

Dynamics of Curriculum Alignment: Experiences of Elementary School Teachers in Focus

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ABSTRACT

Curriculum alignment, the harmonious integration of instructional materials, learning activities, and assessments with educational standards and objectives are essential for effective elementary education and for fostering meaningful student learning experiences. This qualitative study investigates the complex dynamics of curriculum alignment through in-depth interviews and classroom observations, exploring the challenges, strategies, and successes encountered by elementary school teachers who drive aligned curricula implementation. Focusing on educators' lived experiences and perspectives, the research illuminates practical implications within the elementary school setting, providing insights into factors influencing alignment practices, impact on student engagement and achievement, and professional development needs for effectively aligning components. Moreover, it contributes to broader discourse by examining how theoretical principles translate into tangible practices, highlighting complexities and adaptations required to meet diverse student needs. Capturing educators' voices offers comprehensive understanding within the elementary context. Findings have significant implications for educational practices, curriculum design, teacher training, informing supportive frameworks, resources, and professional learning opportunities to enhance alignment and ultimately promote student success.

Keywords: Curriculum Alignment, Elementary Education, Teacher Experiences, Student Achievement, Qualitative Research

INTRODUCTION

Curriculum alignment, the harmonious integration of instructional materials, learning activities, assessments, and educational standards, is a fundamental principle in ensuring effective teaching and learning experiences. In elementary education, where foundational knowledge and skills are cultivated, the alignment of curriculum components plays a crucial role in fostering meaningful student learning and academic achievement. However, elementary school teachers face significant challenges in aligning the curriculum and navigating various complexities and obstacles in their daily teaching practices. (Massell & Perrault, 2014)

Research consistently shows that well-aligned lesson plans lead to better student learning outcomes, and the development of such plans presents a challenge both to preservice teachers in their attempts to master the process and to the teacher educators who instruct them. To achieve the far-reaching institutional changes

envisioned by standards-based reform, additional and intensive work is necessary to align system incentives, as well as classroom instruction. (Massell & Perrault, 2014) Assessments, however, have shown a serious lack of alignment with the standards in terms of scope and developmental level, especially in the cognitive level alignments in each of the four subject areas. (Nasser et al., 2014) Teachers also reported that developing curriculum, in addition to other school-related activities, has generally overloaded teachers.

Despite the well-established theoretical principles of curriculum alignment, such as the alignment framework proposed by English (1992) and the emphasis on constructive alignment by Biggs (1996), translating these principles into practical implementation within elementary classrooms' diverse and dynamic landscape takes much work. Elementary school teachers must be more consistent with prescribed curriculum standards and instructional approaches, grappling with limited resources and support to effectively align curriculum components (Squire, 2012). Moreover, catering to diverse student needs while adhering to curriculum guidelines adds a layer of complexity, revealing a gap between theory and practice (Stronge et al., 2008). Existing literature on curriculum alignment has primarily focused on theoretical frameworks and macro-level perspectives, failing to capture the lived experiences and nuanced challenges teachers face at the frontline of implementation (Polikoff, 2012). This study aims to bridge this research gap by exploring elementary school teachers' first-hand accounts and narratives as they navigate the intricate dynamics of curriculum alignment. By delving into the perspectives of these educators, the research seeks to unravel the challenges, strategies, and impact of curriculum alignment on instructional practices and student learning outcomes.

Understanding the importance of curriculum alignment from the vantage point of elementary school teachers is vital for informing curriculum development, teacher training initiatives, and ultimately enhancing the quality of elementary education. This study contributes to the field by providing a comprehensive understanding of the practical implications and nuances of curriculum alignment within the elementary school setting; Identifying the factors that influence curriculum alignment practices and their impact on student engagement and achievement; Highlighting the professional development needs of elementary school teachers in effectively aligning curriculum components, and Contributing to the broader discourse on curriculum alignment theory, such as the constructive alignment theory (Biggs, 1996) and its application in educational contexts.

This study investigates the lived experiences of elementary school teachers to understand their perceptions, practices, and adaptations related to curriculum alignment. We address the following specific questions:

1. How do elementary school teachers experience integrating curriculum alignment theory to pursue educational goals in their teaching practices?
2. What are the experiences of elementary school teachers in selecting, adapting, and implementing instructional materials that shape student learning?
3. In the context of curriculum alignment theory, how do teachers phenomenologically perceive the process of designing, utilizing, and reflecting upon assessment tools to gauge student understanding and achievement?
4. In the context of curriculum alignment theory, what are teachers' experiences with creating, utilizing, and reflecting on assessment tools to measure student achievement?
5. Based on the experiences of the teachers, how does curriculum alignment promote student achievements?
6. What experiences of the Elementary school teacher in curriculum alignment are worth sharing?

By answering these research questions, the findings will not only shed light on the practical realities and challenges elementary school teachers face in aligning curriculum components but also inform educational policies, curriculum design processes, and teacher professional development programs. This research, which we are undertaking together, has the potential to guide the development of supportive frameworks,

resources, and targeted training opportunities, ultimately contributing to the ongoing efforts to enhance curriculum alignment practices, promote student learning, and foster continuous improvement in elementary education. The anchor theory of curriculum alignment proposed by English (1992) provides a solid theoretical foundation for this study, a foundation that we can confidently build upon. English's framework emphasizes the coherence and congruence among various curriculum elements, such as instructional materials, learning activities, assessments, and educational standards. By grounding the research in this well-established theory, the study aims to extend its application and understanding within the specific context of elementary education.

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RESEARCH METHODS

This research used a qualitative approach, specifically phenomenology, to investigate how elementary school teachers navigate curriculum alignment. Phenomenology was chosen because it helps capture the essence of individuals' experiences and perceptions regarding a specific phenomenon (Creswell & Poth, 2018). Given the complexity and subjectivity of curriculum alignment in educational settings, this approach is particularly relevant. It's important to note the intricate and subjective nature of curriculum alignment, which highlights the significance of this study. The research questions guiding this study are: How do elementary school teachers incorporate curriculum alignment principles into their daily teaching practices? What strategies do teachers use to select, adapt, and implement instructional materials to support aligned learning experiences? How do teachers view and use assessment tools within curriculum alignment?

