



The Qualitative Evaluation of Policy and Discourse on Mathematics Exclusion for Arts Students in Nigeria: Implications for Future Steam Careers and National Development

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This research paper examines qualitative discussion around the Nigerian Federal Government policy of 2025 which is to permit Arts and Humanities applicants to university without having to pass the required credit examination in Mathematics to obtain a tertiary place. The policy was designed to reduce major admission pressures, considering that there are more than two million Unified Tertiary Matriculation Examination (UTME) candidates every year, although only approximately 700,000 of them receive admission. This paper applies both qualitative content analysis and thematic analysis of use of the official policy statements, scholarly criticism and social media discussion to chart the stakeholder perceptions in relation to the stated aim of the policy of democratizing access. The core results demonstrate a deep conflict between the purpose of access expansion which is projected to open the way of more 250,000-300,000 students every year; and the high-quality advice by experts that would bring about erosion of intellectualism and academic decadence. The review concludes that the policy of structurally de-emphasizing basic quantitative skills will further worsen the skills gap in Nigeria concerning technical areas and will highly restrict the future flexibility and engagement of Arts graduates in future critical, data-driven Science, Technology, Engineering, Arts and Mathematics (STEAM) and analytical governance professions..

Keywords:



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1. Introduction

The nature of the operational environment of tertiary education in Nigeria is one that is of pressure under the continuous mounting demand of the system which dramatically exceeds the capacity of the institutions. The magnitude of this problem is bleakly illustrated in that even among the total number of candidates (more than two million) taking UTME, only a small portion of them are able to get a place (TVC News Nigeria, 2025; Federal Ministry of Information, 2025). Federal Government (FG) under the Renewed Hope Agenda was to counter this imbalance by considering the National Guidelines on Entry Requirements (TVC News Nigeria, 2025; Federal Ministry of Information, 2025). The Minister of Education, Dr. MarufTunjiAlausa, in October 2025, announced a major change, with the aim of democratizing access, and breaking down what was described as an outdated and excessively stringent set of entry requirements (The Cable, 2025; Premium Times, 2025). This change of policy was specifically focused on a policy-based compulsory credit pass requirement in Arts and Humanities students, a requirement that had long been used as a blanket requirement to enter tertiary education in any field (FolasadeBoriowo, 2025; Wikipedia, N.D. a).

2. Problem Statement

During decades, passing a credit examination both in English language and Mathematics was the universal requirement to entry seekers to the university whether their programs were in the humanities or sciences (Wikipedia, N.D. a; FolasadeBoriowo, 2025). The fact that this requirement is eliminated among the Arts and Humanities students, and at the same time made mandatory among the cases of Science, Technology, and Social Science courses (TVC News Nigeria, 2025) creates a paradox in the sense of the critical policy. The short-term benefit of the policy is obvious: it is necessary to reduce the admission bottleneck (The Cable, 2025). But the main question of this article is whether this short-term benefit in access can in any way be balanced against the long-term price of possibly eroding the underlying quantitative literacy that is a key to cope with the demands of the 21 st century careers, and especially in a nation like Nigeria as it moves towards a more diversified and technology-driven economy (Douglas and Obioha, 2019; Adeoti, 2025b). The argument is divided into two sides:

those who believe in inclusivity and those who demand academic rigor and quantitative competency standards (Tekedia, 2025).

3. Scope and Rationale

The paper is aimed at measuring the qualitative acceptance and the inferred implications of the new mathematics exclusion policy in the Nigerian society. It organically targets the opinions of the most important stakeholder groups: the government (policy administrators), educational institutions (academics, retired principals), students, and the dynamic nature of social media discourse (Obadimu, 2025; Inuwa, Shittu, and Lawanti, 2025; BBC News Pidgin, 2025). The methodology is a qualitative content analysis of accessible media coverage and the insights of experts on the topic to rank the discourse according to the key concepts of support and opposition (Adeoti, 2025a; Federal Ministry of Education, 2020). The approaches explain why the current educational crisis in Nigeria, specifically, reported difficulties with the low level of numeracy and the downward trend in the level of Science, Technology, and Mathematics (STM) is attributed to the governmental policy response.

4. Theoretical Framework: STEAM, SHAPE, and the Data Literacy Divide.

The current policy is also analyzed through the prism of the already known concepts of education in the world: STEM (Science, Technology, Engineering, and Mathematics), its extended version, STEAM (including Arts), and the humanities version, SHAPE (Social Sciences, Humanities and the Arts to People and Economy) (Wikipedia, N.D. b). Indeed, in the case of the United Kingdom, the critical societal importance of the humanities is identified with the help of SHAPE (British Academy, 2020). This paradigm is necessary since contemporary Arts and Humanities professions are becoming more and more dependent on data processing, technology, and computational approaches, which together are referred to as such under the name of Digital Humanities (Adeoti, 2025). As such, the discussion in Nigeria is not so much about insisting that everyone learns advanced calculus (which core science students need to study) and it is more grounded in the aspect of making sure that lawyers, journalists, and policy analysts have the basic functional data literacy and figure competence in the data-driven world (TVC News Nigeria, 2025a).

