by years of experience in Table 8 show no statistical meaning difference among the levels of the SAMR model: substitution, augmentation, modification, and redefinition. This analysis reveals that regardless of whether it is a beginning, transitional, or seasoned teacher, these teachers are still working within a similar vein concerning the model. For the Substitution level, the means are: 3.07 for starting teachers, 3.26 for mid-career teachers, and 3.18 for experienced teachers. The H-value of 2.702 and p-value of .259 indicate that the differences are insignificant, leading to the failure to reject H₀. This would mean that all groups are on equal practicing level for substitution, and therefore, replacing the old traditional tools with digital counterparts is a common practice by all teachers, irrespective of their level of experience.

In the Augmentation level, the means are also closely aligned: 3.24 by the novice teachers, 3.12 by the transitional teachers, and 3.15 by the experienced teachers. The H-value of 0.858 and p-value of .651 further cement that augmentation practices are not significantly different. Teachers commonly understand how traditional practices are amended with technology; yet, at this level, it concludes that no cohort is superior in innovative applications. The mean scores for the Modification level are 3.08, 3.13, and 3.06 for beginning, transitioning, and experienced teachers, respectively. Again, differences not significant, with an H-value of 0.160 and p-value of .923. This means all groups are alike in modifying practice using technology, as experience does not provide intuitive evidence. Then, at the Redefinition level, average scores for starting teachers are 3.13, transitional teachers with an average of 3.10, and experienced teachers with an average score of 3.19. The H-value was 0.642, and the p-value was .725, indicating that differences have not been that significant. This means

that although some teachers have just started redefining their teaching using technology, the scope of this change is not significantly different between inexperienced and experienced teachers.

Table 8. *Difference in the Extent of Utilization of the SAMR Model when Grouped according to Years of Experience*

	Mean	SD	H	p	Decision on H0	Interpretation
Substitution						
Beginning	3.07	0.32	2.70	.259	Failed to Reject	Not Significant
Transitioning	3.26	0.38				
Experienced	3.18	0.42				
Augmentation						
Beginning	3.24	0.48	0.85	.651	Failed to Reject	Not Significant
Transitioning	3.12	0.28				
Experienced	3.15	0.48				
Modification						
Beginning	3.08	0.55	0.16	.923	Failed to Reject	Not Significant
Transitioning	3.13	0.54				
Experienced	3.06	0.48				
Redefinition						
Beginning	3.13	0.62	0.64	.725	Failed to Reject	Not Significant
Transitioning	3.10	0.36				
Experienced	3.19	0.53				

Generally, the results show that although the teachers of all the experience levels use the SAMR model to a considerable extent, their application has no significant differences. This is one potential direction for focused professional development to promote deeper technology integration for all teachers. This should facilitate cooperation and sharing best practices that could raise the standards on applying the SAMR model, resulting in much more innovative and effective teaching of literature. The experience does not relate directly to the depth of technology integration in teachers' teaching practices. Bicalho et al. (2022) pointed out that research underscored that technology should be integrated at deeper levels through structured professional development to support experience at all levels. They found out that experienced teachers mostly use technology at the levels of substitution and augmentation, while not developing transformation levels, including modification and redefinition. While many teachers are receiving their training based on the SAMR model, the transition from low levels to high requires specific training and assistance that would help all educators. The fact that there is a slight variation in the application of technology by teachers with diverse experience underlines the importance of CPD so that teachers can engage more deeply with the SAMR framework to facilitate better and innovative pedagogical approaches further. (Blundell et al., 2022)

Regarding the variations in the degree of SAMR model implementation based on the highest educational attainment in Table 9, the results showed no statistical significance difference between the various extents of the model- Substitution, Augmentation, Modification, and Redefinition. The application of the SAMR model by the baccalaureate degree holder and master's degree holder is similar. Mean scores at the Substitution level are 3.15 for teachers holding a bachelor's degree and 3.20 for a master's degree holder. U-value = 396.000 and p-value = .585. It is interpreted that the difference between them is not significant. Both have had equal opportunities to use technology to support and complement conventional methods in their teaching work.

