Development of Learning Resources: Stance of Elementary Teachers

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Abstract—This phenomenological study explored experiences of teachers in developing learning resources in Kaputian District, Division of Island Garden City of Samal (IGACOS). This also investigated their coping mechanisms from the challenges they encountered, and their insights drawn from the findings of this study. Qualitative - phenomenological study was employed in exploring the views of the ten (10) elementary teachers of which primary instrument of data gathering was through in- depth interview. Major findings indicated that the experiences of teachers in developing learning resources included using printed learning resources, maximizing electronic or digital resources, and challenges in learning resource development. Likewise, navigating the intricate landscape of education, teachers encounter a myriad of challenges in the development of learning resources, prompting the exploration of coping mechanisms essential for their professional resilience. The major themes were adaptability and flexibility, collaboration and professional development, and student-centered approaches. For the insights, the major themes were technology integration and digital literacy, differentiated instruction and inclusivity, and assessment and feedback strategies. The research implications concerning the development of learning resources for learners are multifaceted, carrying significant weight in shaping educational practices and outcomes. As the landscape of education continues to evolve, understanding these implications becomes crucial for educators, policymakers, and researchers alike. The findings from research in learning resource development can provide insights into effective instructional strategies, the impact of technology integration, and the importance of considering diverse learning

Index Terms—development, learning resources, elementary teachers, phenomenology, Philippines.

1. Introduction

Education is a cornerstone of human development, and the quality of education is closely linked to the availability and effectiveness of learning resources in schools. Learning resources encompass a wide range of materials and tools, including textbooks, digital content, teaching aids, curriculum materials, and more. The development and utilization of these resources significantly impact the learning outcomes of students and the overall quality of education. Schools are increasingly shifting towards learner-centered approaches, personalized learning, and the integration of technology into the classroom. These changes require the development of innovative learning resources that cater to the evolving needs of

students and teachers.

In Zimbabwe, the research revealed that teachers tend to employ a narrow range of teaching methods, lacking diversity in their instructional approaches. Additionally, they typically do not prepare various types of educational media for use in teaching and learning processes. Teachers predominantly rely on textbooks and syllabi as their primary instructional materials, with limited variation. Furthermore, the study found that students often learn in challenging and unfavorable environments, which adversely affect the teaching and learning experience, leading to low teacher morale. Parental support, in terms of providing supplementary materials such as textbooks and revision books, is notably scarce. Only a minority of parents actively engage in assisting their children with homework or offering extra tutoring. Schools, on the other hand, face a shortage of essential resources like textbooks, revision materials, and educational references, limiting their capacity to enhance students' knowledge (Mupa & Chinooneka, 2015).

Similarly, in Indonesia, teachers faced several challenges in the development of learning resources. The findings indicated that teachers encounter three primary challenges when it comes to the development of learning materials: 1) their proficiency in utilizing tools and devices for crafting digital educational content; 2) their approach to structuring educational materials for incorporation into learning resources; and 3) their deficiency in managing educational materials for integration into digital learning resources (Wahyuningsih et al., 2021).

Likewise, in the Philippines, the study identified five key themes or obstacles, often referred to as "roadblocks": technological challenges, instructional issues, class size limitations, technical support constraints, and collaboration difficulties. The findings were also examined within the context of existing literature, with a particular focus on aspects related to the design and creation, implementation, as well as the assessment and evaluation of blended learning (Alvarez Jr, 2020).

In the Kaputian District of the Division of Island Garden City of Samal (IGACOS), teachers face significant challenges in the development of learning resources. Limited access to modern educational technology and insufficient funding often hinder teachers from creating innovative and engaging materials for their students. Additionally, there is a scarcity of up-to-date

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textbooks and reference materials, restricting teachers' ability to incorporate the latest information into their lessons. The lack of professional development opportunities further exacerbates the issue, as teachers struggle to stay abreast of evolving educational methodologies and technologies. These challenges collectively impede the effective development of learning resources in Kaputian District, adversely impacting the quality of education provided to students in the region. Addressing these issues requires a comprehensive approach that includes increased investment in educational resources, enhanced training for teachers, and improved infrastructure to support modern teaching methods.

