

## Assessment of Civic Education Curriculum in Minimising Illegal Weapon Possession among Students in Nigeria: Implication for Artificial Intelligence in Education

Uthman Shehu Lawal<sup>1</sup>, Zohaib Hassan Sain<sup>2\*</sup>, Ibrahim Maimunat Adoke<sup>3</sup>,  
Munirat Binta Abdullahi<sup>4</sup>, Shahzadi Hina Sain<sup>5</sup>

<sup>1,4</sup>Department of Education Foundations, Kaduna State University, Nigeria

<sup>2</sup>Department of Business & Management Sciences, Superior University,  
Pakistan

<sup>3</sup>Department of Social Studies, Federal College of Education, Nigeria

<sup>5</sup>Department of Operations, Beaconhouse Head Office, Pakistan

**Corresponding Author:** Zohaib Hassan Sain [zohaib3746@gmail.com](mailto:zohaib3746@gmail.com)

---

### ARTICLE INFO

*Keywords:* Artificial Intelligence (AI), Civic Education Curriculum, Illegal Weapon Possession

*Received :* 05, October

*Revised :* 20, October

*Accepted:* 04, November

©2024 Lawal, Sain, Adoke, Abdullahi, Sain : This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

Small Arms and Light Weapons (SALW) possession among youths in North-West Nigeria exacerbates violence and crime. This study assessed the effectiveness of civic education in reducing illegal weapon possession among secondary school students. Using a survey of 500 students from Kano, Kaduna, and Sokoto, findings showed moderate success in promoting peace but limited impact on changing attitudes and conflict resolution. Civic education lacked practical strategies against gang influence. Integrating AI could enhance learning and evaluation. The study recommends curriculum improvements, community collaboration, and teacher training to strengthen civic education's role in addressing youth violence.

---

## **INTRODUCTION**

The proliferation of small arms and light weapons (SALW) has become a major security challenge in Nigeria, particularly in the North-West region. According to a 2016 survey, an estimated 6.4-6.5 million firearms were in civilian hands in Nigeria. This proliferation has fueled armed violence, with approximately 8 million Nigerians affected annually (Adesina, 2020; Alozie, 2020; Small Arms Survey, 2016). The proliferation of small arms and light weapons among youth, including school students, has become a growing concern in North-West Nigeria in recent years (Adesina, 2020). Studies have found that criminal gangs and bandits are increasingly targeting and recruiting students, providing them with weapons, and involving them in extortion schemes (Ibrahim & Ahmed, 2022).

A survey of secondary schools in Zamfara State found that approximately 5-10% of male students reported having access to firearms, either through personal ownership or connections to armed groups (Usman et al., 2023). The same study found that gangs had approached up to 15% of students to participate in extortion activities targeting other students or community members. The involvement of students in arms possession and criminal activities has been linked to several factors, including poverty, unemployment, and the normalization of violence in conflict-affected communities (Garba et al., 2022; Aliyu & Bello, 2021). More so, the mass abduction of students by bandits has created a climate of fear that some youth attempt to counter by joining armed groups themselves (Nwankwo, 2024). Additionally, a study in Kenya, Nigeria, Dominican Republic, and South Africa showed that civic education positively impacted citizenship knowledge and participation (Finkel et al., 2018; Bratton, M. & Gyimah-Boadi, 2016; Finkel & Smith, 2016; Finkel, 2014).

Civic education has been proposed as a potential intervention to address this issue among youth. The Civic Education curriculum in Nigeria has been identified as a critical tool for promoting responsible citizenship and addressing social issues, including the possession and use of illegal weapons among secondary school students. The curriculum, reintroduced in 2008 and implemented nationwide by 2012, aims to instill democratic values, respect for law and order, and civic responsibility among learners (NERDC, 2017). This educational approach is particularly relevant in regions such as North-West Nigeria, where youth involvement in violence and illegal weapon possession has been a growing concern.

## **LITERATURE REVIEW**

The term "dangerous weapon" is often used in legal contexts and may include firearms, silencers, short-barreled shotguns, and ballistic knives (Epperson et al., 2024; O'Malley Law Office, 2023). "Illegal weapons" can encompass items like blackjacks, gas guns, metallic knuckles, and certain types of knives. Possession of these weapons can result in misdemeanor or felony charges, depending on the specific item and circumstances (Washington State Legislature, 2023). On the other hand, extortion is "the practice of obtaining money, goods, or services through the use of actual or implied violence or force. It involves organized criminal groups that use threats and violence to extract

money from individuals, schools, and businesses. A key feature of gang extortion is the ability to "bring the force" down upon assets and their owners, a defining characteristic of the extortion business (Bjerregaard & Lizotte, 2022).

Previous research findings of Garba et al. (2022), Usman and Ibrahim (2021), Bello and Abubakar (2020), Ahmed et al. (2019), and Olatunji (2018) revealed that civic education significantly reduced illegal weapon possession among secondary school students. The researchers observed decreased weapon-related incidents after implementing an enhanced civic education curriculum. On the contrary, the findings of Adamu et al. (2023), Okoro and Nwankwo (2021), Eze (2020), Nnamani et al. (2018), Musa and Aliyu (2017) found no significant difference in illegal weapon possession rates between students who received civic education and those who did not. Thus, it was concluded that civic education alone was insufficient in addressing illegal weapon possession, suggesting that multi-faceted interventions, including community involvement and law enforcement, were necessary for meaningful change.

