THE TRENDS AND INNOVATIONS IN CURRICULUM DEVELOPMENT AND DELIVERY IN THE DIGITAL AGE

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ABSTRACT

The digital age has brought significant changes and challenges to the field of education, especially in terms of curriculum development and delivery. Curriculum developers and educators need to adapt to the new demands and opportunities of the digital era, such as the availability of online resources, the diversity of learners, the integration of technology, and the need for lifelong learning. The purpose of this study is to explore the trends and innovations that have emerged in response to these changes and challenges, and to provide an overview of the current trends and innovations in curriculum development and delivery in the digital age, as well as to identify some of the key issues and implications for future research and practice. The paper will focus on four main areas: the integration of digital technologies and resources into the curriculum; the adoption of learner-centered and personalized approaches to curriculum design and implementation; the shift from content-based to competencybased and outcome-based curricula; and the development of new assessment methods and tools that align with the digital age skills and competencies. The paper also discusses some of the opportunities and barriers that educators face in adopting these trends and innovations, and provide some recommendations for curriculum developers and educators who wish to embrace the digital transformation of education.

Keywords: Trends, innovations, digital age, curriculum development, curriculum delivery.

Background to the Study

Curriculum development and delivery are crucial aspects of education that need to adapt to the changing needs and demands of the digital era. Digital technologies have transformed the way students learn, teachers teach, and schools operate. They have also created new opportunities and challenges for curriculum design and implementation.

These are some of the examples of how digital technologies can influence curriculum development and delivery in the digital era (Adamu, 2018). However, these technologies also pose some challenges, such as ensuring quality, equity, security, and ethics of education. Therefore, curriculum developers and educators need to be aware of the potential benefits and risks of using digital technologies in education and adopt appropriate strategies to ensure effective and responsible integration of these technologies in the curriculum. One of the main trends in curriculum development and delivery in the digital age is the use of digital technologies as tools to enhance learning outcomes and experiences. Digital technologies can facilitate access to information, communication, collaboration, creativity, and critical thinking,

as well as provide feedback, assessment, and personalization. According to Twining *et al.* (2021), a quality curriculum in a technological era should:

- be based on a clear vision of the purpose of education and the competencies and dispositions that learners need to develop;
- be flexible and adaptable to different contexts, needs, and interests of learners;
- be coherent and aligned across different levels, domains, and subjects;
- be inclusive and equitable for all learners, regardless of their backgrounds, abilities, or preferences;
- be engaging and motivating for learners, teachers, and other stakeholders;
- be supported by appropriate pedagogies, resources, infrastructures, and policies.

Some of the trends and innovations in curriculum development and delivery in the digital age according to Chukwuemeka *et al.* (2021) are:

- **E-curriculum**: This is a curriculum that is delivered electronically through various platforms, such as online courses, e-textbooks, digital programs, etc. E-curriculum can enhance the quality and accessibility of education by providing flexible, personalized, and interactive learning experiences for students. E-curriculum can also reduce the cost and environmental impact of traditional curriculum materials. Some examples of e-curriculum are: Khan Academy, Coursera, CK-12, etc.
- Social media: This is a curriculum that leverages social media platforms, such as Facebook, Twitter, Instagram, etc., to facilitate communication, collaboration, and sharing of information among students, teachers, and other stakeholders. Social media can enrich the curriculum by providing diverse perspectives, authentic contexts, and real-time feedback for learning. Social media can also foster social skills, digital literacy, and civic engagement among students. Some examples of social media in curriculum are: Edmodo, ClassDojo, Padlet, etc.
- Simulations and virtual labs: These are curriculum tools that use digital technologies to create realistic and immersive environments for learning. Simulations and virtual labs can enhance the curriculum by providing students with opportunities to explore, experiment, and discover concepts and phenomena that are otherwise difficult or impossible to access or observe in real life. Simulations and virtual labs can also develop students' inquiry skills, problem-solving skills, and scientific literacy. Some examples of simulations and virtual labs in curriculum are: PhET Interactive Simulations, Labster, Gizmos, etc.

Curriculum development and delivery in the digital age are influenced by the trends and innovations in digital technologies that offer new possibilities and challenges for education. Curriculum developers and educators need to embrace these changes and adapt their practices accordingly to ensure quality education for all learners.