Table 9. *Difference on the Extent of Utilization of SAMR Model when Grouped according to Highest Educational Attainment*

	Mean	SD	U	p	Decision on H0	Interpretation
Substitution						
Bachelors' Degree	3.15	0.36	396.00	.585	Failed to Reject	Not Significant
Masters' Degree	3.20	0.41				
Augmentation						
Bachelors' Degree	3.20	0.40	398.00	.607	Failed to Reject	Not Significant
Masters' Degree	3.12	0.44				
Modification						
Bachelors' Degree	3.04	0.55	376.50	.400	Failed to Reject	Not Significant
Masters' Degree	3.17	0.46				
Redefinition						
Bachelors' Degree	3.11	0.54	414.00	.785	Failed to Reject	Not Significant
Masters' Degree	3.18	0.46				

In the Augmentation level, the average scores are 3.20 among bachelor's degree holders and 3.12 among master's degree holders. U-values are .398.000, and p-values are low again, at .607; again, no significant differences appear. This means that both groups approach integration similarly toward improving their teaching skill, with no evidence that an increase in the educational levels accompanies greater creativity in application. In the case of the Modification level, a mean score is seen for both bachelor's and master's degree holders as 3.04 and 3.17, respectively. The value of U is 376.500, and the p-value is .400, which shows that at a 0.05 level of significance, both the groups under consideration are not statistically different. Both groups modified their practice to teach at nearly the same rate, and educational attainment has no noticeable effects when using technology to change tasks.

At the Redefinition level, mean scores are 3.11 for bachelor's degree holders and 3.18 for master's degree holders. The U-value is 414, and the p-value is p-value.785 supports the finding that there are no significant differences. Therefore, regardless of their highest educational level, teachers are not differently oriented towards redefining their teaching practice using technology. The overall results showed no critical difference across the educational levels; thus, both groups use the SAMR model similarly. This could result in the inference that, however much higher academic level may make a teacher more pedagogically and technologically sophisticated, it does not necessarily convert into the wider or even more creative application of the SAMR model in literature on teaching.

Such findings indicate the need for professional support, which should be more accessible to all teachers, especially in schools with a weak educational background. Educators who are encouraged through collaborative learning environments and targeted training should successfully explore deeper forms of technology use in literature instruction for better student engagement and learning outcomes. This means that the use of technology in teaching practices is deemed the same for all educators regardless of degree level. This would suggest that teachers use technology similarly unless there is directed, ongoing professional development. Your research finding does seem to support this fact in that the bachelor's degree recipient and the master's degree recipient use SAMR similarly.

Furthermore, neither group of teachers has significantly outperformed the other within the SAMR model at the more transformed levels of the model (Zhang, 2022). Professional development focused on all teachers' needs must be pursued to integrate technology more deeply. That means, in turning the schools' desire to have better-educated instructors who could become more competent into a common reason for them to learn even more, it could instead address the problem directly by offering ongoing education that would support the proper application of technology by any level's instructor (Rablin, 2024).

The number of seminars attended, and trainings taken, as found in Table 10, relate to professional development and its impact on using the SAMR model in teaching literature. This example shows that most use levels of the model encompass Substitution, Augmentation, and Modification. No significant differences were found between teachers who had attended 1 to 5 seminars and those who had participated in 6 or more conferences. In contrast, a difference was found to be significant at the level of Redefinition.

Table 10. *Difference in the Extent of Utilization of the SAMR Model when Grouped according to Number of Trainings and Seminars Attended*

	Mean	SD	U	p	Decision on H0	Interpretation
Substitution						
1-5 Seminars	3.09	0.33	337.00	.094	Failed to Reject	Not Significant
6 and more	3.26	0.41				
Augmentation						
1-5 Seminars	3.18	0.41	443.50	.929	Failed to Reject	Not Significant
6 and more	3.16	0.43				
Modification						
1-5 Seminars	2.99	0.55	361.00	.188	Failed to Reject	Not Significant
6 and more	3.20	0.46				
Redefinition						
1-5 Seminars	3.00	0.54	316.50	.048	Reject	Significant
6 and more	3.29	0.43				

For the Substitution level, the mean scores indicate 3.09 for teachers who attended 1-5 seminars and 3.26 for

those who attended six or more meetings. The U-value of 337.00 and p-value of .094 indicate no significant difference, thus not rejecting the null hypothesis (H0). This finding shows that both groups are on an equal footing in substituting traditional teaching methods with technology, whereby the number of seminars attended makes no difference. For the Augmentation level, mean scores are 3.18 for the workshops of 1-5 and 3.16 for the seminars of 6 or more. The U-value of 443.500 and p-value of .929 all support the fact that there is no real difference in how technology is used to heighten teaching practices. This implies that the degree to which teachers augment traditional tasks with technology does not depend on the number of seminars attended.

