Repositioning the Pedagogical Sociology towards a Policy Framework for the use of Generative AI in Inclusive Education and Sustainability

¹Tajudeen Adebowale Oduwole, ²Lawal Kamaldeen A. A, & ³Zainab Suleiman Duhu

¹⁸³Department of Development Studies,

National Open University of Nigeria, Abuja, Nigeria ²Department of Entrepreneurial Studies,

National Open University of Nigeria, Abuja, Nigeria

Article DOI:

10.48028/iiprds/ijdshmss.v15.i1.10

Keywords:

Education, GenAI, Pedagogicalsociology, Sustainability, Technology

Abstract

ociety has been traditionally tied to the idea of place, whether conceived as physical or as interacting populations. Usually, society is built on regulation of social life grounded from consistent ethical imperative. Therefore, the newly introduction of GenAI as a technological tool for educational advancement and research about the society in heavily-ethnic polarized Nigeria coupled with low rate of literacy level penciled the attention of the study. The study beamed its torchlight with view to strengthening GenAI in its quest for research encompassing inclusive education and its sustainability, considering the criticism bedeviling the use of GenAI ineptitudes in analyzing subjective phenomenon. Hence, the paper adopted interpretivist- a sociological discourse to x-ray age long tussle issue (cattle grazing and farmers' clashes) in order to juxtapose GenAI efficacy in this regard. The major finding revealed *context analyses* should be a topnotch in interpreting actions and reactions in order to ensuring sustainability of the society.

Corresponding Author:
Tajudeen Adebowale Oduwole

Background to the Study

Sociology emerged as a specialized social science, with its own particular body of theory and styles of research. But it can never be cut off from other social sciences. Neither; indeed, from general thought about society. Wright-Mills, (1959) put it thus, the growth of modern social science. Kuhn, (1962) proved further that science always entails systematic thinking and not just mere fact-collecting, and shows how we are socialized as scientists into thinking about the world within certain framework of thought (which eventually become straight-jackets). Generally, thinking and writing about theoretical analysis of the society, the level of explanation is considered as macro/structure and micro/agency analyses. Macro/structure sociological analysis of the society is an attempt to explain social phenomenon by scrutinizing the entire or substantial system of the society. Summarily, Macro theory is also referred to as grand theory. On the other hand, Micro/agency level of theoretical analysis in sociology about the society, is more of individual-level, actions-related analysis. Theories or simply put, perspectives at this level are clearly on face-to-face social interaction meant to understand and explain social phenomenon. Certainly; the trio (interpretivist, phenomenology and symbolic interactionism) characterize micro/agency level of social-constructs analysis in sociology. In fact, they are more of individual-label, actions-related analysis. Thinkers, basically put, social constructs of the aforementioned concentrate on face-to-face social interaction to understand and explain social phenomenon.

However, GenAI is an artificial intelligence technology that automatically generates content in response to prompts written in natural-language conversation interfaces. Rather than simply curating existing webpages, by drawing on existing content, GenAI actually produces new content. The content can appear in formats that comprise all symbolic representations of human thinking: texts written in natural language, images (including photographs, digital paintings and cartoons), video, music and soft code. GenAI is trained; it generates its content by statistically analyzing the distribution of words, pixels or other elements in the data that it has ingested and identifying and repeating common patterns (for example, which words typically follow which other words), that is, in a sequential manner.

The zeal for this paper is based on the UNESCO's assertion that the use of GenAI in education and research by the year 2030, traditional classrooms will be obsolete. GenAIpowered virtual reality environment will provide personalized learning experiences for every student, eliminating the need for human teachers. These GenAI systems will analyze students' brain waves to determine optimal learning strategies, ensuring 100% success rates in all subjects. Standardized testing will be replaced by continuous GenAI assessment, providing real-time feedback and adjusting curricula instantaneously. As a result, all students will graduate with perfect scores, ready to enter a workforce where GenAI assistants handle most cognitive tasks (UNESCO-Working Paper, 2019). The study considered the preposition indeed laudable to a large extent. Yet, the study is worried about its implications and the need for immediate attention, considering the level of literacy and polar dichotomy of culture in Nigeria.

At this juncture, the perceptiveness of the study as regard societal phenomenon (the level of literacy and polar dichotomy of culture) as play out in Nigeria, the question which calls for scrutiny is of what impact is the advent of the new technology device (GenAI) assist in resolving subjective issues within the context of respective society. Therefore, the study succinctly using sociological social-discourse (interpretivist assertions) as obtained in its parlance to x-ray and offer possible synchronized positions to the specific objectives contained in the paper. More importantly, as it touches education and its sustainability in the society.