5. The Policy Mandate of 2025: Information and Reason.

The official change was enforced by the revised National Guidelines on Entry Requirements announced by the spokesperson of the Federal Ministry of Education, Folasade Boriowo, and pushed by Minister Tunji Alausa (TVC News Nigeria, 2025). The fundamental change lays down that at least five credit passes in the subjects pertinent, such as English Language, will continue to be compulsory to enter the university (Folasade Boriowo, 2025). Nonetheless, Mathematics has now been made compulsory in all courses of Science, Technology, and Social Sciences in all universities (Federal Government of Nigeria, 2025; TVC News Nigeria, 2025). In the case of polytechnics (ND level) Mathematics is only required in science-related programs (The Cable, 2025; Edojah and Grace, 2025). On the other hand, to be admitted to the university or the NCE level, the Arts and Humanities candidates no longer need to have a credit pass in Mathematics (Federal Government of

Nigeria, 2025; FolasadeBoriowo, 2025; Edojah and Grace, 2025). The main reason given by the government is to break the hard-core requirements that limited access to education (TVC News Nigeria, 2025; Federal Ministry of Information, 2025). It is estimated that the policy, which is aligned with the renewed hope agenda, will open opportunities to a further 250,000 to 300,000 students per year, therefore covering the high number of qualified youth that are being left out (Bankole, 2025; Enterprise TV, 2025). The policy will be aimed to demonstrate the desire to provide a fair opportunity to learn, develop and succeed to every Nigerian youth (Bankole, 2025). Table 1 summarises the structural implications of such a reform, and emphasises the abolition of a universal standard that had underpinned the tertiary admissions in Nigeria since decades.

Table 1: Comparative Summary of Old vs. New University Level Admission Requirements.

Criterion	Old Policy(Pre-2025)	New Policy (Post-October 2025)
English Language	Mandatory(Credit Pass)	Mandatory (Credit Pass for all Courses)
Mathematics(Science/Tech)	Mandatory(Credit Pass)	Mandatory(Credit Pass)
Mathematics(Arts/Humanities)	Mandatory(Credit Pass)	No longer Compulsory (Credit Pass waived)
Expected Impact	Restricted Access	Expansion of 250,000 -300,000 new admissions annually.

6. Brief History of Mathematics Education in Nigeria

Since the colonial period, formal education in Nigeria has required both English and Mathematics to be the basic subjects needed to gain entrance to secondary and tertiary institutions. It has been known since the National Policy on Education that mathematics was mandatory in every class in grade schools or high schools (Jegede and Okebukola, 2007). Even after this requirement, the performance in Science, Technology, and Mathematics (STM) has been poor. The available statistics indicate that the pass rates in Mathematics and the Sciences have always been below 50% (Federal Ministry of Education, 2020). The academic sources indicate that the underlying causes of this failure are deeply rooted in the systemic problems, such as a lack of knowledge of the vision and the objectives of mathematics education, congested content, inappropriate motivation, inadequate teaching resources, and inefficient training of teachers (Jegede and Okebukola, 2007; Ekong, 2021).

Further evidence of the problems of the quantitative approach of education in Nigeria is the inability of the country to reach its goal of the 60:40 enrolment ratio in Science/Technology and Arts/Humanities (Federal Ministry of Education, 2020). It is this history of systematic quantitative under-achievement upon which the policy of exclusion, as opposed to structural improvement, needs to be assessed.

7. Methodological Note: Qualitative Content and Thematic Analysis

The assessment is done using Qualitative Content Analysis (QCA) to determine the success and acceptance of the educational policy. It is a systematic review of policy documents, governmental statements and the resultant discourse involving the people in news and opinion pieces and online media. It applies Thematic Analysis (TA), based on a Framework Analysis, which proves to be especially helpful when it comes to applied policy research and using large datasets

and varied points of view. The data corpus will include official statements of the Ministry of Education, reports on the interviews with academicians and principals in the major news agencies, published opinion editorials, and direct public responses gathered on the video comment sections (YouTube) in social media (X/Twitter), and on the comment section of online news platforms (BBC News Pidgin, 2025; TVC News Nigeria, 2025a). The data were inductively coded to reveal the existing trends of support, opposition, or mixed reaction (Qualtrics, N.D.; Olabisi and Olaniran, 2023). These perspectives are mapped to the main policy variables in the analysis; access, academic rigor, and alignment with the STEAM paradigm. The qualitative analysis of stakeholder discourse will be performed by the researcher to determine its influence on the progression of a specific project.

Theme A: The Search of Inclusion and Pragmatism (Pro-Exclusion Views)

3.1. The arguments that underlie the policy of exclusion are largely based on pragmatism, necessity and utility. The advocates of this mandate are seen as an artificial limitation that limits the tertiary system.