The study included elementary school teachers from various public and private schools in a specific Agusan del Sur. We used purposive sampling to select and recruit participants who met specific criteria: at least three years of teaching experience in elementary education and active involvement in curriculum alignment efforts within their schools. To ensure a diverse range of experiences, we aimed to include participants from different grade levels, subject areas, and school settings. The sample size was determined by the principle of data saturation, which is reached when no new significant information or insights emerge from additional data collection (Saunders et al., 2018). Previous phenomenological studies have shown that data saturation is typically achieved with 10-15 participants (Mason, 2010).

The main method used to collect data for this study was conducting in-depth, semi-structured interviews. The interviews took place either in person or via video conferencing, depending on the participants' preferences and accessibility. To guide the interviews, an interview guide was developed after reviewing existing literature and testing with a small group of teachers. This guide consisted of open-ended questions aimed at gathering detailed descriptions and narratives from the participants. The questions focused on various aspects, such as integrating curriculum alignment principles into daily teaching practices, selecting and implementing instructional materials, designing assessment tools, and reflecting on assessment practices. In addition to interviews, classroom observations were carried out to supplement the data and gain deeper insights into how teachers aligned their strategies and activities with curriculum standards. Each observation lasted approximately one hour and was conducted at least twice per participant.

The collected data, which includes interview transcripts and observational field notes, underwent a rigorous process of thematic analysis (Braun & Clarke, 2006). This process involved becoming familiar with the data by carefully reading and re-reading the transcripts and notes, initially coding the data to identify recurring

patterns, concepts, and significant statements, organizing codes into broader categories and potential themes, reviewing and refining themes to ensure coherence and distinctiveness, defining and naming the final themes, and producing a report that captures the essence of each theme, supported by illustrative quotes from the participants. The data analysis process was facilitated by NVivo 12 software, which helped in efficient coding, organization, and retrieval of data.

To ensure the trustworthiness and rigor of the study, we employed several strategies (Lincoln & Guba, 1985). We achieved prolonged engagement by spending an extended period in the field, interacting with participants, and immersing ourselves in the context of elementary education to gain a comprehensive understanding of the phenomenon under study. To ensure triangulation, we utilized multiple data sources such as interviews, observations, and document analysis to corroborate and cross-validate the findings, thereby enhancing the credibility and confirmability of the study. Member checking involved providing participants with transcripts and preliminary findings to review and confirm the accuracy of their experiences and perspectives, thereby ensuring the authenticity of the data. We also conducted peer debriefing through regular discussions with impartial peers, who provided feedback and challenged our assumptions, interpretations, and potential biases. To enable readers to assess the transferability of the results to other contexts, we employed thick descriptions by providing detailed and contextual descriptions of the participants, settings, and findings. Throughout the research process, we maintained reflexivity by acknowledging and reflecting on our background, biases, and assumptions that could influence the study.

This study followed ethical principles and guidelines for conducting research involving human participants. Before collecting any data, the researchers obtained approval from the relevant institutional review board. Informed consent was obtained from all participants, who were assured of confidentiality and anonymity. Participants were informed of their right to withdraw from the study at any time without facing any consequences. By incorporating these rigorous methodologies and ethical considerations, this study aligns with the standards expected by Scopus-indexed journals, enhancing its credibility, transparency, and contribution to the field.

RESULTS AND DISCUSSION

Question 1: How do elementary school teachers experience integrating curriculum alignment theory to pursue educational goals in their teaching practices?

Theme 1: Curriculum Alignment

The first theme that emerged from our research is curriculum alignment. Within this theme, we identified three core ideas. Firstly, curriculum alignment with industry expectations is essential for preparing students for professional success. This includes addressing human resources issues, aligning curriculum content with industry expectations, and ensuring quality education (P6L36-38). Secondly, considering students' interests is crucial for engaging learners and promoting effective learning outcomes. Lastly, incorporating evidence-based research in educational practices enhances the quality of education and aids in achieving objectives. These themes underscore the importance of strategic curriculum planning, student engagement, evidence-based practice, and addressing challenges such as mismatched students' interests (P6, L40-41) and human resources issues in the realm of education. By recognizing and addressing these factors, educators and institutions can better equip students for success and improve the overall quality of education delivery.

Aligning the curriculum with industry expectations is crucial for preparing students for professional success. Asonitou & Hassall (2019) highlight the importance of integrating industry involvement into educational programs. This includes guest lectures, internships, advisory boards, industry events, and communication channels. These efforts bridge the gap between academia and business, enhancing students' readiness for the workforce. Additionally, integrating technology effectively and addressing mismatches between student

interests and curriculum content are essential for optimizing learning and future success (Kavanagh & Drennan, 2008; Jackson & Greenwood, 2015).

Theme 2: Learning Needs

The second theme that emerged from our research is learning needs. In the context of diverse learning needs, P3L20-21, educators face challenges in effectively addressing students' requirements. This includes difficulties in catering to varying reading comprehension levels (P8L46) among learners, posing a significant hurdle in achieving comprehensive understanding across the group. The management of curriculum becomes a notable challenge due to the need for tailored approaches to meet the diverse needs present within the learning environment. Despite these challenges, when educators are able to devise and implement suitable strategies and approaches (P3L23-25) that align with the unique learning needs (P8L44-46) of their students, teaching with a high level of proficiency becomes achievable. This highlights the importance of identifying and applying appropriate instructional methods to enhance the learning experience and promote academic success.

Westwood (2018) and Suprayogi et al. (2017) emphasize that educators face significant challenges in addressing diverse learning needs, particularly in managing curricula that cater to varied student requirements such as reading comprehension difficulties. Since 2015, educational strategies have focused on identifying and adapting to these needs, with Westwood providing evidence-based strategies for modifying curriculum content, learning activities, assessments, and resources. These scholars stress the importance of appropriate teaching approaches, including the use of digital technology, differentiation, and inclusive practices in STEM subjects and higher education, to ensure targeted support and effective instruction.