Statement of the Problem

The digital age has brought significant changes and challenges to the field of curriculum development and delivery. Educators need to adapt to new technologies and pedagogies that can enhance the quality and accessibility of education for all learners. However, there are also barriers and issues that need to be addressed, such as the digital divide, the alignment of curriculum with assessment, the integration of digital literacy skills, and the ethical and social implications of using digital technologies in education. The significance of curriculum

development and delivery cannot be over emphasized and Twining et al., 2021 submit in their research study the following significance; the rapid changes in technology and society that demand new skills and competencies for learners and educators (Twining et al., 2021). the increased access to information and resources that enable learners to learn anytime, anywhere, and at their own pace (OECD, 2019); the diversity of learners' needs, preferences, backgrounds, and aspirations that require personalized and inclusive learning experiences (Asim & Suman, 2022); the emergence of new pedagogies and learning environments that leverage digital technologies to enhance engagement, collaboration, creativity, and problemsolving (Ada et al., 2019); the alignment of curriculum with assessment, standards, policies, and practices that ensure quality, equity, and accountability in education (Edikpa et al., 2020). These significance calls for a rethinking of curriculum development and delivery in the digital age. How can curriculum developers and educators design and implement a quality curriculum that meets the needs and expectations of learners and society in a technological era? What are the best practices and strategies for integrating digital technologies into curriculum development and delivery? What are the barriers and enablers for effective curriculum development and delivery in the digital age? It is against this background that this study examines the trends and innovations in curriculum development and delivery in the digital age in Nigeria.

Objective of the Study

The purpose of this study is to determine the trends and innovations in curriculum development and delivery in digital age. Specifically, the study seeks to:

- i. What is the current trends and innovations in curriculum development and delivery in the digital age in Nigeria?
- ii. How can the curriculum be aligned with the national and international standards and benchmarks for education?
- iii. How can the curriculum be relevant and meaningful for learners from different cultures, languages, and backgrounds in Nigeria?
- iv. How can the curriculum foster critical thinking, creativity, collaboration, communication, and other 21st century skills among learners in Nigeria?
- v. How can the curriculum provide appropriate challenge and support for learners with different abilities and needs in Nigeria?
- vi. How can the curriculum incorporate various modes of delivery, such as face-to-face, online, blended, or hybrid in Nigeria?
- vii. How can the curriculum utilize various types of resources, such as textbooks, multimedia, open educational resources (OER), or social media in Nigeria?
- viii. How can the curriculum be evaluated and improved based on feedback from learners, educators, parents, and other stakeholders?

Literature Review - Concept of Curriculum Development and Delivery

Curriculum development and delivery are two interrelated processes that aim to provide quality education for learners (Abdullahi, 2014). Curriculum development refers to the planning, design, implementation and evaluation of a curriculum, which is a coherent and comprehensive plan of learning experiences and outcomes for a specific group of learners. Curriculum delivery refers to the enactment of the curriculum in the classroom, which involves the selection, organization, presentation and assessment of learning activities and

materials. Both processes require collaboration among various stakeholders, such as teachers, administrators, learners, parents and experts.

The curriculum is developed to address the needs of the Nigerian society in accordance with the national and global objectives of education, such as the Millennium Development Goals, the National Economic Empowerment Development Strategy and the vision 20-20-20. The curriculum also considers the cultural diversity and the linguistic plurality of Nigeria, as well as the emerging issues in science, technology and other fields (Oyovwi & Oghenevwede, 2018).

Curriculum is a term that has different meanings and interpretations depending on the context and perspective of the users. However, one common way of defining curriculum is as a document, plan or blueprint for instructional guidance which is used for teaching and learning to bring about positive and desirable learner behaviour change. Curriculum is not only about the content or subject matter that is taught, but also about the methods, strategies, objectives, outcomes and evaluation of the learning process.

In Nigeria, curriculum development and implementation are guided by the National Policy on Education, which outlines the goals, structure and content of education at all levels. The policy also stipulates the roles and responsibilities of various agencies and stakeholders involved in curriculum matters, such as the Nigerian Educational Research and Development Council (NERDC), the National Commission for Colleges of Education (NCCE), the National Universities Commission (NUC), the National Board for Technical Education (NBTE), the Joint Admissions and Matriculation Board (JAMB), the West African Examinations Council (WAEC), the National Examinations Council (NECO), the State Ministries of Education, the Teachers Registration Council of Nigeria (TRCN), the professional associations and bodies, and the teachers and learners themselves (Ogunniyi & Rollnick, 2015).