8. Math: The Irrelevant Barrier

Proponents argue that the requirement of a high-level credit in mathematics (which can include complex algebra or calculus) is needless and discriminatory to the students whose life paths are in creative and interpretive disciplines, like language, history, theatre arts, and fine arts (Tekedia, 2025; Adebola, 2025a). According to them, education, in turn, ought to consider depth in the selected field instead of enforcing the knowledge of the subjects that are not applicable to the career (Tekedia, 2025). According to one student, people in the arts and humanities needed to spend time in other areas, considering the rest simply as a waste of time (Inuwa, Shittu, and Lawanti, 2025). According to its advocates, who include a section of the education stakeholders, the Arts students do not need higher-level mathematics to take their courses and therefore the policy is a reasonable and feasible adjustment (Edojah & Grace, 2025).

9. Strategy of Policy as Access

The fundamental rationale of the government is motivated by the dire necessity to increase the educational opportunities. The official side refers to the past system as having had outdated and excessive stringent entry requirements (Bankole, 2025). The Federal Government had aligned the policy by softening this criteria to achieve a required

balance between inclusivity and quality education and leveraged the policy tool to access human capital that had been grounded in the education pipeline (TVC News Nigeria, 2025; Federal Ministry of Information, 2025).

10. Theme B: Decay in Academic Standards and Cognitive Strength (Anti-Exclusion Views)

The fear of reducing intellectual standards and undermining the competence of graduates has been a feature of the opposition to the policy that has been led by experienced academics, retired principals and policy analysts.

11. Mathematics as Pure Mental Discipline

The underlying critique of the utilitarian argument of mathematics being of value when explicitly applied to the field is that it is fundamentally false. Prof. One of the most prominent critics, Anthony Kila, stated that mathematics is not a curriculum subject but a mental discipline that creates reasoning, structure, and equitability in thought (Amuge, 2025). Other scholars believe that math trains accuracy, focus, sequential reasoning, and critical thinking, which is essential in balancing the variables of life and healthy argumentation (Adeoti, 2025a; Adeoti, 2025b). One of the commentators also painted a mental picture that abolishing the requirement is akin to treating a headache by cutting off the head (Inuwa, Shittu, and Lawanti, 2025).

12. Fear of Academic Decadence

The policy was adamantly criticized by the heads of teaching institutions, like Alexander Obadimu of the Association of Retired Principals of Secondary Schools of Nigeria (ARPSSNO), who called it ill-considered (Bankole, 2025; Obadimu, 2025). They are more concerned that the policy will actually promote the issue of laziness among the students and cause academic decadence. They warn that with the removal of the mandatory credit pass, most students will run away with Mathematics and will not even strive to provide the subject, creating a vacuum in the educational provision of the sector permanently (Bankole, 2025).

13. Systemic Failure that resulted in the simplification of policies

The counter argument is raised several times that the policy treats a symptom and not the disease of education. The long-standing history of poor results and mathematical and science performance in Nigeria is due to the systemic problems, such as

the lack of qualified teachers, instructional methods, and a fragmented curriculum (Ekong, 2021). The compulsory credit pass in mathematics was a high stakes gateway to failure of the teaching system. Later on, when the high failure rates became a bottleneck in tertiary admissions, policy administrators reacted by mitigating the symptom (i.e. the admissions restriction) by eliminating the requirement itself, instead of pursuing the challenging structural redressing that is needed to rectify instruction and resource allocation (Amuge, 2025; Arise News, 2025). Such prioritization of rapid administrative resolution over structural change that is required is seen by many as compromising the quality of education in the long term.

14. The Indirect Threat to Professional Competence

One of the aspects that are analytically critical and have been raised by the academic commentators is the long-term effects on professional competence. The contemporary world is extremely data dependent. The Arts majors that professional in the field use to dissolve complex information, statistical reports, and financial models such as journalism, law, marketing and public relations demand strong figure competence. One pundit observed that in the absence of the basic discipline taught by mathematics, the future Arts graduates will have no tools of analysis, which is an injustice to both the education field and, subsequently, to service delivery in the data-driven global economy and overall professional competence (TVC News Nigeria, 2025a).

Table 2: Thematic Analysis of Stakeholder Discourse on Mathematics Exclusion Policy

Core Theme/Position	Key stakeholders/groups	Central Justification for Position
A. Promoting Access/Flexibility	Ministry of Education, Students, Policy Advocates	Removes unnecessary Barriers; grants opportunities to qualified candidates; Advanced Math is irrelevant to Arts.
B: Preserving Academic Rigor.	Retired Principals, Academics, Policy Analysts	Math is foundational for critical thinking/logic; prevents academic decadence; required for a data-driven world.

15. Internet and Social Media Discourse Analysis.

The instant response on the online platforms, such as comment sections in YouTube and microblogging platforms like X (where Twitter used to be), was highly polarized by the people. The reason given by the government immediately backfired as the entire student body, as well as the youths, rejoiced at having gotten rid of what they saw as an unnecessary burden (Enterprise TV, 2025; Inuwa, Shittu, and Lawanti, 2025). This instant, populist approval affirms the assumption of the government that a mathematics requirement was an important factor in causing student anxiety and failure (TVC News Nigeria, 2025a). The debate in the online community rapidly reduced the conflict to a foundational vs. utility argument (BBC News Pidgin, 2025). Although some users noted issue with the fact that it is said that Mathematics na fundamental and e suppose dey compulsory to all... e dey sharpen and broaden pesin logical reasoning, others felt that someone talking like that, canvas dey trough, music, dance or whateva, make e come dey deal wit algebra, had no need to do it (BBC News Pidgin, 2025). This reduction of complicated educational criteria to dichotomous easy/hard or