Also, Sundawa and Rohayani (2021), Sofadekan (2017), and Oluwagbohunmi (2017) revealed that civic education can be an important tool for nation-building and instilling values of responsible citizenship in Nigerian youth. These studies noted that civic education helps students imbibe the values, norms, knowledge, and actions that will promote national development. This suggests civic education has the potential to shape attitudes away from violence. However, Ibe et al. (2024) and Chansa (2023) identified gaps in the practical application of civic education for conflict resolution. While civic education provided knowledge on human rights and participation, it has seemingly not produced the desired results, especially concerning conflict resolution.

Furthermore, the findings of Magaji et al. (2024), Muhammad et al. (2023), Bello (2021), Omundi and Okendo (2018), and Wahab (2018) revealed that civic education improved students' attitudes toward social cohesion indirectly reducing gang-related activities. On the other hand, contradicting the findings of Adedigba and Wahab (2019), Oladiti (2018), Onuoha and Okam (2017), Philip-Ogoh (2016), Kazi (2015) revealed that civic education alone is insufficient to address gang-related-issues among students. Thus, while civic education aims to reduce gang activities, its effectiveness is limited without broader societal changes.

Additionally, Omoloso et al. (2017) and Yusuf and Adika (2017) discovered that civic education aims to build informed, responsible, and morally upright citizens by instilling fundamental social values and virtues. The emphasis is on creating awareness of civic duties, rights, and responsibilities, which aligns with the study's finding that civic education promotes values discouraging gang participation. However, the study of Wahab (2022) highlights a gap in civic education's capacity to provide practical strategies for resisting gang pressure and understanding the legal implications of gang activities. While civic education has potential, its effectiveness in minimizing illegal weapon possession and use among secondary school

students in North-West Nigeria remains understudied. Thus, this fills the gap by exploring the following research questions and hypotheses:

### **Research Questions**

*Research Question 1* : What is the efficacy of civic education curriculum contents in minimising illegal weapon possession and use among secondary school students in north-west Nigeria?

*Research Question 2* : What is the efficacy of civic education evaluation techniques in minimising gang extortion among secondary school students in north-west Nigeria?

### **Research Hypothesis**

*H<sub>01</sub>* : There is no significant difference in the mean response scores on the efficacy of civic education curriculum contents in minimising illegal weapon possession and use among secondary school students in north-west Nigeria.

*H<sub>02</sub>* : There is no significant difference in the mean response scores on the efficacy of civic education evaluation techniques in minimising gang extortion among secondary school students in north-west Nigeria.

## **METHODOLOGY**

The research design adopted for this study was survey design. This study population comprises all SS II students in Kano, Kaduna, and Sokoto, Nigeria's north-west zone. Thus, according to the Nigeria Digest of Education Statistics (2020), the study population is one hundred and forty-three thousand five hundred and fifty-nine (143,559). The study sampled five hundred (500) Senior Secondary school students' SS II for the study, as determined by Wassanet's (2010) Research adviser, which suggested that, for a population between 120,000-150,000, a sample of five hundred (500) participants is appropriate for the study at 0.05 level of significance.

The study adopted two sampling techniques: stratified and proportionate sampling techniques. The instrument titled "Efficacy of Civic Education Curriculum in Minimising Illegal Possession and Gang Extortion Scale (EFICULPGE)" was used for data collection. The questionnaire was constructed using a 4-point modified Likert scale: Strongly Agree, Agree, Disagree, and Strongly Disagree with scores of four, three, two, and one point, respectively. To ensure the instrument's content validity, a draft copy of the questionnaire was submitted to Social Studies, curriculum, statistician, and language experts in the Faculty of Education, A.B.U., Zaria. Their expert critique and input on the face and content validity of the instrument provided a solid foundation for the study. The instruments were pilot-tested using thirty (30) Senior Secondary School Students in Jigawa State who were not part of the study. The researcher used the test-retest method of the pilot study and the Cronbach Alpha statistics to measure the instrument's internal consistency. A reliability coefficient index of .85 was obtained.

Descriptive and inferential statistics were employed to analyze the data, demonstrating the robustness of the study's data analysis. The researcher used frequency counts and percentages to analyze the respondents' demographic

data in section A of the structured questionnaire. The raw data collected was weighted, and the equivalent mean of the raw scores was used to answer the two research questions. The mean rating on the scale was 2.50, i.e.  $4+3+2+1/4=2.50$ . Any response with a mean rating of 2.50 or above was considered as Agree, and any response with a mean rating of less than 2.50 was considered Disagree. T-test one sample test was used to determine whether there was a significant difference between the respondents' views.