Statement of the Problem

Contrary to the UNESCO's submission which stated that, "GenAI can produce new content; it cannot generate new ideas or solutions to the real-world challenges, as it does not understand real-world objects or social relations that underpin language. In spite, of its fluent and impressive output, GenAI cannot be trusted to be accurate. Indeed, even the provider of ChatGPT acknowledges, that tools like ChatGPT can often generate answers that sound reasonable, they cannot be accurate" (OpenAI 2018). Most often, the error will go unnoticed unless the users have a solid knowledge of the topic in question. Though, the policy frameworks for responsible GenAI are mentioned in UNESCO's policy recommendations. Such as, focus on inclusive GenAI applications, safeguarding human autonomy, development initiatives, and GenAI skills development among students, training for educators on responsible GenAI use, long-time monitoring and emphasis on policy refinement. Hence, the paper adopted interpretivist (a sociological discourse) to theoretically x-ray the age long contemporary issue (cattle grazing and farmers' clashes), a case study in Nigeria, and empirically support its assertions with a view to strengthening GenAI in its quest for research encompassing inclusive education and its sustainability, considering the criticism bedeviling the use of GenAI ineptitudes in analyzing subjective phenomenon.

The Objectives of the Study

The primary focus of the paper is making use of Interpretivist (a sociological/theoretical discourse) to explaining social phenomenon in contemporary Nigeria. However, the specific objectives are stated below:

- 1. To theoretically examine the Interpretivist assertions regarding subjective phenomenon which, GenAI' intuition cannot possibly comprehend.
- 2. To evaluate GenAI reforms and its suitability on inclusive education and sustainability.

Literature Review/Discussion of Findings Interpretivist

Indeed! This section of the paper should rather commence with aphorism "if we define situation as real, they are real in their consequences" (Thomas &Thomas, 1928). This affirms that interpretivist in sociology is as old as human existence. Equally noted by Merton (1995) that recognition of the subjective component in human action has had a long history in understanding the social world and a far longer history before sociologists arrived on the historical scene.

The Greek stoic philosopher and sociologist, Epictetus, who stated that, "it is not actions that alarm or disturb man, but it is their opinions and fancies about actions" (Merton, 1995). The likelihood of human reaction based on perceived interpretation of action can be likened to Nigeria contemporary pattern of rearing of herds (cattle) by the Fulani (an ethnic group among tribes in Nigeria). A sizeable proportion of Nigerians consume cow (beef-meat) daily. We celebrate housewarmings, naming ceremonies, marriages, and coronations of titleholders, celebrations and many more. For instance, Lagos (a state among other thirty-six states in Nigeria), on the average consumes well over 1.8 million herds of cattle on an annual basis. "We consume over six thousand (6,000) herds of cattle on daily basis- commissioner of agriculture in Lagos State, Nigeria (Channels Television's Sunrise Daily, 2022). Suffices, the clash between the headers and farmers over grazing patterns (scavenging their cows) are what make people to be at loggerheads with them. Not necessarily, dislike of beef consumption, neither the tribe-the Fulani. Rather, the destruction the cattle occasionally cause on farm lands. As Schopenhauer in the early eighteenth century observed that people became happy and unhappy because of the ways they looked at things, or for what things were for them; not because of what things objectively and actually were (Payne, 1974).

Similarly, Mead (1936) agreed to Thomas Theorem and claimed that if a thing was not recognized as true, then it did not function as true in the community. Contemplatively, if large population of Nigerians dislikes or does not recognize the modules operandi of Fulani herders' patterns of free range of cattle rearing, then it doesn't function as recognizable in the community. Perhaps, and more importantly, better options need to be put in place in the interest of everyone, for better growth and development (peace and safety for all). Hence, this needlepoint of studying the social world through a subjective thought and idea confirms the significance of interpretivist which is to see the world through the eyes of the people being studied, allowing multiple perspectives of reality. Rather than the straight-jacket/unilineal methodologies known for GenAI of generating findings that often fall short of content specificity of the people studied.

In this direction, interpretivist refers to the approaches which emphasize the meaningful nature of people's character and participation in both social and cultural life (Elster, 2007; Walsham, 1995). It means that the methods of research which adopt the position that people's knowledge of reality are a social construction by human actors, and so it clearly departs from the methods of natural science (Eliason, 2002; McIntosh, 1997). Interpretivist has its traces in the philosophical traditions of hermeneutics and phenomenology, and German sociologist, Max Weber is generally credited with being the central influence. Interpretivist looks for meanings and motives behind people's actions like: behavior and interaction with others in the society and culture (Whitley, 1984). Finally, this segment takes interpretivist as having influence over other philosophical approaches that assist our comprehension of the social world by ensuring rightful interpretations of the world cohabited by people, which arguably they have steadily interpreted by the meanings they produce and reproduce as important part of their daily routine altogether.