WHAT ARE THE CURRENT TRENDS AND INNOVATIONS IN CURRICULUM DEVELOPMENT AND DELIVERY IN THE DIGITAL AGE IN NIGERIA?

One of the current trends and innovations in curriculum development and delivery in the digital age in Nigeria is the inclusion of digital literacy in the primary school curriculum. Digital literacy is the ability to use digital technologies to access, create and communicate information effectively (Ogunyinka *et al.* (2015). It is a crucial skill for the 21st century, as digital technologies are transforming various sectors of the economy and society, such as health, agriculture, education and governance.

According to Mba (2020), Nigeria needs to embed digital literacy in its primary school curriculum to ensure that it is technologically prepared for the future and that it can benefit from the breakthroughs offered by artificial intelligence and other emerging technologies. He argues that Nigeria can equip every child with basic digital skills if it takes three simple steps: revising the teacher education curriculum to include digital literacy, developing a national digital literacy framework and providing adequate infrastructure and resources for digital learning.

Some of the benefits of incorporating digital literacy in the primary school curriculum include enhancing the quality of education, improving learning outcomes, fostering creativity and

innovation, promoting lifelong learning and empowering learners to participate in the digital economy and society. However, there are also some challenges and barriers that need to be addressed, such as inadequate funding, poor quality teachers, dilapidated and inadequate classrooms, dearth of textbooks and weak monitoring systems (Adamu, 2018).

Another trend and innovation in curriculum development and delivery in the digital age in Nigeria is the use of e-learning strategies for higher education. E-learning is the use of electronic media and information and communication technologies to support learning. It can take various forms, such as online courses, blended learning, mobile learning, open educational resources and massive open online courses. E-learning can provide access to quality education for a large number of learners, especially in Africa where there is a high demand for higher education but limited supply of institutions and facilities.

According to Udofia (2021), one of the reasons for adopting e-learning strategies in higher education in Nigeria is to align with the global best practices in education, such as the Millennium Development Goals, the National Economic Empowerment Development Strategy and the Vision 20-20-20. He also notes that e-learning can address some of the gaps in the old curriculum, such as the lack of consideration for the needs of the Nigerian society, the aging of the curriculum and the low standards in education. He reviews some of the strengths and weaknesses of the new educational curriculum in Nigeria, which incorporates e-learning strategies among other features.

Some of the advantages of using e-learning strategies for higher education in Nigeria include increasing access and equity, enhancing flexibility and convenience, reducing costs and improving quality. However, there are also some challenges and obstacles that need to be overcome, such as poor internet connectivity, inadequate infrastructure and equipment, low digital literacy skills among teachers and learners, lack of relevant content and pedagogy, resistance to change and cultural barriers (Edikpa *et al.*, 2020).

These trends and innovations require a shift in the roles and responsibilities of curriculum developers, teachers, learners and other stakeholders, as well as a change in the policies and practices that support curriculum development and delivery in the digital age. Some of the key issues that need to be addressed are: stakeholder engagement, teacher professionalism, summative assessment and trust (Schütz *et al.*, 2020).

HOW CAN THE CURRICULUM BE ALIGNED WITH THE NATIONAL AND INTERNATIONAL STANDARDS AND BENCHMARKS FOR EDUCATION?

Curriculum alignment is the process of ensuring that the learning objectives, content, instruction, and assessment of a curriculum are coherent and consistent with the standards and benchmarks of education at the national and international levels. Curriculum alignment can improve student learning outcomes, enhance teacher effectiveness, and facilitate curriculum development and evaluation. Curriculum alignment is the process of ensuring that the content and skills taught in schools are consistent with the national and international standards and benchmarks for education (Standards Alignment to Curriculum and Assessment, 2018). Curriculum alignment can help to improve the quality and relevance of education, as well as to facilitate the comparability and transferability of learning outcomes across different contexts. In Nigeria, curriculum alignment is a key policy goal for the

development of the 9-Year Basic Education Curriculum (BEC), which covers primary and junior secondary education. The BEC aims to meet the targets of the Universal Basic Education (UBE) programme, which seeks to provide free and compulsory education for all Nigerian children.