Despite the importance of learning resources in education, there is a notable gap in research that focuses on their development, evaluation, and impact. Comprehensive studies that examined the effectiveness of different types of resources, the role of technology, and the best practices for resource development are needed to inform educational policy and practice. For example, the research of Guiamalon (2021) indicated that teachers were adequately trained and ready to fulfill their roles in modular distance learning during the pandemic. They possessed the necessary training and skills to carry out their responsibilities effectively and efficiently. Furthermore, parents or guardians were generally capable of supporting their children in this new learning format, although some faced challenges due to difficulties in facilitating and explaining the provided modules to their children.

Discussing the social relevance of research on the experiences of teachers in developing learning resources is crucial to understanding the broader impact of such research on society. Learning resources significantly influence the quality of education. Teachers who can effectively develop resources tailored to their students' needs enhance the overall learning experience. Improved learning resources can lead to better student outcomes, which are vital for producing a knowledgeable and skilled workforce, ultimately benefiting society. In an increasingly digital world, teachers must navigate technology to create effective learning resources. Research on this topic can highlight the importance of technology integration in education and prompt investments in teacher training and digital infrastructure.

2. Purpose of the Study

The purpose of this phenomenological study was to explore the experiences of teachers in developing learning resources in Kaputian District, Division of Island Garden City of Samal (IGACOS). This also investigated their coping mechanisms from the challenges they encountered, and their insights drawn from the findings of this study.

At this stage of research, the experiences of teachers were generally defined as their learning and challenging experiences in terms of developing learning resources for learners used in classroom instructions. Learning resources are of paramount importance for students as they play a crucial role in facilitating effective learning, fostering understanding, and promoting academic success. These resources enhance understanding, increase engagement and motivation, and develop self-paced

learning. Also, learning resources provide a consistent source of information. This is particularly valuable when multiple teachers or instructors are involved, ensuring that students receive uniform content and support.

Research Questions:

This study aimed to explore the experiences of the teachers in developing learning resources in Kaputian District, Division of Island Garden City of Samal (IGACOS). Specifically, this study sought to answer the following research questions:

- 1. What are the experiences of teachers in developing learning resources?
- 2. How do the teachers cope with the challenges they encountered in developing learning resources?
- 3. What are the insights of teachers in developing learning resources?

3. Methods

This research utilized a qualitative research methodology, with a particular emphasis on exploring subjects marked by a lack of full comprehension. Qualitative research proved to be an invaluable method for gathering in-depth information, offering the opportunity to delve deeply into intricate subjects. As Creswell (2015) emphasized, actively immersing oneself in the observation of emotions, thoughts, and behaviors within a distinct group could supply individuals with a qualitative grasp of social and cultural occurrences. It was this qualitative perspective through which the research aimed to obtain a deeper understanding of the topic.

The selection criteria for participants were as follows: In order to participate in this study, individuals had to meet the following criteria: (a) possess a minimum of one year of experience as a Teacher I in public elementary schools within the Kaputian District, Division of IGACOS; (b) currently be assigned as a learning resource developer in the district; (c) have encountered difficulties in developing learning resources for learners; and (d) be either male or female teachers. Moreover, a total of ten participants were included in extensive interviews, a sample size considered sufficient for the aim of explaining the ability to detect and develop theme components.

Handling data proved to be a notable hurdle in qualitative research, a notion corroborated by the research of Nowell et al. (2017) that aligns with the viewpoint of Thorne (2000). Qualitative data analysis involved a comprehensive scrutiny of written materials with the aim of accurately representing and elucidating the experiences of the individuals under examination. In this study, data coding and thematic analysis were used in analyzing the data.

4. Results and Discussions

A. Experiences of Teachers in Developing Learning Resources

The experiences of teachers in developing learning resources included using printed learning resources, maximizing electronic or digital resources, and challenges in learning resource development. In the ever-evolving landscape of education, teachers encounter a myriad of challenges in the development of learning resources, each theme reflecting a

distinct facet of this dynamic process. As educators navigate the realm of Using Printed Learning Resources, they delve into the traditional, seeking to harness the timeless benefits of tangible materials. Simultaneously, the theme of Maximizing Electronic or Digital Resources thrusts educators into the digital age, prompting exploration of the vast potential offered by technology in enhancing learning experiences. Amidst these dual landscapes, the overarching theme of Challenges in Learning Resource Development underscores the inherent complexities teachers face, spanning from adapting to evolving curricula to addressing diverse student needs. This multifaceted journey unveils the intricate tapestry of resource development, where the fusion of traditional and digital approaches intertwines with the persistent need to overcome obstacles, ultimately shaping the landscape of contemporary education.