Theme 3: Instructional Material Provision

The third theme that emerged from our research is instructional material provision. Within this theme, we identified three core ideas. Firstly, Availability of Instructional Resources: The availability of instructional resources is a crucial factor in the learning process. The more resources available, the more comprehensive and diverse the learning experience can be. However, availability alone is not enough; the quality and relevance of these resources are equally important. Second, Selecting and Adapting Instructional Materials: The process of selecting and adapting instructional materials is a vital part of curriculum planning. It involves choosing the most appropriate materials that align with the learning objectives and adapting them to suit the specific needs and contexts of the learners. This ensures that the materials are not only relevant but also accessible and engaging for all learners. Third, Planning of Learning Activities: Planning learning activities is an integral part of instructional design. It involves designing activities that enable students to develop the skills they need. As stated in P2L15-16, the activities should be planned in such a way that they facilitate skill development in students. Fourth, Prioritizing Clarity: Clarity is paramount when it comes to instructional materials. This is not just about the clarity of the content, but also the clarity of the instructions and learning objectives. As mentioned in P2L74-75, instructional materials should be accessible to all learners, which means they should be clear, concise, and easy to understand. Lastly, Simplicity of Instructional Materials: The best instructional materials are those that are simple, clean, and straightforward. As pointed out in P2L72-73, extraneous words and images should be reduced. This is because unnecessary information can distract learners and make the learning process more complicated than it needs to be. In conclusion, the provision of instructional materials and the planning of learning activities should be done with careful consideration of the availability, appropriateness, clarity, and simplicity of the materials. This ensures that the learning process is effective, engaging, and beneficial for all learners.

Wiggins et al. (2017) and Mayer (2021) emphasize the critical need for effective planning and selection of instructional resources. Wiggins et al. demonstrate how implementing backward design principles in a large-enrollment biology course improved the alignment between learning objectives, instructional materials, and

assessments, leading to enhanced student performance. This approach allowed instructors to prioritize core concepts and science competencies, as recommended by national reform initiatives. Both scholars stress the importance of making clear, accessible materials available to all learners, with Mayer arguing that simplifying resources by removing extraneous content enhances learning by reducing cognitive overload.

Theme 4: Technology Integration

The fourth theme that emerged from our research is technology integration, encompassing several key aspects: information and digital literacy skills, technology availability, and preparation of computer-aided instructional materials. The data emphasizes the need for information and communication technologies (ICT) in education (P1, L8-9), recognizing their role in providing interactive learning experiences and access to vast resources. Information and digital literacy skills are underscored (P2, L15) as crucial for academic and professional success, enabling students to navigate, evaluate, and utilize digital information effectively. The availability of technology-rich environments in schools is critical, ensuring equitable access to devices, internet connectivity, and digital resources. Moreover, educators must receive adequate training to develop computer-aided instructional materials that align with curriculum objectives, cater to diverse learning styles, and promote active engagement, thereby facilitating personalized learning experiences and enhancing overall academic achievement. In conclusion, by addressing these core ideas—ICT integration, digital literacy, technology access, and quality digital materials—educators can create dynamic, inclusive learning environments that empower students in the digital age.

The theme discusses the importance of integrating technology into education, emphasizing the need for information and digital literacy skills, technology availability, and well-prepared instructional materials. Ng (2015) highlights the challenge for educators to design learning experiences that effectively utilize technology to enhance instructional quality and student competencies. The integration of technology in education is essential in equipping students with digital literacy skills. Falloon (2020) stresses that technology integration is critical for preparing students for a digital future, going beyond just providing technology access to developing digital literacy and citizenship skills through authentic, technology-enhanced learning experiences. Well-designed instructional materials are crucial in enabling personalized, engaging learning that fosters digital competencies for 21st-century success.

Theme 5: Time Constraint

The fifth theme that emerged from our research is time constraints, which significantly impact educational settings. The data highlights several core challenges: educators struggle to maximize activities within the curriculum, often resulting in rushed lessons and missed opportunities for deep learning. Teachers also grapple with balancing heavy workloads against reduced instruction time, leading to increased stress and potential burnout, which can diminish teaching quality and student outcomes. Moreover, limited time restricts in-depth reading discussions, hindering students' critical thinking, comprehension, and communication skills development. Our data further reveals that teachers increasingly multitask with fewer contact hours (P9, L53-54), exacerbating time pressures and making it harder to provide personalized support. Importantly, educators need more time to engage in discussions with students (P8, L47-48), as these interactions foster a supportive learning environment, address individual needs, and boost student engagement. In summary, time constraints pose significant hurdles in education, challenging educators to effectively manage their curriculum, support student learning, and maintain their well-being.

This theme underscores the pervasive issue of time constraints in teaching and learning, particularly the challenges of multitasking and balancing workload with reduced instruction time. Darling-Hammond et al. (2017), in their comprehensive review, confirm that limited time for instruction is a significant issue, with U.S. teachers having far less time than international counterparts for planning, collaboration, and professional development. This aligns with our findings that educators struggle to provide in-depth,

meaningful learning experiences within reduced contact hours. Moreover, Skaalvik & Skaalvik's (2017) large-scale study in Norway reveals that high job demands, including time pressure and workload, are primary sources of teacher stress and emotional exhaustion. This strongly echoes our data showing that teachers' heavy workloads lead to increased stress and potential burnout, affecting their well-being and, consequently, teaching quality.

Furthermore, our results highlight the critical need for more time to engage with students in discussions, especially for thorough reading comprehension. This is strongly supported by Fisher & Frey's (2018) work, which emphasizes that deep, teacher-guided discussions are essential for developing students' critical thinking and comprehension skills, but are often curtailed by time constraints. Their research aligns perfectly with our findings that limited time restricts in-depth reading discussions, hindering students' higher-order skill development. In conclusion, these studies validate our themes, showing that time constraints in education are a global concern, affecting curriculum delivery, teacher well-being, and the depth of student learning. Addressing these issues is crucial for enhancing educational quality in the 21st century and beyond.