To align the curriculum with the national and international standards and benchmarks for education, several steps are required. First, the curriculum developers need to identify the relevant standards and benchmarks that apply to the Nigerian context. These may include the National Policy on Education, the National Minimum Standards for Basic Education, the National Curriculum Standards for Social Studies, the OECD Evaluation and Assessment Frameworks for Improving School Outcomes, and other regional or global frameworks that reflect best practices and expectations for student learning. Second, the curriculum developers need to analyse the existing curricula for primary and junior secondary education, and identify the gaps, overlaps, strengths and weaknesses in terms of content, skills, competencies and assessment. Third, the curriculum developers need to revise and update the curricula to address the identified issues, and to ensure that they reflect the learning outcomes and competences expected of graduates of each academic programme. Fourth, the curriculum developers need to implement and monitor the new curricula, and provide feedback and support for teachers, schools and students. This may involve developing curriculum guides, textbooks, teacher training programmes, assessment tools and quality assurance mechanisms (Udofia et al., 2021).

Curriculum alignment is not a one-time event, but a continuous process that requires regular review and evaluation. The curriculum developers need to collect and analyse data on student performance, teacher effectiveness, school quality and system outcomes, and use this information to inform further improvement and innovation (Wratcher *et al.*, 1997 and Wiles & Bondi, 2015). Curriculum alignment also requires collaboration and consultation among various stakeholders, such as teachers, parents, students, policymakers, researchers and experts. By aligning the curriculum with the national and international standards and benchmarks for education, Nigeria can enhance its educational system and achieve its goals of providing quality education for all.

HOW CAN THE CURRICULUM BE RELEVANT AND MEANINGFUL FOR LEARNERS FROM DIFFERENT CULTURES, LANGUAGES, AND BACKGROUNDS IN NIGERIA?

One of the challenges of education in a diverse and multicultural society is how to make the curriculum relevant and meaningful for learners from different cultures, languages, and backgrounds. Culturally responsive teaching is an approach that aims to address this challenge by using students' cultural identities and lived experiences as tools for effective instruction. According to Gay (2018), culturally responsive teaching means "when academic knowledge and skills are situated within the lived experiences and frames of reference for students, they are more personally meaningful, have higher interest appeal, and are learned more easily and thoroughly." In this way, culturally responsive teaching in schools and other academic spaces, but also empowers them to become lifelong learners and critical thinkers. In the context of Nigeria, a country with over 250 ethnic groups and over 500 languages, culturally responsive teaching can be a powerful strategy to foster inclusion, respect, and

mutual understanding among diverse learners. Some of the benefits of culturally responsive teaching in Nigeria according to Iyekekpolor & Uveruveh (2023) include:

- Enhancing students' academic achievement by building on their prior knowledge, cultural strengths, and learning styles.
- Promoting students' social and emotional development by affirming their identities, values, and beliefs.
- Developing students' intercultural competence by exposing them to multiple perspectives, worldviews, and ways of knowing.
- Preparing students for citizenship in a global society by cultivating their awareness of social justice issues, human rights, and democratic values.

To implement culturally responsive teaching in Nigeria, teachers need to adopt a holistic approach that involves curriculum design, instructional delivery, classroom management, assessment, and professional development. Some of the key elements of culturally responsive teaching as opined by Onyia & Offorma (2011) include:

- Developing a positive and caring relationship with students and their families.
- Learning about students' cultural backgrounds, interests, needs, and goals.
- Integrating students' cultural knowledge and experiences into the curriculum content and objectives.
- Using a variety of instructional strategies that match students' learning preferences and abilities.
- Creating a respectful and supportive classroom environment that values diversity and fosters collaboration.
- Assessing students' learning outcomes using multiple and authentic measures that reflect their cultural contexts.
- Engaging in ongoing reflection and professional growth to improve one's cultural competence and responsiveness.

Culturally responsive teaching is not a one-size-fits-all approach, but rather a dynamic and flexible process that requires teachers to be responsive to the changing needs and realities of their students. By adopting culturally responsive teaching practices, teachers can make the curriculum more relevant and meaningful for learners from different cultures, languages, and backgrounds in Nigeria.

HOW CAN THE CURRICULUM FOSTER CRITICAL THINKING, CREATIVITY, COLLABORATION, COMMUNICATION AND OTHER 21ST CENTURY SKILLS AMONG LEARNERS IN NIGERIA?