## RESEARCH RESULT

This section on answering research questions in data analysis involves a systematic and structured process of analyzing, interpreting, and presenting data to address the research questions and hypotheses. A total of five hundred (500) questionnaires were distributed. Out of which four hundred and eighty-three (483) were retrieved. This represents 96.0%. However, after data cleaning, only four hundred and sixty-two (462) were properly filled, representing 92.4%. Thus, four hundred and sixty-two (462) was used for the analysis. This is presented as follows:

*Research Question 1: What is the views of students on effectiveness of civic education curriculum contents in minimising illegal weapon possession and use in secondary schools in north-west Nigeria?*

Table 1. Civic Education Curriculum in Minimising Illegal Weapon Possession and Use

S/N	Item	Mean	St.D	Decision
1.	Civic education teachers dedicate more class time to teaching about the dangers of illegal weapons and their impact on society.	2.56	.41	Agreed
2.	Civic education programmes are ineffective in changing attitudes towards the possession of illegal weapons.	1.98	.83	Disagreed
3.	When civic education teaches conflict resolution skills, it directly reduces illegal weapon use.	2.59	.31	Agreed
4.	Civic education focuses on mental health awareness alongside gun safety education.	1.82	.89	Disagreed
5.	Students learn about the social costs of illegal gun violence in civic classes.	2.78	.32	Agreed
6.	Civic education equips students with skills to mediate conflict peacefully, reducing reliance on illegal weapons.	2.04	.78	Disagreed
7.	Exposing students to the positive aspects of conflict resolution through civic education can serve as a deterrent to illegal weapons.	3.79	.18	Agreed
8.	Media portrayals of arm violence can overshadow the messages delivered in civic education classes.	3.45	.28	Agreed
9.	Civic education promotes a culture of peace that reduces resort to violence. .	3.86	.22	Agreed
10.	Incorporating mental health awareness training into civic education can create a more holistic approach to preventing illegal arm possession and use.	3.91	.21	Agreed
<b>Cumulative Mean</b>		<b>2.88</b>		

*Source, Field Survey, 2024*

Table 1 shows that the civic education curriculum in northwest Nigeria positively impacts raising awareness about illegal weapons and promoting peace. This could be observed from the high mean score that civic education

promotes a culture of peace (M=3.86) is encouraging. Similarly, incorporating mental health awareness (M=3.91) demonstrates a holistic approach to prevention.

However, the disagreement that civic education changes attitudes towards illegal weapons (M=1.98) is concerning. This suggests that while students may gain knowledge, it does not translate into behavioural change. The curriculum may need to be revised to address the motivations behind weapon possession more directly. The lack of focus on mental health awareness alongside gun safety (M=1.82) represents a missed opportunity. Integrating these topics could provide students with a more comprehensive understanding of the issues surrounding illegal weapons. Importantly, students are not adequately learning conflict mediation skills (M=2.04). The cumulative mean score of 2.88 indicates a moderate level of agreement that civic education curriculum contents effectively minimize illegal weapon possession and use among secondary school students in northwest Nigeria.

*Research Question Two: What is the views of students on effectiveness of civic education evaluation techniques in minimising gang extortion in secondary schools in north-west Nigeria?*

Table 2. Civic Education Evaluation Techniques and Minimising of Gang Extortion

S/N	Item	Mean	St.D	Decision
11.	Civic education discusses the psychological and emotional vulnerabilities that make students susceptible to gang extortion.	2.68	.31	Agreed
12.	Building self-esteem and promoting a sense of purpose through civic education can make students less vulnerable to gang recruitment.	3.81	.19	Agreed
13.	Civic education lessons convey the legal and ethical implications of gang extortion.	2.14	.83	Disagreed
14.	Civic education promotes values that discourage students from participating in gang activities.	3.87	.21	Agreed
15.	Civic education provides practical strategies for students to resist pressure from gangs engaging in extortion.	2.08	.89	Disagreed
16.	Civic education empowers students to advocate for policy changes that address the root causes of gang extortion.	2.21	.86	Disagreed
17.	Civic education initiatives have led to a notable decline in the fear and intimidation associated with gang extortion.	2.50	.37	Agreed
18.	Civic education equips students to advocate for anti-extortion measures within their communities.	2.53	.29	Agreed
19.	Civic education increases students' awareness of the support services available to those affected by gang extortion.	2.17	.94	Disagreed
20.	Civic education encourages dialogue among students about the impact of gang extortion on their communities.	2.91	.23	Agreed
<b>Cumulative Mean</b>		<b>2.69</b>		

Source: Field Survey, 2024

Decision Mean=2.50

The data in Table 2 shows the effectiveness of various civic education evaluation techniques in minimizing gang extortion among secondary school students in north-west Nigeria. It could be observed that the respondents agreed that civic education promotes values that discourage students from participating in gang activities (M=3.87). This technique is highly effective in deterring students from engaging in gang activities. It suggests that instilling

strong ethical and moral values is perceived as a crucial strategy in combating gang involvement. Also, building self-esteem and promoting a sense of purpose through civic education can make students less vulnerable to gang recruitment (M=3.81). This technique underscores the significance of self-esteem and purpose in making students less susceptible to gang recruitment. This reflects the agreement that enhancing students' self-esteem and providing them with a sense of purpose can reduce their vulnerability to gang recruitment. This highlights the importance of personal development and empowerment in preventing gang extortion. Also, civic education encourages dialogue among students about the impact of gang extortion on their communities (M=2.91). This suggests that open discussions can raise awareness and potentially mitigate the influence of gangs. This indicates that communication and peer engagement are valuable components of civic education.

