Journal of Educational Studies, Trends and Practice
July, 2025 Editions
www.ssaapublications.com

JESTP
Vol. 9, No.8, E-ISSN 3027-1630
P-ISSN 3026-8907
Sahara African Academic

# CURRICULUM ALIGNMENT: ENSURING CURRICULUM COHERENCY AND CONSISTENCY WITH INSTRUCTION AND OUTCOMES ACROSS GRADE LEVELS IN NIGERIA

***GUNDE, YAKUBU; **MOLOKWU, CAROLINE EJIROGHENE; & **PHILEMON, JANET CETAWOMILO**

*Department of Educational Foundations, Nasarawa State University, Keffi. **Federal University of Education, Demonstration School, Kontagora, Niger State.

**Corresponding Author:** yakubugunde4@gmail.com
**DOI:** https://doi.org/10.70382/sjestp.v9i8.046

## Abstract

Curriculum alignment has become a cornerstone in the pursuit of educational quality and equity, serving as a means of ensuring consistency in teaching, learning, and assessment across all grade levels. This study critically investigates the level of curriculum alignment in Nigerian basic and secondary education, with a particular focus on vertical and horizontal alignment, instructional coherence, and assessment integration. Using a descriptive survey design, data were collected from 200 teachers, school administrators, and curriculum officers through structured questionnaires. Findings reveal a moderate degree of curriculum alignment, with notable inconsistencies in transitional classes, inadequate teacher training, resource deficiencies, and misaligned assessment strategies. The study integrates Constructivist Theory, Tyler's Rationale, Backward Design, and Systems Theory to explain the interrelationship between curriculum components and learning outcomes. It concludes that curriculum misalignment contributes to learning inefficiencies, gaps in knowledge progression, and inequities in educational delivery. The study recommends teacher professional development, curriculum mapping tools, better supervision, and policy frameworks aimed at improving alignment. The study contributes to both theory and practice by offering a framework for policymakers and practitioners to improve curriculum coherence and effectiveness across educational levels.

**Keywords:** Curriculum, Curriculum Alignment, Curriculum Standards, Instructional Strategies, Assessments and Students' Outcomes

## Introduction:

Curriculum alignment is a fundamental concept in educational planning and implementation, aimed at ensuring coherence and continuity in the learning experiences of students across different grade levels. In today's dynamic educational landscape, marked by increasing demands for accountability, equity, and global competitiveness, the need for a well-aligned curriculum has become more pronounced than ever. Curriculum alignment refers to the systematic coordination of learning objectives, instructional strategies, content delivery, and assessment practices to guarantee that what is taught in classrooms is consistent with educational standards and learning goals across grade levels and subject areas (Aborlo, Tudor, Fomsi, 2023; Oguledo, 2023). It

ensures that students are not only meeting expected competencies at each grade level but are also adequately prepared for future learning.

In many education systems, both developed and developing, misalignments in curriculum delivery often result in content redundancies, learning gaps, and unequal access to quality education. For instance, students may encounter repetitive content in different grades, or worse, may miss critical foundational skills altogether due to poor vertical alignment. This disjointed learning progression can hinder students' academic performance and ultimately affect their readiness for higher education or the workforce (Shaltry, 2020). Moreover, unaligned curricula contribute to discrepancies in assessment outcomes, making it difficult to evaluate student learning accurately or to hold educators accountable based on performance metrics.

Furthermore, as education increasingly shifts toward competency-based and student-centered models, curriculum alignment has emerged as a strategic tool to ensure that learning outcomes are relevant, progressive, and connected across all levels of education. Policymakers and curriculum developers worldwide have recognized the importance of curriculum alignment in driving educational reforms, particularly in achieving Sustainable Development Goal 4 (SDG 4), which seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UNESCO, 2022). In this regard, curriculum alignment is not merely a technical task but a critical policy and pedagogical strategy to improve educational quality, equity, and relevance.

In the context of Nigeria and other African countries, where educational systems often grapple with decentralization, lack of standardization, and insufficient teacher capacity, ensuring curriculum alignment is essential for addressing systemic inefficiencies. The Nigerian Educational Research and Development Council (NERDC), for instance, has made several attempts to restructure the national curriculum to ensure better alignment and relevance, especially through initiatives like the 9-year Basic Education Curriculum (BEC). However, implementation challenges persist due to limited teacher training, infrastructural deficits, and inadequate monitoring frameworks (Okebukola, 2020; Ajayi & Afolabi, 2022).