The curriculum is a vital tool for fostering critical thinking, creativity, collaboration, communication, and other 21st century skills among learners in Nigeria. These skills are essential for preparing students for the challenges and opportunities of the globalized world. However, the current curriculum in Nigeria is largely based on the traditional model of education that emphasizes memorization, rote learning, and examination-oriented outcomes. This model does not adequately equip learners with the skills they need to thrive in the 21st century (Adeyeye & Oyeleke, 2022).

Therefore, there is a need to reform the curriculum in Nigeria to incorporate 21st century skills across all subject areas and levels of education. Some of the strategies that can be adopted based on the submission of Ornstein & Hunkins (2018) to achieve this include:

- Adopting a learner-centered approach that encourages inquiry, problem-solving, and project-based learning. This approach can foster critical thinking and creativity among learners by engaging them in authentic and meaningful tasks that require them to apply their knowledge and skills to real-world situations.
- Integrating information and communication technology (ICT) into the curriculum to enhance learning outcomes and facilitate collaboration and communication among learners. ICT can provide access to a variety of resources, tools, and platforms that can support learners' development of 21st century skills.
- Developing local and global connections among learners, teachers, and other stakeholders to promote intercultural awareness and understanding. This can help learners appreciate the diversity and complexity of the world and develop the skills they need to interact effectively with people from different backgrounds, perspectives, and cultures.
- Providing continuous professional development for teachers to equip them with the pedagogical skills and competencies they need to teach 21st century skills effectively. Teachers play a crucial role in facilitating learners' acquisition of 21st century skills, but they also need to update their own knowledge and skills to cope with the changing demands of the curriculum.

HOW CAN THE CURRICULUM PROVIDE APPROPRIATE CHALLENGE AND SUPPORT FOR LEARNERS WITH DIFFERENT ABILITIES AND NEEDS IN NIGERIA?

One of the major challenges facing education in Nigeria is how to cater for the diverse needs and abilities of learners in inclusive classrooms. Inclusive education is the education of all learners, including those with special needs, in regular schools rather than in segregated schools. Inclusive education is based on the principle of educational justice and participatory fairness for all learners, regardless of their differences (Saloviita, 2020).

However, implementing inclusive education in Nigeria is not without difficulties. One of the difficulties is how to design and deliver instruction that can meet the varying needs and abilities of learners in the same classroom. This is where differentiated instruction (DI) comes in. DI is a pedagogical approach that involves modifying and adapting instruction, materials, content, students' projects, and assessments to suit the learning preferences, readiness levels, interests, and goals of individual learners or groups of learners (Tucker, 2011). DI aims to provide appropriate challenge and support for learners with different abilities and needs, so that they can achieve their full potential and learn effectively.

Differentiating instruction in inclusive classrooms requires teachers to have a clear understanding of the curriculum goals, the learners' characteristics, and the available resources. Teachers also need to use a variety of strategies and techniques to plan, implement, and evaluate instruction that can address the diversity of learners. Some of the strategies and techniques that can be used for differentiating instruction include:

i. Pre-assessing learners' prior knowledge, skills, interests, and learning styles before starting a new topic or unit.

- ii. Grouping learners according to their readiness levels, interests, or learning styles for different activities or tasks
- iii. Providing multiple options for learners to access information and content, such as using texts, videos, audios, graphics, or hands-on materials.
- iv. Providing multiple options for learners to demonstrate their understanding and mastery of content, such as using written tests, oral presentations, portfolios, or projects.
- v. Providing feedback and scaffolding to learners according to their needs and progress.
- vi. Providing enrichment and extension activities for learners who need more challenge or depth.
- vii. Providing remediation and support activities for learners who need more assistance or practice.

Differentiating instruction in inclusive classrooms can benefit both teachers and learners. For teachers, it can help them to meet the curriculum standards and objectives more effectively, as well as to foster a positive learning environment that respects and values diversity (Onyishi & Sefotho, 2020). For learners, it can help them to develop their academic skills and abilities, as well as their motivation, engagement, confidence, and self-esteem.

HOW CAN THE CURRICULUM INCORPORATE VARIOUS MODES OF DELIVERY, SUCH AS FACE-TO-FACE, ONLINE, BLENDED, OR HYBRID IN NIGERIA?