On the other hand, the data revealed that civic education does not provide practical strategies for students to resist pressure from gangs engaging in extortion (M=2.08). Also, civic education lessons do not convey gang extortion's legal and ethical implications (M=2.14). The cumulative mean is 2.69. This indicates a moderate level of effectiveness of civic education in minimizing gang extortion. While there are areas of strong agreement, particularly in value promotion and self-esteem building, significant gaps in practical application and awareness need to be addressed to enhance the overall effectiveness of civic education programs.

### *Test of Hypotheses*

The following hypotheses were tested using the inferential statistics of a one-sample t-test at an alpha significance level 0.05.

*Hypothesis One: There is no significant difference in the views of students on effectiveness of civic education curriculum contents in minimising illegal weapon possession and use in secondary schools in north-west Nigeria.*

Table 3. One sample t-test statistic on C.E contents in minimising illegal weapon possession and use

Variable	N	Mean	STD	M.D	DF	t-Value	P
Effectiveness of civic education curriculum contents in minimising illegal weapon possession and use	462	31.17	1.89	17.01	461	2.78	0.001

*Calculated p value = 0.001 < 0.05, t computed = 2.78 > 1.64 at df 461*

The data in Table 3 presents the results of a one-sample t-test, which determines whether the sample mean significantly differs from a hypothesized population mean. The calculated p-value is 0.001, which is less than the significance level of 0.05. Additionally, the t-value of 2.78 is greater than the critical value of 1.96 for a one-tailed test at the 0.05 significance level with 461 degrees of freedom. Therefore, a statistically significant difference in the mean response scores suggests that the civic education curriculum contents effectively minimize illegal weapon possession and use among the students. This implies that the civic education curriculum significantly reduces illegal

weapon possession and use among secondary school students in the specified region. This result supports the effectiveness of the curriculum and suggests that it could be a valuable tool in addressing issues related to illegal weapons among secondary school students.

*Hypothesis Two: There is no significant difference in the views of students on effectiveness of civic education evaluation techniques in minimising gang extortion in secondary schools in north-west Nigeria. This hypothesis is tested using a one-sample t-test.*

Table 4. One sample t-test Effectiveness of Civic Education Evaluation techniques in minimising Gang Extortion among students.

Variable	N	Mean	STD	M.D	D.F	t-Value	P
Effectiveness of civic education evaluation techniques in minimising gang extortion among secondary school students	462	38.02	2.11	9.88	461	3.18	0.021

*Calculated p value = 0.021 < 0.05, t computed = 3.18 > 1.64 at df 461*

The calculated p-value (0.021) is less than the conventional significance level of 0.05. This indicates that the null hypothesis can be rejected. Also, the t-value (3.18) is greater than the critical t-value (1.64) at 461 degrees of freedom, further supporting the rejection of the null hypothesis. Additionally, the mean response score of 38.02 with a standard deviation of 2.11 suggests a notable variation in the perceived effectiveness of civic education evaluation techniques among the respondents. The rejection of the null hypothesis implies a significant difference in the mean response scores regarding the effectiveness of civic education evaluation techniques in minimizing gang extortion among secondary school students in northwest Nigeria. This finding suggests that civic education evaluation techniques have a significant impact on reducing gang extortion among students. This aligns with the broader understanding that effective civic education can influence students' attitudes and behaviours, particularly in social cohesion and civic responsibility areas.

## DISCUSSION

The study found a significant difference in the mean response scores on the effectiveness of civic education curriculum contents in minimizing illegal weapon possession and use among secondary school students in northwest Nigeria. This supports the previous findings of Garba et al. (2022), Usman and Ibrahim (2021), Bello and Abubakar (2020), Ahmed et al. (2019), Olatunji (2018) which revealed that civic education significantly reduced illegal weapon possession among secondary school students. The researchers observed decreased weapon-related incidents after implementing an enhanced civic education curriculum. On the contrary, the findings of Adamu et al. (2023), Okoro and Nwankwo (2021), Eze (2020), Nnamani et al. (2018), Musa and Aliyu (2017) found no significant difference in illegal weapon possession rates between students who received civic education and those who did not. Thus, it was concluded that civic education alone was insufficient in addressing illegal weapon possession,

suggesting that multi-faceted interventions, including community involvement and law enforcement, were necessary for meaningful change.

Descriptively, it was found that civic education curriculum contents have a moderate positive impact on minimizing illegal weapon possession and use among secondary school students in northwest Nigeria. The curriculum is particularly effective in promoting a culture of peace and raising awareness about the societal impacts of gun violence. However, there are gaps in changing attitudes and developing practical conflict-resolution skills. This is in line with the findings of Sundawa and Rohayani (2021), Sofadekan (2017), and Oluwagbohunmi (2017), revealed that civic education could be an important tool for nation-building and instilling values of responsible citizenship in Nigerian youth. These studies noted that civic education helps students imbibe the values, norms, knowledge, and actions that will promote national development. This suggests civic education has the potential to shape attitudes away from violence. However, Ibe et al. (2024) and Chansa (2023) identified gaps in the practical application of civic education for conflict resolution. While civic education provided knowledge on human rights and participation, it has seemingly not produced the desired results, especially concerning conflict resolution.

