



Assessment of Stakeholders' Perspectives on the Effectiveness of the Technical Colleges' Curriculum in Addressing Societal Needs in Gombe State

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ABSTRACT

In an era marked by rapid technological advancements, globalization, and evolving labor markets, aligning educational systems with the needs of society and industry has become increasingly urgent. However, the alignment of technical college curricula with these evolving demands remains a contentious issue, particularly in regions such as Gombe State. This challenge is exacerbated by concerns about the quality of education, outdated teaching methods, and the relevance of curricula to contemporary industry practices. This study aims to evaluate the effectiveness of technical colleges' curricula in Gombe State from the perspectives of various stakeholders. Understanding their views is crucial for identifying gaps in the curriculum and proposing potential improvements. Key issues driving this study include systemic challenges such as inadequate funding, lack of modern educational tools, and large teacher-student ratios. Teachers and administrators report that the curriculum is inflexible and outdated, limiting students' ability to acquire essential, up-to-date skills. On the other hand, industry professionals argue that many technical college graduates are insufficiently prepared for the workforce due to a lack of emphasis on hands-on training and contemporary technologies. This study was guided by two main objectives, two research questions, and one hypothesis. A descriptive survey research design was employed, with a total population of 170 participants and a sample size of 130 respondents. Data were collected using a questionnaire, whose reliability was confirmed with a split-half coefficient of 0.75. Data analysis was conducted using mean, standard deviation, and t-test with a significance level of 0.05 via the Statistical Package for Social Sciences (SPSS) version 23. The findings indicate that most educators believe the curriculum adequately prepares students for societal challenges and the workforce. However, there is a clear need to strengthen areas like problem-solving and addressing global challenges. Furthermore, the t-test results show no significant difference in the perspectives of educators and industry professionals regarding the effectiveness of the current technical college curriculum in meeting societal needs.

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INTRODUCTION

The relationship between educational curricula and societal needs has been a central

focus of academic and policy debates, especially in developing countries like Nigeria. As the world rapidly advances in technology, globalized

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economies, and changing labor markets, the importance of aligning educational systems with societal and industry needs becomes ever more pressing. Specifically, technical and vocational education and training (TVET) is increasingly viewed as a critical driver of economic development and social mobility, as it equips students with practical skills necessary to meet the demands of the workforce (Obi, Okoro, & Ugwu, 2020). However, the alignment of technical college curricula with the evolving needs of society remains a contentious issue, particularly in states like Gombe, Nigeria, where educational infrastructure and resources are often limited.

In Nigeria, technical colleges are expected to prepare students for the workforce by providing them with the relevant skills and knowledge needed to meet both local and national economic demands. However, According to Adeyemo & Bello, (2021), despite substantial investments in the educational sector, there remains a significant gap between the skills students acquire in technical colleges and the needs of the job market. This gap is compounded by concerns over the quality of education, outdated teaching methods, and the relevance of the curriculum to current industry practices (Ibrahim & Sulaimon, 2019). In particular, the mismatch between the curriculum of technical colleges and the practical requirements of industries is often cited as a major barrier to addressing societal needs effectively (Dike, 2020). Stakeholders, including educators, industry professionals, policymakers, and students, have varying perspectives on the effectiveness of the current curriculum in technical colleges. These stakeholders are key in evaluating the curriculum's responsiveness to societal needs and determining its role in bridging the gap between education and employment (Ogunyemi, 2023). According to Tunde & Yakubu (2022), teachers and administrators, for instance, often report that the curriculum is rigid and outdated, which limits students' ability to acquire modern, in-demand skills. In contrast, industry stakeholders argue that many graduates from technical colleges are not adequately prepared to meet the challenges of the workforce due to the insufficient emphasis on

hands-on training and current technologies (Ayodele & Ojo, 2021).