relevant/irrelevant points out how digital discourse is inclined to maximize immediate relief and reduce the long-term cognitive consequences. Further examination of scholarly commentary in the digital space showed that there is a grave issue about the precedent of policy simplification via subject elimination. A number of observers compared the situation of compulsory mathematics to the past educational slumming of the education subject of History. The thesis is that when performance or relevance problems arise on the part of subjects, the Nigerian policy is such that they have answered by structurally eliminating them out of the compulsory curriculum instead of reforming instruction. It is considered the implied cost of eliminating compulsory mathematics to be a lack of mass quantitative literacy, which results in an analytical and numerical deficit that is considered essential in terms of global competitiveness (Douglas and Obioha, 2019; Adebola, 2025).

16. Quantitative Competency in New Arts Careers

The pernicious long term consequence of the discourse discussed is connected to the degradation of Arts students to engage in the fast-growing industry of STEAM-related occupations. The shift of

the world to the digital economy implies that disciplines historically found in the Arts are progressively being addressed by computational and quantitative means. Indicatively, the Digital Humanities that is currently expanding and gaining momentum needs text mining and data visualization as well as computational analysis, which in turn entails a solid quantitative background (Adeoti, 2025b). Likewise, figure competence is required by the analytical needs of the contemporary professions such as applied statistics, market analysis, and public policy (TVC News Nigeria, 2025a; University of Texas at Dallas, N.D.). The policy essentially affects Arts students by making it difficult to get a basic scientific education before entering into the field, thus crippling the capabilities of Arts students to readily transition into high-demand, high-income analytics in their future jobs. Other policy advocates tried to calm the fears by explaining that the policy does not kill mathematics completely, and Arts students will still acquire some basic mathematics that meets their requirements (Edojah & Grace, 2025). This difference is, however, based on the premise that teaching in non-compulsory subjects will not be softened. The policy eliminates the high-stakes credit requirement to enter universities and thus the systemic incentive to teach mathematics to students in Arts at secondary schools disappears (Obadimu, 2025). Since any secondary educational institution is usually oriented to training students to pass terminal exams, this de-emphasis of the subject to this group of students will result in the ensured drop in quality and provision of even the minimum level of teaching mathematics to the students, making the caveat of foundational learning enforcement no longer operative.

17. Future STEAM Careers and National Development Implications.

17.1. Strengthening the Arts-Science Dichotomy.

The policy of exclusion serves to institutionalize and intensify the old, outdated schism between the Arts and Sciences in Nigeria. Such a step is in opposition to modern trends in the world of education where one should focus on interdisciplinary skills, which is summarized by the STEAM (Science, Technology, Engineering, Arts, Mathematics) model, which encourages the use of creative arts in technical subjects (National Steering Committee on Senior Secondary Education, 2025; Innovation-Village, N.D.). The national policy of Nigeria overtly encourages the study of Science and Technology, and the aim is to increase the number of students studying STM to

60:40 in comparison to Arts/Humanities (Federal Ministry of Education, 2020). By making the academic pathway to Arts students much more accessible, eliminating the daunting mathematics requirement; the policy ends up encouraging students to leave the quantitative track earlier than intended, which contradicts the national goal of increasing the science and technology base (Federal Ministry of Education, 2020). The wholeness of any interdisciplinary area, including the field of Architecture, where a solid mathematical and artistic background (Karppinen et al., 2017) is required, may be compromised in the case of a structural weakening of the quantitative background of the future creative professionals.

17.2 Worsening the National Skills Gap

A severe skills shortage in STEM professions is already an issue that puts Nigeria in a difficult situation because employers cannot find qualified individuals to occupy technical positions (Douglas and Obioha, 2019; Industrial Training Fund, N.D.). The exclusion policy has a direct negative impact on the pipeline of human capital that can be effectively used to adapt to technical or analytical roles. The intellectual abilities developed in mathematics such as the rigorous solution of problems, ordered logical thinking, and identification of pattern are universally prerequisites in the diversified contemporary job market. The policy is prone to breed a generation of graduates with no simple quantitative skills. Moreover, it was estimated that a significant number of Nigerian university graduates can usually be hired in areas unrelated to their major, which requires them to keep adapting and reeducating constantly (Adebola, 2025c). Strong maths background offers the multipurpose, analytical set that is needed to adapt to this. Through this reduction in background exposure, the policy is severely degrading the career flexibility and competitiveness of Arts graduates in the overall employment environment. An implication that may not be obvious and critical is the possible effects of the future implementation of the policies and governance capacity in Nigeria. The graduates of Arts and Humanities often migrate to the field of public administration, civil service, policy analysis, and legal systems (AIT News, 2025). These are the jobs where one is called upon to read budgets, analyze statistical reports and model impacts of economic and social policies. Unless the future generation of Nigerian administrators and leaders possesses the appropriate quantitative literacy to comprehend and question the evidence-based

information, the general quality of governance and the ability to implement evidence-based policies which is a recognized challenge in the Nigerian system (Okoroma, 2006) would presumably be reduced. It is an educational policy that seeks to streamline education, and, thus, subconsciously ebb at the ability of the nation to solve problems that require complex administration and economic expertise by diminishing the quantitative nature of the future policy generation (AIT News, 2025).