While seminars aim to equip teachers with new skills, their effectiveness depends on whether they address the real-world constraints educators face. Successful professional development models emphasize hands-on training, peer collaboration, and contextual application. The TPACK framework (Technological Pedagogical Content Knowledge) provides a valuable lens for understanding this dynamic, as it emphasizes the need for teachers to integrate technology in ways that align with their subject matter and teaching strategies. Effective programs should introduce new tools and offer guidance on overcoming barriers, such as strategies for managing time constraints and advocating for institutional support.

On the Modification scale, average scores are 2.99 for workshops of 1-5 and 3.20 for workshops of 6 or more. The U-value of 361.00 and p-value of .188 indicate no significant difference. Therefore, while there may be a slight difference between teachers who attended more workshops and other teachers in the sense that the former may have slightly modified their practice, this is not statistically significant. The mean scores for Redefinition level among the teachers who attended 1 to 5 seminars were only 3.00. The mean scores for teachers who attended more than six seminars stood at 3.29. Since the U-value was 316.500 and the p-value was .048, the observed difference was highly significant in rejecting H0. This means that some teachers have attended more seminars likely to show redefined teaching practices through transforming learning experiences using technology.

A significant difference at the Redefinition level shows that more professional development opportunities can empower teachers to create innovative and interactive learning environments. This finding raises the importance of continuous professional development through enhancing teachers' ability to use technology creatively in their instruction. The number of seminars has very little influence on the use of SAMR models at substitution, augmentation, and modification; however, the number of workshops plays a critical role in how the teachers redefine their practice. This makes professional development training very important to motivate teachers to adopt more transformative teaching practices that use technology effectively. The findings indicate that educators who attend more seminars demonstrate greater application of Redefinition practices, such as engaging students in real-world problem-solving, facilitating interactive digital storytelling, and connecting learners to global literary discourse. These transformative approaches require a depth of technological proficiency and pedagogical innovation that general teaching experience alone may not provide. One possible explanation for this gap is that professional development seminars often focus on cutting-edge technology use, encouraging educators to push beyond basic integration. Substitution and augmentation allow for straightforward improvements in efficiency and accessibility, such as transitioning (Bradley, 2020). This supports that there were no significant differences between teachers attending one to five seminars versus those attending six or more at the substitution, augmentation, and modification levels.

3.4 Processes Used by Teachers in Integrating Technology for Literature Instruction

This study explores the application of the SAMR Model in teaching Literature in private junior high schools. Using thematic analysis, the research identifies teachers' technology use patterns and aligns these practices with the SAMR Model's levels—Substitution, Augmentation, Modification, and Redefinition. Findings highlight practical applications, challenges like limited resources, and the transformative potential of technology in enhancing student engagement and instructional practices. The study proposes guidelines for teachers leveraging technology for more dynamic and effective literature instruction.

Impacts of Technology Integration on Educational Transformation

This theme showcases teachers' understanding of the SAMR model and its role in integrating technology to enhance teaching. Their responses illustrate how progressing from Substitution to Redefinition transforms basic technology use into innovative learning opportunities.

"When we say Substitution, technology is used as a direct substitute for a traditional tool without a significant change in

the task. Augmentation – the technology still serves as a substitution but offers functional improvement. Modification is when technology makes substantial changes in designing new possibilities, and using Redefinition means technology allows for creating new tasks that were previously unimaginable.

These explanations reveal that teachers understand both the technical and pedagogical aspects of the SAMR model and recognize its potential to enhance learning. They see how Substitution and Augmentation improve teaching incrementally, while Modification and Redefinition enable transformative, creative, and engaging student experiences.

Technology Availability and Its Impact on SAMR Implementation

This theme explores how technological resource availability influences the SAMR model's effective adoption. Teachers highlighted that access to reliable infrastructure is essential for progressing through the levels of SAMR. Schools with sufficient resources empower educators to explore higher-level tasks, while those with limited infrastructure are often restricted to basic technology use.

"Since we are provided with internet connection facilities, I can say that the implementation of the SAMR model is effective. We also have an LMS to transfer learning and administrative activities."