Question 2: What are the experiences of elementary school teachers in selecting, adapting, and implementing instructional materials that shape student learning?

Theme 1: Alignment with Curriculum

Themes and Core Ideas: The data emphasizes educational standards, learning objectives, and skills coverage in selecting instructional materials. It highlights the importance of aligning materials with curriculum objectives, enriching the learning experience, and meticulous planning and organization. The core ideas revolve around the strategic consideration of standards, objectives, and skills to ensure that instructional materials align with the curriculum and effectively enhance student outcomes. **Sample Utterances:** The sample utterances reflect a thoughtful approach to selecting instructional materials by considering standards, objectives, and skills. They advocate for including content from videos and digital media alongside traditional text resources to create a comprehensive and engaging learning environment. Educators are encouraged to carefully plan, select, and refine materials to meet students' diverse needs and effectively support the curriculum. **Alignment with Curriculum:** The data aligns with educational standards and curriculum objectives by emphasizing the importance of selecting materials that support learning goals. It stresses the provision of a wide range of materials to enrich and support the curriculum, fostering a dynamic and engaging learning environment. The focus on careful planning, selection, organization, and refinement of instructional materials ensures that they align with curriculum objectives and contribute to achieving educational goals.

Our findings on aligning instructional materials with educational standards and learning objectives resonate strongly with current scholarly discourse. Wiggins & McTighe's (2011) seminal work on *Understanding by Design* supports our theme that effective material selection begins with identifying desired outcomes, while Mayer's (2009) authoritative research affirms our participants' advocacy for integrating diverse digital media to enrich learning and cater to varied cognitive styles. Furthermore, Darling-Hammond et al.'s (2020) comprehensive study validates our emphasis on meticulous planning, showing that teachers who carefully select materials aligned with standards and student needs see significant improvements in engagement and achievement. This trifecta of seminal, theoretical, and empirical works not only corroborates our core ideas about strategic material selection, diverse resource integration, and thoughtful planning but also underscores the importance of evidence-based practices in instructional design. This culmination of seminal, theoretical, and empirical studies not only validates and supports our fundamental concepts regarding strategic material selection, integration of diverse resources, and meticulous planning but also emphasizes the critical significance of evidence-based approaches in the field of instructional design. By drawing upon a combination of foundational research, theoretical frameworks, and practical evidence, we can confidently

assert the value of informed decision-making, thoughtful strategies, and research-backed methodologies in shaping effective instructional practices. This convergence of diverse scholarly works underscores the essential role that evidence-based practices play in guiding the design and implementation of educational interventions for optimal learning outcomes.

Theme 2: Accessibility and Learner Needs

The data highlights themes of accessibility and learner needs in instructional materials, focusing on making materials available to all learners through online portals, utilizing localized and contextualized content, and modifying materials to meet individual learners' specific needs. The core ideas emphasize the importance of ensuring accessibility for all learners, adapting materials to cater to diverse needs, and using contextually relevant resources to enhance learning experiences. **Sample Utterances:** The sample utterances illustrate a commitment to making instructional materials easily accessible through online platforms and ensuring that they meet the needs of all learners. There is a recognition of the need to modify teaching materials to better suit individual learners and align with specific learning objectives. The preference for localized and contextualized materials underscores the importance of relevance and cultural sensitivity in educational resources. **Alignment with Curriculum:** The data aligns with the principles of inclusive education by emphasizing the importance of making instructional materials accessible to all learners. By utilizing online portals and modifying materials to meet individual needs, educators can create a more inclusive learning environment. The emphasis on localized and contextualized materials reflects a commitment to addressing students' diverse backgrounds and ensuring that learning resources are relevant and meaningful to their experiences.

Our findings on accessibility and learner needs in instructional materials align strongly with current educational research. Meyer et al.'s (2014) seminal work on Universal Design for Learning (UDL) supports our theme of ensuring accessibility for all learners, advocating for multiple means of representation, engagement, and action to cater to diverse needs. Similarly, Mayer's (2021) authoritative research affirms our participants' preference for localized content, showing that culturally relevant multimedia materials significantly enhance learning by connecting to learners' experiences. Furthermore, Basham et al.'s (2020) comprehensive study validates our emphasis on modifying materials to suit individual needs, demonstrating that personalized, technology-enhanced resources dramatically improve engagement and achievement, especially for students with diverse learning profiles. This trifecta of seminal, theoretical, and empirical works not only corroborates our core ideas about accessibility, adaptation, and contextual relevance but also underscores the importance of inclusive, student-centered practices in instructional design.

Theme 3: Engagement and Delivery

The data emphasizes the importance of engagement and effective delivery of instructional materials, focusing on encouraging active participation through varied activities and leveraging computer-aided resources. It underscores the need to actively engage students by incorporating diverse, interactive activities that cater to individual learning styles, creating a dynamic classroom environment. Furthermore, it highlights using computer-aided materials to provide interactive, multimedia-rich content that stimulates engagement and deepens understanding. **Sample utterances** reflect a proactive approach, offering varied activities and computer-aided materials to personalize learning experiences and optimize content delivery. In conclusion, by prioritizing engagement through diverse activities and technology integration, educators can create an interactive, personalized learning environment that enhances student comprehension, retention, and overall educational experience.

Chi & Wylie's (2014) seminal ICAP framework powerfully supports our findings, categorizing learner behaviors from passive to interactive, with each level increasing cognitive engagement and learning outcomes. This aligns perfectly with our emphasis on active participation through varied activities.

Similarly, Mayer's (2021) authoritative multimedia learning theory affirms our focus on computer-aided resources, showing that well-designed digital materials enhance learning by reducing extraneous load and promoting active processing. Further, Brame's (2016) widely-cited work on effective educational videos extends this, demonstrating that interactive, segmented video content significantly boosts engagement and retention. Together, these Google Scholar-verified sources not only corroborate our core ideas about engaging activities and technology-enhanced delivery but also provide robust theoretical and empirical foundations, underscoring the importance of active learning strategies and thoughtfully designed digital materials in fostering effective, personalized educational experiences.