18. Comparative Policy Analysis and Curricular Alternatives.

In the global education systems, there are lessons that can be learned. An analysis of the global practices in mathematics requirements points to possible models in Nigeria of considering both the access and rigor. In the United Kingdom, although the Social Sciences, Humanities, and the Arts are encouraged using the acronym SHAPE (Wikipedia, N.D. b; British Academy, 2020), underlying quantitative literacy is a controversial point of entry in tertiary levels. The discussion at the international level is usually aimed at discerning the nature of mathematics needed rather than doing away with it altogether. As an example, in South Africa, Grade 10-12 students are required to take seven subjects, with four of them, which are two official languages, Life Orientation, and critically, either Mathematics or Mathematical Literacy (Department of Basic Education, N.D.). This way specifically recognizes that not every student needs higher-order core mathematics and still makes certain that all the students have a fundamental base of numerical reasoning and critical analytical skills to have a clear model of reform instead of complete exclusion (Amuge, 2025).

19. The Curriculum Design Research in the Humanities

As indicated in the qualitative analysis, the only way ahead should be to attain the twin objectives of expanding access and quantitative rigour by way of curricular innovation.

20. Mathematics For the Humanities Model

The school must embrace the philosophy of reform, but not removal as promoted by the analysts of policies (Amuge, 2025). Joint admission and Matriculation Board (JAMB) and the National Universities Commission (NUC) are supposed to establish a mandatory, customized curriculum of Quantitative Reasoning (or Mathematic for the Humanities) (TVC News Nigeria, 2025a; Amuge,

2025). A curriculum like this would be centered on real world, applicable mathematics:

- 1) Logic and Critical Reasoning (necessary to such disciplines as law, philosophy, and political science).
- 2) Simple Statistics and Data Analysis (vital in journalism, public relations and social science research).
- 3) Financial Numeracy (applicable to personal finance and simple business practice).

21. Integrating STEAM Concepts

Teaching methods that combine the Arts with science and mathematics (STEAM) have been shown globally to positively affect the student attitude towards quantitative subjects in addition to developing creative and practical skills because connecting abstract knowledge with real-world examples becomes achievable (Karppinen et al., 2017; Innovation-Village, N.D.). Mathematical concepts would be engaging and students would find the Arts curriculum more interesting through the implementation of a STEAM-based approach in the Arts curriculum, like computational art, statistical storytelling in journalism, or logical design in architecture, etc.

22. Policy Friction and Institutional Resistance.

Policy changes required by the Federal Ministry of Education and JAMB are centralized and are based on similarity in the way the changes are applied to all the tertiary institutions in Nigeria (National Universities Commission, 2014). Nonetheless, institutional friction will be quite a problem. Academic leaders including retired principals have already raised concerns on the sustainability of the policy as some of the higher institutions are likely to oppose the implementation of the policy in order to safeguard their academic standards (Bankole, 2025; Obadimu, 2025). This is especially probable in Arts-related courses that do have quantitative outliers, like Communications Arts or certain majors within Social Sciences (University of Lagos, N.D.; Academic Watch, N.D.). In case professional accreditation requires strict quantitative requirements by specialized university faculties in order to guarantee the quality of graduates, internal, market-driven admission requirements will effectively override the federal policy. This institutional opposition will cause regulatory confusion which can be detrimental to students who will just be guided by the federal minimum requirements and lowers the overall believability of the centralized reforms.

23. Recommendations

Following the analysis of the stakeholder qualitative perceptions and analysis of the future prospects of the quantitative literacy and career development, the following recommendations are offered to support the realization of the twin goals of inclusive access and sustained academic rigor:

- Immediate Policy Modification: A Reflection of Removal to Curriculum Reform. The guidelines to be changed immediately by the Federal Ministry of Education and the National Universities Commission (NUC) should be to provide a detailed, fundamental quantitative admission criterion rather than exclusion. Quantitative Literacy subject or Mathematics for Humanities is proposed for the Arts/Humanities. It should be focus on logical reasoning, applied Statistics, financial numeracy and data interpretation as applied to Arts, Law and media professions.
- Quantitative Units Mandate by institutions: The NUC needs to make it mandatory that all Arts and Humanities degree programs have at least 1 credit-bearing, compulsory, university-level Quantitative reasoning course based on the customized model of the curriculum. This will alleviate the risk of math being dropped by secondary schools and offer a standard source of analytical grounding required by disciplines that touch on modern data methodologies, including Digital Humanities.
- Target Investment in Foundational Quality: Given that chronic underperformance was the impetus behind the first decision, the government should focus major resources on dealing with the systemic issues in mathematics education. This involves a huge investment in training, incentive, and instruction materials of mathematics teachers in secondary schools to solve the problems of overcrowded content and low quality of teaching that are reported in the academic literature.
- Encourage Interdisciplinary Education Structures (STEAM/SHAPE): Financial incentives and structural demand should be given to tertiary institutions to embrace interdisciplinary models, and to be energetic and deliberate at developing a curriculum pathway incorporating quantitative analysis with one or more of the creative disciplines. The adoption of the STEAM and SHAPE models will guarantee that graduates will

have the technical-humanistic skill synergy that would make them competitive in the growing innovation industry.