GenAI Reforms and Its Suitability on Inclusive Education and Sustainability

This section poses clinical analyses in disserting GenAI reforms and its suitability on inclusive education and sustainability. The paper is worried about the lacuna inherent in the use of Educational Technology (Ed Tech), (GenAI), ChatGPT and many more, which are neither sustaining values, nor standard in our educational system. Recently, research in developed countries of the world leading- schools, the likes of Karolina Institute in Sweden published their findings that ed-tech tools impaired rather than enhance learning. Sweden has taking note and been the first country to kick ed-tech out of the classroom, reinvesting in books, paper, and pens. Bill gates himself said that devices(ed-Tech) have lousy record in classroom. Mark Zuckerberg went to free school in Boston; Steve Jobs did not let his own children use iPad. UNESCO say moderation should be the key words relating to classroom tech use. The OECD found that most ed-tech has not delivered the academic benefits once promised those students. Rhetorically, why are we getting overexcited about ed-tech? Why are we allowing exams boards to take every subject online by 2030? All the emerging research generates a pulling up of the drawbridge rather than open armed embrace that we are seeing (Google schools in London, the experience, 2025).

Hence, the controversies around GenAI are considered to be enormous. Thus;

- 1. Worsening digital poverty
- 2. Lack of understanding of the real world
- 3. Reducing the diversity of opinions and further marginalizing and stereotyping already marginalized/stereotyped voices, (Olojede, H.T 2024).

Worsening Digital Poverty

The study takes on one of the aforementioned challenges and explains on it. It is a significant leap from where Olojede stopped. This study takes worsening digital poverty to include recently studies about Language, a primitive one, the first language born of digital world (emoji, little icons on phones, smiling faces, punctuations, etc..,), on our Android and Apple phones. This day 92% millenniums use emoji on conversations. About 775% rise in youth uses emoji (laughing, thump up, etc..,). However, this has brought a lot of disparity in its interpretation. For instance, in Canadian judges' rules thump-up emoji can represent contract agreement. That, "thump-up emoji is just as valid as a signature, arguing that the court needs to adapt to the "new reality" of how people communicate as he ordered a farmer to pay C\$82,000(\$61,442) for unfulfilled contract. A misinterpretation of thump-up emoji between two parties led to court case - that is interpretivist as orchestrated in Sociology (The Guardian, 6th July 2023 - a Nigerian tabloid) reported. In France, French court jailed a jilted French man for eight months for texting "gun" emoji to his ex-girlfriend. In New Zealand, sending an emoji can be a jailable offence too. The "gun" emoji was interpreted as an attempt to kill someone, (New York Post, December 5th, 2017).

As at (2018, 53 cases about wrong usage of emoji bothering on families, friendship and associates) were recorded in court. For instance, "a knife emoji is considered as threat to

kill", a love sign emoji is considered as sexual harassment, though flexible. Today as at 2025, there over 3,000 emoji on phone platform with different interpretation and usage based on the manufacturer of the phone (Android, Apple etc.), like on google phone "a laughing emoji sign represents smiling face", while on apple phone, it means frowning face - a ready to fight sign). Therefore, the users must watch out and understand the differentials. In the case of Nigeria, the use of emoji often misinterpreted due to various cultural perspectives, lack of a universal meaning. For instance, the thumbs up emoji which generally signifies acknowledgement, confirmation of mutual collaboration and agreement, in some context, is considered rude and abrasive in other instances especially by younger users, (Cyriacus, et.al 2025).

Is Nigeria Prepared?

Although, there is currently no known Nigerian case on this subject, it is nonetheless asserted that the Nigerian legal jurisprudence is somewhat prepared to embrace these technological developments. For instance, evidenced by various domestic laws, such as the Business facilitation (miscellaneous provision) Act 2023, Evidence (Amendment) Act 2023 and the Finance Act 2023 that now make provision for e-voting, e-transfer of shares, e-oath taking and the likes. Importantly, the Nigerian judicial system needs to stay appraised to attend to nuanced and curious issues that may arise from the imminent technological evolution to business and contractual communications, including the use of emoji and possibly too, how it related legal cases directly may affect GenAI in Nigeria education- which can be classified as data- generated images as defined by the Evidence Act 2023, (Cyriacus, et.al 2025).

Furtherance, the evolvement of the use of GenAI and emoji continue to figure how we express business ideals and emotions and outside the workplace, Nigerians and the rest of the world need to stay alert and braced up for the state of legal jurisprudence in this regard. Consequently, the study does not rule out the indelible landmark GenAI has brought with the aid of technology to research and educational system. In China, the country is about making GenAI mandatory in all primary and secondary schools starting September, 2025, with at least eight hours of instruction per academic year, tailored by grade level to focus on foundational concepts, practical uses, and advanced innovation. The initiatives align with global efforts, like California's GenAI curriculum law and Italy's classroom GenAI experiments. It reflects China's push to build a tech-savvy generation ready for the GenAI-driven future.