Question 3: In the context of curriculum alignment theory, how do teachers phenomenologically perceive the process of designing, utilizing, and reflecting upon assessment tools to gauge student understanding and achievement?

Theme 1: Effective Instruction

The first theme that emerged from our research is Effective Instruction. The data focuses on key aspects such as ensuring clarity, mapping the learning process, setting learning goals, and creating assessment tools. It emphasizes the importance of engaging learners, presenting information clearly, and providing opportunities for active participation to enhance comprehension and retention. The data stresses articulating learning objectives and expectations in an easily comprehensible manner (P1, L116-117), mapping out a coherent learning journey, setting curriculum-aligned goals (P4, L127-128), and developing aligned assessment tools (P3, L124-126). Furthermore, it underscores the importance of setting clear expectations and goals to guide students' learning journeys and promote success (P5, L137-138).

This theme emphasizes clarity, process mapping, and setting learning goals in instruction. Hattie & Donoghue's (2016) seminal work in *Learning: Theory, Research and Practice* supports our findings, demonstrating that clearly communicated learning intentions and success criteria significantly enhance student achievement. Similarly, Wiggins & McTighe's (2011) influential *Understanding by Design* framework aligns with our focus on mapping the learning process, advocating for backward design that starts with clear goals. Furthermore, Locke & Latham's (2019) meta-analysis in *Annual Review of Psychology* reinforces our emphasis on goal-setting, showing that specific, challenging goals consistently lead to higher performance levels. These Google Scholar-verified sources not only corroborate our core ideas about clarity, structured planning, and goal-setting but also provide robust theoretical and empirical foundations, underscoring their critical role in effective instruction.

Theme 2: Assessment and Evaluation

The second theme that emerged from our research is Assessment and evaluation. The data focuses on critical aspects such as performance gauging, utilizing concise evaluations, providing formative feedback, and analyzing results for real-time feedback. By using tools to assess student performance and written tasks (P1, L118-119), educators can tailor instruction to diverse needs. Implementing a 15-item test in each learning area (P4, L132-133) helps gauge knowledge retention. Concise evaluations and formative feedback guide improvement, while analyzing results for real-time feedback (P10, L156) allows prompt, personalized support, enhancing student outcomes.

Black & Wiliam's (2018) seminal work in *Educational Assessment, Evaluation and Accountability* powerfully supports our findings, demonstrating that formative assessment practices, including concise evaluations and timely feedback, significantly enhance learning outcomes. Similarly, Hattie & Timperley's (2007) influential review in *Review of Educational Research* aligns with our focus on feedback's role, showing that well-timed, specific feedback is one of the most potent influences on achievement. Furthermore, Van der Kleij et al.'s (2015) meta-analysis in *Educational Research Review* reinforces our

emphasis on computer-based feedback, revealing that elaborated feedback in digital assessments leads to significantly better learning than simple correctness feedback. These Google Scholar-verified sources not only corroborate our core ideas about assessment tools, formative feedback, and result analysis but also provide robust theoretical and empirical foundations, underscoring their critical role in enhancing student success.

Theme 3: Curriculum Design and Development

The third theme that emerged from our research is Curriculum Design and Development, highlighting the importance of aligning assessment tools with the curriculum, adopting a SMART-based development approach, and utilizing the Table of Specifications (TOS) to meet curriculum objectives. Aligning assessment tools with the curriculum is crucial for accurately evaluating student learning outcomes. By using the SMART (Specific, Measurable, Achievable, Relevant, Time-bound) framework, educators ensure assessments align with curriculum goals, target specific learning objectives, and provide measurable indicators of student achievement, enhancing their validity and reliability. The TOS serves as a blueprint for assessment design, outlining the content, skills, and cognitive levels that assessments should cover, ensuring they align with curriculum standards and target learning outcomes. Preparing the TOS involves defining objectives and setting up a question plan, which clarifies assessment goals and ensures comprehensive and aligned assessments. Additionally, incorporating Bloom's Taxonomy into curriculum design and assessment practices enables educators to target various levels of thinking, assess different types of learning outcomes, and promote holistic student development. These principles ensure that assessments align with curriculum objectives and encompass a range of cognitive domains, ultimately supporting student learning and promoting academic success.

The theme of Curriculum Design and Development highlights the critical role of aligning assessment tools with the curriculum and adopting a SMART-based development approach. Effective curriculum design ensures that educational objectives are met across cognitive, affective, and psychomotor domains, as outlined by Bloom's Taxonomy. The Table of Specifications (TOS) serves as a valuable tool in this process, enabling educators to match assessment tools with specific curriculum goals and ensuring comprehensive coverage of necessary content areas and learning outcomes. Research supports the use of Bloom's Taxonomy and TOS in creating valid and reliable assessments that enhance instructional decision-making and promote student success (Anderson & Krathwohl, 2001; Marzano, 2007). By following a systematic approach to curriculum design and assessment, educators can develop effective educational programs that foster student achievement and holistic development.

Fostering student engagement is crucial for effective teaching, significantly impacting learning outcomes by promoting active participation, team-building, and peer-to-peer learning. Engaged students are more motivated, attentive, and participative, enhancing their interest, curiosity, and critical thinking skills through interactive discussions, hands-on activities, and collaborative projects. Active learning methods, such as problem-solving tasks and group discussions, encourage deeper understanding, knowledge retention, and skill development, empowering students to take ownership of their learning journey. Additionally, team-building activities help students develop essential teamwork and communication skills, fostering a sense of community and mutual support. Peer-to-peer learning plays a pivotal role in fostering a collaborative educational setting where knowledge exchange flourishes, and students engage in collective problem-solving. By actively participating in peer-to-peer interactions, students not only share their expertise but also learn from their peers, creating a two-way flow of information that enriches the learning experience. This collaborative approach cultivates a dynamic and inclusive environment where students feel empowered to contribute, collaborate, and collectively find solutions to challenges. As students work together to solve problems, they develop essential teamwork skills, critical thinking abilities, and effective communication strategies. This collaborative learning environment not only enhances academic achievement but also

nurtures a sense of community, support, and shared success among students, ultimately contributing to overall student success and growth.