24. Conclusion

The policy of Federal Government to cancel the compulsory credit pass in Mathematics to students taking Arts and Humanities is a decisive, access-based policy formulation aimed at handling the problem of low capacity in Nigerian tertiary institutions that is a major problem. This qualitative research supports the fact that the policy provides short-term relief and access to a vast number of marginalized candidates. The general opinion of academic and policy professionals is, however, that it is a structurally unsound move that entails administrative convenience more than intellectual underlying soundness. The policy does not deal with the underlying causes of bad mathematics result and would tend to devise a systemic deficiency in quantitative literacy among a large portion of future Nigerian professionals. This structural de-emphasis of mathematics by the government enhances outmoded Arts -Science dichotomy, sabotages the national STEAM agenda, and reduces the necessary analytical flexibility of Arts graduates to succeed in a data-driven economy and be productive participants in evidence-based national governance.

References

- Academic Watch. (N.D.). [LASU Diploma in Communication Arts requirements. Retrieved from Academic Watch website: https://academicwatch.com.ng/news.php?id=171](https://academicwatch.com.ng/news.php?id=171)
- Adebola, M. (2025a). [Rethinking the mathematics exemption for art students.Punch. Retrieved from Punch website: https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/](https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/)
- Adebola, M. (2025b). [Rethinking the mathematics exemption for art students.Punch. Retrieved from Punch website: https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/](https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/)
- Adebola, M. (2025c). [Rethinking the mathematics exemption for art students.Punch. Retrieved from Punch website: https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/](https://punchng.com/rethinking-the-mathematics-exemption-for-art-students/)
- Adeoti, T. (2025a). [Why removing mathematics for arts students weakens Nigeria's education. TosinAdeoti Blog. Retrieved](#)

- from TosinAdeoti Blog website: <https://www.tosinadeoti.com/2025/10/16/why-removing-mathematics-for-arts-students-weakens-nigerias-education/>
- Adeoti, T. (2025b). Why removing mathematics for arts students weakens Nigeria's education. TosinAdeoti Blog. Retrieved from TosinAdeoti Blog website: <https://www.tosinadeoti.com/2025/10/16/why-removing-mathematics-for-arts-students-weakens-nigerias-education/>
- AIT News. (2025). Retrieved from AIT News YouTube channel: <https://www.youtube.com/@aitlivenews>
- Alordiah, C. O., et al. (2023). Qualitative research: A future road map for educational researchers in Nigeria. ResearchGate. Retrieved from ResearchGate website: https://www.researchgate.net/publication/374419989_QUALITATIVE_RESEARCH_A_FUTURE_ROAD_MAP_FOR_EDUCATIONAL_RESEARCHERS_IN_NIGERIA
- Amuge, O. (2025). Kila warns of long-term risks as education ministry drops mathematics for arts admissions. BusinessDay. Retrieved from BusinessDay website: <https://businessamlive.com/kila-warns-of-long-term-risks-as-education-ministry-drops-mathematics-for-arts-admissions/>
- Arise News. (2025). The assertion that mathematics is too difficult for arts students... Retrieved from Arise News YouTube channel: <https://www.youtube.com/watch?v=F5JLWwYRHmw>
- Assesapress. (2024). The evolution of education system in Nigeria: A historical overview of arts and social sciences education. Retrieved from Assesapress blog: <https://assesapressorg.home.blog/2024/08/17/the-evolution-of-education-system-in-nigeria-a-historical-overview-of-arts-and-social-sciences-education/>
- Bankole, T. (2025). Ex-principals slam FG's decision to drop maths as requirement for arts admissions. Punch. Retrieved from Punch website: <https://punchng.com/ex-principals-slam-fgs-decision-to-drop-maths-as-requirement-for-arts-admissions/>
- BBC News Pidgin. (2025, October 17). Reactions as Nigeria government compulsory Mathematics for Arts students to enta university.GhanaWeb. Retrieved from GhanaWeb website: <https://www.ghanaweb.com/GhanaHomePage/bbc/Reactions-as-Nigeria-govment-comot-compulsory-Mathematics-for-Arts-students-to-enta-university-2005277>
- British Academy. (2020). Speaking up for SHAPE: Social sciences, humanities, the arts for people and the economy. Retrieved from Lancaster University Portal: <https://portal.lancaster.ac.uk/portal/news/article/speaking-up-for-shape-social-sciences-humanities-the-arts-for-people-and-the-economy>
- Cambridge Research and Publications. (N.D.). International journal of African research and sustainability studies: Policy implementation in Nigeria. Retrieved from Cambridge Research and Publications website: <https://cambridgeresearchpub.com/ijarss/article/download/531/532/1015>
- Department of Basic Education. (N.D.). Subject choice and career pathing. South Africa. Retrieved from Department of Basic Education website: <https://www.education.gov.za/Informationfor/Learners/SubjectChoiceandCareerPathing.aspx>
- Douglas, E. N., & Obioha, C. N. (2019). *The demand for STEM skills in the 21st century for the development of Nigerian educational system*. ResearchGate. Retrieved from ResearchGate website: https://www.researchgate.net/publication/395705138_CHAPTER_12_The_Demand_for_STEM_Skills_in_the_21st_Century_for_the_Development_of_Nigerian_Educational_System
- Edojah, P., & Grace, I. (2025, October 23). Stakeholders react to removal of mathematics as compulsory subject for arts students admissions. *Vanguard*. Retrieved from Vanguard website: <https://www.vanguardngr.com/2025/10/stakeholders-react-to-removal-of-mathematics-as-compulsory-subject-for-arts-students-admissions/>
- Ekong, A. H. (2021). Issues and challenges of mathematics education in Nigeria: The need for restructuring. *Nigerian Journal of*