This paper explores curriculum alignment with a focus on its relevance to ensuring curriculum coherency and consistency across grade levels. It discusses the conceptual framework of curriculum alignment, its significance, the challenges facing its implementation, strategies for effective alignment, and empirical evidence demonstrating its impact on student learning outcomes. The goal is to underscore the importance of aligning curriculum components as a pathway toward achieving coherent, inclusive, and high-performing education systems.

## Statement of the Problem

Despite numerous reforms and investments in education systems globally, a persistent challenge remains: the lack of curriculum alignment across grade levels. In many educational contexts particularly in developing countries like Nigeria curriculum content is often fragmented, inconsistently implemented, or poorly sequenced, leading to a disjointed educational experience for learners, reduction of motivation and increases failure. This misalignment results in significant learning gaps, repetition of topics across grades, and a failure to build adequately on students' prior knowledge, thereby limiting their academic progression and readiness for higher-order learning tasks.

The absence of curriculum alignment in curriculum design, development and implementation also undermines the validity and reliability of educational assessments, as these may not truly reflect what has been taught or learned as against what is suppose to be taught. Consequently, students may be tested on content they have not been adequately prepared for, leading to poor performance and increased dropout rates. Teachers, on the other hand, are often left without clear guidance on instructional sequencing or learning expectations across grade levels, resulting in instructional inconsistency and redundancy.

Furthermore, with the global push toward competency-based education and the integration of 21st-century skills such as critical thinking, collaboration, and digital literacy, the need for a well-aligned curriculum has become even more urgent. However, many school systems lack the tools, capacity, or policy frameworks necessary to implement and monitor effective curriculum alignment. This problem is exacerbated in decentralized education systems, where different regions or states may operate under divergent curricular standards, thereby complicating efforts to ensure national consistency in learning outcomes.

Ultimately, the failure to align curricula across grade levels in Nigeria, threatens the quality, equity, and effectiveness of education; proportionately to learners outcomes and employable skills acquired. This study, therefore, seeks to critically examine the issues surrounding curriculum alignment, its impact on educational quality, and strategies for ensuring curriculum coherency and consistency across grade levels in Nigeria.

## Objectives of the Study

The main aim of this study is to examine the concept of curriculum alignment and its role in ensuring consistency across grade levels in educational systems. Specifically, the study aims to:

i. **Analyze the concept of curriculum alignment** and its different dimensions (vertical, horizontal, and instructional alignment) within the context of educational planning and implementation.
ii. **Evaluate the significance of curriculum alignment** in promoting continuity, coherence, and progression in student learning across various grade levels.
iii. **Identify the key challenges** that hinder effective curriculum alignment in educational systems, particularly in developing countries like Nigeria.
iv. **Explore best practices, strategies, and tools** used in achieving curriculum alignment across grade levels, with a focus on international and local experiences.
v. **Recommend policy measures and practical interventions** for improving curriculum alignment and ensuring consistency in content delivery and assessment across all levels of education.

## Statement of Hypothesis

**Ho1:** there is no statistically significant difference in perceptions of curriculum alignment based on years of teaching experience.

## Conceptual Framework

The conceptual framework for this study is grounded in the understanding that effective curriculum alignment is essential for achieving a coherent and progressive education system. It

connects key components of the educational process curriculum standards, instructional strategies, learning materials, and assessment tools to ensure consistency and continuity in student learning across grade levels.

**Key Concepts and Variables**

1. **Curriculum Standards:** These refer to the official learning goals and objectives prescribed by national or regional education authorities for each subject and grade level. Well-defined standards serve as the foundation for curriculum alignment.
2. **Instructional Practices**: These involve the methods and techniques used by teachers to deliver content. Aligned instructional practices ensure that teaching is in line with curriculum expectations and learning goals.
3. **Assessment and Evaluation**: Aligned assessment ensures that students are evaluated based on the content and skills outlined in the curriculum standards, promoting fairness and reliability in learning measurement.
4. **Learning Progression and Outcomes**: This refers to the cumulative acquisition of knowledge and skills by students as they move from one grade level to another. Proper alignment enhances learning progression, reduces content gaps, and improves overall student outcomes.
5. **Curriculum Mapping and Monitoring**: Tools and practices such as curriculum mapping, teacher collaboration, and regular review of curriculum implementation moderate the effectiveness of alignment and help identify discrepancies across grade levels.