The state of education in Gombe, like in many parts of Nigeria, faces systemic challenges such as insufficient funding, lack of modern educational tools, and a high teacher-student ratio (Yusuf & Adamu, 2019). The curriculum in technical colleges within the state has been described as heavily theoretical, with limited integration of practical and real-world problem-solving skills (Omotayo & Alabi, 2022). This issue is particularly pertinent in Gombe, where the local economy is predominantly agrarian, and there is a growing demand for technical skills in areas such as agriculture, construction, and small-scale manufacturing. If the technical colleges curriculum does not align with the needs of these sectors, it risks rendering students ill-equipped to address local economic challenges. Furthermore, the alignment of technical curricula with societal needs requires continuous review and input from a diverse range of stakeholders to ensure that the content taught in schools mirrors the current demands of the labor market and broader society (Musa, Yusuf, & Ali 2023).

In recent years, efforts have been made to reform Nigeria's TVET sector, but these reforms have often been fragmented and lack comprehensive stakeholder engagement. Stakeholder perspectives, therefore, offer valuable insights into understanding how effectively the technical colleges curriculum meets the needs of society, including employment prospects, economic development, and social integration. This study seeks to examine the effectiveness of the technical colleges' curriculum in Gombe State from the perspectives of various stakeholders. Understanding their viewpoints is essential for identifying gaps in the curriculum and proposing strategies for improvement. By addressing these gaps, it is possible to create a more effective technical education system that not only enhances students' employability but also contributes meaningfully to the economic and social development of Gombe State.

Purpose of the Study

The purpose of the study is to assess stakeholders' perspectives on the effectiveness of

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the technical colleges' curriculum in addressing societal needs in Gombe state, specifically, the study sought to:

1. To determine the perspectives of educators, on the effectiveness of the technical colleges' curriculum in addressing societal needs in Gombe state.
2. To determine the perspectives of industry professionals on the effectiveness of the technical colleges' curriculum in addressing societal needs in Gombe state.

Research Questions

The following research questions were formulated to guide the study;

1. What are the perspectives of educators, on the effectiveness of the technical colleges' curriculum in addressing societal needs in Gombe state?
2. What are the perspectives of industry professionals on the effectiveness of the technical colleges' curriculum in addressing societal needs in Gombe state?

Research Hypotheses

One hypothesis was poised to guide the study and was tested at 0.05 level of significance.

H₀₁. There is no significant difference in the perspectives of educators and industries professionals on the effectiveness of the current technical colleges' curriculum in addressing societal needs

METHODOLOGY

A descriptive survey research design was employed in this study, as it allowed for the examination of variables in their natural form without any manipulation. The study was

conducted in Gombe State, with a total population of 170 participants, consisting of 124 technical teachers and 46 industry professionals from both small- and large-scale industries within the localities across the state. A purposive sampling technique was used to select 100 educators, including technical teachers and workshop technologists, from six government science and technical colleges across various local government areas in the state. Additionally, a simple random sampling method was applied to select 30 industry professionals from some selected small- and large-scale industries including technical workshops across the state, resulting in a total sample size of 130 participants.

The data collection instrument was a questionnaire titled "Stakeholders' Perspectives on the Effectiveness of the Technical Colleges Curriculum in Addressing Societal Needs in Gombe State" (SPETCCASNGQ), which was validated by three experts from the Federal College of Education (Technical), Gombe. The reliability of the instrument was determined using the split-half method, yielding a coefficient of 0.75. The researchers administered the questionnaires directly to the respondents and allowed them two weeks to complete and return the forms. With the assistance of research assistants, all distributed questionnaires were successfully collected. Data analysis was carried out using mean and standard deviation and the only hypothesis was tested using t-test with 0.05 level of significance and with the Statistical Package for Social Sciences (SPSS) version 23.

RESULTS

Research question one: What are the perspectives of educators, on the effectiveness of the technical colleges curriculum in addressing societal needs in Gombe state?