This statement shows that infrastructure contributes to the adoption of technology. Teachers in schools with sufficient resources find it easier to innovate and design tasks that enhance student engagement and learning outcomes. Reliable technology also allows teachers to explore complex tasks that foster collaboration and critical thinking.

Strategic Technology Utilization to Foster Engagement and Collaboration in Education

This theme centers on the various methods teachers use to maintain high student engagement levels while implementing the SAMR model. Participants acknowledged that engaging students effectively requires intentional strategies that align technology use with learning objectives. They recognized that integrating technology meaningfully enhances the learning experience and fosters greater interaction and participation among students.

"As a teacher, I employ a high level of student engagement when using technology to ensure that technology integration aligns with specific learning goals and objectives that provide purpose and relevance for students, increasing their engagement."

This theme centers on the various methods teachers use to maintain high student engagement levels while implementing the SAMR model. Participants acknowledged that engaging students effectively requires intentional strategies that align technology use with learning objectives. They recognized that integrating technology meaningfully enhances the learning experience and fosters greater interaction and participation among students.

Teamwork and Time Management in Technology-Enhanced Teaching

This theme investigates how teachers navigate the complexities of planning and implementing technology-based lessons. Educators recognize that effectively managing time and resources is crucial to successfully integrating technology into their teaching practices. By employing various strategies, teachers can streamline their efforts and enhance the quality of their lessons.

"Managing the additional time required for planning and implementing technology-enhanced lessons can be challenging, but it's essential to plan, use templates, collaborate, and utilize technology tools effectively."

"I prioritize and schedule specific blocks of time for lesson planning. I also use ready-made resources and tools to streamline the process."

These statements highlight that collaboration saves time and enhances lesson quality by incorporating diverse perspectives and expertise. Teachers recognize that working together fosters a supportive environment where they can learn from each other and improve their practices.

3.5 Guidelines for the teachers in the Use of the SAMR Model

The integration of technology in education has become increasingly important in modern classrooms. The SAMR Model (Substitution, Augmentation, Modification, and Redefinition) provides a structured framework for educators to incorporate technology into their teaching practices effectively. This research aimed to prepare guidelines for teachers to utilize the SAMR Model, ensuring that technology integration enhances student learning and engagement. The study revealed that private junior high school English teachers need more professional development to use the SAMR model and educational technologies better. Despite having varied backgrounds and some experience with the SAMR Model, they only moderately use it, indicating room for improvement. Teachers who attended more seminars used the Redefinition level more effectively. Challenges like limited resources and time constraints hinder full implementation. In line with this, the researcher prepared guidelines wherein teachers can move beyond merely substituting traditional tools with digital ones and transform their teaching methods to create dynamic and interactive learning environments. This transformation is essential for fostering a more engaging and practical educational experience, ultimately preparing students for the demands of the 21st century.

The proposed guidelines aim to assist teachers in effectively using the SAMR model in teaching literature, addressing the identified gaps and challenges, and providing structured support to enhance teachers' abilities to integrate technology and transform their instructional practices.

Table 9. *Guidelines for the Teachers in the Use of the SAMR Model*

Phase	Goal	Examples	Teachers Actions
Substitution (Tech acts as a direct tool substitute, with no functional change)	Introduce technology as a simple replacement for traditional tools.	Instead of: Reading a printed text. Use: An e-book or PDF version of the text on a tablet or computer. Instead of: Writing essays by hand. Use: Word processing software (e.g., Google Docs, Microsoft Word). Instead of: Handing out paper copies of poems. Use: Displaying poems on a projector or interactive whiteboard.	• Ensure students are comfortable accessing and using basic digital versions of texts. • Provide tutorials on basic word processing skills. • Focus on the content of the literature, not the technology itself.
Augmentation (Tech acts as a direct tool substitute, with functional improvement)	Enhance the learning experience through the functionality of technology.	Instead of: Simply reading an e-book. Use: E-books with features like text-to-speech, built-in dictionaries, or highlighting and annotation tools. Instead of: Writing essays in a basic word processor. Use: Word processing with features like spell check, grammar check, thesaurus, and track changes for peer review. Instead of: Displaying poems on a projector. Use: Interactive whiteboards to annotate poems as a class, highlight key literary devices, or collaboratively brainstorm interpretations.	• Introduce students to the advanced features of the technology. • Model how to use these features effectively. Encourage students to use these features to improve their understanding and analysis of the text.
Modification (Tech allows for significant task redesign)	Redesign learning tasks to incorporate technology in a meaningful way.	Instead of: Writing a traditional book report. Use: Creating a digital multimedia presentation with images, audio, and video to analyze the characters, themes, and setting of a novel. Instead of: Answering basic comprehension questions. Use: Participating in online discussion forums or blogs to analyze literary themes, share personal interpretations, and engage in debates with classmates. Instead of: Memorizing poems. Use: Creating digital audio recordings of their own dramatic readings of poems, incorporating sound effects and music.	• Design learning activities that require students to use technology to create, collaborate, and communicate. • Provide clear guidelines and rubrics for these activities. Offer opportunities for students to share their work with a wider audience (e.g., through a class blog or website).
Redefinition	Transform the learning	Instead of: Simply studying Shakespearean	• Encourage students to think