**Diagrammatic Representation**

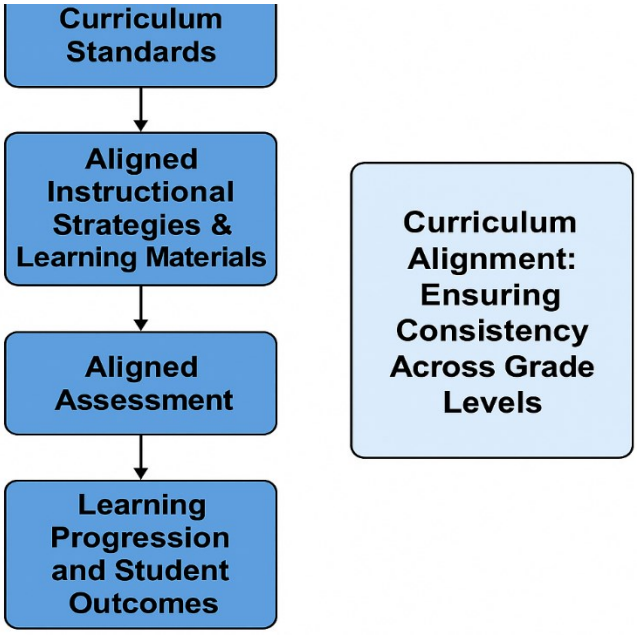


Fig. 1: Conceptual Framework on Curriculum Alignment in Ensuring Coherency and Consistency across Grade Levels. **Source: Author (s)**

**Explanation of the Framework**

The framework illustrates that curriculum standards form the foundation for what students are expected to learn. These standards must be vertically aligned (across grade levels) and horizontally aligned (across subjects at the same level). The standards guide the development of instructional strategies and learning materials, which in turn must align with formative and summative assessments. If these components are well-aligned, students will experience smooth learning progression, minimizing redundancy and content gaps. However, variables such as the presence of curriculum mapping tools, professional development for teachers, and monitoring systems play a crucial role in maintaining this alignment and addressing implementation challenges.

This framework is instrumental in guiding the study by:

i. Clarifying how misalignment affects student achievement.
ii. Highlighting the interdependence of curriculum, instruction, and assessment.
iii. Offering a basis for evaluating alignment practices in different educational settings.
iv. Informing policy recommendations aimed at improving alignment and consistency.

**Importance of Curriculum Alignment across Grade Levels**

According to Lightcast (2025), curriculum alignment is essential to offering students the education and resources they need to secure employment and achieve positive career outcomes. An effective strategy is especially important given today's competitive job market and rapidly evolving in-demand skills. Furthermore, effective curriculum alignment takes the latest labor market and skills data into consideration to equip students with the skills they will need as they begin their careers. Specifically, the benefits of curriculum alignment include:

a. Improved learners or student achievement by creating clear, consistent learning pathways
b. Helping educational institutions identify and address potential learning gaps
c. Implementing teaching methods and practices that match assessment strategies
d. Enabling more targeted and efficient instruction for learners or students across programs
e. Better equipping learners or students for career success following graduation

In line with the above stated benefits, Shaltry, 2020; Cowan et al., (2020) outlined the following benefits of curriculum alignment;

i. Proper alignment allows for a natural progression of knowledge and skills. For example, in mathematics, students must master basic arithmetic before progressing to algebra and calculus.
ii. With well-aligned curricula, assessment tools can effectively measure student progress and instructional effectiveness. This supports data-driven decision-making in education.
iii. Alignment ensures that no essential content is skipped or unnecessarily repeated, minimizing gaps and redundancies in instruction.
iv. Teachers across grade levels can better collaborate when there is a shared understanding of curriculum expectations, facilitating smoother transitions for students.

v. Aligned curricula support better academic outcomes by ensuring that students are prepared for each subsequent level of instruction.