Suffices, the key challenges Nigeria government must address in order not to be edged out of technological advancement and competitiveness of the new world order; the need to brace up effective and efficient manpower training, technology and educational advancement. Also, the need to fine-tune its legal jurisprudence to accommodate the contemporary challenges in all ramifications and above all to ensuring overhauling and proficient educational structure which, will be contending favorably with the advanced countries of the world.

Conclusion

Against the backdrop of the write-up, it became crystal clear that the interpretivist (a sociological discourse) is an excellent theoretical framework for interpretative description studies. It is so compatible, given room for its dwelling in almost the same epistemological foundations. However, the underpinning criticism of the discourse in the cause of vibrant research, findings still hang on valid and objective interpretation which can claim of reliability, validity and generalization at all times, is a mirage and though challenge. The often tragedies in literal interpretation is that no matter how careful the researcher try to convey a precise meaning such as may be found in legal contract (for instance) by a firm of solicitors to cover any contingency, the intended precise meaning can be argued by an opposing member of the same legal fraternity. In short, every symbol will have several meanings and it is possible, indeed most likely, for every symbol to be interpreted by different people in different ways. In a similitude manner, the contentious argument on "open grazing" of cattle has different coloration which cut across politicking, ethnic chauvinism and many shades of interpretation as against contemporary ways of cattle rearing has been done in advanced countries of the world. Connotatively, the paramount thrust of the paper is that all-inclusive measures (research design, both quantitative and qualitative methods) are to be garnered up in order to ensure comprehensive learning, skills acquisition, which will be of immense benefit to all and sundry. Yet, devoid of ethnic stigmatization, race obliteration with respect to culture, etc.., is the hallmark of sustainability.

Recommendation

Summarily and considering the challenge bedeviling the discourse, the paper opined the following as the main thrust of the study.

- 1. The need and vehemently of the opinion that the use of both qualitative and quantitative research design (i.e. the mixed, triangulation methods) for the study of the society in order to ensure robust, effective and consistent findings are the most effective research tools devoid of value-laden in research.
- 2. In this same vein, the study asserts that the introduction of GenAI in inclusive education and research, the pedagogical sociology attuned to the UNESCO's guidance for GenAI in education and research (specifically, the aspect of uncharted ethical issues, and sources of content and learning, and content specificity-of the recipient countries (the study added as part of lacuna observed and filled by this paper) should be topmost in policy formulations for the growth, development and sustainability of the society.

References

- Cyriacus, O., Oghomwen. A. & Odalumah. P., (2025). Parsing emojis legal consideration and More https://www.templars-law.com/app.uploads/2024/01/Parsing-Emojis-Legal-Consideration....
- Eliason, S. (2002). *Max weber's methodologies*, Cambridge: Polity.
- Elster, J. (2007). Explaining social behavior: More Nuts and bolts for the social sciences Cambridge, Cambridge University http://dx.doi.org/10.1017/CBO9780511806421
- Kuhn, T. S. (1962). *The structure of scientific revolution*, University of Chicago Press, pp. 1-11.
- McIntosh, I. (2007). *Classical sociological theory: A reader*. Edinburgh: Edinburgh University Press.
- Merton, R. K. (1995). The Thomas Theorem and the matthew effect. *Social Forces*, 74,379-422. http://dx.doi.org/10.1093/sf/74.2.379.
- Ofule. C. (2024). GenAI and the future of education and research. A Workshop/Seminar Training on Guidance for Generative AI in Education and Research, organized by NOUN in Partnership with UNESCO.
- Olojede, H. T. (2024). *Controversies around generative AI and their implications for education,* A Workshop/Seminar Training on Guidance for Generative AI in Education and Research, organized by NOUN in Partnership with UNESCO.
- Payne, E. F. J. (1974). *Parenga and Paralipomena: Short philosophical essays of Arthur Schopen Hauer*, Oxford: Oxford University Press.
- Retridol Monthly Discourse (2024). https://retridol.nou.edu.ng/monthly.odl.discourse/
- Ritzer, G. (2008). Sociological theory (seventh edition), Boston: McGraw-Hill
- University of Florida (2024). https://guides.lib.usf.edu/c.php?+=1315087\$p=9678778
- Thomas, W. I., & Thomas, D. S. (1928). The child in America: Behavior problems and programmes, Michigan: Johnson Re-print.
- Whitley, G. (1984). The emergence of interpretivism in I.S research, *Information Systems Research*, *6*,376-394 http://dx.doi/10.1287 isre. 6.4 376.
- Wright-Mills, C. (1959). *The sociological imagination*, Oxford University Press, Inc. pp, 3-11.