Table 1: Mean and standard deviation on perspectives of Educators on the effectiveness of the technical Colleges curriculum in addressing societal needs

| S/N | Items | N | \bar{x} | SD | Remark |
|-----|--|-----|-----------|------|----------|
| 1 | The current technical colleges curriculum prepares students well for societal challenges. | 100 | 4.43 | 1.18 | Accepted |
| 2 | The skills taught in the curriculum align with the needs of society. | 100 | 4.48 | 0.70 | Accepted |
| 3 | The curriculum includes topics that are relevant to today's job market. | 100 | 4.42 | 1.32 | Accepted |
| 4 | The technical curriculum helps students develop problem-solving skills needed in society. | 100 | 2.28 | 1.17 | Rejected |
| 5 | I feel confident that the curriculum will help contribute to societal development. | 100 | 4.53 | 1.44 | Accepted |
| 6 | The current technical curriculum meets the evolving needs of society. | 100 | 4.00 | 1.33 | Accepted |
| 7 | The curriculum is regularly updated to reflect societal and industry changes. | 100 | 4.07 | 1.16 | Accepted |
| 8 | The curriculum equips students with the skills needed by today's employers. | 100 | 4.88 | 1.22 | Accepted |
| 9 | The technical curriculum supports the development of skills that address global societal challenges. | 100 | 4.50 | 1.24 | Accepted |
| 10 | There is adequate emphasis on practical, real-world applications in the curriculum. | 100 | 4.43 | 0.91 | Accepted |
| 11 | Technical colleges graduates possess skills relevant to the needs of industry. | 100 | 4.08 | 1.06 | Accepted |
| 12 | The current technical curriculum adequately prepares students for the demands of the workforce. | 100 | 4.35 | 0.95 | Accepted |
| 13 | Employers' feedback is effectively incorporated into the curriculum. | 100 | 4.42 | 0.85 | Accepted |
| 14 | The curriculum is effective in addressing the long-term societal needs of the workforce. | 100 | 4.17 | 1.09 | Rejected |
| 15 | The technical curriculum helps students gain skills that are critical for solving societal problems. | 100 | 1.43 | 0.78 | Rejected |

Total \bar{x} = 61.46 $G\bar{x}$ of table = 4.09

\bar{x} = Mean Response of Industry of respondents **SD** = Standard Deviation **$G\bar{x}$** = Grand mean

The survey results on Table 1, reveal a generally positive perception among educators from the various technical institution about the effectiveness of the technical school curriculum in addressing societal needs in Gombe state. With a grand mean of 4.09, well above the benchmark

mean of 3.0, the findings suggest that most stakeholders believe the curriculum is effective in preparing students for societal challenges, job markets, and the workforce. Most items related to this set of stakeholders show favorable responses, with mean scores ranging from 4.42 to

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4.48, indicating that the curriculum is perceived as adequately preparing students for societal challenges. Items such as the alignment of the curriculum with societal needs (Mean = 4.48) and the development of relevant skills (Mean = 4.42) received particularly high ratings, with standard deviations ranging from 0.70 to 1.32, demonstrating relatively consistent responses among educators. While the majority of Educators agree that the technical curriculum is effective in preparing students for employment and addressing societal needs, there is a clear indication that certain areas, such as problem-

solving and addressing global challenges, need to be strengthened. The low scores for Item 4 and Item 15 warrant further examination and possible revisions to ensure the curriculum aligns with the expectations of both society and industry in developing well-rounded, problem-solving professionals.

Research question two: What are the perspectives of industry professionals on the effectiveness of the technical colleges curriculum in addressing societal needs in Gombe state?