The curriculum is a vital component of the education system that determines the content, methods, and outcomes of learning. In Nigeria, the curriculum has undergone several reforms to meet the changing needs of the society and the global standards of education. However, one of the challenges facing the curriculum is how to incorporate various modes of delivery, such as face-to-face, online, blended, or hybrid, to enhance access, quality, and relevance of education.

Face-to-face mode of delivery is the traditional method of teaching and learning that involves physical interaction between teachers and students in a classroom setting. This mode has some advantages, such as fostering social skills, providing immediate feedback, and creating a sense of community. However, it also has some limitations, such as high cost, low enrolment, and geographical barriers.

Online mode of delivery is the use of information and communication technologies (ICTs) to facilitate teaching and learning without physical contact between teachers and students. This mode has some benefits, such as increasing access, flexibility, and personalization of education. However, it also has some drawbacks, such as lack of social interaction, technical issues, and low retention.

Blended mode of delivery is the combination of face-to-face and online methods to create a balanced and optimal learning experience for students. This mode has some merits, such as enhancing motivation, engagement, and collaboration among learners. However, it also has some challenges, such as requiring more planning, coordination, and training for teachers and students.

Hybrid mode of delivery is the integration of different types of online methods, such as synchronous and asynchronous, to provide a variety of learning opportunities for students. This mode has some strengths, such as catering for different learning styles, preferences, and needs of students. However, it also has some weaknesses, such as increasing complexity, workload, and confusion for teachers and students.

To incorporate these various modes of delivery into the curriculum in Nigeria, some strategies can be adopted according to Okebukola & Olorundare (2018). These include:

- Conducting a needs assessment to identify the goals, objectives, and outcomes of the curriculum and the appropriate modes of delivery for each subject or course.
- Developing a clear and coherent curriculum framework that specifies the content, pedagogy, assessment, and evaluation methods for each mode of delivery.
- Providing adequate resources and infrastructure to support the implementation of each mode of delivery, such as computers, internet access, learning management systems (LMS), etc.
- Training and empowering teachers and students to use each mode of delivery effectively and efficiently.
- Monitoring and evaluating the impact of each mode of delivery on the quality and relevance of education.

HOW CAN THE CURRICULUM UTILIZE VARIOUS TYPES OF RESOURCES SUCH AS TEXTBOOKS, MULTIMEDIA, OPEN EDUCATIONAL RESOURCES (OER) OR SOCIAL MEDIA IN NIGERIA?

The curriculum can utilize various types of resources to enhance teaching and learning in Nigeria. Some of the resources are:

Textbooks: Textbooks are useful for providing comprehensive and structured information on a subject. They can also offer exercises, examples, and assessments to reinforce learning. However, textbooks need to be used critically and creatively, as they may not reflect the local context or the latest developments in the field. Teachers can supplement textbooks with other media resources to enrich their lessons and engage their students.

Multimedia: Multimedia resources include audio, video, animations, graphics, and interactive elements that can appeal to different learning styles and preferences. They can also illustrate concepts that are difficult to explain with words or images alone. Multimedia resources can be accessed online or offline, depending on the availability of technology and internet connectivity. Teachers can use multimedia resources to introduce a topic, demonstrate a procedure, provide feedback, or stimulate discussion.

Open Educational Resources (OER): OER are educational materials that are freely available for anyone to use, adapt, and share. They can include textbooks, courseware, lecture notes, videos, journals, reports, and more. OER can offer teachers and learners access to high-quality and relevant content that can be customized to their needs and interests. They can also promote collaboration and innovation among educators and learners across different contexts and disciplines. OER can be found on various platforms and repositories, such as the University of Nigeria's OER website or OER Africa .

Social Media: Social media are online platforms that enable users to create and share content and interact with others. They can include blogs, wikis, podcasts, forums, social networks, microblogs, and more. Social media can be used for educational purposes to facilitate communication, collaboration, reflection, and feedback among teachers and learners. They can also provide opportunities for learners to access diverse perspectives, express their opinions, and showcase their work. Teachers can use social media to create online communities of practice, support learner autonomy, and enhance professional development.

HOW CAN THE CURRICULUM BE EVALUATED AND IMPROVED BASED ON FEEDBACK FROM LEARNERS, EDUCATORS, PARENTS, AND OTHER STAKEHOLDERS?