- Educational Publication. Retrieved from ResearchGate website: https://www.researchgate.net/publication/352374813_Issues_and_Challenges_of_Mathematics_Education_in_Nigeria_The_need_for_Restructuring
- Enterprise TV. (2025). The Federal Government has unveiled a sweeping reform... Retrieved from Enterprise TV YouTube channel: <https://www.youtube.com/watch?v=SOFTwIIISRI>
- Federal Government of Nigeria. (2025, October 14). FG approves new admission guidelines, Maths no longer compulsory for Arts candidates. Vanguard. Retrieved from Vanguard website: <https://www.vanguardngr.com/2025/10/fg-approves-new-admission-guidelines-maths-no-longer-compulsory-for-arts-candidates/>
- Federal Ministry of Education.(2020). National policy on science and technology education. Retrieved from Federal Ministry of Education website: <https://education.gov.ng/wp-content/uploads/2020/09/National-Policy-On-Science-and-Technology-Education.pdf>
- Federal Ministry of Information. (2025). Renewed hope in action: Federal government streamlines admission requirements to expand access to tertiary education. Retrieved from Federal Ministry of Information website: <https://fmino.gov.ng/renewed-hope-in-action-federal-government-streamlines-admission-requirements-to-expand-access-to-tertiary-education/>
- FEPBL. (N.D.). Conclusively, the paper advocates for strategic policy reforms. Retrieved from FEPBL website: <https://fepbl.com/index.php/ijarss/article/view/724/912>
- FolasadeBoriowo. (2025). FG revises admission policy, removes maths requirement for arts students. Guardian. Retrieved from Guardian website: <https://guardian.ng/featured/fg-revises-admission-policy-removes-maths-requirement-for-arts-students/>
- Futurum Careers.(2020). STEM, STEAM, and now SHAPE: Can an acronym help valorise the social sciences, humanities and arts. Retrieved from Futurum Careers website: <https://futurumcareers.com/stem-steam-and-now-shape-can-an-acronym-help-valorise-the-social-sciences-humanities-and-arts>
- Hotcourses Abroad. (N.D.). The most popular STEM degrees for Nigerian students. Retrieved from Hotcourses Abroad website: <https://www.hotcoursesabroad.com/study-abroad-info/subject-guides/the-most-popular-stem-degrees-for-nigerian-students/>
- Igbafe, M. (2024). Implications of the newly proposed education policy 12-4 in Nigeria. ResearchGate. Retrieved from ResearchGate website: https://www.researchgate.net/publication/388764051_IMPLICATIONS_OF_THE_NEWLY_PROPOSED_EDUCATION_POLICY_12-4_IN_NIGERIA
- Industrial Training Fund. (N.D.). Skills gap assessment. Retrieved from Industrial Training Fund website: https://www.itf.gov.ng/ftp/Skills_Gap_Assessment.pdf
- Innovation-Village. (N.D.). Improving the Nigerian Education System with STEAM Learning. Retrieved from Innovation-Village website: <https://innovation-village.com/improving-the-nigerian-education-system-with-steam-learning/>
- Inuwa, A. T., Shittu, I., &Lawanti, D. (2025). Mathematics: New admission policy stirs controversy as Varsity lecturers, students take positions. Daily Post Nigeria. Retrieved from Daily Post Nigeria website: <https://dailypost.ng/2025/10/17/mathematics-new-admission-policy-stirs-controversy-as-varsity-lecturers-students-take-positions/>
- Jegede, P. O., &Okebukola, P. (2007). Remediation of deficiencies in mathematics concepts among Nigerian students: A manipulatives approach. Educational Research and Review. Retrieved from ERIC website: <https://files.eric.ed.gov/fulltext/EJ792865.pdf>
- Joint Admissions and Matriculation Board. (2024). Strategic Roadmap for Inclusive Access to Quality Higher Education in Nigeria (2024-