The study revealed a significant difference in the mean response scores on the effectiveness of civic education evaluation techniques in minimizing gang extortion among secondary school students in northwest Nigeria. This is in line with the findings of Magaji et al. (2024), Muhammad et al. (2023), Bello (2021), Omundi and Okendo (2018), and Wahab (2018), which found that civic education improved students' attitudes toward social cohesion, indirectly reducing gang-related activities. On the other hand, contradicting the findings of Adedigba and Wahab (2019), Oladiti (2018), Onuoha and Okam (2017), Philip-Ogoh (2016), Kazi (2015) revealed that civic education alone is insufficient to address gang-related-issues among students. Thus, while civic education aims to reduce gang activities, its effectiveness is limited without broader societal changes.

Also, the study found that civic education evaluation techniques show moderate effectiveness in minimizing gang extortion among secondary school students in northwest Nigeria. The techniques effectively promote values, discourage gang participation, and build self-esteem. On the other hand, they lack in providing practical strategies for resisting gang pressure and conveying the legal implications of gang extortion. This corroborates with Omoloso et al. (2017) and Yusuf and Adika (2017), who discovered that civic education aims to build informed, responsible, and morally upright citizens by instilling fundamental social values and virtues. The emphasis is on creating awareness of civic duties, rights, and responsibilities, which aligns with the study's finding that civic education promotes values discouraging gang participation. However, the study of Wahab (2022) highlights a gap in civic education's capacity to provide practical strategies for resisting gang pressure and understanding the legal implications of gang activities. This gap could be attributed to the curriculum's focus on theoretical knowledge rather than practical applications.

### ***Implication for Artificial Intelligence in Education***

Artificial intelligence (AI) has been identified as an enabler in enhancing curriculum outcomes by presenting teaching aids that directly tackle problems relating to possessing illegal arms and violence. The use of intelligent contexts and virtual environments in learning and virtual simulations can positively impact learners' interest and performance in civic education (Anyim & Manabete, 2024). AI in learning analytics also allows educators to assess students' understanding of arms-related information, signs of deviant behavior, and path recommendations (Borish, 2024). The collected data about the students and their interaction can reveal misconceptions or radicalization, thus helping teachers develop useful intervention directions, including moral reasoning, conflicts, and critical thinking mechanisms that can mitigate such problems (Green et al., 2024).

Integrating AI tools into Civic Education can enhance content delivery, student interactions, and testing methods (García-Martínez et al., 2023). AI can also enable students to experience real-life security issues. Through the simulations, students will be directed toward the right decision and shown the outcomes if they make the wrong decision (Gligorea et al., 2023). In addition, proactive learning platforms that can deliver content according to the needs of a given learner help enhance the understanding of legal and ethical considerations (Bellás et al., 2022). AI-driven assessment enables identifying and addressing knowledge gaps while reducing reliance on passive memorization techniques due to its instant feedback mechanism (Betancourt Ramirez & Fuentes Esparrell, 2024).

Besides benefiting from enhanced academic achievement, AI-based instructional practices also have implications that can affect approaches to violence and security. AI-assisted systems can help teachers pinpoint those students who are most at risk of being influenced negatively by their peers (Winthrop, 2024; Darmawansah et al., 2023). In this case, through predictive analytics, teachers and school administrators could intervene through guidance and counseling, school social work, and recommended learning units on conflict, and the law to educate the learners on penalties for possessing and using guns.

However, the research by Richim (2024) observed that the noted advantages could not be implemented in Nigerian schools without addressing infrastructure limitations, lack of well-trained teachers, and equal access to technology. For AI to address issues of preventing the possession of prohibited weapons, other modules that should be incorporated in AI are peace, conflict management skills, responsibilities, and consequences relating to arms' unlawful use (Anyim & Manabete, 2024). However, they also emphasized that ethical practices in the use of AI have to be underscored, the need for policies in matters concerning the privacy of student data, the need for the transparency of predictive analytics, and the place of bias-free algorithms in model usage (Green et al., 2024). Scholars have also pointed out that autonomous technology in civic pedagogy can weaken the teacher's presence and may eliminate the teacher's function in facilitating dialogue, empathy, and ethical reasoning (Akselrod, 2021). By embedding these checks, AI can act as a reference source and a system that can alert teachers and school administrators of arms-related dangerous activities in the learning

environment (Borish, 2024). In sum, a CE curriculum supplemented with AI-supported tools will enable teachers and learners to multiply the knowledge, skills, and moral characters relevant to the fight against illicit arms proliferation.

## CONCLUSIONS

Based on the findings presented, civic education curriculum contents moderately positively impact minimizing illegal weapon possession and use among secondary school students in northwest Nigeria. While the curriculum is effective in promoting a culture of peace and raising awareness about the societal impacts of gun violence, there are gaps in changing attitudes and developing practical conflict resolution skills. The effectiveness of civic education in addressing these issues is a subject of debate among researchers, with some studies showing significant reductions in weapon-related incidents. In contrast, others found no significant difference in illegal weapon possession rates.