Table 2: Mean and standard deviation on perspectives of industry professionals on the effectiveness of the technical colleges curriculum in addressing societal needs

| S/N | Items | N | \bar{x} | SD | Remark |
|-----|--|----|-----------|------|----------|
| 16 | The current technical college curriculum prepares students well for societal challenges. | 30 | 4.50 | 1.00 | Accepted |
| 17 | The skills taught in the curriculum align with the needs of society. | 30 | 4.35 | 1.04 | Accepted |
| 18 | The curriculum includes topics that are relevant to today's job market. | 30 | 4.40 | .940 | Accepted |
| 19 | The technical curriculum helps students develop problem-solving skills needed in society. | 30 | 2.87 | 1.23 | Rejected |
| 20 | I feel confident that the curriculum will help contribute to societal development. | 30 | 4.30 | .979 | Accepted |
| 21 | The current technical curriculum meets the evolving needs of society. | 30 | 4.35 | 1.27 | Accepted |
| 22 | The curriculum is regularly updated to reflect societal and industry changes. | 30 | 4.55 | 0.95 | Accepted |
| 23 | The curriculum equips students with the skills needed by today's employers. | 30 | 4.45 | .999 | Accepted |
| 24 | The technical curriculum supports the development of skills that address global societal challenges. | 30 | 4.50 | 1.00 | Accepted |
| 25 | There is adequate emphasis on practical, real-world applications in the curriculum. | 30 | 4.45 | 1.10 | Accepted |
| 26 | Technical collegel graduates possess skills relevant to the needs of the industry. | 30 | 4.25 | 1.02 | Accepted |
| 27 | The current technical curriculum adequately prepares students for the demands of the workforce. | 30 | 4.55 | 0.95 | Accepted |
| 28 | Employers' feedback is effectively incorporated into the curriculum. | 30 | 4.20 | 1.28 | Accepted |

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| | | | | | |
|--|--|----|------|------|----------|
| 29 | The curriculum is effective in addressing the long-term societal needs of the workforce. | 30 | 4.35 | 1.04 | Accepted |
| 30 | The technical curriculum helps students gain skills that are critical for solving societal problems. | 30 | 3.15 | 0.78 | |
| Total \bar{x} = 64.95 $G\bar{x}$ of table = 4.33 | | | | | |

\bar{x} = Mean Response of Industry of respondents **SD** = Standard Deviation $G\bar{x}$ = Grand mean

The survey results on Table 2, shows a favourable perception among industry professionals across workshops and local industries within the state with regards to the effectiveness of the technical school curriculum in addressing societal needs in Gombe state. With a grand mean of 4.33, well above the benchmark mean of 3.0, the findings suggest that most industry professionals believe the curriculum is effective in preparing students for societal challenges, job markets, and the workforce. Most items related to these particular stakeholders show favorable responses, with mean scores ranging between 3.15 to 4.55, showing that the curriculum is perceived as adequately preparing students for societal challenges. Except for item 19 which states that the technical curriculum helps students develop problem-solving skills needed in society that was rejected with a low mean score of 2.87 with a standard deviation of 1.23. From the

table, almost all of Industry professionals agree that the technical curriculum is effective in preparing students for employment and addressing societal needs, there is a clear indication that certain areas, such as problem-solving and addressing global challenges, need to be strengthened. The low scores for Item 19 calls for further examination and possible revisions to ensure the curriculum aligns with the expectations of both society and industry in developing well-rounded, problem-solving professionals.

Research Hypothesis

H₀: there is no significant difference in the perspectives of educators and industries professionals on the effectiveness of the technical colleges curriculum in addressing societal needs

Table 3: T-test on the perspectives of educators and industries professionals on the effectiveness of the technical colleges curriculum in addressing societal needs

| Group | N | Mean | t | df | P-value | Decision |
|--------------------------|-----|------|-------|-----|---------|-----------------|
| Educators | 100 | 4.09 | 0.658 | 128 | 0.516 | Accepted |
| Industries professionals | 30 | 4.33 | | | | |

Key: df=degree of freedom P>0.05

The hypothesis on the perspectives of stakeholders' i.e educators and industries professionals on the effectiveness of the technical school curriculum in addressing societal needs shown on table 3, With reference to the T-test result from the SPSS, which indicate the significance level of responses, shows that, the value of t found on the table is 0.658, and the p-value for t is given as 0.516 which is greater than

the Alpha value of 0.05 for this reason the null hypothesis was accepted. This shows that the null hypothesis which states that; there is no significant difference in the perspectives of educators and industries professionals on the effectiveness of the technical colleges curriculum in addressing societal needs, stands accepted.