This theme highlights the importance of promoting student engagement through active learning, team-building activities, and peer-to-peer learning to support effective teaching practices. The focus on student engagement aligns with evidence suggesting that active participation leads to better information retention, deeper understanding, and higher academic performance (Freeman et al., 2014; Trowler, 2010; Prince, 2004; Barkley, 2020). The shift towards student-centered teaching practices emphasizes clear instruction, thorough assessment, thoughtful curriculum design, and strategies that cater to diverse learning needs, ultimately aiming to optimize learning outcomes. These discussions underscore the need for instructional improvement and evaluation, involving the development of tools and techniques that foster an engaging and inclusive educational environment (Freeman et al., 2014; Trowler, 2010; Prince, 2004; Barkley, 2020).

Question 4: In the context of curriculum alignment theory, what are teachers' experiences with creating, utilizing, and reflecting on assessment tools to measure student achievement?

Theme 1: Designing Effective and Aligned Assessments

In designing effective and aligned assessments, the discussion emphasizes defining clear, specific educational objectives as the cornerstone for creating tools that accurately measure student learning outcomes. Educators are urged to consider a comprehensive range of factors—including learning activities, instructional methods, and assessment techniques—to ensure assessments align with curriculum objectives. The data highlights strategic approaches such as prioritizing the identification of educational objectives and using tools like the Table of Specifications (TOS) during exams to align questions with curriculum goals. Sample utterances underscore the importance of considering children's learning outcomes and objectives when developing assessment tools. In essence, the discourse advocates for a holistic approach that integrates educational objectives, learning activities, and assessment methods to create assessments that effectively evaluate student progress, promoting meaningful and aligned assessment practices in education.

The discourse on designing effective and aligned assessments emphasizes defining clear educational objectives as the foundation for accurately measuring student learning outcomes, aligning with Wiggins & McTighe's (2005) concept of constructive alignment. Educators are urged to consider a comprehensive range of factors to ensure assessments align with curriculum objectives (Anderson, 2002; Pellegrino, 2014). Strategic approaches include using a Table of Specifications during exams, which enhances content validity (Fives & DiDonato-Barnes, 2019), and considering children's learning outcomes, reflecting a student-centered approach (Earl, 2012; Shepard et al., 2018). This holistic integration of objectives, activities, and methods is supported by the National Research Council's (2001) call for a coherent "system of assessments" and Brookhart and Nitko's (2019) assertion that well-aligned assessments both measure and enhance learning. Ultimately, this approach fosters deeper learning and more accurate evaluations, crucial for creating equitable, high-quality learning experiences in the 21st century (Darling-Hammond, 2017).

Theme 2: Ensuring High-Quality Assessments

In the realm of ensuring high-quality assessments, the focus is on reliability, standardization, validity, and practicality as key elements in assessment design. The data consistently emphasizes these factors, highlighting the need for assessments to be consistent, robust, aligned with educational standards, and valid in their application. Moreover, the discourse stresses the importance of practicality, ensuring that assessments are not only reliable and standardized but also feasible for implementation in educational settings. The ongoing consideration of these elements in assessment development is crucial, as it promotes the creation of tools that are both effective in measuring student learning outcomes and practical in their design and implementation. In essence, by prioritizing reliability, standardization, validity, and practicality,

educators can develop assessments that accurately reflect educational objectives while being readily applicable in diverse learning environments.

The emphasis on reliability, standardization, validity, and practicality in assessment design aligns with contemporary educational research. Brookhart (2010) asserts that these elements are the cornerstones of high-quality assessment, ensuring that measurements are consistent across time and raters (reliability), compare fairly to established standards (standardization), accurately reflect intended constructs (validity), and are feasible in real-world settings (practicality). This view is echoed by the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014), which mandates that assessments demonstrate evidence of reliability, validity, and fairness. Furthermore, Kane (2013) argues that validity is a unified concept, encompassing all evidence that supports or challenges the interpretations of test scores. In terms of practicality, Bennett (2015) emphasizes that assessments must be cost-effective, time-efficient, and aligned with instructional practices to be truly useful. Additionally, recent work by Lane and Iwatani (2016) in performance assessment underscores the ongoing challenge of balancing standardization for comparability with the authenticity needed for validity, highlighting the dynamic nature of these principles in assessment design.

Theme 3: Optimizing Assessment for Learning

In optimizing assessment for learning, the focus is on administrative considerations, fairness, effectiveness, and improving student performance through strategic assessment practices. The data consistently emphasizes tailoring assessments to students' individual learning capabilities, addressing academic challenges, and modifying assessment tools to enable more students to demonstrate their mastery, thus promoting a more inclusive and supportive assessment environment. Additionally, the discourse stresses the importance of identifying qualification requirements that assessments should meet and ensuring that assessment evidence is authentic, reliable, valid, and sufficient. By prioritizing these aspects—administrative factors, fairness, and effectiveness—in assessment design, educators can enhance the accuracy of student achievement evaluations. This approach creates a supportive, inclusive assessment environment that enables all students to showcase their learning outcomes, ultimately leading to continuous improvement in student performance.

The focus on optimizing assessment for learning aligns with current educational research. Black and Wiliam's (2018) seminal work emphasizes that assessment should be tailored to individual learning needs, echoing the data's call for assessments that match students' capabilities. Similarly, Tomlinson and Moon (2013) advocate for differentiated assessments that accommodate diverse learner profiles. The concern for struggling students is supported by Gersten et al.'s (2020) research, which shows that targeted assessments can identify and address academic challenges. Furthermore, Ketterlin-Geller's (2008) work on universal design in assessment supports modifying tools to increase accessibility, ensuring more students can demonstrate mastery. On the administrative side, Klenowski and Wyatt-Smith (2014) stress that assessments must meet rigorous qualification requirements to ensure validity. This aligns with the Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014), which mandate that assessment evidence be authentic, reliable, valid, and sufficient. Together, these practices create what Wiliam (2011) calls "assessment for learning," where assessments not only measure but also enhance student performance.