(Tech allows for the creation of new tasks, previously inconceivable)

experience by creating new tasks that would be impossible without technology.

plays.

Use: Creating interactive, branched narrative stories using tools like Twine or Inkle writer, where students adapt the plot or characters of a Shakespearean play for a modern audience.

Instead of: Writing traditional essays.

Use: Collaboratively creating a digital annotated edition of a literary text, incorporating multimedia annotations, historical context, and critical analysis.

Instead of: Analyzing a text in isolation.

Use: Participating in a global online book club, connecting with students from other countries to discuss shared readings and cultural perspectives.

creatively and explore new possibilities with technology.

- Provide access to a range of digital tools and resources.
- Facilitate collaboration and communication among
- students, and with experts or audiences beyond the classroom.

4.0 Conclusion

The findings highlight that private junior high school English teachers in Batangas possess diverse teaching experiences, primarily hold bachelor's degrees, and have attended a moderate number of seminars. While professional development remains crucial, especially in applying the SAMR Model effectively, its impact on Substitution and Augmentation levels appears limited, likely due to pressing barriers such as resource constraints and workload demands. Despite moderate usage of the SAMR Model across all levels, opportunities remain for deeper technology integration to enhance instruction. Seminar participation showed an apparent influence at the Redefinition level, suggesting that hands-on training, exposure to advanced pedagogical frameworks, or structured collaborative learning may be key drivers of higher-level technology adoption. However, professional development alone may not be sufficient without addressing teachers' practical constraints. The proposed guidelines should focus on practical strategies, such as time-efficient tech integration models, access to adaptable digital tools, and institutional support mechanisms to ensure meaningful implementation.

Additionally, professional development initiatives should address the systemic barriers that hinder lower-level SAMR applications, offering targeted solutions for resource limitations and workload management. Future research should explore long-term impacts of professional development, variations in institutional support, and strategies for sustaining higher-level technology integration. By refining professional development approaches and addressing practical constraints, educators can more effectively navigate the complexities of technology-enhanced literature instruction, ultimately improving student engagement and learning outcomes.

5.0 Contributions of Authors

The first author significantly contributed to the research by conceptualizing ideas, designing methodologies, conducting data analyses, drafting manuscripts, and revising them based on feedback. The second author served solely as the adviser, providing consultation during the conception and design phases to ensure clarity and relevance. The second author also guided the first author in refining methodologies and addressing critical aspects of the research. The authors confirm that they reviewed and approved the final manuscript.

6.0 Funding

This work received no specific grant from any funding agency.

7.0 Conflict of Interests

The authors declare no conflicts of interest regarding the publication of this paper.

8.0 Acknowledgment

The researcher would like to thank the Almighty Father, the source of everything. Also, her loving parents, Rolando and Ramona, who have been her pillars of strength and greatest inspiration throughout this journey; her siblings, Monaliza, Jediglenn, Robin, Monette, Monique, and Kevin, for their constant encouragement, generous support, and inspiring words; her dearest boyfriend, John Meneses, whose kindness, patience, and unwavering support have been a source of endless comfort and motivation; her friends, colleagues, and former teachers, whose guidance and encouragement have been invaluable in completing this study. Lastly, she thanks herself for the unwavering determination, countless hours of hard work, and relentless pursuit of knowledge that have brought the research to fruition.

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