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FINDINGS OF THE STUDY

1. Table 1, results reveal a generally positive perception among educators about the effectiveness of the current technical school curriculum in addressing societal needs as findings suggest that most educators believe the curriculum is effective in preparing students for societal challenges, job markets, and the workforce. However, there is a clear indication that certain areas, such as problem-solving and addressing global challenges, need to be strengthened.
2. Table 2, findings shows that most industry professionals agreed the curriculum is effective in preparing students for societal challenges, job markets, and the workforce. However, the capacity of the curriculum in helping students to develop problem-solving skills needed in society warrant further examination and possible revisions to ensure the curriculum aligns with the expectations of both society and industry in developing well-rounded, problem-solving professionals.
3. From table 3, the T-test of the two opinion group, shows that there is no significant difference in the perspectives of educators and industries professionals on the effectiveness of the current technical school curriculum in addressing societal needs

DISCUSSION OF FINDINGS

Findings from research question one agrees with a study by Yusuf and Adebayo (2020) emphasized that the curriculum is effective however, many instructors face significant challenges in delivering a modern, relevant curriculum due to inadequate infrastructure and a shortage of qualified personnel in technical fields. This also aligns with Adamu (2021), who noted that there is lack of professional development opportunities, which hinders their ability to teach industry standards effectively. Moreover, some educators argue that the curriculum is too rigid and does not allow for the incorporation of new technologies or emerging fields. For example, technical training in fields such as digital manufacturing and renewable energy is virtually absent from the curriculum, despite the growing

demand for these skills in the labor market (Yusuf & Adebayo, 2020). This gap reflects broader concerns regarding the inability of the curriculum to evolve in response to rapidly changing industry needs.

Findings from research question two is in agreement with a study by Aliyu and Suleiman (2022), who asserted a certain report by employers that, while graduates possess basic technical knowledge, they often lack the practical experience and critical thinking abilities needed to solve real-world problems. In disagreement, Akinyemi (2021), stated that employers have particularly criticized the narrow focus of the curriculum, which they argue does not equip students with the broad skill set necessary for success in diverse industries.

From the available hypothesis, findings disagreed with Adamu, (2021) who stated that both educators and employers have raised concerns that the curriculum does not adequately address the evolving demands of the labor market, particularly in fields such as information technology, renewable energy, and advanced manufacturing. The lack of alignment between the curriculum and industry needs is a significant challenge, as it contributes to high rates of graduate unemployment and underemployment. However, it agrees with Yusuf & Adebayo (2020), who affirmed that, the curriculum is effective but resource limitations are a critical issue, as schools often lack modern equipment, software, and instructional materials, which limits the quality of practical training that students receive.

CONCLUSION

This study has provided valuable insights into the perspectives of stakeholders regarding the effectiveness of the technical colleges' curriculum in Gombe State in addressing societal needs. The findings indicate a generally positive perception from both educators and industry employers, who agree that the curriculum is largely effective in preparing students for societal challenges, the job market, and the workforce. Both groups recognize the relevance of the curriculum in equipping students with the necessary skills for societal contributions.



However, the study highlights a shared concern regarding the need for improvement in fostering problem-solving abilities and addressing global challenges within the curriculum. Both educators and employers believe that these areas require further attention to ensure that the curriculum aligns with the evolving demands of society and industry. Furthermore, the results from the T-test analysis show that there is no significant difference in the opinions of educators and industry employers, suggesting a consensus between the two groups on the overall effectiveness of the curriculum in addressing societal needs. This alignment between the perspectives of these key stakeholders indicates a solid foundation for enhancing the curriculum based on their collective insights. Moving forward, it is crucial to integrate strategies that emphasize critical thinking, problem-solving, and adaptability to better prepare students for complex societal challenges and the dynamic needs of the workforce.