**Challenges in Achieving Curriculum Alignment**

Despite the pertinent place of curriculum alignment, several challenges may impede its effective implementation:

One of the challenges with curriculum alignment is achieving successful teacher buy-in (Wenzel, 2016). Jones and Leagon (2014) point to factors such as teachers' prior knowledge and experience, self-efficacy, epistemic belief and the socio-cultural context of the teacher and school affecting the construction and change in teachers' behaviour. This suggests that teachers' behaviour is influenced by their experiences, knowledge, abilities, beliefs and their school community. In view of this, Oguledo, (2023) stated that factors affecting curriculum alignment will be considered under three dimensions: teacher-induced, curriculum-induced and school-induced factors.

a. **Teacher-induced factors**

Teachers play an essential role in the implementation of the curriculum. Teachers' understanding of curriculum, their attitude towards it and their self-efficacy in the ability to contextualise the curriculum contents, can have an effect on curriculum alignment (Bay, 2016). Typically, teachers may rely on their knowledge and experience of delivering a curriculum in the past to inform the delivery of a new curriculum – for example, a teacher delivering the new GCSE content based on their knowledge of the old GCSE specifications. Their experience could result in a better understanding of why and how to align curricula, or it could impede the opportunity to align as they could be stuck in their old ways. Their interpretation of the curriculum can also be a contributing factor. Teachers' belief of what the curriculum is can affect their interpretation of it (Phaeton and Stears, 2017). Where interpretation misaligns with the intended curriculum, there is the possibility of a weak adoption of the curriculum.

Experience in the form of teacher subject knowledge and familiarity with the intended curriculum can influence the enacted curriculum (Kurz, 2011). Teachers require both content knowledge and pedagogical content knowledge for effective teaching (Coe at al., 2014). If a teacher is deficient in one, the ability to translate the curriculum into suitable learning activities for students becomes limited.

b. **Curriculum-induced factors**

The nature of the written curriculum can be a hindrance to its effective implementation. Vague curriculum statements open up different interpretations of the intended curriculum (Phaeton and Stears, 2017). These interpretations can be influenced by the experience of the teacher, teachers' conception of what the curriculum should be and their subject knowledge. With limited subject knowledge, especially when some teachers teach outside their specialism due to staff shortages, variations in the interpretation of the curriculum become unavoidable. This results in the varied delivery of the curriculum. The volume of the curriculum content can also play a part here. With the limited curriculum time available in some subjects and the demands of externally assessed

subjects, teachers may be faced with the dilemma of selecting what is crucial in the intended curriculum. When there is a conflict between the externally assessed curriculum and school-intended curriculum, it is logical to argue that the assessed curriculum will inform the implemented curriculum.

c. School-induced factors

School factors, including the school structure, leadership system and the school climate, can affect curriculum alignment (Bay, 2016) – for example, when the school's mission promotes a particular aspect of the curriculum more than others. This uneven promotion of certain elements of the curriculum may trigger gaps between the intended and implemented curriculum. It is rational to point out that when school leaders promote certain elements of the school curriculum over others, the latter is prone to ill-implementation (Okebukola, 2020).

Time constraint could be another factor affecting curriculum alignment (Wenzel, 2016). Effective curriculum alignment would require teachers working collaboratively to harmonise what they intend to deliver and how they intend to do so. However, time for curriculum development may not be readily available, as schools have to deal with other areas of their provisions. This is not helped by changes in national and school policies, which put a strain on time availability, as new policies require time for effective implementation (Oguledo, 2023). In addition to the time for curriculum development, curriculum implementation time may affect alignment. It is logical to argue that when curriculum time is limited, the implemented curriculum, particularly for exam groups, will closely match the externally assessed curriculum. The unassessed elements of the school's intended curriculum are perhaps ignored.

## Strategies for Effective Curriculum Alignment

According to Lightcast, (2023) some of the proven strategies to ensure effective Curriculum Alignment are:

1. Establishing Clear National and Regional Standards: Curriculum alignment begins with well-articulated standards that define what students should learn at each grade level. For instance, the Common Core State Standards in the U.S. provide a basis for vertical alignment.
2. Curriculum Mapping: This involves charting curriculum content, skills, and assessments across grade levels to identify gaps and overlaps.
3. Professional Learning Communities (PLCs): Encouraging collaboration among educators fosters shared understanding of curriculum goals and facilitates alignment.
4. Data-Driven Instruction: Using assessment data to inform curriculum adjustments helps maintain alignment with learning objectives.
5. Use of Technology and Digital Tools: Learning management systems (LMS) and curriculum mapping software can facilitate better curriculum tracking and alignment.

