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PERCEPTION OF FINAL-YEAR STUDENTS OF GODFREY OKOYE UNIVERSITY ON THE RELEVANCE OF ENGLISH STUDIES IN THE AI AND STEM ERA

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Abstract: *This study investigated the perceptions of final-year undergraduate students of English and Literary Studies at Godfrey Okoye University regarding the relevance of their discipline in the Artificial Intelligence (AI) and Science, Technology, Engineering, and Mathematics (STEM) era. Anchored on Human Capital Theory (Becker, 1993), which posits that education and skill acquisition enhance individual productivity and employability, the research examined how English Studies can remain market-relevant by integrating digital literacy, AI tools, and STEM-related communication skills. A descriptive survey design was adopted, with the entire cohort of eight students forming the study population. Data were collected using a structured questionnaire titled* Perception of Final-Year Undergraduate Students on the Relevance of English Studies in the AI and STEM Era *and analyzed using mean and standard deviation, applying a decision benchmark of 2.5. Findings revealed that students generally acknowledged the continued relevance of English Studies when adapted to contemporary market demands, especially through interdisciplinary integration with STEM and the adoption of AI-powered tools. However, they expressed concerns about employability gaps compared to STEM graduates, highlighting the need for curriculum reforms to embed technical communication and digital competencies. These findings align with previous studies (Rafiq et al., 2025; Lee & Stephens, 2020; Mohammed et al., 2024) demonstrating the career advantages of blending linguistic and technical skills. The study concludes that English Studies can thrive in the AI-STEM era if strategically restructured to meet emerging skill demands. It recommends curriculum innovation, partnerships with technology industries, and increased adoption of AI-assisted learning tools. Future research should*

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	expand the scope to multiple institutions and larger populations to validate and generalize the findings.

Introduction

The 21st century has witnessed an unprecedented acceleration in technological innovation, marked by the dominance of Artificial Intelligence (AI) and the global prioritization of Science, Technology, Engineering, and Mathematics (STEM) disciplines. This shift has sparked a growing concern about the place of humanities-based fields, particularly English and Literary Studies, in an era that prizes technical competencies over linguistic, literary, and critical thinking skills. While STEM disciplines are widely celebrated for their role in driving economic growth and technological advancement, recent scholarship emphasizes that the humanities remain essential for fostering creativity, ethical reasoning, and cross-cultural communication (Adeyemi & Johnson, 2022). The current academic climate has therefore triggered debates about whether the traditional skills nurtured by English Studies can maintain relevance alongside rapidly evolving STEM capabilities.

English Studies, traditionally centered on literature, linguistics, and communication, plays a vital role in enhancing skills that complement STEM. These include analytical reasoning, narrative construction, critical interpretation, and persuasive communication. According to Rafiq et al. (2025), global competitiveness increasingly demands bilingual or multilingual proficiency alongside technical expertise, making English proficiency indispensable for STEM professionals navigating the demands of the Fourth Industrial Revolution, also known as Industry 4.0. The discipline's ability to cultivate both creative and analytical thinking positions it as a bridge between technological problem-solving and human-centered communication.

The communication, information retrieval, and knowledge production have changed due to the AI technologies, which creates a question whether English Studies can be relevant in the changing environment. According to Mohammed et al. (2024), the automation of translation, content creation, and data visualization with the help of AI will pose not only opportunities but also threats to disciplines related to languages. These changes have rendered it necessary to have the inclusion of digital literacy and AI literacy in the English Studies curricula such that graduates are competent in using the emerging technological tools.

Another important effect of English in STEM situations is its use. As Lee and Stephens (2021) emphasise, the proficiency in English is a somewhat obvious facilitator of STEM engagement in the English-medium systems of higher education. Nigerian graduates wanting to work and find opportunities in the world market should learn academic English, which greatly

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increases the chances of finding jobs and cooperating internationally, as well as in the context of STEM literacy. In most instances, competency in articulating the technicalities in English translates to the competitiveness of graduates in the international market.

These benefits come with a perceived lack of employment opportunities among the final-year students of English and Literary Studies, especially in the job market that is dominated by STEM subjects. According to Tang et al. (2023), students typically cannot imagine how feasible it is to use their language and literature abilities in fast-growing vocations. This is further compounded by the notion that STEM careers are more lucrative and socially prestigious and the enrollment in humanities courses is decreasing.