RECOMMENDATIONS

Based on the findings of the study, the following were recommended

1. A structured and continuous feedback loop should be established, involving students, educators, and industry professionals. This would ensure that the curriculum remains responsive to the evolving needs of both the educational sector and the labor market, thereby enabling timely adjustments
2. The government should consider offering incentives such as tax breaks or subsidies to industries that collaborate with technical schools in curriculum development, provision of training equipment, or offering internships and apprenticeships to students.
3. Students should be more actively involved in the curriculum development process. Their perspectives on what skills are most relevant for their future careers should be incorporated, ensuring that their education is both practical and forward-looking.

REFERENCES

- Adamu, M. (2021). Challenges faced by technical educators in Nigeria: A case study of Gombe State. *International Journal of Educational Research and Practice*, 12(2), 122-136.
<https://doi.org/10.4324/ijerp.2021.0145>
- Adeyemo, A. A., & Bello, M. O. (2021). Reforming vocational education in Nigeria: Issues and challenges. *Journal of Vocational Education and Training*, 73(3), 348-362.
<https://doi.org/10.1080/13636820.2021.1882046>
- Akinyemi, M. (2021). Evaluating technical school curricula in Ogun State: A societal needs assessment. *Journal of Educational Research*, 18(4), 110-123.
- Aliyu, M., & Suleiman, R. (2022). Mismatch between technical education and labor market needs in Nigeria: Employer perspectives from Gombe State. *Journal of Education and Work*, 35(1), 91-105.
<https://doi.org/10.1080/13639080.2022.1999932>
- Ayodele, A., & Ojo, O. (2021). Curriculum relevance and the skills gap in Nigerian technical schools. *International Journal of Education and Development*, 7(1), 45-57. <https://doi.org/10.23856/702>
- Dike, V. E. (2020). The role of technical education in national development: The Nigerian perspective. *Journal of Educational Studies*, 19(2), 101-113.
<https://doi.org/10.2139/ssrn.3582342>
- Ibrahim, M., & Sulaimon, A. (2019). Assessing the alignment of technical school curricula with industry needs in Northern Nigeria. *Nigerian Journal of Education and Training*, 12(4), 38-51.
<https://doi.org/10.1234/njet.2019.067>
- Musa, S., Yusof, R., & Ali, M. (2023). Stakeholder engagement in curriculum development: Enhancing the impact of TVET in Nigeria. *Education*



- and Society, 41(1), 70-84.
<https://doi.org/10.1029/es2023.004>
- Obi, D., Okoro, U., & Ugwu, A. (2020). Challenges facing the technical education sector in Nigeria: A case study of the North East Zone. *Journal of Education and Practice*, 11(6), 50-63.
<https://doi.org/10.7176/jep/11-6-06>
- Omotayo, A., & Alabi, M. (2022). The effectiveness of technical education in Nigeria: An analysis of curriculum and teaching methods. *Education and Development Review*, 15(2), 113-126.
<https://doi.org/10.26653/edr.2022.021>
- Ogunyemi, A. (2023). Aligning vocational training with labor market needs in Nigeria: A case study of Gombe State. *Nigerian Journal of Vocational Education Research*, 14(1), 88-100.
<https://doi.org/10.5281/zenodo.7176229>
- Tunde, A. S., & Yakubu, S. (2022). Teachers' perceptions of technical education curriculum in Nigeria: Implications for reform. *Journal of Education and Practice*, 23(1), 67-82.
<https://doi.org/10.1234/jep.2022.089>
- Yusuf, M. I., & Adamu, J. (2019). Education for economic development: A focus on Gombe State's technical education. *Nigerian Journal of Educational Development*, 18(3), 56-69.
<https://doi.org/10.1016/j.njed.2019.09.004>
- Yusuf, T., & Adebayo, M. (2020). Addressing the curriculum gaps in Nigerian technical schools: The role of educators. *International Journal of Educational Development*, 75, 102108.
<https://doi.org/10.1016/j.ijedudev.2020.102108>