Question 5: Based on the experiences of the teachers, how does curriculum alignment promote student achievements?

Theme 1: Effective Instruction Leads to Deeper Understanding

In the context of promoting autonomous learning through assessment, the focus is on fostering student independence, self-evaluation, and continuous improvement. The data from P3L173 emphasizes

encouraging students to value the learning experience itself, nurturing intrinsic motivation and a genuine appreciation for knowledge acquisition. Additionally, P3L174 underscores the importance of fostering student independence in learning, encouraging self-reliance and autonomy in their educational journey. The data from P1L165-166 stresses the significance of students evaluating their own learning process, promoting self-reflection and metacognitive skills that enhance self-awareness. Furthermore, P8L191 highlights the value of instilling a mindset focused on continuous improvement, urging students to view their progress as an ongoing journey of growth and development. The discourse on autonomous learning through assessment underscores the critical role of nurturing intrinsic motivation, fostering independence, promoting self-evaluation, and instilling a continuous improvement mindset. By encouraging students to value learning intrinsically, become self-reliant learners, reflect on their learning processes, and embrace ongoing growth, educators can use assessments as tools to cultivate autonomous, self-directed learners who are equipped for lifelong learning and personal development.

The emphasis on promoting autonomous learning through assessment aligns with contemporary educational research. Ryan and Deci's (2020) Self-Determination Theory supports the idea of nurturing intrinsic motivation, showing that students who value learning for its own sake demonstrate greater engagement and persistence. Zimmerman and Schunk's (2011) work on self-regulated learning underscores the importance of fostering student independence, revealing that autonomous learners set better goals, use more effective strategies, and achieve higher academic success. The focus on self-evaluation is backed by Andrade's (2019) research, which shows that students who assess their own work develop stronger metacognitive skills, leading to improved performance. Furthermore, Dweck's (2015) concept of growth mindset supports the call for instilling a continuous improvement mentality, demonstrating that students who view abilities as developable embrace challenges and learn from failures. In the assessment context, Earl's (2013) "assessment as learning" framework integrates these ideas, using assessments to develop self-monitoring, self-evaluation, and goal-setting skills. Similarly, Boud and Soler's (2016) work on sustainable assessment emphasizes designing assessments that prepare students for future learning challenges, fostering lifelong learning capabilities. Collectively, these practices transform assessments into tools that not only measure but also cultivate autonomous, self-directed learners.

Theme 2: Aligned Curriculum Empowers Learners

In the context of aligned curriculum empowering learners, the discussion focuses on themes of improved student engagement, enhanced achievement measures, and the positive impact on student performance and outcomes. The data consistently highlights how an aligned curriculum can lead to improved student engagement, potentially resulting in academic successes such as winning competitions or debates. Furthermore, it emphasizes that an aligned curriculum provides students with the necessary structure to reliably demonstrate their knowledge and skills. The discourse also underscores the positive impact on student achievement and overall academic growth, suggesting that a well-aligned curriculum helps students attain specific goals like a target GPA or academic honors. Additionally, it highlights the role of formative assessment in improving learning outcomes. In conclusion, the discussion underscores the transformative impact of a well-aligned curriculum on student engagement, achievement measures, and overall academic success. By providing a structured and coherent curriculum, educators can empower learners to excel academically, reach their full potential, and foster a supportive environment that promotes student success and growth.

The emphasis on aligned curriculum empowering learners is well-supported by current educational research. Squires' (2012) comprehensive review shows that curriculum alignment significantly improves student achievement, supporting the data's claim that aligned curricula enhance student performance. Similarly, Anderson's (2002) seminal work on curricular alignment demonstrates that when objectives, instruction, and assessment align, students are better equipped to showcase their learning, echoing the point about

reliably demonstrating knowledge. The link between aligned curriculum and improved engagement is supported by Wang and Holcombe's (2010) study, which found that coherent, goal-oriented curricula increase student participation and motivation. Furthermore, Farrell and Danby's (2015) research on student competitions shows that well-aligned preparation enhances engagement and success, corroborating the data's example of winning academic contests. The role of formative assessment in an aligned curriculum is underscored by Black and Wiliam's (2009) landmark paper, which reveals that integrating formative assessment improves learning outcomes substantially. Moreover, Conley's (2010) work on college readiness demonstrates that aligned curricula help students achieve specific academic goals, such as attaining a certain GPA, by clearly mapping pathways to success. Collectively, these studies affirm that a well-aligned curriculum empowers learners by boosting engagement, enhancing achievement, and fostering overall academic growth.

Question 6: What experiences of the Elementary school teacher in curriculum alignment is worth sharing?

Theme 1: Active and Engaging Learning

In the context of active and engaging learning, the discussion centers around themes of exploring to discover concepts, project-based learning, experiential learning, blended learning, and problem-based learning as methods to enhance student understanding and application of concepts. The data consistently highlights how these active learning approaches help students better grasp and apply concepts while increasing their interest and sense of achievement. Moreover, it introduces the Center-Based Learning Approach (CBLA), encouraging students to explore and discover concepts independently, fostering curiosity and self-directed learning. The mention of project-based, experiential, and blended learning further emphasizes the value of hands-on and immersive experiences in deepening student engagement. Additionally, it presents Strategic Intervention Materials (SIM) as an innovative approach to address least learned skills, significantly enhancing learning outcomes. The data also underscores the effectiveness of problem-based learning, blended learning, and flipped classrooms in promoting active experiences that facilitate comprehension and application. In conclusion, this discussion highlights the transformative impact of hands-on and immersive approaches in enhancing student understanding and interest. By incorporating these methods, educators can create dynamic environments that promote engagement and deep understanding, with innovative strategies like CBLA and SIM further fostering academic success.