To respond to this issue, academicians have suggested the need to modify the English Studies curricula by incorporating interdisciplinary means. According to Okonkwo and Bello (2022), it is proposed to provide English Studies with content related to STEM, project-based learning, and integration of technology with the aim of making graduates competitive. With elements of AI-aided research, technical writing, and media literacy as course elements, English programs may help fill this particular skills gap and more directly gear to the needs of emergent industries.

In Nigeria, English Studies is one of the fundamental fields in higher learning institutions, but has been overshadowed by fewer enrolled students since the influence of the so-called STEM push agenda in the educational funding and policies agenda in Nigeria. According to Ahleyani et al. (2025), the incorporation of AI tools in the classroom practice will allow modernizing the discipline and rendering it more pertinent to the needs of the 21st century. It encompasses the application of AI on creative writing, linguistic analysis, and online feedback thus improving teaching and learning.

Language and STEM have also been examined as a complementary relationship by scholars. According to Park and Choi (2020), both linguistic principles and the understanding of technical concepts can be covered more efficiently and included in the framework of English Studies, which can also include STEM communication. Such interdisciplinary learning in this AI-STEM-humanities nexus is significant in making graduates ready to face the complex world of work.

Although the literature on integrating English and STEM in the world is growing, not many papers have been published regarding the opinions of Nigerian students regarding the AI era. The above gap is especially great among final-year students who are on the verge of entering the job market and whose attitudes can impact further trends in enrollment and curriculum planning.

The present study investigates the perceptions of final-year students of English and Literary Studies at Godfrey Okoye University regarding the relevance of their discipline in the AI and

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STEM era. The aim is to determine whether they view their field as adaptable and valuable within current technological and professional landscapes, as well as to assess whether they believe the curriculum should evolve to incorporate AI tools, STEM communication skills, and digital literacy.

Research Questions

1. How do final-year English and Literary Studies students at Godfrey Okoye University perceive the relevance of their discipline in the AI and STEM era?
2. What is their perception of the employability of English Studies graduates compared to STEM graduates?
3. To what extent do they believe English Studies should incorporate AI tools, STEM communication skills, and digital literacy?

Theoretical Framework

The basis of this study is the Human Capital Theory (Becker, 1993) that argues that education, training, and the acquisition of relevant skills make individuals more economically productive and contribute to the general development of society as well. This theory indicates that knowledge is not the only value of a field of study in question but also a competency to address changes in the market situation offered to learners. With the contemporary world revolving around the power of Artificial Intelligence (AI) and prioritization of Science, Technology, Engineering and Mathematics (STEM), it is only by redefining it in terms of its market-focused competence and ability to combine technical communication, digital literacy, interdisciplinary cooperation, and cross-cultural fluency that we can review the application of English and Literary Studies.

Altogether, the Human Capital Theory approach on investing in English Studies would imply that the pay-offs are measurable in terms of employability, adaptability, and innovation, at least, when the curricula are updated or renewed with STEM-related communication skills and AI-supported language tools introduced into the coursework. By doing so, the graduates will be in a position to cut across the conventional mold of the humanities because they will use their linguistic skills to enter fields that are in great demand such as technology, business, and international communication networks. This theory should also be focused on the fact that an idea that respect should be based on the perceived value of a subject can be linked with how the development of economically viable competencies is perceived which is an important part of how final-year students may view the future of their field in the AI-STEM context.

Empirical Review

Annual studies have given empirical evidence that is quite in line with the main principles behind the Human Capital Theory. Indicatively, Rafiq et al. (2025) found that learning the English language and incorporating its contents with STEM subjects greatly influenced the level of competition of students in their respective careers in Malaysia, implying that interdisciplinary skills training facilitates career-

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readiness. Likewise, Lee and Stephens (2020) have learned that the level of English language proficiency is a pivotal factor in the academic performance of non-native speakers in STEM educational areas, which is one more mark in favor of the combination of linguistic and technical skills in strategic terms.