## Theoretical Framework

The theoretical framework guiding this study is rooted in **Constructivist Learning Theory, Backward Design Theory,** and **Curriculum Theory**, which collectively provide a foundation for

understanding how curriculum alignment supports student learning and instructional effectiveness across grade levels.

**Constructivist Learning Theory by Jean Piaget and Lev Vygotsky, 1979**

Constructivism posits that learners actively construct knowledge based on prior understanding and experiences. In this view, curriculum alignment ensures that each new grade level builds upon the knowledge and skills acquired in previous levels thus promoting **scaffolded learning**.

i. **Relevance to Alignment:** Vertical curriculum alignment ensures that students are not introduced to advanced concepts without the necessary foundational knowledge, allowing for effective knowledge construction and cognitive development.
ii. **Application:** Teachers use aligned curricula to provide appropriate challenges within students' zones of proximal development (ZPD), making learning continuous and progressive.

**Systems Theory in Education**

General Systems Theory, developed by Ludwig von Bertalanffy (1968), views an organization as a system of interrelated parts working toward a common goal. In education, curriculum, instruction, and assessment are subsystems that must function cohesively. Misalignment in any component can disrupt the system and affect learning outcomes.

Systems theory emphasizes **coherence and interdependence**. A well-aligned curriculum acts as a systemic mechanism that ensures consistent delivery of content, instruction, and evaluation across all educational levels. It also supports continuous feedback loops for curriculum review and improvement.

## Methodology

### Research Design

This study adopts a **descriptive survey research design**, which is appropriate for systematically collecting data to understand the current state of curriculum alignment across grade levels. The design enables the researcher to gather opinions, perceptions, and experiences from a cross-section of educational stakeholders' teachers, curriculum developers, school administrators, and policymakers regarding the consistency and coherence of curriculum implementation.

### Population of the Study

The population of this study comprises all public and private primary and secondary school teachers, curriculum planners, education officers, and administrators in the selected geographical area (e.g., Nasarawa State, Nigeria). This includes personnel from Local Government Education Authorities (LGEAs), State Universal Basic Education Board (SUBEB), and school heads, who are directly involved in curriculum development, supervision, or implementation.

### Sample and Sampling Techniques

A multi-stage sampling technique was employed. A sample size of **200 respondents** was determined using Yamane's formula (Yamane, 1967) to ensure statistical reliability and

generalizability. First, stratified sampling was used to select urban and rural local government areas to ensure representation. Secondly, simple random sampling procedure was used to select schools within the chosen LGAs. Thirdly, purposive sampling was used to select respondents such as experienced teachers, curriculum officers, and school heads.

**Instrumentation**

A **structured** primary data collection **questionnaire** titled *Curriculum Alignment Evaluation Questionnaire (CAEQ) was used for data collection.* The questionnaire included both **closed-ended** and **Likert-scale** items, structured around the following dimensions; Awareness and understanding of curriculum standards; Instructional alignment practices; Assessment alignment practices; Perceptions of vertical and horizontal consistency and challenges and constraints to curriculum alignment.

**Validity of Instrument**

The instrument was subjected to **face and content validation** by educational experts in Nasarawa State University, Keffi and the calculated validity index obtained is 0.81.

**Reliability of Instrument**

**Reliability:** A pilot test will be conducted with 20 respondents outside the study area. The **Cronbach's Alpha** method will be used to test internal consistency. A reliability coefficient of **0.70 or above** will be considered acceptable.

**Method of Data Collection**

The researcher administered the questionnaires in person with the assistance of trained research assistants. Respondents were assured of confidentiality, and their informed consent was obtained. In areas with limited literacy, the questionnaires were read out and explained to respondents in simple terms.