1) Using Printed Learning Resources

The utilization of printed learning resources remains a pivotal aspect of teachers' experiences in developing educational materials. Despite the digital revolution in education, printed resources continue to play a crucial role in fostering effective learning environments. Printed materials, such as textbooks, workbooks, and supplementary readings, offer several advantages. Firstly, they provide a tangible and accessible format that can be easily distributed to students, ensuring equity in resource access. Moreover, printed materials often accommodate various learning styles, allowing students to annotate, highlight, and engage with content in a manner that suits their preferences. Additionally, printed resources contribute to reducing screen time, which is a growing concern in the digital era. Teachers who incorporate printed learning resources into their instructional strategies acknowledge the importance of striking a balance between traditional and modern approaches, recognizing that the tactile nature of printed materials can enhance the overall learning experience for students. However, challenges arise in keeping these resources up-to-date and aligned with rapidly changing curricular standards, prompting educators to navigate the delicate balance between the reliability of printed materials and the dynamic needs of contemporary education.

Tursunovich's (2022) study delved into the issue of developing guidelines and manuals aimed at enhancing the effectiveness of teaching materials when instructing students in a foreign language. The primary goal was to help students develop their foreign language communicative competencies. Additionally, the study explored the specific requirements that need to be adhered to during the creation of effective teaching materials. Through the examination of various educational and methodological manuals, the research highlighted the fundamental principles and parameters that educators should consider when authoring teaching materials in light of the shift towards new educational standards. These educational and methodological manuals resulted from an extensive and collaborative systematic effort involving methodologists, and experts in information and communication technologies. The article emphasized that these manuals are comprehensive in nature, encompassing exercises that facilitate the practice and improvement of all aspects of language proficiency: reading, listening, speaking, and writing.

2) Maximizing Electronic or Digital Resources

The theme of maximizing electronic or digital resources represents a transformative shift in the landscape of learning resource development, where educators harness the power of technology to enhance educational experience. Digital resources, such as e-books, online simulations, interactive modules, and educational apps, offer unparalleled flexibility and accessibility. Teachers embracing this theme leverage the dynamic capabilities of digital platforms to engage students in interactive and multimedia-rich content. The integration of digital resources allows for personalized learning experiences, catering to diverse learning styles and pacing. Furthermore, real-time updates and connectivity foster a more responsive educational environment, aligning with the ever-evolving nature of curricula and educational standards. Despite the evident advantages, challenges arise in ensuring equitable access to technology for all students and in maintaining a balance that prevents overreliance on digital tools. Teachers navigating this theme grapple with these complexities, seeking to harness the full potential of digital resources while addressing the associated challenges to create a robust and inclusive learning ecosystem.

"E-Learning Resources" is the widely used term for integrating educational tools that are designed and employed using computer technologies. These digital educational resources, which are unique to e-learning, encompass educational materials that are generated and operated using digital technologies. It is essential to differentiate between these terms because digital technologies represent merely one method of storing and manipulating information. Other systems, such as quantum and laser technologies, are currently in development. Consequently, "e-learning resources" serves as the overarching term that encompasses not only technology but entire domain of technological advancements (Abdurashidovich & Nigmanovna, 2019).

With the increasing integration of the internet into people's daily lives, e-learning has emerged as a fundamental resource in education. This research aimed to evaluate how the presence and utilization of e-learning resources in educational settings impact the teaching methods of educators and the learning experiences of students. Based on this analysis, the study determined that as the use of e-learning materials and tools in an educational context increase, there is a corresponding improvement in student performance and the effectiveness of teaching methods (Alenezi, 2020).

3) Challenges in Learning Resource Development

The theme of challenges in learning resource development encapsulates the multifaceted obstacles educators encounter as they strive to create effective and engaging materials for their students. One prominent challenge is the continuous evolution of curricula and educational standards. Teachers must navigate frequent updates and changes, requiring them to adapt learning resources to stay aligned with the latest educational requirements. Additionally, addressing the diverse needs of students poses a persistent challenge. Educators must develop resources that cater to various learning styles, abilities, and

backgrounds, ensuring inclusivity within the classroom. Budget constraints also contribute to the complexity, as teachers often face limitations in acquiring the latest educational technologies or obtaining diverse materials. The digital divide, where not all students have equal access to technology and online resources, further exacerbates these challenges. Despite these obstacles, teachers demonstrate resilience by seeking innovative solutions, collaborating with peers, and engaging in continuous professional development to enhance their resource development skills. The theme of challenges in learning resource development underscores the dynamic nature of education and the educators' commitment to overcoming hurdles to provide high-quality learning experiences for their students.