At the Nigerian local and global level, Ahleyani et al. (2025) found several opportunities and issues that exist in the implementation of teaching STEM-specific words to English language learners. According to their results, although such integration presents several challenges to the learners, interdisciplinary projects ultimately lead to more learners being engaged and retaining skills in the long run. Further, Tang et al. (2023) noted that learners in the STEM context who are learning English often struggle with transitions to technical language, but that transition could be profited a great deal by a systematic language support program that will fill those gaps.

Moreover, the issue of AI-powered language tools as a transformative technology and means of improving cognitive proficiency in academic language, especially in STEM students, was mentioned by Mohammed et al. (2024), who demonstrated that different AI-assisted language technologies can provide individual feedback, mechanical translations, and learning simulations, thus promoting better linguistic literacy of STEM students. Together, the studies provide a display of the importance of English Studies, in their strategic applications, that go beyond being relevant, with the possibility of emerging as the value-added contribution towards success in STEM and AI-related professions. Through such evidence, it is clearly shown that the Human Capital Theory argument that educational investments provide a higher economic and social payoff in areas that match the contemporary and future skill demands of the labor market is indeed true.

Methodology

This study adopted a descriptive survey design, which is suitable for investigating the perceptions of a defined population through structured data collection and statistical analysis. The approach allowed the researcher to obtain accurate and comparable responses on how students view the relevance of English and Literary Studies in an era shaped by Artificial Intelligence (AI) and Science, Technology, Engineering, and Mathematics (STEM).

The population of the study comprised all final-year undergraduate students of English and Literary Studies at Godfrey Okoye University, Enugu. Due to the small size of the cohort, a census approach was used, meaning that every eligible student was included in the study rather than selecting a subset. This resulted in a total of eight (8) respondents, ensuring that the findings reflect the perspectives of the entire group without sampling error.

The instrument for data collection was a structured questionnaire titled Perception of Final-Year Undergraduate Students on the Relevance of English Studies in the AI and STEM

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Era. The questionnaire contained items designed to assess students' perceptions of the career relevance of their discipline, the need for integrating digital and media literacy, and the comparative value of English Studies relative to STEM disciplines.

For data analysis, the study employed mean and standard deviation to summarize and interpret responses. A benchmark mean score of 2.5 was set as the decision rule: items with a mean score of 2.5 or above (≥2.5) were considered "Accept," while items scoring below 2.5 (<2.5) were considered "Reject."

Data Analysis

Table 1: Mean Ratings on the Relevance of English and Literary Studies in the AI and STEM Era

S/N	Item Statement	N	Mean	SD	Decision
1	English Studies remains valuable despite the growing dominance of STEM fields.	8	3.38	0.52	Accept
2	The discipline contributes significantly to interdisciplinary problem-solving.	8	3.25	0.46	Accept
3	AI will enhance rather than replace English-related professions.	8	3.00	0.54	Accept
4	Skills from English Studies are essential for cultural preservation in the digital era.	8	3.50	0.53	Accept
5	English Studies promotes critical thinking applicable across AI and STEM contexts.	8	3.63	0.52	Accept
6	Integration with STEM content will strengthen the relevance of English Studies.	8	3.38	0.52	Accept
Grand Mean			**3.36**		**Accept**

Table 2: Mean Ratings on Perceived Employability of English Studies Graduates Compared to STEM Graduates

S/N	Item Statement	N	Mean	SD	Decision
7	English graduates face more limited job opportunities than STEM graduates.	8	2.38	0.62	Reject
8	Communication expertise gives English graduates a competitive career advantage.	8	3.50	0.53	Accept

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S/N	Item Statement	N	Mean	SD	Decision
9	Media, publishing, and creative industries provide ample opportunities for graduates.	8	3.38	0.52	Accept
10	Globalisation increases the demand for English Studies graduates in multinational organisations.	8	3.63	0.52	Accept
11	Digital content creation offers career opportunities equal to STEM careers.	8	3.25	0.46	Accept
12	Collaboration with STEM professionals expands career prospects for English graduates.	8	3.50	0.53	Accept
Grand Mean			**3.27**		**Accept**

Table 3: Mean Ratings on the Need to Incorporate AI Tools, STEM Communication Skills, and Digital Literacy into English Studies