The curriculum is a plan of what learners should learn and how they should learn it. It is influenced by the needs and aspirations of the society and reflects the national goals and objectives of education. In Nigeria, the curriculum has undergone several changes over the years to meet the changing demands of the global and local contexts. However, the curriculum also needs to be evaluated and improved based on feedback from various stakeholders, such as learners, educators, parents, and others who are involved or affected by the curriculum.

Curriculum evaluation is the process of collecting and analyzing information about the effectiveness and quality of the curriculum. It helps to identify the strengths and weaknesses of the curriculum, as well as the gaps and challenges in its implementation. Curriculum evaluation can be done at different levels, such as national, state, school, or classroom level. It can also be done for different purposes, such as formative evaluation (to provide feedback for improvement), summative evaluation (to measure outcomes and impacts), or diagnostic evaluation (to identify problems and causes).

Curriculum improvement is the process of making changes and modifications to the curriculum based on the findings and recommendations of the evaluation. It aims to enhance the relevance, appropriateness, and suitability of the curriculum for the learners and the society. Curriculum improvement can involve revising or updating the curriculum content, objectives, methods, materials, or assessment. It can also involve developing new curricula or introducing new innovations or approaches to the curriculum.

Feedback from learners, educators, parents, and other stakeholders is essential for both curriculum evaluation and improvement. Feedback is a form of communication that provides information about how well something is working or meeting expectations. Feedback can be positive or negative, formal or informal, quantitative or qualitative, direct or indirect. Feedback can be obtained through various methods, such as surveys, questionnaires, interviews, focus groups, observations, tests, portfolios, or self-reports.

Feedback from learners can help to assess their learning outcomes, needs, interests, attitudes, preferences, and satisfaction with the curriculum. Feedback from educators can help to evaluate their teaching effectiveness, professional development, challenges, and suggestions for improvement. Feedback from parents can help to understand their expectations, involvement, support, and concerns about their children's education. Feedback from other stakeholders can help to align the curriculum with the societal goals and values.

Feedback from different sources can provide different perspectives and insights into the curriculum. However, feedback also needs to be analyzed critically and systematically to ensure its validity and reliability (Okebukola, 2004). Feedback also needs to be used constructively and responsibly to inform decision-making and action-taking for curriculum evaluation and improvement.

Summary

The digital age has brought significant changes and challenges to the field of curriculum development and delivery. Some of the trends and innovations that have emerged in this context are:

- i. The use of online platforms and tools to design, deliver and assess curricula that are flexible, personalized and interactive.
- ii. The integration of digital literacy and competencies across the curriculum to prepare learners for the 21st century skills and demands.
- iii. The adoption of blended learning models that combine face-to-face and online instruction to enhance learner engagement and outcomes.
- iv. The incorporation of emerging technologies such as artificial intelligence, virtual reality and ramifications to create immersive and authentic learning experiences.
- v. The alignment of curricula with the global standards and frameworks that promote quality, equity and sustainability in education.

These trends and innovations have implications for curriculum developers, educators, learners and stakeholders who need to adapt to the changing needs and expectations of the digital age.

Conclusion

The trends and innovations in curriculum development and delivery in the digital age have significant implications for the future of education. The emergence of new technologies, pedagogies, and platforms has enabled educators to design and deliver more personalized, flexible, and engaging learning experiences for diverse learners. However, these trends and innovations also pose challenges and opportunities for curriculum developers and educators, who need to adapt to the changing needs and expectations of learners, employers, and society. In this paper, the researcher has discussed some of the key trends and innovations in curriculum development and delivery in the digital age, such as competency-based education, micro-credentials, adaptive learning, blended learning, and open educational resources. Also, some of the benefits and challenges of these trends and innovations for learners, educators, and educational institutions were highlighted. It is hoped that this paper will inspire further research and practice in this important and evolving field of education.

Recommendations

Based on the arguments and conclusions made by the researcher, the following recommendations were made:

- 1. Identify the learning needs and preferences of the target audience in the digital age
- 2. Design curriculum that is aligned with the learning outcomes and competencies required for the digital economy and society
- 3. Incorporate innovative pedagogies and technologies that enhance learner engagement, collaboration, and feedback

- 4. Evaluate the effectiveness and impact of the curriculum using data-driven and learnercentered approaches
- 5. Adapt and update the curriculum based on the changing needs and trends in the digital age

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