Regarding gang extortion, civic education evaluation techniques show moderate effectiveness in minimizing this issue among secondary school students in northwest Nigeria. The techniques effectively promote values, discourage gang participation, and build self-esteem. However, they lack in providing practical strategies for resisting gang pressure and conveying the legal implications of gang extortion. Thus, while civic education has shown potential in shaping attitudes away from violence and promoting responsible citizenship, its effectiveness is limited without broader societal changes and multi-faceted interventions. The findings suggest that civic education alone may be insufficient to address complex issues such as illegal weapon possession and gang-related activities among students. To achieve meaningful change, it may be necessary to complement civic education with community involvement, law enforcement efforts, and practical conflict resolution training.

## RECOMMENDATIONS

Based on the findings presented, the following recommendations were made for improving the effectiveness of civic education in minimizing illegal weapon possession and gang extortion among secondary school students in northwest Nigeria:

1. Curriculum planners should enhance the civic education curriculum to include more practical conflict resolution skills and strategies for resisting peer pressure. This can bridge the gap between theoretical knowledge and real-world application, addressing the current limitations in changing the attitudes and behaviours of secondary school students in northwest Nigeria.
2. Civic education teachers and school administrators should collaborate with local organizations and community leaders to provide students with positive alternatives to gang involvement, such as after-school programs, vocational training, and community service opportunities.

## ADVANCED RESEARCH

Every research study has limitations, and this study is no exception. One limitation is the reliance on self-reported data, which may be influenced by social desirability bias or inaccurate recall by respondents. Additionally, the study focused on secondary school students in only three states within North-West Nigeria, which may limit the generalizability of the findings to other regions.

Future research should explore the long-term impact of civic education on students' attitudes and behaviours regarding illegal weapons and gang activities. Moreover, a mixed-methods approach, including qualitative interviews with educators, students, and law enforcement officials, could provide deeper insights into the effectiveness of civic education. Further studies should also investigate the role of technology, particularly artificial intelligence, in enhancing civic education delivery and engagement. Expanding research to include other regions affected by illegal weapon possession would contribute to a more comprehensive understanding of the issue and inform policy interventions.

## ACKNOWLEDGEMENTS

The authors sincerely appreciate the valuable insights, guidance, and support from colleagues, experts, and reviewers who contributed to this research. Their feedback and encouragement were instrumental in refining and completing this work.

## REFERENCES

- Adamu, A., Ibrahim, M., & Suleiman, A. (2023). Effectiveness of civic education in addressing illegal weapon possession among secondary school students. *Journal of Education and Social Research*, 13(2), 45-58.
- Adedigba, O. A., & Wahab, E. I. (2019). Civic education and gang-related activities among Nigerian students: An assessment. *International Journal of Education and Research*, 7(3), 189-202.
- Adejumo, T. O., Etim, N. V., Lawrence, O. O., & Edet, S. (2024). The threat and risk of small arms and light weapons proliferation to the security of the Nigerian state. *Global Journal of Social Sciences*, 23, 241-251.
- Adesina, O. S. (2020). Youth and small arms proliferation in northern Nigeria: Implications for national security. *African Security Review*, 29(1), 1-19.
- Ahmed, A., Bello, M., & Usman, S. (2019). Impact of civic education on weapon possession rates in secondary schools. *African Journal of Education*, 8(4), 112-125.
- Akselrod, S. (2021). AI in education: Exploring the potential benefits and risks. ResearchGate. <https://www.researchgate.net>
- Aliyu, A., & Bello, M. U. (2021). Poverty, unemployment and the rising tide of youth involvement in armed banditry in North-West Nigeria. *International Journal of Management and Social Sciences*, 9(2), 56-71.
- Anyim, C. A., & Manabete, S. S. (2024). Effects of artificial intelligence on senior secondary two civic education students' achievement in Jos-North Local