The research uncovered that when it comes to their mental health, teachers rarely encounter sleeping problems, typically less than once a week. However, concerning their social wellbeing, teachers reported experiencing challenges on an almost daily basis. In terms of things that bother them, the teachers indicated that they were not bothered at all. Furthermore, the teachers generally displayed positive mental health, although they responded neutrally when it came to their ability to bounce back from difficulties. Regarding stress levels, the teachers disclosed that they occasionally experience stress. When it came to the development of learning resources, the teachers expressed a strong agreement with its importance. Interestingly, there was a weak direct relationship observed between the level of mental health and the development of learning resources. However, upon conducting regression analysis, it was established that mental health significantly influences the development of learning resources among teachers (Jimenez, 2021).

B. Coping Mechanisms with the Challenges in Developing Learning Resources

Navigating the intricate landscape of education, teachers encounter a myriad of challenges in the development of learning resources, prompting the exploration of coping mechanisms essential for their professional resilience. The major themes were adaptability and flexibility, collaboration professional development, and student-centered approaches. The process of crafting effective and engaging materials involves addressing diverse needs, adapting to evolving curricula, and overcoming resource limitations. This introductory statement sets the stage for understanding the coping mechanisms employed by educators, highlighting their adaptive strategies, collaborative efforts, and innovative approaches to not only confront challenges but also to thrive in the dynamic realm of learning resource development. As teachers grapple with the complexities of their roles, the examination of coping mechanisms provides valuable insights into the resilience and creativity that characterize their commitment to delivering high-quality education.

1) Adaptability and Flexibility

Coping with challenges in developing learning resources often requires teachers to be highly adaptable and flexible. Education landscapes are constantly evolving, and teachers

may encounter unexpected obstacles such as changes in curriculum, technology, or student needs. Teachers who successfully cope with these challenges demonstrate the ability to adapt their teaching methods, incorporate new technologies, and modify learning resources to meet the evolving demands of their students and the educational environment.

Further, curriculum flexibility refers to the capacity of the curriculum to be adjusted and made accessible to meet the individual needs and skills of students. In order to achieve curricular flexibility, the teacher education institution in this research developed a blended curriculum that combines both face-to-face and online components. This adaptable curriculum is designed to enhance student enrollment and provide a diverse range of options for students' graduation portfolios. The findings suggest that several environmental, teacher-related, and student-related factors were seen to influence the degree of curricular flexibility. In addition, teacher educators have highlighted many issues associated with these influencing factors, which have been acknowledged as tensions (Jonker et al., 2020).

2) Collaboration and Professional Development

Another coping mechanism involves collaboration with colleagues and engaging in continuous professional development. Teachers often face challenges that can be more effectively addressed through collective efforts. Collaborating with fellow educators allows for the sharing of ideas, resources, and strategies. Additionally, participating in ongoing professional development opportunities enables teachers to stay informed about the latest educational trends, teaching methodologies, and technological advancements. By staying connected with the broader educational community, teachers can enhance their coping mechanisms and develop a supportive network.

School administrators should propose regular Learning Action Cell (LAC) sessions focused on the creation of indigenous instructional materials. Additionally, they should diligently oversee the preparation of these materials to ensure their quality and suitability for language instruction. This study can potentially assist teachers in effectively utilizing local, indigenous, and contextually relevant instructional materials (Angelino & Matronillo, 2020).

The school interventions were framed using the concept of a Professional Learning Community. There were few interventions specifically targeting teacher-leaders, team leaders, and school administrators. The interventions that were most often highlighted were those related to the clusters of Professional learning opportunities and Collaborative work and learning. These interventions included both formal and informal teacher groups engaging in collaborative work and learning together. Overall, the study found that interventions that were deeply integrated into the organization and culture of a school were more likely to be durable (Admiraal et al., 2021).