**Method of Data Analysis**

Quantitative data collected through the questionnaire were analyzed using **descriptive and inferential statistics** with the aid of SPSS: frequencies, percentages, and mean scores were used to summarize demographic data and general trends while Chi-square test, ANOVA, and correlation analysis were used to determine relationships between variables such as years of teaching experience and perception of curriculum alignment effectiveness.

**Data Presentation, Analysis, and Discussion**

**Table 1: Demographic Characteristics of Respondents**

| Variable | Category | Frequency | Percentage |
|---|---|---|---|
| **Gender** | Male | 110 | 55% |
| | Female | 90 | 45% |
| **Qualification** | NCE | 60 | 30% |
| | B.Ed/BA.Ed | 100 | 50% |
| | M.Ed and above | 40 | 20% |
| **Years of Experience** | 1–5 years | 40 | 20% |
| | 6–10 years | 90 | 45% |
| | 11 years and above | 70 | 35% |

Table 1 shows the demographic distribution of respondents across gender, qualification and years of experience in teaching. On gender, 110 respondents (55%) are male while 90 respondents, (45%) are female. Based on qualification in academics, 60 respondents (30%) are NCE holders, 100 respondents, (50%) are B. Ed/B. A. Ed degree holders while 40 of the respondents, (20%) are M. Ed degree holders and above. Lastly, based on years of teaching experience, 40 respondents (20%) are from year 1-5 in teaching, 90 respondents (45%) are of year 6-10 in teaching while 70 respondents (35%) are of 11 years and above in teaching.

**Answering of Research Questions**

**RQ1: To what extent is the curriculum vertically and horizontally aligned across grade levels?**

**The Cluster Mean Score of 2.84 was reported (on a 5-point Likert scale)**. This implies that there is a moderate curriculum alignment reported, with inconsistencies noted in transitional years (e.g., from primary to junior secondary). The report revealed that 62% of respondents agreed that curriculum progression lacked clear linkage between some grade levels. Some content is unnecessarily repeated, while some essential topics are skipped. This finding confirms the theoretical assertion of Tyler's Rationale and Constructivism, which emphasize continuity and logical sequencing in curriculum planning. The lack of clear progression limits cognitive scaffolding and may negatively affect learning outcomes (Vygotsky, 1978; Tyler, 1949).

**RQ2: Are instructional strategies and materials aligned with curriculum standards?**

**The Cluster Mean Score of 3.01 was reported. This implies that** 70% of teachers strive to align their lessons with curriculum objectives, 45% indicated that they lack adequate materials and training. It further revealed that in urban schools, curriculum alignment was higher due to access to digital resources and professional development programs. These results align with Backward Design Theory (Wiggins & McTighe, 2005), which highlights the need for deliberate planning based on desired outcomes. Lack of teacher support and resources weakens alignment even when curriculum documents are available.

**RQ3: Are assessments aligned with curriculum objectives and instruction?**

**The Cluster Mean Score of 2.71 was reported.** The study further revealed that only 40% of respondents believed that assessment practices in their schools were adequately aligned with instructional content. This implies that there is frequent reliance on standardized tests that are not reflective of actual classroom instruction or curriculum objectives. This finding supports the views of Martone & Sireci (2009), who noted that misalignment between assessment and curriculum can distort evaluation of student learning. Assessment tools must be purposefully designed to reflect learning objectives and teaching strategies.

**RQ4: What are the major challenges to curriculum alignment?**

**Based on the findings, the challenges Identified (in order of frequency) are;** Lack of teacher training on curriculum interpretation; Inadequate instructional materials; Poor monitoring and supervision; Curriculum overload and content duplication; Disparities between rural and urban

schools. These challenges are consistent with previous findings (Ajayi & Afolabi, 2022; Okebukola, 2020), and they reveal systemic issues in curriculum implementation. According to Systems Theory, the curriculum, instruction, and assessment are interdependent components. Misalignment in one disrupts the entire system (Bertalanffy, 1968).

**Testing Hypothesis**

**Table 2: ANOVA Test: Influence of Teaching Experience on Perception of Curriculum Alignment**

| Source | SS | df | MS | F | p-value |
|---|---|---|---|---|---|
| **Between Groups** | 12.35 | 2 | 6.175 | 3.45 | 0.036 |
| **Within Groups** | 352.22 | 197 | 1.788 | | |
| Total | 364.57 | 199 | | | |

**Table 2 shows that** since $p = 0.036 < 0.05$, there is a statistically significant difference in perceptions of curriculum alignment based on years of teaching experience. Teachers with over 10 years of experience perceived higher misalignment.