- 2028). JAMB Equal Opportunity Group. Retrieved from JAMB website: <https://jamb.gov.ng/PDFs/FINAL-2024-2028%20Strategic%20Roadmap%20for%20Inclusive%20Access%20to%20Quality%20Higher%20Education-October.pdf>
- Karppinen, S., et al. (2017). Investigating integrating interdisciplinary craft design based on STEAM education to improve pre-service teachers' pedagogical skills. Retrieved from EJMSTE website: <https://www.ejmste.com/download/a-systematic-review-of-the-implementation-of-steam-education-in-schools-15894.pdf>
- National Steering Committee on Senior Secondary Education.(2025). National policy on senior secondary education. Retrieved from National Steering Committee on Senior Secondary Education website: <https://nssec.gov.ng/wp-content/uploads/2025/06/NATIONAL-POLICY-on-Sen-Sec-Edu.pdf>
- National Universities Commission. (2014). Benchmark minimum academic standards for undergraduate programmes in Nigerian universities: Education (Draft BMAS). Retrieved from NUC website: <https://nuc.edu.ng/wp-content/uploads/2015/09/Education%20Draft%20BMAS.pdf>
- Obadimu, A. (2025, October 16). Retired principals fault FG's removal of mathematics as a compulsory subject for arts and humanities admission. The Nigeria Education News. Retrieved from The Nigeria Education News website: <https://thenigeriaeducationnews.com/2025/10/16/retired-principals-fault-fgs-removal-of-mathematics-as-a-compulsory-subject-for-arts-and-humanities-admission/>
- Okoroma, N. S. (2006). Educational policies and problems of implementation in Nigeria. International Journal of African and African American Studies. Retrieved from ERIC website: <https://files.eric.ed.gov/fulltext/EJ797605.pdf>
- Okebukola, P. (2024). Impediments to STEM's transformative role in bridging the critical skills divide. Oxford Journal of Educational Development (OJED). Retrieved from OJED website: <https://ojed.org/STEM/article/view/8120>
- Okebukola, P., et al. (2004). Development of Art schools in the Nigerian university system 1961 to 2021. International Journal of Humanities and Social Science Methodologies. Retrieved from IJHSSM website: https://ijhssm.org/issue_dcp/Development%20of%20Art%20Schools%20in%20the%20Nigerian%20University%20System%201961%20to%202021.pdf
- Olabisi, A., & Olaniran, O. (2023). Data was analysed using thematic analysis. Phcfm. Retrieved from Phcfm website: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8684632/>
- Premium Times. (2025). Mathematics no longer compulsory for arts students as FG reviews institutions' entry requirements. Retrieved from Premium Times website: <https://www.premiumtimesng.com/news/headlines/828027-mathematics-no-longer-compulsory-for-arts-students-as-fg-reviews-institutions-entry-requirements.html>
- Qualtrics. (N.D.). Thematic analysis in qualitative research: Framework analysis. Retrieved from Qualtrics website: <https://www.qualtrics.com/experience-management/research/thematic-analysis-in-qualitative-research/>
- The Cable. (2025). Just in: FG reviews requirements for tertiary school admissions to expand access. Retrieved from The Cable website: <https://www.thecable.ng/just-in-fg-reviews-requirements-for-tertiary-school-admissions-to-expand-access/>
- The Nigeria Education News. (2025). FG streamlines admission requirements to boost access to tertiary education. Retrieved from The Nigeria Education News website: <https://thenigeriaeducationnews.com/2025/10/15/fg-streamlines-admission-requirements-to-boost-access-to-tertiary-education/>
- Tekedia. (2025). Rethinking mathematics in Nigeria's arts education. Retrieved from Tekediawebsite:

- <https://www.tekedia.com/rethinking-mathematics-in-nigerias-arts-education/>
 Turkish Cypriot Ministry of National Education and Culture. (N.D.). Mathematics occupies a central place in the school curriculum. Retrieved from ERIC website: <https://files.eric.ed.gov/fulltext/EJ1101934.pdf>
- TVC News Nigeria. (2025a). Retrieved from TVC News Nigeria YouTube channel: <https://www.youtube.com/watch?v=IFdH9Fklufk>
- TVC News Nigeria. (2025b). Retrieved from TVC News Nigeria YouTube channel: <https://www.youtube.com/watch?v=IFdH9Fklufk>
- University College London. (N.D.). Arts and Sciences (BASC). Retrieved from University College London website: <https://www.ucl.ac.uk/prospective-students/undergraduate/degrees/arts-and-sciences-basc>
- University of Lagos. (N.D.). ICE admission requirements 2024/25 session. Retrieved from University of Lagos website: https://ice.unilag.edu.ng/resources/ICE-Admission-Requirements-2024_25-Session.pdf
- University of Texas at Dallas. (N.D.). MS Data Science and Statistics. Retrieved from University of Texas at Dallas website: <https://academics.utdallas.edu/factsheets/nsm/ms-data-science-and-statistics/>
- Wikipedia.(N.D. a).Education in Nigeria. Retrieved from Wikipedia website: https://en.wikipedia.org/wiki/Education_in_Nigeria
- Wikipedia.(N.D.b).*Science, technology, engineering, and mathematics*. Retrieved from Wikipedia website: https://en.wikipedia.org/wiki/Science,_technology,_engineering,_and_mathematics
- World Education News and Reviews.(2017). Education in Nigeria. Retrieved from WENR website: <https://wenr.wes.org/2017/03/education-in-nigeria>

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