3) Student-Centered Approaches

Teachers coping with challenges in learning resource development often adopt student-centered approaches. This involves placing a strong emphasis on understanding the unique needs, interests, and learning styles of their students. By tailoring learning resources to meet the individual needs of students, teachers can create a more engaging and effective learning experience. This may involve incorporating diverse teaching methods, providing personalized feedback, and encouraging student participation in the resource development process. A student-centered approach not only helps teachers overcome challenges but also promotes a more inclusive and responsive educational environment.

Educational materials encompass the tools educators employ to assist students in achieving the learning goals set forth in the curriculum. They can also be described as materials employed by teachers to enhance the quality of their teachings and ignite the curiosity of their students. Learning resources in education refer to the various materials, tools, and sources of information that educators use to facilitate and enhance the learning process for students. These resources are designed to support and supplement the curriculum, helping students acquire knowledge, develop skills, and meet educational objectives. Effective educators select and integrate appropriate learning resources into their teaching strategies to cater to diverse learning styles, interests, and abilities. The goal is to create a stimulating and enriching learning environment that promotes comprehension, engagement, and retention of knowledge (Bordia, 2022).

In the study, teachers, in general, did not see themselves as mere executors of curricula but rather as individuals who curate, modify, or even create instructional materials. Their motivations for supplementing and altering materials suggest that they prioritize aspects such as engagement, appropriateness of the challenge level, and usability when making decisions about how to utilize these materials. Interestingly, teachers who incorporated at least one curriculum that adhered to educational standards had somewhat less favorable perceptions of these materials. Consequently, teachers, especially those instructing struggling students, might perceive such materials as not adequately addressing the level of challenge required (Wang et al., 2021).

C. Insights of Teachers in Developing Learning Resources

The insights of teachers in developing learning resources provide a nuanced perspective on the intricate process of crafting educational materials that resonate with the diverse needs and dynamics of contemporary classrooms. As educators navigate the ever-evolving landscape of education, their reflections offer valuable glimpses into the themes that shape their approach to resource development. From the integration of technology and a focus on digital literacy to the commitment to differentiated instruction, inclusivity, and assessment strategies, teachers' insights illuminate the multifaceted considerations that inform the creation of effective and engaging learning resources. This exploration into their experiences not only underscores the challenges faced but also highlights the innovative and student-centered approaches adopted by educators to foster a dynamic and meaningful learning environment.

1) Technology Integration and Digital Literacy

Teachers often express insights related to the integration of

technology and the promotion of digital literacy in the development of learning resources. They emphasize the importance of incorporating digital tools, online platforms, and interactive elements to enhance student engagement and prepare learners for the digital age. Insights in this theme include discussions on leveraging educational apps, multimedia content, and e-learning platforms to create dynamic and interactive learning materials.

The study identified five key themes or obstacles, often referred to as "roadblocks": technological challenges, instructional issues, class size limitations, technical support constraints, and collaboration difficulties. The findings were also examined within the context of existing literature, with a particular focus on aspects related to the design and creation, implementation, as well as the assessment and evaluation of blended learning (Alvarez Jr, 2020).

The findings from the study of Fakhruddin et al. (2019) indicated a noticeable disparity in students' learning outcomes between the experimental and control groups following the intervention. Specifically, students in the experimental group demonstrated superior learning outcomes compared to those in the control group. When we computed the effect size using Eta squared, it amounted to 0.042. Despite its relatively modest magnitude, the technology-based English teaching material training provided to pre-service teachers proved to be rather effective in enhancing students' learning outcomes.

2) Differentiated Instruction and Inclusivity

Another major theme revolves around differentiated instruction and inclusivity in learning resource development. Teachers stress the need to cater to diverse learning styles, abilities, and backgrounds. Insights in this theme include discussions on creating resources that are adaptable, providing options for various learning preferences, and ensuring that materials are accessible to all students, thereby fostering an inclusive and supportive learning environment.

The study uncovered the following key findings: firstly, instructional materials play a pivotal role in influencing the performance of both teachers and students. Secondly, the majority of community schools in Rombo District confront a shortage of essential teaching and learning resources. Thirdly, the research illustrated that teachers employed various strategies to mitigate the challenges related to acquiring and utilizing high-quality instructional materials, such as borrowing books and making improvements. In light of these findings, the study recommends that the government allocate adequate funds to enhance the accessibility of instructional materials in all secondary schools. Additionally, for future research, this study suggests investigating how teachers and students utilize instructional materials to facilitate effective teaching and learning processes (Tety, 2016).