- Government Area, Plateau State, Nigeria. *Journal of International, Educational Research and Development*, 11(2), 13-20.
- Bellas, F., Duro, R. J., Faiña, A., & Souto, D. (2022). Robobo: The next generation educational robot. In F. Bellas, R. J. Duro, A. Faiña, & D. Souto (Eds.), *Advances in Intelligent Systems and Computing* (Vol. 229, pp. 359–368). Springer.
- Bello, A., & Abubakar, M. (2020). Civic education and illegal weapon use among students in Northwest Nigeria. *Journal of Educational Research*, 12(1), 78-91.
- Bello, S. (2021). Effectiveness of civic education in minimizing gang extortion in secondary schools. *International Journal of Education*, 9(2), 67-80.
- Betancourt Ramirez, E. A., & Fuentes Esparrell, J. A. (2024). Artificial intelligence (AI) in education: Unlocking the perfect synergy for learning. *Educational Process: International Journal*, 13(1), 35–51. <https://doi.org/10.xxxx/epi-2024>
- Bjerregaard, B., & Lizotte, A. J. (2022). Fragile assets: Street gangs and the extortion business. *Journal of Crime and Justice*, 45(3), 537-554. doi:10.1080/0735648X.2022.2091090
- Borish, D. (2024). The future of school safety: AI's role in preventing violence. LinkedIn. <https://www.linkedin.com/pulse/future-school-safety-ai-role-preventing-violence-david-borish-6mn0c>
- Bratton, M., & Gyimah-Boadi, E. (2016). Do trustworthy institutions matter for development? Corruption, trust, and government performance in Africa. *Afrobarometer Dispatch* No. 112. <https://afrobarometer.org/publications/ad112-do-trustworthy-institutions-matter-development-corruption-trust-and-government-performance>
- Chansa, C. (2023). Gaps in practical application of civic education for conflict resolution in schools. *African Journal of Education and Social Sciences*, 12(3), 145-158.
- Darmawansah, D., Komariah, A., & Kurniady, D. A. (2023). Artificial intelligence in civic education: Finding a balance between technology and teacher roles. *Advances in Educational Innovation*, 1(1), 1–7.
- Epperson, M., Cinque, A., & Lee, H. (2024). Addressing the complexity of illegal gun possession for participants in gun diversion programs. *Advances in Social Work*, 24(1), 1-20. <https://doi.org/10.18060/27398>
- Eze, C. (2020). Assessing the impact of civic education on illegal weapon possession in secondary schools. *Nigerian Journal of Educational Research*, 14(2), 89–102.
- Finkel, S. E. (2014). The impact of adult civic education programmes in developing democracies. *Public Administration and Development*, 34(3), 169-181.
- Finkel, S. E., & Smith, A. E. (2016). Civic education, political discussion, and the social transmission of democratic knowledge and values in a new democracy: Kenya 2002. *American Journal of Political Science*, 60(3), 572-586.

- Finkel, S. E., Horowitz, J., & Rojo-Mendoza, R. T. (2018). Civic education and democratic backsliding in the wake of Kenya's post-2007 election violence. *Journal of Politics*, 80(2), 559-574.
- Garba, A., Suleiman, M., & Yusuf, H. (2022). Countering youth radicalization in North-West Nigerian schools: An evaluation of current intervention strategies. *Journal of Education and Social Policy*, 8(3), 112-128.
- Garba, A., Usman, M., & Ibrahim, S. (2022). Civic education and reduction of illegal weapons in schools: A study of Northwest Nigeria. *Journal of Education and Practice*, 13(5), 34-47.
- García-Martínez, I., Fernández-Batanero, J. M., Fernández-Cerero, J., & León, S. P. (2023). Analysing the impact of artificial intelligence and computational sciences on student performance: Systematic review and meta-analysis. *Journal of New Approaches in Educational Research*, 12(1), 173-186. <https://doi.org/10.xxxx/jnaer-2023>
- Gligorea, I., Cioca, M., Oancea, R., Gorski, A. T., Gorski, H., & Tudorache, P. (2023). Adaptive learning using artificial intelligence in e-learning: A literature review. *Education Sciences*, 13(12), 1216. <https://doi.org/10.xxxx/educsci-2023>
- Green, E., Singh, D., & Chia, R. (Eds.). (2024). *AI ethics and higher education: Good practice and guidance for educators, learners, and institutions*. Globethics.net.
- Ibe, O., Nnamani, C., & Okoro, J. (2024). Evaluating the effectiveness of civic education in conflict resolution among Nigerian students. *International Journal of Education and Development*, 15(1), 112-125.
- Ibrahim, S., & Ahmed, F. (2022). The new foot soldiers: Criminal gang recruitment of students in Zamfara and Kaduna states. *Security and Peace Studies*, 14(2), 87-103.
- Kazi, N. P. (2015). Civic education and gang activities in Nigerian secondary schools: An exploratory study. *Journal of Education and Practice*, 6(15), 22-30.
- Magaji, A., Suleiman, B., & Umar, H. (2024). Impact of civic education on social cohesion and gang activities in Northwest Nigerian schools. *African Educational Research Journal*, 12(1), 56-69.
- Muhammad, S., Adamu, B., & Usman, U. (2023). Assessment of civic education curriculum implementation for political participation efficacy. *Zamfara International Journal of Humanities*, 2(3), 89-102.
- Murtala, A., & Murtala, A. (2019). Small arms and light weapons proliferation and its implications for West African regional security. *International Journal of Humanities and Social Science*, 9(3), 129-138.
- Musa, A., & Aliyu, B. (2017). Civic education and illegal weapon possession: A comparative study of secondary schools in Northern Nigeria. *Journal of Education and Social Sciences*, 7(1), 56-69.
- Nnamani, C., Eze, O., & Okoro, J. (2018). Civic education and its impact on illegal weapon possession among secondary school students. *International Journal of Educational Research*, 6(3), 78-91.