**Summary of Key Findings**

i. Curriculum alignment is moderate but fragmented, especially during grade transitions.
ii. Instructional practices are generally aligned in intention but hindered by lack of materials and training.
iii. Assessment alignment is weak due to over-reliance on non-contextualized testing methods.
iv. Significant systemic challenges undermine alignment efforts, particularly in rural and resource-poor schools.
v. Experience influences teachers' perception of alignment, with senior educators more critical of existing gaps.

**Summary, Conclusion and Recommendations**

**Summary**

This paper examined **curriculum alignment and the extent to which it ensures consistency across grade levels** in the education system. The research was premised on the increasing need for coherent, equitable, and progressive curriculum implementation that supports learning continuity and academic achievement. Guided by **Constructivist Theory**, **Tyler's Rationale**, **Backward Design**, and **Systems Theory**, the study explored how alignment among curriculum standards, instruction, and assessment affects learning outcomes.

A **descriptive survey design** was used, and data were collected from 200 respondents comprising teachers, curriculum officers, and school administrators using a structured questionnaire. The findings revealed that while some alignment exists, there are significant **gaps in vertical and horizontal alignment**, especially in transitional grades. Instructional practices were only partially aligned due to **inadequate training, poor access to instructional materials, and inconsistent monitoring**. Assessment practices were found to be **misaligned** with curriculum objectives in many cases, especially in under-resourced settings.

Inferential statistics indicated that years of teaching experience significantly influenced teachers' perception of curriculum alignment, suggesting a deeper awareness of systemic inconsistencies among more experienced educators.

## Conclusion

The study concludes that curriculum alignment across grade levels remains **moderate and inconsistent**, especially in public education systems in developing contexts. While the curriculum may be well-documented, **implementation challenges** such as inadequate teacher capacity, resource gaps, and lack of oversight continue to undermine effective alignment. This leads to **learning redundancies, instructional confusion, and poor assessment validity**.

To improve educational quality and equity, it is essential to **institutionalize curriculum alignment mechanisms** that ensure learning objectives are clearly defined, instruction is properly sequenced, and assessments truly reflect expected outcomes.

## Recommendations

Based on the findings of this study, the following recommendations are made:

a) Regular, targeted training should be provided for teachers and school administrators on curriculum interpretation, alignment strategies, and instructional planning.
b) Education authorities should adopt curriculum mapping tools to visualize learning objectives across grade levels and identify overlaps or gaps.
c) Align assessment instruments with curriculum standards and ensure they are contextually relevant to the instructional content taught at each level.
d) Ministries of education and curriculum bodies should develop national policies that institutionalize vertical and horizontal curriculum alignment.
e) School inspectors and curriculum officers should be equipped and mandated to evaluate alignment in instructional delivery and student assessment regularly.

## References

Ajayi, K., & Afolabi, S. O. (2022). *Challenges of curriculum implementation in Nigerian schools: Implications for national development*. *African Journal of Educational Research,* 26(1), 113–127. https://doi.org/10.4314/ajer.v26i1.9.

Aborlo, K. N., Tudor, C. & Fomsi, E. (2023). Curriculum alignment: An evaluation of the major determinants at the College of health sciences, University of Port Harcourt, Nigeria. *World Journal of Advanced Research and Reviews*, 17 (01), 459-469.

Bay, E. (2016). Developing a scale on factors regarding curriculum alignment. *Journal of Education and Training Studies* 4 (5), 8–17.

Breslawski, S. (2017). Managing academic program resources. In: Powers K and Schloss P (eds) *Organization and Administration in Higher Education*. New York: Routledge, pp. 146–181.

Bertalanffy, L. V. (1968). *General system theory: Foundations, development, applications*. George Braziller.

Coe, R., Aloisi, C. & Higgins, S. (2014). *What makes great teaching? Review of the underpinning research.* The Sutton Trust. Available at: www.suttontrust.com/wp-content/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf (accessed 30 November 2022).