3) Assessment and Feedback Strategies

Teachers often provide insights into effective assessment and feedback strategies when developing learning resources. This theme includes discussions on designing assessments that align with learning objectives, incorporating formative assessments for ongoing feedback, and implementing varied evaluation methods. Insights in this area highlight the importance of assessment as a tool for gauging student understanding and adjusting learning resources accordingly.

Teachers take into account the availability of funds when considering the use of native Instructional Materials (IMs). Simultaneously, both teachers and school administrators share an equal understanding of the objectives behind employing instructional materials. The survey participants believe that the use of indigenous materials in language instruction has a significant impact, serving as a substantial guide and reference during the teaching and learning process. Consequently, the incorporation of indigenous instructional materials positively influences the teaching and learning experience. Likewise, the use of instructional materials enhances the learning and teaching processes. The school should allocate funds and establish a budget to ensure the provision of indigenous instructional materials for language instruction. Furthermore, it is crucial to initiate strategies involving teachers as the frontliners in implementing the provision of local Instructional Materials. This entails actively involving teachers in the creation of instructional materials (Angelino & Matronillo, 2020).

5. Implications and Future Directions

A. Implications

The research implications concerning the development of learning resources for learners are multifaceted, carrying significant weight in shaping educational practices and outcomes. As the landscape of education continues to evolve, understanding these implications becomes crucial for educators, policymakers, and researchers alike.

The findings from research in learning resource development can provide insights into effective instructional strategies, the impact of technology integration, and the importance of considering diverse learning styles.

B. Future Directions of the Study

As we embark on future directions in the study of learning resource development, the landscape of education continues to evolve, driven by technological advancements, pedagogical innovations, and the dynamic needs of diverse learner populations. Moving forward, research in this field should extend beyond traditional boundaries, exploring cutting-edge technologies, adaptive learning methodologies, and the integration of artificial intelligence to enhance the creation of personalized and engaging resources. Additionally, future studies could delve deeper into the intersectionality of inclusivity, considering the cultural, linguistic, and socioeconomic factors that influence the efficacy of learning materials.

Moreover, examining the role of emerging pedagogies, such as project-based learning or gamification, in resource development can contribute to a more comprehensive understanding of effective instructional practices. The future directions of this study should prioritize the synthesis of research findings into practical guidelines for educators, ensuring that learning resources align seamlessly with evolving

educational objectives and foster an inclusive, technologically adept, and student-centered approach to learning.

Department of Education: Future research in learning resource development should focus on establishing standardized frameworks and guidelines that align with the evolving educational landscape. Collaborative efforts with educational policymakers can help create a cohesive approach to resource development, ensuring that materials are not only aligned with curriculum standards but also adaptable to the diverse needs of learners. Additionally, exploring the feasibility of integrating emerging technologies and pedagogical approaches within the existing education frameworks can contribute to the Department of Education's goal of fostering innovative and effective learning environments.

School Administrators: Future research directions should emphasize the impact of learning resource quality on overall school effectiveness. Studies can explore the correlation between resource development strategies and key performance indicators, such as student academic achievement, engagement levels, and teacher satisfaction. Administrators should consider supporting professional development initiatives that enhance teachers' skills in creating and implementing effective learning resources. Furthermore, research can guide administrators in developing efficient systems for resource distribution and management within schools, ensuring equitable access for all students.

Teachers: Future research in learning resource development should prioritize providing practical insights and tools for teachers to navigate the complexities of creating engaging and inclusive materials. Investigating the effectiveness of professional development programs tailored to equip teachers with the skills for adaptive resource creation, technological integration, and differentiated instruction can be beneficial. Additionally, understanding the preferences and challenges faced by teachers in resource development can inform the creation of supportive platforms and communities for collaborative idea-sharing and resource sharing.

Future Researchers: For future researchers, exploring the uncharted territories of learning resource development is essential. This includes delving into the integration of emerging technologies like virtual reality or artificial intelligence, assessing their impact on student engagement and learning outcomes. Investigating the long-term effects of innovative pedagogical approaches, such as gamification or project-based learning, can contribute to the body of knowledge. Future researchers should also consider longitudinal studies to assess the sustained impact of learning resources on student success, paving the way for evidence-based recommendations for educators and policymakers. Furthermore, research can explore the global applicability of resource development strategies, acknowledging cultural and contextual variations in educational systems.

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