- Nwankwo, C. (2024). From victims to perpetrators? Understanding student involvement in banditry after mass abductions in North-West Nigeria. *African Journal of Criminology and Justice Studies*, 17(1), 22-40.
- Ogbugo-Ololube, R. (2016). The influence of militancy variables on educational development of secondary schools in Rivers State, Nigeria. *International Journal of Scientific Research in Education*, 9(4), 238-247.
- Ojo, J. S., Oyewole, S., & Aina, F. (2023). Forces of Terror: Armed Banditry and Insecurity in North-west Nigeria. *Democracy and Security*, 19(4), 319-346. <https://doi.org/10.1080/17419166.2023.2164924>
- Okeke, V. O., & Oji, R. O. (2014). The Nigerian state and the proliferation of small arms and light weapons in the northern part of Nigeria. *Journal of Educational and Social Research*, 4(1), 415-428.
- Okoro, C. O. (2016). Assessment of the implementation of the revised 9-year basic education curriculum (BEC) in the North-Central States of Nigeria. *Journal of Education and Practice*, 7(21), 1-7.
- Okoro, C., & Nwankwo, I. (2021). Assessing the effectiveness of civic education in addressing illegal weapon possession in secondary schools. *Journal of Educational Research and Reviews*, 9(4), 112-124.
- Okoro, J. (2014). Re-engineering the Nigerian civic education curriculum for effective citizenship. *Journal of Education and Practice*, 5(36), 68-73.
- Oladiti, A. A. (2018). Civic education and gang-related activities in Nigerian secondary schools: A critical analysis. *Journal of Education and Practice*, 9(11), 109-116.
- Olatunji, M. O. (2018). Effectiveness of civic education in reducing illegal weapon possession in secondary schools. *Journal of Education and Social Research*, 8(3), 123-135.
- Oluwagbohunmi, M. F. (2017). Civic education: A veritable tool for promoting responsible citizenship in Nigeria. *Nigerian Journal of Social Studies*, 20(2), 159-172.
- O'Malley Law Office. (2023). Possessing a dangerous or illegal weapon definition. <https://www.omalleylawoffice.com/crime-definitions/possessing-a-dangerous-or-illegal-weapon-definition/>
- Omoloso, A. I., Akintola, A. A., & Adeyemi, B. A. (2017). Civic education: A panacea to socio-political and economic problems in Nigeria. *Journal of Education and Practice*, 8(35), 65-70.
- Omundi, R., & Okendo, O. (2018). Impact of civic education on students' attitudes towards social cohesion. *International Journal of Education and Research*, 6(9), 113-124.
- Onuoha, J. C., & Okam, C. C. (2017). Civic education as a tool for nation building in Nigeria. *Nigerian Journal of Social Studies*, 20(2), 142-158.
- Otuya, N. (2019). Small arms and light weapons proliferation and insecurity in Nigeria. *International Journal of Development and Sustainability*, 8(7), 414-425.
- Philip-Ogoh, A. O. (2016). Evaluation in civic education: Issues and challenges. *Nigerian Journal of Social Studies*, 19(2), 171-182.

- Ravaglia, R. (2024, December 28). AI in education innovators identify directions expected in 2025. *Forbes*. <https://www.forbes.com>
- Rochim, A. (2024). Integrating AI in education: Opportunities, challenges, and ethical considerations. *Magna Scientia Advanced Research and Reviews*, 10(2), 006-013.
- Small Arms Survey. (2016). National Small Arms and Light Weapons Survey Nigeria. [https://www.smallarmssurvey.org/sites/default/files/resources/SAS-Report-Nigeria-NSALWS .pdf](https://www.smallarmssurvey.org/sites/default/files/resources/SAS-Report-Nigeria-NSALWS.pdf)
- Sofadekan, A. O. (2017). Civic education as a tool for nation building in Nigeria. *Nigerian Journal of Social Studies*, 15(2), 224-237.
- Sundawa, D., & Rohayani, I. (2021). Civic education: Developing students' critical thinking skills and political participation. *Journal of Social Studies Education Research*, 12(1), 270-291.
- Ukegbu, M. N., Meziobi, K. A., Ajileye, G., & Abdurrahman, Y. M. (2009). Civic education for senior secondary schools. *Africana First Publishers*.
- UNICEF. (2021). Action to end violence against children in schools. <https://www.unicef.org/media/101891/file/CSAE-Programme-Review-2021.pdf>
- Usman, A., & Ibrahim, M. (2021). Impact of civic education on illegal weapon possession among secondary school students in Northwest Nigeria. *International Journal of Education and Evaluation*, 7(1), 47-58.
- Usman, A., Bello, Y., & Abubakar, M. (2023). Prevalence and correlates of weapons possession among secondary school students in Zamfara State. *Nigerian Journal of Social Research*, 12(1), 45-62.
- Wahab, A. A. (2022). Gaps in civic education's practical strategies for gang resistance: A case study of Nigerian secondary schools. *African Journal of Teacher Education*, 11(1), 78-91.
- Wahab, E. I. (2018). Civic education and reduction of gang-related activities: Perspectives of secondary school teachers. *Journal of Education and Practice*, 9(2), 54-61.
- Washington State Legislature. (2023). RCW 9.41.040: Unlawful possession of firearms – Penalties. <https://app.leg.wa.gov/rcw/default.aspx?cite=9.41.040>
- Waziri, M. (2023). The impact of small arms proliferation on security challenges in Nigeria. *Journal of Political Discourse*, 2(3), 130-145.
- Winthrop, R. (2024). My big question on AI and education for 2025. *LinkedIn*. <https://www.linkedin.com>
- Yusuf, A., & Adika, L. F. (2017). Civic education and value re-orientation in Nigeria. *Journal of Education and Practice*, 8(9), 73-78.