S/N	Item Statement	N	Mean	SD	Decision
13	English Studies should integrate AI-powered writing and research tools.	8	3.63	0.52	Accept
14	Students should be trained in STEM-related communication and technical writing skills.	8	3.50	0.53	Accept
15	Digital literacy should be a core component of the English Studies curriculum.	8	3.75	0.46	Accept
16	AI-assisted translation and editing tools should be part of English Studies training.	8	3.38	0.52	Accept
17	Courses should include training in interdisciplinary research methods with STEM fields.	8	3.50	0.53	Accept
18	Practical projects combining English Studies with technology should be compulsory.	8	3.63	0.52	Accept
Grand Mean			**3.56**		**Accept**

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Discussion of Findings

The findings of this study indicated that final year undergraduate students in English and Literary Studies at Godfrey Okoye University have a general view in considering their discipline as relevant in the era of AI and STEM though there are some reservations in the minds of the students regarding employability compared to the STEM graduates. A majority of the respondents believed that English Studies can provide transferable skills, including conversation and trade skills, critical thinking, and cultural literacy; all of which are necessary in a technologically oriented workplace. It is consistent with Rafiq et al. (2025), who proved that the effectiveness of language learning material and STEM content increased the global competitiveness of students and indicated the broader career perspective of the graduates with both linguistic and technical skills.

Learners also recognized that the field may make it more relevant by including tools of Artificial Intelligence, practices in communicating STEM, and digital literacy into its curriculum. This opinion reflects the finding of Lee and Stephens (2020) that language competence directly impacts STEM achievement in non-native speakers, which would mean that English Studies students have the potential to enhance the marketability of their credentials by supplementing their linguistic skills with technological ones.

Also, the results indicated that there is a high belief that interdisciplinary methods like integrating the STEM vocabulary and project learning into English classes would raise engagement and professional preparation. This is by a study by Ahleyani et al. (2025), which revealed that although the addition of STEM-specific vocabulary in English language instructions might present short-term challenges, it does play a long-term role in promoting enhancement in skill retention and greater learning. The views of the students also echo with Tang et al. (2023), who emphasized the critical role of systematic language support programs towards addressing the gaps that exist during transition to any given technical subject among English learners.

Lastly, the students shared the opinion that language tools powered by AI had the potential to make the learning process more productive, which makes sense in light of Mohammed et al. (2024), who demonstrated that these technologies have a considerable effect on cognitive academic language proficiency, as they provide individual responses and interactivities through simulations. Overall, the findings reinforce the Human Capital Theory premise that education yields higher economic and social returns when aligned with evolving market demands—in this case, through the integration of digital, interdisciplinary, and AI-based competencies into English Studies.

Conclusion

This study concludes that while English and Literary Studies remains relevant in the AI and STEM era, its full potential lies in embracing a

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more interdisciplinary and technology-integrated approach. The unanimous perception among the respondents is that the discipline's employability prospects could be strengthened by embedding AI tools, STEM communication skills, and digital literacy into the curriculum. In line with Human Capital Theory, such integration would enhance graduates' adaptability, competitiveness, and capacity to contribute meaningfully in technologically advanced and globalized labor markets.

Recommendations

1. **Curriculum Integration of AI and Digital Skills** – English Studies programs should embed AI-powered tools, digital literacy, and STEM communication modules into course content to enhance graduate employability.
2. **Project-Based Interdisciplinary Learning** – Collaborative projects between English Studies and STEM departments should be institutionalized to encourage cross-disciplinary competence and innovation.
3. **AI-Supported Language Training** – Universities should adopt AI-based language learning platforms to provide personalized feedback, vocabulary enrichment, and simulation-based communication practice.
4. **Industry Partnership and Internship Opportunities** – Partnerships with tech companies, media organizations, and research institutions should be developed to expose students to real-world applications of English in AI and STEM contexts.
5. **Capacity-Building for Lecturers** – Academic staff should be trained in emerging educational technologies and interdisciplinary pedagogies to ensure effective curriculum delivery.

Suggestions for Future Research

- A comparative study involving multiple universities across Nigeria to determine whether the perceptions found here are consistent nationwide.
- Longitudinal research tracking English Studies graduates' career trajectories in AI- and STEM-influenced labor markets.
- Experimental studies on the effectiveness of AI-powered language tools in enhancing STEM-related communication skills among English Studies students.
- Investigations into employer perspectives on the value of English Studies graduates with interdisciplinary and digital skill sets.

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