Drake, S. M., & Burns, R. C. (2020). *Meeting standards through integrated curriculum* (3rd ed.). ASCD.

Fullan, M. (2020). *Leading in a culture of change* (2nd ed.). Jossey-Bass.

Glatthorn, A. A., Boschee, F., Whitehead, B. M., & Boschee, B. F. (2019). *Curriculum leadership: Strategies for development and implementation* (5th ed.). SAGE Publications.

Jacobs, H. H. (2022). *Curriculum mapping: A framework for aligning curriculum, instruction, and assessment*. Association for Supervision and Curriculum Development (ASCD).

Jones, M. & Leagon, M. (2014). Science teacher attitudes and beliefs: Reforming practice. In: Lederman, N. & Abell, S. (eds) *Handbook of Research on Science Education*, 2. New York: Routledge, pp. 830–847.

Kurz, A. (2011). *Access to what should be taught and will be tested: Students' opportunity to learn the intended curriculum*. In: Elliott, S., Kettler, R., Beddow, P. et al. (eds) Handbook of Accessible Achievement Tests for All Students. New York: Springer: pp. 99–130.

Kurz, A., Elliott, S. & Wehby, J. (2010). Alignment of the intended, planned, and enacted curriculum in general and special education and its relation to students' achievement. *Journal of Special Education* 44 (3), 131–145.

Martone, A., & Sireci, S. G. (2009). Evaluating alignment between curriculum, assessment, and instruction. *Review of Educational Research*, 79 (4), 1332–1361. https://doi.org/10.3102/0034654309341375

Lightcast, (2025). *Improve curriculum alignment in higher education with labor market insight.* Retrieved from https://lightcast.io/resources/blog/curriculum-alignment-in-higher-education

Obioma, G. O. (2021). Bridging the gap between curriculum design and classroom implementation in Nigeria. *Journal of Curriculum Studies in Africa*, 12 (2), 58–75.

Oguledo, N. (2023). *Curriculum alignment: A reflection of its place in a school curriculum.* Retrieved from https://my.chartered.college/impact_article/

Okebukola, P. (2020). The state of curriculum implementation in Nigeria: Problems and prospects. *Nigerian Educational Forum*, 34 (2), 1–14.

Penuel, W. R., Briggs, D. C., Davidson, K. L., Herlihy, C., Farrell, C. C., & Sherer, D. (2017). Findings from a study of research-practice partnerships in education *Educational Policy*, 31 (7), 1016–1044. https://doi.org/10.1177/0895904816649218

Phaeton, M. & Stears, M. (2017) Exploring the alignment of the intended and implemented curriculum through teachers' interpretation: A case study of A-level biology practical work. *Eurasia Journal of Mathematics Science and Technology Education* 13 (3), 723–740.

Pinar, W. (2012). *What is Curriculum Theory?* 2nd ed. New York: Routledge.

Seitz, P. (2017) Curriculum alignment among the intended, enacted and assessed curricula for Grade 9 mathematics. *Journal of the Canadian Association for Curriculum Studies* 15(1), 72–94.

Shaltry, C. (2020) A new model for organizing curriculum alignment initiatives. *Advances in Physiology Education,* 44, (2) 658–663.

Tyler, R. W. (1949). *Basic principles of curriculum and instruction*. University of Chicago Press.

UNESCO (2022). Greening curriculum guidance: The UN Transforming Education Summit. Retrieved from https://www.unesco.org.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Watermeyer, R. (2011) *Curriculum alignment, articulation and the formative development of the learner. International Baccalaureate Organisation*. Available at: https://purehost.bath.ac.uk/ws/portalfiles/portal/136642120/curriculumalignmenteng.pdf (accessed 28 November 2022).

Wenzel, A. (2016) Curriculum alignment. In: Mertens, S., Caskey, M. & Flowers, N. (eds) *The Encyclopedia for Middle Grades Education, 2nd ed.* Charlotte: *Information Age Publishing,* pp. 112–115.

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Expanded 2nd ed.). ASCD.

Yusuf, A., & Adigun, J. T. (2023). Enhancing curriculum coherence in Nigerian secondary schools: The role of technology and policy reform. *International Journal of Education and Curriculum Development*, 10 (1), 44–61. https://doi.org/10.1007/ijecd.v10i1.781