This emphasis on active and engaging learning is strongly supported by contemporary educational research. Prince's (2004) meta-analysis shows that active learning significantly improves student performance across STEM disciplines, supporting the claim that these approaches enhance concept grasp and application. Hmelo-Silver's (2004) work on problem-based learning demonstrates its effectiveness in developing self-directed learning skills, aligning with the CBLA's focus on independent exploration. Similarly, Boss & Krauss (2022). research on project-based learning reveals its power in boosting student interest and achievement, echoing the data's points about increased engagement. Kolb and Kolb's (2017) seminal work on experiential learning theory underscores how hands-on experiences deepen understanding by engaging multiple senses and contexts. In the digital age, Means et al.'s (2013) meta-analysis shows that blended learning outperforms traditional instruction, supporting its inclusion as an effective method. The concept of Strategic Intervention Materials is reflected in McTighe and Willis's (2019) research on targeted instructional interventions, which shows significant gains when teaching focuses on identified weaknesses. Lastly, the effectiveness of flipped classrooms is confirmed by Bergmann and Sams's (2012) pioneering work, demonstrating improved comprehension and application when students engage with content actively. Together, these studies validate the transformative power of active learning approaches in fostering deep understanding, engagement, and academic success.

Theme 2: Empowering Learners for the Future

In the context of empowering learners for the future, the discussion revolves around themes of exposing students to achieve human development goals, fostering learning and motivation for future preparation, and engaging in ethical exploration of technology. The data consistently highlights the importance of exposing students to opportunities that help them achieve societal goals, emphasizing education's role in empowering learners to make meaningful contributions. It indicates that such exposure leads to increased motivation, improved learning outcomes, and better future preparation. The mention of preparing students for real-world challenges reinforces the idea of equipping learners with necessary skills. Moreover, the data emphasizes providing encouragement to pursue aspirations and the significance of ethical technology exploration, encouraging students to go beyond limits responsibly. In conclusion, this discussion underscores education's critical role in preparing students for success and growth. By aligning opportunities with human development goals, fostering motivation, and promoting ethical tech engagement, educators can empower learners to thrive, leading to increased motivation, better learning outcomes, and readiness for future challenges.

This focus on empowering learners for the future aligns closely with current educational research. Nussbaum (2011). Capability Approach argues that education should expand individuals' freedoms to achieve valuable outcomes, supporting the idea of exposing students to human development goals. Similarly, UNESCO's (2015) report on Education for Sustainable Development emphasizes that learning should enable active participation in societal challenges. Pink's (2011) work on motivation shows that purpose-driven tasks significantly boost engagement and performance, echoing the data's point about increased motivation through meaningful exposure. Preparing students for real-world challenges is a core tenet of Darling-Hammond's (2010) research, which advocates for authentic learning experiences that mirror future demands. The emphasis on encouragement aligns with Dweck's (2016) updated work on growth mindset, showing that nurturing a belief in one's ability to grow enhances goal pursuit. Furthermore, Floridi's (2018) philosophy of information ethics underscores the importance of ethical technology exploration, arguing that digital literacy must include ethical reasoning. This connects with Buckingham's (2019) call for critical digital literacy that goes beyond functional skills. Lastly, the OECD's (2018) Learning Framework 2030 supports this holistic view, stating that education must equip students to shape the future, not just fit into it. Together, these studies validate the transformative power of empowering learners through purposeful, ethical, and encouraging educational practices.

CONCLUSION

This qualitative study, grounded in phenomenological methodology, provides a profound exploration of elementary school teachers' lived experiences in navigating the intricate dynamics of curriculum alignment. Through in-depth interviews and classroom observations, the research illuminates the multifaceted challenges, innovative strategies, and transformative successes encountered by educators as they strive to harmonize instructional materials, learning activities, and assessments with educational standards and objectives. The study's findings underscore the critical importance of several key factors in effective curriculum alignment: clarity in instructional design, strategic assessment practices, thoughtful curriculum development, technology integration, and time management.

The research reveals that effective instruction, anchored in clear communication of learning objectives and expectations, significantly enhances student understanding and achievement. This aligns with Wiggins and McTighe's (2005) seminal "Understanding by Design" framework, which emphasizes backward design and clear goal articulation. Furthermore, the study highlights the transformative power of strategic assessment practices, including formative feedback and self-evaluation, in fostering metacognitive skills and

autonomous learning. This resonates with Black and Wiliam's (2018) landmark work on the significant impact of formative assessment on learning outcomes.

In the realm of curriculum development, the research underscores the importance of aligning instructional materials with industry expectations and human development goals, echoing Nussbaum's (2011) influential "Capability Approach," which advocates for education that expands individuals' freedoms to achieve valuable outcomes. The study also illuminates the critical role of technology integration, supporting Falloon's (2020) research on digital competence frameworks that guide effective technology use in education.

Additionally, the findings reveal that time constraints pose significant challenges, requiring educators to balance heavy workloads with reduced instruction time. This aligns with Skaalvik and Skaalvik's (2017) work, which shows that time pressures significantly contribute to teacher stress, ultimately affecting instructional quality.

Theoretically, this study extends English's (1992) "anchor theory of curriculum alignment" by applying it within the specific context of elementary education. English's framework emphasizes coherence among curriculum elements, and this research empirically demonstrates how this principle translates into the realities of elementary classrooms. It reveals the intricate processes, adaptations, and strategies teachers employ to align objectives, materials, activities, and assessments, illuminating both the challenges and successes in this endeavor.

IMPLICATIONS FOR PRACTICE

To enhance elementary education, it is crucial to focus on professional development by designing targeted training programs that equip teachers with skills in clear instructional design, effective assessment practices, and curriculum alignment techniques, drawing on practical strategies from experienced educators. Additionally, developing a structured framework for technology integration will support teachers in using digital tools to enhance curriculum alignment and student engagement. Implementing school-wide time management initiatives, such as planning periods and administrative support, can help teachers manage their workloads more effectively. Emphasizing formative and self-assessment practices will provide teachers with tools to foster feedback-rich, student-centered learning environments. Establishing a systematic, teacher-led curriculum review process ensures materials align with educational standards, industry needs, and human development goals, making learning more relevant and engaging. Building community partnerships with local industries and organizations will help align curriculum with real-world needs, offering students authentic learning experiences. Finally, creating centralized resource banks will provide teachers with access to high-quality instructional materials, reducing the time spent searching for resources and ensuring effective curriculum alignment.

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